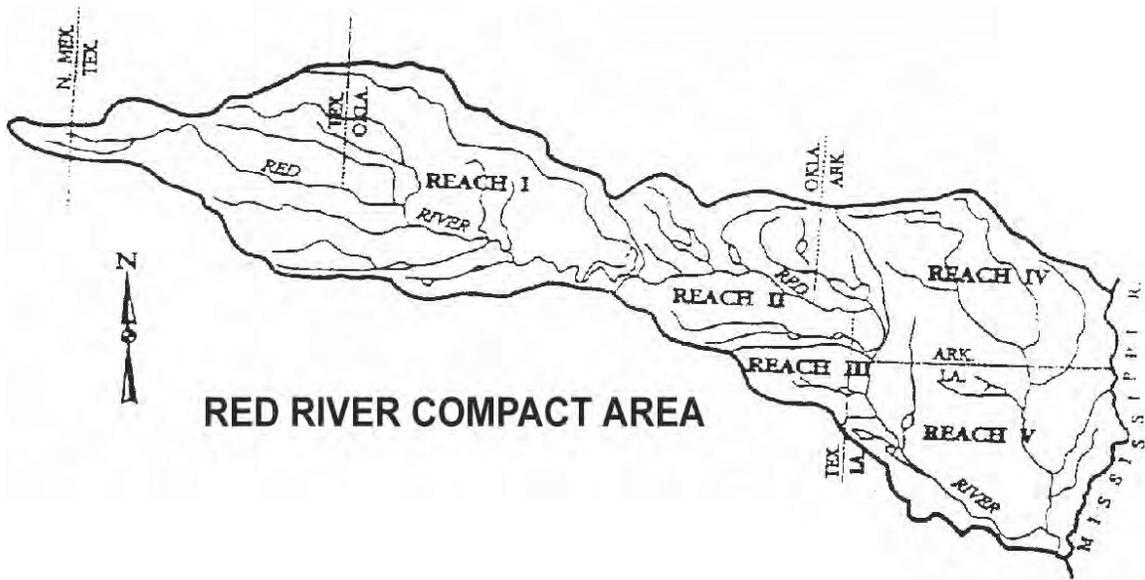


REPORT
OF THE
RED RIVER
COMPACT COMMISSION
2011



Published
June 2012

REPORT
OF THE
RED RIVER
COMPACT COMMISSION
2011

Arkansas
Louisiana

Oklahoma
Texas

Published
June 2012



RED RIVER COMPACT COMMISSION

May 7, 2012

The President
United States of America

The Honorable Mike Beebe, Governor
State of Arkansas

The Honorable Bobby Jindal, Governor
State of Louisiana

The Honorable Mary Fallin, Governor
State of Oklahoma

The Honorable Rick Perry, Governor
State of Texas

Dear Mr. President and Governors:

The Red River Compact is an interstate agreement entered into by the States of Arkansas, Louisiana, Oklahoma and Texas, with the consent of Congress, dealing with the water resources of the Red River Basin.

Pursuant to Section 10.02 paragraphs (d) and (e) of the Red River Compact and as directed by the Red River Compact Commission (RRCC), the interstate body overseeing the Compact, the Compact at its Thirty-first Annual Meeting submitted the report of the RRCC, together with an account of all funds received and expended in the conduct of its work for FY 2010 covering the anticipated expenses of the Commission for FY 2011.

The State of Oklahoma hosted the Thirty-first Annual Meeting on April 26, 2011, in Oklahoma City, Oklahoma.

Pursuant to the previous agreements to rotate the office of Vice-Chairman and Secretary in connection with the rotation of the annual meeting host state, the State of Texas accepted the responsibility for both offices for FY 2011. The Office of Treasurer remained with the State of Arkansas.

Sincerely,


Gordon W. Fassett
Chairman and Federal Commissioner

**Red River Compact Commission
2011 Report**

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**Red River Compact Commission
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Officers and Committee Members**

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ATTENDANCE

Please turn off your cell phone

MEETING: Red River Compact Commission
3800 N. Classen Boulevard
Oklahoma City, OK

DATE: April 26, 2011

TIME: 8:30 A.M.

NAME	MAILING ADDRESS/Email	REPRESENTING
ART THEIS	688 S. Lakewood B.R. ⁷⁰⁸¹⁰ LA.	Louisiana
Louis Voegelé	US Army Corps of Engineers 1645 S. 101 ST East Ave. Tulsa, OK ⁷⁴¹²⁸	Corps of Engineers
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Vendal Fairchild	fairchild V @ GMAIL.COM	LA Cattlemen's association
RICHARD LANE	richard_lane @ ok.usda.gov	USDA-NRCS
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MAX FORBES	max.forbes @ la.gov	
Rich Brantoli	reddriverva @ hotmail.com	RRVA
Suzy Valentine	Suzy.Valentine @ tceq.texas.gov	Texas
JOHN CAJ	OKLAHOMA city, OK	U.S.B.R.
Pete Lowerre	rl @ caddo lake.us	Caddo Lake Trust Inc
Bob Blazs	bobblazs @ sbcglobal.net	USGS-OK
Randy Young	RANDY.YOUNG @ ARKANSAS.GOV	ANRC
EDWARD SWAIM	EDWARD.SWAIM @ ARKANSAS.GOV	ANRC

ATTENDANCE

Please turn off your cell phone

MEETING: Red River Compact Commission
 3800 N. Classen Boulevard
 Oklahoma City, OK

DATE: April 26, 2011

TIME: 8:30 A.M.

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Julie Cunningham	jcunningham@ourb.ok.gov	OWRIB

ATTENDANCE

Please turn off your cell phone

MEETING: Red River Compact Commission
3800 N. Classen Boulevard
Oklahoma City, OK

Legal Committee

DATE: April 25, 2011

TIME: 4:00 P.M.

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Dana Couch	dacouch @ aurb.ok.gov	OURB
Randy Young	randy-young @ arkansas.gov	ANRC
Jeff Fassett	Jeff.Fassett@drinc.com	Chairman RRC

ATTENDANCE

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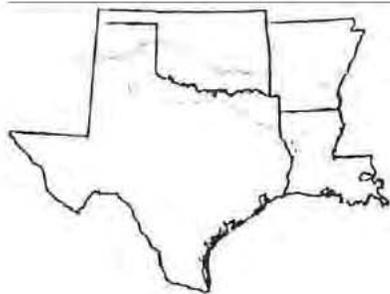
Engineering / Environmental NR Committee

MEETING: Red River Compact Commission
 3800 N. Classen Boulevard
 Oklahoma City, OK

DATE: April 25, 2011

TIME: 4:00 P.M.

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RED RIVER COMPACT COMMISSION

AGENDA

RED RIVER COMPACT COMMISSION
 31st ANNUAL MEETING
 OKLAHOMA WATER RESOURCES BOARD
 3800 N. CLASSEN BOULEVARD
 OKLAHOMA CITY, OKLAHOMA
 April 26, 2011
 8:30 A.M.

Monday, April 25

- 3:00 p.m. Engineering Committee
- 4:00 p.m. Environmental and Natural Resources Committee
- 4:00 p.m. Legal Committee
- 5:00 p.m. Budget Committee
- 6:30 p.m. Dinner

Tuesday, April 26

8:30 a.m. Commission Meeting

- I. CALL TO ORDER – Chairman Fassett
- II. WELCOME
- III. APPROVAL OF THE AGENDA
- IV. APPROVAL OF THE MINUTES OF THE APRIL 2010 ANNUAL MEETING
- V. REPORT OF THE CHAIRMAN
- VI. REPORT OF THE TREASURER
- VII. REPORT OF THE COMMISSIONERS
 - A. ARKANSAS
 - B. LOUISIANA
 - C. TEXAS
 - D. OKLAHOMA
- VIII. REPORT OF COMMITTEES
 - A. BUDGET
 - B. LEGAL
 - C. ENGINEERING
 - 1. Status Update – Reach IV, Sub-basin 2 proposed rules & regulations
 - D. ENVIRONMENTAL AND NATURAL RESOURCES

- IX. FEDERAL AGENCY REPORTS**
 - A. BUREAU OF RECLAMATION**
 - B. U.S. ARMY CORPS OF ENGINEERS**
 - C. NATURAL RESOURCES CONSERVATION SERVICE**
 - D. U.S. GEOLOGICAL SURVEY**

- X. BIG CYRESS CREEK/CADDO LAKE BASIN STUDY - USACOE Ft. Worth District**

- XI. BAYOU MACON - Louisiana Cattlemen's Association**

- XII. UNFINISHED BUSINESS and TOPICS for DISCUSSION by COMMISSIONERS**

- XIII. NEW BUSINESS**
 - A. ANNUAL REPORT**
 - B. ASSIGNMENTS TO COMMITTEES**
 - C. ELECTION OF OFFICERS**
 - D. APPOINTMENT TO COMMITTEES**
 - F. 32ND ANNUAL MEETING**

- XIV. OTHER BUSINESS**
 - A. Update or comments from Red River Valley Association - Rich Brontoli**

- XV. PUBLIC COMMENT**

- XVI. ADJOURNMENT**

Minutes of the

**RED RIVER COMPACT COMMISSION
31st Annual Meeting**

**Oklahoma Water Resources Board
3800 N. Classen Boulevard, Oklahoma City, OK
April 26, 2011
8:30a.m.**

I. CALL TO ORDER and II. WELCOME

The Annual Meeting of the Red River Compact Commission was called to order at 8:37 a.m. on April 26, 2011, at the Offices of the Oklahoma Water Resources Board located at 3800 N. Classen Boulevard, in Oklahoma City, Oklahoma.

Chairman Gordon "Jeff" Fassett presided as Federal Commissioner and Chairman. Chairman Fassett recognized there was a quorum of members present, and asked each person in attendance to make a self-introduction.

Those present at the meeting were:

Red River Compact Commissioners

Gordon Jeff Fassett, Federal Chairman, Wyoming
Julie Cunningham, Oklahoma (by proxy for J.D. Strong)
Charles Dobbs, Oklahoma
Bill Abney, Texas
Suzy Valentine, Texas (by proxy for Herman Settemeyer)
J. Randy Young, Arkansas
Wayne Dowd, Arkansas
Arthur Theis, Louisiana
Larry Ardoin, Louisiana

Representatives, Federal Agencies and Guests from Oklahoma

Derek Smithee, Oklahoma Water Resources Board (OWRB), Oklahoma City, OK
Mary Schooley, Oklahoma Water Resources Board, Oklahoma City, OK
Dean Couch, Oklahoma Water Resources Board, Oklahoma City, OK
John Gage, Bureau of Reclamation (Bureau), Oklahoma City, OK
Bob Blazs, U.S. Geological Survey (USGS), Oklahoma City, OK
Kim Winton, U.S. Geological Survey, Oklahoma City, OK
Jason Lewis, U.S. Geological Survey, Oklahoma City, OK
Richard Lane, U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS), Stillwater, OK
Mike Mathis, Chesapeake Energy, Oklahoma City, OK
Louis Vogele, U.S. Army Corps of Engineers (COE), Tulsa, OK
Bill Cauthron, Oklahoma Water Resources Board, Oklahoma City, OK
Tom Buchanan, Lugert-Altus Irrigation District, Altus, OK

Representatives, Federal Agencies and Guests from Arkansas

Edward Swaim, Arkansas Natural Resources Commission, Little Rock, AR
Ken Brazil, Arkansas Natural Resources Commission, Little Rock, AR
Chris Soller, Arkansas Natural Resources Commission, Little Rock, AR

Representatives, Federal Agencies and Guests from Texas

Mike Rickman, North Texas Municipal Water District, Wylie, TX
Robert P. Smith, Tarrant Regional Water District
Tim Raines, U.S. Geological Survey, Austin, TX
Wayne Owen, TX
Rick Lowerre, Caddo Lake Institute, Austin, TX

Representatives, Federal Agencies and Guests from Louisiana

Max Forbes, Department of Transportation and Development, Baton Rouge, LA
Rich Brontoli, Red River Valley Association (RRVA), Shreveport, LA
Zahir "Bo" Bolourchi, Department of Transportation and Development, Baton Rouse, LA
Brandon Brown, Department of Transportation and Development, Baton Rouge, LA
Vendal Fairchild, Louisiana Cattlemen's Association

Others

Rich Feibelman, U.S. Army Corps of Engineers, Vicksburg, MS

Chairman Fassett thanked Oklahoma for hosting the meeting. Prior to continuing with the meeting agenda, Chairman Fassett recognized the presentation of credentials for the appointment of Commissioner Wayne Dowd of Arkansas, and for Ms. Julie Cunningham to represent Commissioner J.D. Strong of Oklahoma. He welcomed Commissioner Larry Ardoin of Louisiana, Department of Transportation, Division of Water Resources. (Texas Commissioner Vickery provided a letter of proxy for Mr. Herman Settemeyer; however, Mr. Settemeyer was unable to attend and Ms. Suzy Valentine attended for Mr. Settemeyer.) (Attachment 1)

III. APPROVAL OF THE AGENDA

Chairman Fassett stated the agenda had been previously circulated according to the rules of the Compact. He asked if there were any comments to the agenda, or a motion to approve the agenda, or further discussion.

Commissioner Young moved to approve the agenda as circulated, and Commissioner Theis seconded.

The motion was unanimously approved.
(Attachment 2)

IV. APPROVAL OF THE MINUTES OF THE APRIL 2010 MEETING

Chairman Fassett stated the draft minutes of the April 2010 meeting in Texarkana, AR, had been previously distributed. He asked if there were any additions or deletions to the minutes.

There being no amendments, Ms. Julie Cunningham moved to approve the minutes, and Commissioner Abney seconded. Chairman Fassett called for the vote, and the motion was unanimously approved.

V. REPORT OF THE CHAIRMAN

Chairman Fassett said that his report would be brief as there had not been any formal meetings since the previous year's annual meeting. The Committees have had constant dialogue on the rules, but he had not participated in any formal or informal gathering of the Commission that required his attention. Mr. Fassett did say that he had been contacted annually by President Obama's Administration seeking input and information about the Compact Commission which is the form of a survey, and he had not received any responses. He said he will take the view, and is the support of the Commission, he is to continue to be the Federal Chairman, he is pleased to do so, and he would serve as long as his company supports his participation. He said he had not been officially reappointed by the new Administration; he has served as Federal Chairman for nine years, since 2002.

Chairman Fassett concluded his report.

VI. REPORT OF THE TREASURER

Chairman Fassett asked for the report of the Treasurer. He noted that Mr. Earl Smith, Arkansas, long-time treasurer for the Compact, has taken a different position within Arkansas State government, and he called upon Commissioner Young for the report.

Commissioner Young stated that members of the Commission have been provided a written report of the Treasurer covering fiscal year July 1, 2009-June 30, 2010. The beginning balance was just under \$12,000; the report shows the receipt of members' assessments and small dividend income; expenses covering printing, audit and meeting expenses totaled about \$1,260. As of June 30, 2010, there was a balance of \$12,853.12, and a certificate that earns a modest rate of return brought a total balance as of 6/30/2010 to \$23,902.92. He added as of March 22, 2011, a balance of \$24,837.00.

Commissioner Young stated that at the proper time he will be recommending Mr. Ed Swaim, Chief of the Water Management Division, to be elected as Commission Treasurer.

There were no questions. Commissioner Young moved to accept the report of the Treasurer, and Commissioner Abney seconded.

The motion carried unanimously.

(Attachment 3)

VII. REPORT OF THE COMMISSIONERS

A. Arkansas – Commissioner Randy Young presented the Report of the Arkansas Commissioners. He distributed the written report, and highlighted the following programs: updated nonpoint source management plans on 5-year increments, updated groundwater network of 1,500 wells statewide, statistics on licensing and registration (there are border issues), National Flood Insurance Program update, Safe Dams Program, and the Southeast Arkansas Boeuf-Tensas Feasibility Study. Commissioner Dowd reported on the Red River Navigation Study and the struggle to reach authorization (also in the written report).

Commissioner Theis asked about the status of the White River Diversion.

Commissioner Young answered it is under construction; there are three contracts underway for three portions of the project. He said there were problems with protests, but mainly with the federal funding; the situation with the federal budget is the biggest problem.

Julie Cunningham asked about the number of FTEs associated with the dam safety program, and Commissioner Young committed to providing that information. (Attachment 4)

B. Louisiana - Commissioner Larry Ardoin presented a written report regarding recent activities in Louisiana. He specifically noted the Louisiana House of Representatives approved a Concurrent Resolution No. 244 in 2010 to request the State of Arkansas, Governor of Arkansas, and Red River Compact Commission to take affirmative action to increase the flow of all streams to the rates agreed to in the RRCC (attached); and the Louisiana Attorney General's office provided advice and direction regarding the management and sale of surface water owned by and controlled by the State of Louisiana (memo included in the report). He provided an update on the Red River Navigation Project; Statewide Flood Control project, Port Construction and development priority program, Dam Safety Program, Levee Safety Program, and Floodplain Management Program.

Ms. Cunningham asked about the breach analysis funding, and Mr. Ardoin responded there was some funding obtained through FEMA. She asked about the number of high hazard dams in Louisiana, and Mr. Bolourchi answered that there are 33 high hazard dams.

Chairman Fassett asked about the sale of water, and Mr. Ardoin responded that the program is just in the beginning phase, but it is through the permit process. Commissioner Theis added there has been an interest in placing turbines in the rivers for development of electricity; Commissioner Ardoin explained there are over one hundred permits by energy companies to place turbines in the riverbed but below navigation. (Attachment 5)

C. Texas – Commissioner Bill Abney presented the Texas Commissioner's report. He distributed a written report and noted items of interest: the agency budget is down \$295 million at the TCEQ, equaling 236 FTEs, and most reductions will be in the Texas Emissions Reduction Plan program where grants are awarded regarding air quality. Hurricane Alex and a tropical storm in South Texas produced record flooding, but Texas is also dealing with extreme drought. Proposed groundwater legislation (SB 332) would provide vested ownership to landowners in groundwater below the surface as real property with stipulations to regulate groundwater in areas where there are no Conservation Districts. Environmental Flows evaluations have begun on the Colorado, Guadalupe, Rio Grande, Brazos and Nueces river basins as a result of SB 3. Commissioner Abney also discussed ESA Litigation and the TCEQ Sunset Review. Commissioner Abney was reappointed by Governor Perry to the Red River Compact until 2017. (Attachment 6)

D. Oklahoma - Ms. Julie Cunningham welcomed the attendees to Oklahoma, and presented the State's report on behalf of the Oklahoma Commissioners. She distributed a written report, and highlighted the following: extreme drought conditions, the Oklahoma Comprehensive Water Plan which is wrapping up (she detailed the planning process), water resource studies, sedimentation surveys; water quality activities including an update of the surface water quality trends analysis and water quality standards revisions. She spoke about the dam safety program reclassification of hazard-potential dams using Google Earth; water-related legislation being postponed until the Comprehensive Water Plan is complete--also because of budget concerns--and, that staff is helping to permit the oil and gas industry activities in the field. Regarding water resource financing, \$869 million has been saved through OWRB financial assistance low interest loans. She concluded her report announcing the annual Governor's Water Conference in October and that the Interstate Stream Compact website is up and running through the OWRB website.

Commissioner Theis asked if there had been problems with reclassification of high hazard dams. Ms. Cunningham responded that 16% of the low hazard dams look like they will require reclassification as there has been growth around metro areas, and it will have to be decided what steps to take to reduce the hazard. Commissioner Theis asked about flood flow easements to restrict development, and Ms. Cunningham said Oklahoma does not have such easements.

Commissioner Ardoin commented that while Louisiana has not experienced flooding events, the state has had to manage water flow from the Upper Mississippi Valley, and Ohio River and Missouri River Valleys, and that the Mississippi River will crest in a couple of weeks, totaling 1.25 million cfs. (Attachment 7)

VIII. REPORT OF COMMITTEES

A. Budget Committee - Commissioner Young presented the Budget Committee Report. He said the Committee met on the previous day, and he referred to the distributed report covering the two-year period of FY2011-FY2012 (July 1, 2011-June 30, 2012). There are no changes between the two budgets, and the Budget Committee recommends the state assessments continue.

Commissioner Young stated if there were no questions, he would move for adoption. Ms. Cunningham seconded. The motion passed unanimously. (Attachment 8)

B. Legal Advisory Committee – Mr. Dean Couch, Oklahoma Water Resources Board and Committee Chairman, stated to the Commission there were no assignments, and therefore no report by the Legal Advisory Committee.

C. Engineering Advisory Committee – Ms. Cunningham presented the Engineering Advisory Committee report. She said the Committee had a productive meeting, discussing a number of issues. Reviewing the minutes from the last year's meeting, the Committee had recommended continuation of development of rules and regulations for Reach IV Subbasin 2, and also to consider Sweetwater Creek North Fork Red River rules and regulations after the compilation of the USGS calculation for the noncontributing drainage area. Ms. Cunningham said it was her understanding that the USGS was not able to make progress on the calculation, so Sweetwater Creek was not part of the Committee discussions.

Ms. Cunningham stated the Committee did discuss Reach IV, Subbasin 2, as in the interim, the States of Louisiana and Arkansas met to discuss the rules, which have been discussed with the Commission for a number of years. The rules are to enforce compact compliance, establishing protocols and rule language that both states agree upon. Ms. Cunningham distributed a copy of the draft rules and regulations. Management of the basin will be implemented in accordance with the following requirements: computations for compact compliance will be coordinated between the states, the Engineering Committee will provide oversight through review of the procedures and periodical assessment and reporting to the Commission, and there is a requirement of state legal enforcement. The Engineering Committee heard from both states that they are ready to proceed with the rules; other members of the Committee had no concerns. With a comment about whether there is public notice of the rules, the Engineering Committee recommended adoption of the proposed rules as presented in the current form.

Commissioner Abney stated the State of Texas did not have a problem with the rules, but did have a problem with the notice that's been given. He said under the state laws, thirty days written notice is required even though the rules do not actually affect Texas. He said he believed Arkansas also had a 45-day notice requirement. Commissioner Abney said while he would like to vote for the rules, he has been advised by legal counsel he cannot vote because that would be in violation of state law. He suggested the Commission set a date for a telephonic meeting, allowing the states that need to make notice; then the rules can be approved.

Chairman Fassett asked Louisiana and Arkansas if there was discussion on the proposed rules. Commissioner Young stated he had attended the Committee meeting, he had heard the discussion and no further discussion was necessary. Chairman Fassett said he

understood there had been much work in the rules for the past several years, and there is a monitoring plan included that provides the details and backs up the rules. Commissioner Young suggested the Chairman consult with the Legal Committee and schedule a timely telephonic meeting so that Texas notice provisions under their law is cured. Chairman Fassett asked the Commission if it is preferred to not wait a full year, the rules are ready that affect the states that have been working on them for a long time, and the Committee is now recommending adoption, but needs to address the procedural matter.

Commissioner Theis asked if the Commission is proposing to adopt the rules subject to meeting the legal requirements for the various states, and final approval by telephonic meeting at some later time. Chairman Fassett asked if that is a motion, and Commissioner Theis said he would so move. Commissioner Young seconded the motion.

Chairman Fassett repeated the motion: The rules be approved on a provisional basis subject to proper legal notice, and final approval at a later scheduled telephonic meeting.

There were no further comments or questions.

Chairman Fassett called for the vote, and motion was approved unanimously.

(Attachment 9)

Continuing with the Engineering Committee report, Ms. Cunningham stated the Commission had been provided a resolution regarding the funding of the streamflow gages. She said it had been approved each year for several years, and she asked that the Committee again approve the resolution this year.

Commissioner Abney moved that the resolution be approved and signed by all Commissioners, sending last to Mr. Settemeyer who will take appropriate action. Commissioner Ardoin seconded the motion. Chairman Fassett said the resolution states the most important gages to the Commission, and will be signed by everyone today, as it has in the past. He said, as in past years, he anticipates he will receive notice by letter it has been received, noting the difficult budget situation.

There being no further comment or questions, Chairman Fassett called for the vote. The motion carried unanimously.

There was no further business of the Engineering Committee. (Attachment 10)

D. Environmental and Natural Resources Committee - Mr. Max Forbes, substituting for Mr. Derek Smithee, stated to the Commission that two members were unable to attend, but he is able to report the good news that on an overall basis, water quality is very acceptable when it reaches Louisiana (Red River and Washita River). One of the items over the years has been the presence of chloride; he said he can report that the twelve chloride measurements made since last year showed a substantial improvement in over past years. He said dissolved oxygen measurements in both streams were very high, with no readings below 5 mg/l, and water quality is in great shape as far as chlorides are concerned. There was no other information to report by the Committee.

Commissioner Theis asked if there was information to report regarding the Chloride Control project, or was that to be presented by the Corps of Engineers. Mr. Forbes responded that the Committee looks at the results at the state line, the Red River at Spring Bank in Arkansas, and the Washita at Sterlington, Louisiana.

There were no other questions.

IX. FEDERAL/STATE ACTIVITY REPORTS

Chairman Fassett invited representatives of the federal agencies to make comments to the Commissioners about the work their agency is performing in the basin.

A. U.S. Bureau of Reclamation

Mr. John Gage, Bureau of Reclamation, Oklahoma, presented a written report of the activities in the member states and highlighted certain activities. Mr. Gage noted there are several handouts and spoke to the Bureau Activity report for Oklahoma-Texas, including the Texas Brackish and Impaired Water Special Study, the High Plains Ogallala Aquifer Special Study in Kansas, the Oklahoma South Central Regional Assessment, and the Oklahoma Comprehensive Water Plan Update. He said the agency has assisted Oklahoma with the Fort Cobb Reservoir appraisal investigation for alternatives for water augmentation, the Arbuckle-Simpson Aquifer water resources management special study, and the High Plains Ogallala Aquifer in Texas. The Bureau, through its Native American Technical Assistance program, is working with the Kickapoo Tribe to define the extent of radionuclides and trace metals in domestic well water, the Chickasaw Nation in determining beneficial use of water from hydraulic fracturing, the Cherokee Nation water infrastructure assessment, the Kickapoo Nation assessment of water supply systems, the Alabama Quassarte Tribal Town needs assessment of water supply and wastewater systems, the Caddo Nation Rush Springs Groundwater/Surface water interaction and Rush Springs Inventory, the Seminole Nation assessment of the Sasakwa Rural Water System Distribution System, and the Pawnee Nation wellhead protection plan.

Mr. Gage said that in construction assistance, the Bureau is working with the Lower Rio Grande Valley Water Conservation and Improvement Program--he said this project has been going on since 2000, and funding is provided as it is available (up to \$55 million). Also, the Equus Beds Groundwater Recharge Project in Wichita, Kansas can be funded to \$30 million.

Mr. Gage described the new "Reclamation Wide Programs" that include the WaterSMART Program, and WaterSMART Grants, Basin Studies Program, Water Reclamation and Reuse Program, Reclamation Rural Water Supply Program, Science and Technology Program, and he noted information on current funding opportunities. He referred the agencies to "www.grants.gov" to search for funding opportunities, and encouraged everyone to apply, as there have not been enough applications.

Questions to Mr. Gage included whether the Chloride Control project has been funded and how much. Mr. Gage said \$24 million in research and development, and that is growing. Commissioner Young asked if states that are not one of the 17 western states could apply; Mr. Gage will research that, he said. (Attachment 11)

B. U.S. Army Corps of Engineers

Mr. Louis Vogele, Chief of the Civil Ordnance Branch, U.S. Army Corps of Engineers Tulsa District, spoke on behalf of Colonel Michael Teague. He distributed a printed report and made a PowerPoint presentation on District activities.

Mr. Vogele said the District has execution and oversight of all the civil works projects of the District, and there are approximately 600 people in the District which covers the Arkansas River and Red River Basins in Oklahoma, southern Kansas, and northern Texas. In addition to the recreation activities on the COE lakes, other activities include navigation, flood control and military construction, regulatory/environmental, war fighting, and Homeland security. The

District covers the upper portion of the Red River Basin. Currently, there are 15 projects managed for flood risk: seven COE projects, eight projects owned by others, one Chloride Control Project; 38 operating projects, and 1.5 million acres of land. He said that the District often uses the analogy of "Stretch Armstrong" with all of the competing interests in reservoir management: flood control, water supply, hydropower, recreation, navigation, environmental issues, water storage, and fish and wildlife. The COE's greatest challenge, but top priority, is maintaining existing infrastructure. He said the Tulsa District typically receives about \$150 million in civil works appropriations, \$100 million from Recovery Act funds with 80% going to operation and maintenance projects, and other repairs. He said the Recovery Act funding helped the District to get caught up on project maintenance.

Mr. Voegle spoke about reservoir sustainability through managing sedimentation and associated projects in the basin; the best use of lake storage; the Red River flood damages prevented; and the President's 2011 Budget for Red River basin projects (\$19,985,000 for O&M only thru April 2011), noting the District does not do well nationally in competing for funds, and carryover will not be allowed for FY 2011. He described the COE's dam and levee safety programs--(update on Pine Creek Dam) noting that Tulsa District projects are mostly low or moderate risk projects; the assistance to the OWRB on the update of the Oklahoma Comprehensive Water Plan; and an update on the Chloride Control Project activities, which he said had not been funded for a number of years. He said the FY2010 carryover of \$1.5 million will be split \$800,000 for Wichita Basin, TX, and \$707,000 for Elm Fork, OK, and after those funds are expended, there will not be any future funding for the project. He said the FY 2012 President's Budget (for Red River Basin projects) only included Operations and Maintenance of \$17,370,000. He invited visitors to the COE website (www.swt.usace.army.mil) for additional information on projects and reservoir levels.

Commissioner Art Theis asked the status of the current chloride control project. Mr. Voegle responded that there is not any construction scheduled for this year as the Headquarters does not support the construction portion of the project, and that they had been specifically instructed not to do property acquisition which is the next portion they are ready to conduct on Area X.

Commissioner Abney asked about a list of the ranking and sources of chlorides in the basin. Mr. Voegel referred him to the "eLibrary" link on the website, but stated that the difference is between surface and subsurface sources and they are currently looking at surface sources, at the request of Senator Inhofe. He said the project involved capturing subsurface chlorides and transporting them.

C. Natural Resource Conservation Service

Mr. Richard Lane, NRCS Planning and Water Resources Staff, Stillwater, Oklahoma, addressed the members and presented program updates on rehabilitation of aging watershed dams. He said there is a rapidly aging infrastructure of watershed dams in Oklahoma that provide flood control and water supply, irrigation, recreation, and fish and wildlife. The NRCS has developed an innovative program based on "doing more with less" approach, but also avoiding the problems that created the NRCS in 1935. He referenced the Flood Control Act of 1936, and the Flood Control Act of 1944, and said the Red River was part of the authorized watersheds -- the Washita County Briar Creek Site No. 1 was the first flood control structure in the country.

Mr. Lane provided a history and status of the program in Oklahoma detailing the time consuming process, development of a stateside Environmental Impact Statement for rehabilitation, as well as the cost of the project site rehabilitation (using a PowerPoint presentation).

He said there is currently a total of 2,100 flood control structures in Oklahoma. In 2008, 250 dams reached their design life, today (2011) there are 587 structures, and it is estimated that in 2015, that over half the dams will have reached their 50-year design life. He said that currently, planning has been completed on 47 sites, 22 are in design, five sites are under construction (de-commissioning one site), construction has been completed for 20 sites, and four more sites are in planning for 2011. He said hazard classification and downstream development are a priority.

Ms. Cunningham asked about the statewide GPS. Mr. Lane said they had worked with several federal agencies, as well as several private environmental agencies.

Mr. Bolourchi asked about the source of funding. Mr. Lane said this past year, they were nationally funded \$18 million, and the previous year, there was \$40 million. Oklahoma's funding was significant because there several projects in the pipeline, for about \$7-8 million. There will not be as much this year. Mr. Bolourchi asked about the cost share amount, and Mr. Lane answered that it is a 65/35 cost share. Mr. Bolourchi asked about NRCS ownership, and Mr. Lane said ownership is with some type of public entity with taxing authority and power of eminent domain. Mr. Bolourchi asked about hazard classification, and the process for reclassification, and Mr. Lane spoke about options for design criteria to resolve the hazard classification. Final decisions are made by the local sponsors, the OWRB makes the final hazard classification, and the NRCS final decision is made by the conservation engineer. Mr. Bolourchi said that in Louisiana, the NRCS has not funded any projects, and Mr. Lane said each state has to submit ranking on projects and applications are submitted to NRCS in Washington, D.C., which makes the funding decisions. He visited about the mechanics of program funding and local involvement for easements, funding, and zoning.

D. U.S. Geological Survey

Mr. Jason Lewis, Oklahoma District of the USGS, addressed the members and provided a written report. Mr. Lewis said right now there are over 20 crews out making flood measurements in Oklahoma and Arkansas. He updated the members on the flow conditions of the Red River for 2011, with the average flow being the same as the average flow of record (50 years). He talked about the dam breach project on Cache Creek, and the gaging for chloride control (Oklahoma). He said the budget has been cut and money that goes to the stream gaging program has been cut, and they will attempt to keep as much of it as possible. (Attachment 12)

X. Big Cypress Creek/Caddo Lake Basin Study - USACOE Ft. Worth District.

There was no representative of the COE Ft. Worth District in attendance for a presentation.

Chairman Fassett invited Mr. Richard Loweree with the Caddo Lake Institute to speak to the Commission. Mr. Loweree addressed the Commission and said the Institute is a non-profit organization that began in 1992 to work on protection of the Caddo Lake system. He said he could provide an overview of the environmental flows project at the lake as well as what he thought the COE was doing on its watershed study. He presented a PowerPoint presentation about activities in the watershed that affect the lake which is one-half in Texas and one-half in Louisiana. Ninety percent of the watershed is in Texas, and they look at pollution and flows and other issues in the watershed that affect the lake, and address these issues jointly with Louisiana. Caddo Lake is located in the Cypress Basin, and downstream from the lake is Twelve Mile Bayou which flows into the Red River near Shreveport. There is a 6,000 acre wetlands system with thousands of Cypress Trees; and it is part of the Ramsar Convention (in

Texas), since 1993, which is part of an international treaty to protect important wetlands areas around the world. There are now 30 sites in the U.S., and 160 counties are members and exchange information, science, and develop policy for protection of wetlands. Partners in the designation are the federal and state government, and local and private entities. A part of the system is Lake of the Pines, built in 1960, with maximum flows released of 3,000 cfs. It was designed for flood control and water supply, and operation was originally 5,000 cfs 24/7, but later changed to increase benefit for downstream habitat, wetlands and economic development of the area.

Mr. Loweree said Texas passed its environmental flows legislation two years after the project began to establish flow needs in all river basins in the state, with the idea that, if there is water available, could some water be set aside to protect habitat and enhance the wetlands and other systems. He said it is a long-term project, and is one of six sustainable river projects with the COE. Partners (scientists and stakeholders) joined together in 2004--facilitated by The Nature Conservancy--and Texas A&M was hired to establish a literature survey to pull together the existing information on the flows of the system. Workshops were held in 2006 to develop flow recommendations; experimental releases were conducted; and a series of workshops were held on water quality data collection and biology collection to validate science work that has been conducted. Texas Commission on Environmental Quality (TCEQ), NE Texas Water District, and the COE, have partnered to develop building blocks for flow regimes for the ecological benefits. The scientists will get together this fall with the stakeholders and discuss what they think is possible.

Mr. Loweree talked about the COE effort to conduct a watershed study as part of the project, and that the COE is currently conducting the reconnaissance work to obtain input from everyone involved to determine what issues are wanted in the study (i.e., replacing weir with a release structure), if changes in the recreational pool at Lake of the Pines are required to provide more water, and what local sponsors needs should be identified. He referred the group to the website, www.caddolake.us.

Mr. Ken Brazil asked how the project was started, and Mr. Loweree said the COE was approached.

Chairman Fassett thanked Mr. Loweree for his presentation who replied that if the COE provided information, it will be put on the website.

XI. Bayou Macon - Louisiana Cattlemen's Association.

Chairman Fassett introduced Mr. Vendal Fairchild, Louisiana Cattlemen's Association, who had asked to speak to the Commission today. He also serves on the Board for the Louisiana NRCS.

Mr. Fairchild addressed the Commissioners and thanked them for the opportunity to bring their concerns. He said Bayou Macon is located in the northeast corner of the state, near Benton, Arkansas, which constructed Lake Chicot. Mr. Fairchild said that most years, when more water is needed, a call to the COE resulted in opening the gates at Ditch Bayou, but not this year. He said he was told the gates were opened to 50 cfs (which is the minimum he understood), but they can be opened to 150 cfs. After many calls to Congressman Anderson's office because crops were burning up, releases of up to 170 cfs were made, but it took 10 days for the water to arrive. He said there are a large number of pumps being put in within Arkansas prohibiting water flow to Louisiana.

Mr. Fairchild said the Red River Compact specifically addressed Bayou Macon and stated that 40 cfs will come to the state line. He said it is his belief that if that 40 cfs was received, there would not be any problems, but what happens is everyone is out of water before anything is addressed. He said he is working on getting a gage at the Arkansas/Louisiana state

boundary that will measure the amount of water coming down. He asked if the pumps were permitted by Arkansas, and stated that no permits are required in Louisiana on the Macon. He said both states need to look at the number of pumps and volume of water pumped. He asked Arkansas to consider sending the amount of water specified in the Compact. He said he did not know who to contact other than working with the COE, he had not been happy with their response, so discovered the Commission and began to make contacts. He said he spoke with Mr. Boulorchi in February and Mr. Forbes, and was advised this would have to be addressed by the Commission, and he asked the Commission to do so. He also asked if the rules the Commission addressed earlier affected this issue.

Chairman Fassett asked if this issue was related to the rules. Mr. Forbes responded that Mr. Fairchild believed Lake Chicot has a substantial amount of water, and he reported that he had spoken with the COE--he received cooperation and was told they are releasing a minimum of 50 cfs. He said he spoke with the managers of the structure and there is no substantiation that the structure rating is correct, and they will be conducting some measurements to see if the measuring device they are using is correct. He said it is his opinion that it may not be. He said downstream is the Eudora gage, and there is substantial difference between it and the Chicot gage,--50 cfs and 18 cfs--and he had asked about any substantial withdrawals between the two gages. The response was no, it is a winter time situation, and there were no large agricultural withdrawals.

Regarding the rules and regulations, Mr. Forbes said that they were accepted this morning, and they will begin monitoring based on the rules and regulations. They will have the information on a weekly basis on what is coming to the gages. He said the COE, USGS and Arkansas will be taking a look at the Eudora gage and balance out the discrepancy between the two devices. Mr. Fairchild will be kept informed.

Mr. Fairchild asked about the operation of the weirs in Bayou Macon and he said that he had inquired about the weirs, but the information about the weirs was unclear. He said the weirs needed to be monitored so that the elevations are not changed. He said he had applied for weirs in Louisiana, but that the DEQ had denied the permit due to water quality degradation. Mr. Forbes said the weirs are a mystery, he has spoken with the COE and the NRCS, and he would be checking into the situation and trying to find out more.

Chairman Fassett expressed his appreciation for the issue being brought to the Commission.

XII. UNFINISHED BUSINESS and TOPICS for DISCUSSION by COMMISSIONERS

Chairman Fassett stated he was not aware of any Unfinished Business items. There was no comment by the Commissioners.

XIII. NEW BUSINESS

A. Annual Report - The Oklahoma Water Resources Board will publish the 2011 report.

B. Assignments to Committees - There were no assignment to the Committees. Commissioner Young stated Mr. Ed Swaim would represent Arkansas on the Budget Committee. He said Ms. Crystal Phelps will serve on the Legal Committee.

Commissioner Theis suggested the Engineering Committee look at the authorized and unauthorized structures in both states, but particularly in Arkansas, and to check with the USGS on correlation of gages and whether there is discrepancy in gage operation. Chairman Fassett said to this point the dialogue had been with Louisiana, and he suggested the framework of the

new rules provided a forum for the two states to discuss the issues. Commissioner Young said it would be an opportunity to review with the COE about the operation plan of the Lake Chico pumping plant and the impact to releases to Ditch Bayou and to Bayou Macon. Chairman Fassett said there are several items there that fall to the Engineering Committee.

There was no other discussion about assignments to any other committees.

C. Election of Officers - Chairman Fassett said the 32nd meeting will be in the State of Texas, and as such, the Committee Chairs and Officers will shift.

Commissioner Young moved that Ed Swaim be elected Commission Treasurer. Commissioner Dowd seconded. The motion carried unanimously.

Commissioner Young moved that Commissioner Abney be elected at Vice Chairman for 2012, Commissioner Theis seconded. The motion carried unanimously.

Commissioner Abney moved that Donna Shell serve as Secretary, Jane Atwood serve as chair of the Legal Committee, Herman Settemeyer serve as chair of both the Environmental and Natural Resources Committee and Engineering Committee, and Ed Swaim serve as chair of the Budget Committee. Commissioner Young seconded. The motion carried unanimously.

D. Appointment to Committees - There were no appointments to any committee.

E. 32nd Annual Meeting

Commissioner Abney stated Texas would host the 2012 Annual Meeting, and it would most likely be held in Austin, Texas. He believed the dates would be April 23-24, and he would confirm the dates and location at a later date.

There was no other New Business for the Commission's consideration.

XIV. OTHER BUSINESS

A. Update or comments from Red River Valley Association - Mr. Rich Brontoli.

Mr. Brontoli distributed a written report, and noted the information is available on the RRVA website. He highlighted the following items: the Congressional stance on no earmarks has left the RRVA without money, which is the way it has been funded. He said they do not agree with the House and Senate position, and that specifically the COE projects and budget are not earmarks; they have gone through an authorization process and have been signed into law by the WRDA bill and the President. Senator Inhofe has introduced SR 23 to define earmarks and exempt any project that has been through an authorization process. The RRVA position paper is included.

Mr. Brontoli noted the second enclosure of the report that illustrates the comparison of FY2010 and FY2011, and that the President's budget is zero, as is the House's, and that the Senate Omnibus bill was not passed. Congress is giving the COE a lump sum, allowing the Administration to determine how the funding will be appropriated and what projects will be funded. He believed the COE, and all federal agencies, will have an issue with personnel and funding. He anticipated tough times for the civil works program.

He noted reduced funding for the J. Bennett Johnston Waterway and discussion of changing the metric used to determine "low-use waterways" affectively lowering the O&M appropriation for dredging. He complimented the Vicksburg District for shifting work and maintaining funding for the waterway for navigation. The RRVA Waterway Position paper on

metrics is enclosed, as is the briefing provided to the Mississippi River Commission on April 12, 2011.

And concluding his report, Mr. Brontoli spoke about the upcoming conferences for 2011-2012.

Commissioner Dowd asked about the status of the Inhofe bill. Mr. Brontoli answered the problem is that it is a resolution, not a bill, and there were not many other Congressmen signed onto it. He said if it is approved, he is unsure of its effect, as the Senate definition is in law. Chairman Fassett asked about the information presented to Congress, and Mr. Brontoli responded he had been gathering information from the industry about what the impact will be i.e., changing the channel by a one foot draft proposed by the COE. He explained, for example, that the new power plant at Alexandria, LA, has indicated it will have to go to rail because the one foot would cost an additional \$3 million bringing fuel by barge. This information is being gathered. (Attachment 13)

There was no other business for the Commission.

XV. PUBLIC COMMENT

There was no public comment.

XVI. ADJOURNMENT

There being no further business, Commissioner Young moved to adjourn the meeting. Chairman Fassett adjourned the 31st Annual Meeting of the Red River Compact Commission at 11:27 a.m., April 26, 2011.

Respectfully submitted,



Mary Lane Schooley
Oklahoma Water Resources Board
2011 Secretary to Commission

4-13-2012

Date



Federal Chairman Gordon Jeff Fassett

4/17/12

Date



STATE OF OKLAHOMA
WATER RESOURCES BOARD
www.owrb.ok.gov

April 25, 2011

Mr. Gordon W. "Jeff" Fassett
United States Commissioner and Chairman
Red River Compact commission
Fassett Consulting LLC
1720 Carey Avenue, Suite 612
Cheyenne, Wyoming 82001

Dear Chairman Fassett:

Please accept my sincere apologies for being unable to participate in the 2011 Red River Compact Commission meeting on April 26, 2011, due to the death of my father. However, in my absence, I designate my proxy vote, as Commissioner of the Compact Commission, for any considerations of the Commission to Ms. Julie Cunningham, Planning and Management Division Chief, Oklahoma Water Resources Board, and advisor to the Commission.

I would like to welcome you and the distinguished Commissioners, staff and others to Oklahoma, and extend my best wishes for a successful meeting.

Sincerely,

J.D. Strong, Executive Director
Oklahoma Water Resources Board
Oklahoma Commissioner, Red River Compact Commission



STATE OF ARKANSAS
MIKE BEEBE
GOVERNOR

OFFICIAL APPOINTMENT

Date: October 4, 2010

TO THE SECRETARY OF STATE:

Under the provisions of Arkansas Code Annotated § 15-23-503

I have, on this date, appointed The Honorable Wayne Dowd,

whose address is 12 Northern Hills Place, Texarkana, AR 71854, Miller County,

and whose telephone number is w: 870-773-6025, h: 870-772-0525,

as a member of the Red River Compact Commission

for the term which expires March 31, 2017.

Replaces: John Upton



Mike Beebe, Governor

Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 31, 2011

Mr. Gordon W. "Jeff" Fassett
Chairman and Federal Representative
Red River Compact Commission
Fassett Consulting LLC
1720 Carey Avenue, Suite 612
Cheyenne, Wyoming 82001

Dear Chairman Fassett:

I regret that I am unable to participate in the 2011 annual meeting of the Red River Compact Commission on April 26, 2011, due to commitments I must honor here at the agency and at the legislature. In my absence, I grant my support and proxy vote, as Commissioner of the Compact Commission, for any considerations of the Commission to Herman Settemeyer, Technical Advisor to the Commission and representative from Texas.

My best wishes to the Commission for a successful meeting. I look forward to working with you on future Commission issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "Mark R. Vickery".

Mark R. Vickery, P.G., Executive Director
Texas Commission on Environmental Quality
Commissioner, Red River Compact Commission

cc: Herman Settemeyer, TCEQ, Technical Advisor to the Red River Compact Commission
William A. Abney, Commissioner, Red River Compact Commission

Report of the Treasurer
 July 1, 2009 – June 30, 2010
 Red River Compact Commission
 April 26, 2011

Bank Balance as of 7/1/2009 **\$11,901.02**

RECEIPTS

Member Assessments	\$2,200.00
Dividend Income	<u>15.85</u>
TOTAL	\$2,215.85

EXPENSES

Printing	\$ 482.55
Audit	275.00
Meeting Expense	<u>506.20</u>
TOTAL	\$ 1,263.75

Bank Balance as of 6/30/2010 **\$12,853.12**

Certificate of Deposit Balance as of 7/1/2009 \$10,885.10

RECEIPTS

Dividend Income	\$ 164.70
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Certificate of Deposit Balance as of 6/30/2010 **\$11,049.80**

TOTAL BALANCE as of 6/30/2010 **\$23,902.92**

As of March 22, 2011

Bank Balance		\$13,723.32
Certificate Balance		<u>\$11,113.68</u>
Total		\$24,837.00

Register Report

7/1/2009 through 6/30/2010

3/8/2011

Page 1

Date	Account	Num	Description	Memo	Category	Clr	Amount
BALANCE 6/30/2009							10,821.13
8/27/2009	CD Certificate... DEP		Metropolitan ...		Certificate Of ...	R	63.97
10/29/2009	CD Certificate... DEP		Metropolitan ...		Certificate Of ...	R	41.51
1/30/2010	CD Certificate... DEP		Metropolitan ...		Certificate Of ...	R	50.39
3/26/2010	CD Certificate... DEP		Metropolitan ...		Certificate Of ...	R	31.57
6/30/2010	CD Certificate... DEP		Metropolitan ...		Certificate Of ...	R	41.23
7/1/2009 - 6/30/2010							228.67
BALANCE 6/30/2010							11,049.80
TOTAL INFLOWS							228.67
TOTAL OUTFLOWS							0.00
NET TOTAL							228.67

Register Report
7/1/2009 through 6/30/2010

3/8/2011

Page 1

Date	Account	Num	Description	Memo	Category	Clr	Amount
BALANCE 6/30/2009							11,901.02
7/9/2009	Red River CC	DEP	Regions Bank	July 2009	Div Income	R	1.59
7/9/2009	Red River CC	1013	Kinko's	2008 Report	Printing-Report	R	-482.55
8/20/2009	Red River CC	DEP	Regions Bank	August 2009	Div Income	R	1.36
8/31/2009	Red River CC	1014	Johnson, Bun...	Audit 2009	Annual Audit	R	-275.00
9/21/2009	Red River CC	DEP	Regions Bank	September 2...	Div Income	R	1.48
10/21/2009	Red River CC	DEP	Regions Bank	October 2009	Div Income	R	1.37
11/19/2009	Red River CC	DEP	Regions Bank	November 2...	Div Income	R	1.33
12/21/2009	Red River CC	DEP	Regions Bank	December 2...	Div Income	R	1.47
1/15/2010	Red River CC	DEP	Louisiana	2010	Assessment	R	550.00
1/20/2010	Red River CC	DEP	Regions Bank	January 2010	Div Income	R	1.38
1/27/2010	Red River CC	DEP	Oklahoma	2010	Assessment	R	550.00
2/11/2010	Red River CC	DEP	Texas	2010	Assessment	R	550.00
2/17/2010	Red River CC	DEP	Arkansas	2010	Assessment	R	550.00
2/18/2010	Red River CC	DEP	Regions Bank	February 2010	Div Income	R	1.44
3/22/2010	Red River CC	DEP	Regions Bank	March 2010	Div Income	R	1.17
4/21/2010	Red River CC	DEP	Regions Bank	April 2010	Div Income	R	1.10
4/29/2010	Red River CC	1015	Clairion Hotel	Annual Mtg. ...	Mtg. Expenses	R	-506.20
5/19/2010	Red River CC	DEP	Regions Bank	May 2010	Div Income	R	1.00
6/21/2010	Red River CC	DEP	Regions Bank	June 2010	Div Income	R	1.16
7/1/2009 - 6/30/2010							952.10

BALANCE 6/30/2010 **12,853.12**

TOTAL INFLOWS	2,215.85
TOTAL OUTFLOWS	-1,263.75
NET TOTAL	952.10

Register Report
6/30/2010 through 3/8/2011

3/8/2011

Page 1

Date	Account	Num	Description	Memo	Category	Clr	Amount
BALANCE 6/29/2010							12,853.12
7/21/2010	Red River CC	DEP	Regions Bank	July 2010	Div Income	R	1.06
8/6/2010	Red River CC	DEP	Regions Bank	August 2010	Div Income	R	1.02
8/6/2010	Red River CC	1016	FEDEX	2009 Report	Printing-Report	R	-943.74
9/2/2010	Red River CC	1017	Fedex To Mail...		Postage	R	-84.24
9/2/2010	Red River CC	DEP	Regions Bank	September 2...	Div Income	R	1.04
9/14/2010	Red River CC	1018	VOIDED	VOIDED	Annual Audit	R	0.00
10/20/2010	Red River CC	DEP	Regions Bank	October 2010	Div Income	R	0.94
11/15/2010	Red River CC	FEE	Stop Pay-Spe...	Lost check t...	Misc. (Stop P...	R	-36.00
11/17/2010	Red River CC	1019	Johnson, Bun...	Audit 2010	Annual Audit	R	-275.00
11/18/2010	Red River CC	DEP	Regions Bank	November 2...	Div Income	R	0.94
12/22/2010	Red River CC	DEP	Regions Bank	December 2...	Div Income	R	1.07
1/18/2011	Red River CC	DEP	Arkansas	2011	Assessment	R	550.00
1/20/2011	Red River CC	DEP	Regions Bank	January 2011	Div Income	R	0.92
1/31/2011	Red River CC	DEP	Louisiana	2011	Assessment	R	550.00
2/7/2011	Red River CC	DEP	Oklahoma	2011	Assessment	R	550.00
2/17/2011	Red River CC	DEP	Regions Bank	February 2011	Div Income	R	0.97
2/28/2011	Red River CC	DEP	Texas	2011	Assessment	R	550.00
6/30/2010 - 3/8/2011							868.98

BALANCE 3/8/2011 **13,722.10**

TOTAL INFLOWS **2,207.96**

TOTAL OUTFLOWS **-1,338.98**

NET TOTAL **868.98**

**RED RIVER COMPACT COMMISSION
STATE OF ARKANSAS
COMMISSIONER'S REPORT
2011**

NONPOINT SOURCE POLLUTION PROGRAM

Priority Watershed Program

The Arkansas Natural Resources Commission NPS Management Plan is in the process of being updated. The NPS Task Force has met annually the past four years, incrementally updating portions of the plan. The Plan is holistically updated and reprinted every five years. Ten priority watersheds have been identified utilizing a Risk Assessment matrix. Watersheds of interest include: Bayou Bartholomew, Lower Ouachita – Smackover and Upper Saline.

GROUND-WATER PROGRAM SUMMARY

The Ground-Water Section of the ANRC is responsible for statewide ground-water resources planning, management, and conservation activities, water-level measurements, analysis and reporting of data, and administration of some portions of the Arkansas Water Well Construction Commission (AWWCC) program.

Each year ANRC staff works closely with the US Geological Survey (USGS) and the Natural Resource Conservation Service to collect water-level data from a network of approximately 1500 wells and springs statewide. This data is analyzed and reported in the annual Ground-Water Protection and Management Report; a report generated as part of the Arkansas Water Plan activities since the early 1990's. This section also provides data, presentations, and hydrogeologic evaluation to other agencies and the public as requested.

The Ground-Water Section is also responsible for the licensing and registration of about 175 water well contractors, and over 280 drillers, with 270 pump installers. Two water well construction inspectors are utilized to perform water well inspections in response to complaints or routine area visits. All wells constructed in the state are required to meet standards as defined in the rules and regulations of the Arkansas Water Well Construction Act. The section also works with the USGS to update and maintain water well construction reports as part of the Arkansas Water Inventory System. This inventory provides data on well construction, locations and depths, driller's logs, water use categories, yield, and pump information.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

The Arkansas Natural Resources Commission (ANRC) manages the NFIP for the State of Arkansas. Currently the ANRC floodplain management database has 574 communities. Of these 574 communities 75 are counties and the other 499 are cities. 64 of the 75 counties participate in the NFIP and 339 of the 499 cities participate in the NFIP. 160 cities of the 499 do not participate in the NFIP.

There are 672 Floodplain Administrators in the State of Arkansas. ANRC provided 10 free NFIP workshops in various locations of Arkansas, in the year 2010, that gave Floodplain Administrators the opportunity to complete the necessary 8 hours of training to become accredited floodplain administrators. There are 61 floodplain administrators in Arkansas that have passed the test to earn the title of certified floodplain manager (CFM).

SAFE DAMS PROGRAM

The Arkansas Natural Resources Commission manages the Safe Dams Program for the State of Arkansas. ANRC currently has 417 active permit dams that it inspects on a routine basis. Of the 417 active permit dams: 111 are high hazard; 93 are significant hazard; and 213 are low hazard. ANRC staff inspected 95 dams in the year that ended on September 30, 2010. Of the 95 inspected dams: 27 were high hazard; 23 were significant hazard; and 45 were low hazard.

There are a total of 1296 dams in the ANRC dam database. 61 of these dams are regulated by the Federal government. The other 1235 are regulated by ANRC. In the counties lying in the Red River Compact area, ANRC permits 393 dams.

RED RIVER NAVIGATION STUDY

Four alternatives are being evaluated by the US Army Corps of Engineers, Vicksburg District. Plan A contains two lock and dams above Shreveport to provide a 9 ft. channel to the vicinity of Garland at U.S. Highway 82. Plan B is a three lock and dam system. Plan D anticipates a two lock and dam system to provide navigation to Fulton, Arkansas. Plan E is a three lock and dam plan to Index, Arkansas. Because the transportation benefits for extending navigation from Fulton to Index are minimal, the Corps is not evaluating Plan E as intensely as the other alternatives. Feasibility studies are scheduled to be completed in 2012. Current "freight rates" must be reevaluated to update benefit-cost ratio. The Red River Commission is working to survey potential shippers to show a positive benefit-cost ratio for the alternatives.

SOUTHEAST ARKANSAS BOEUF-TENSAS FEASIBILITY STUDY

The Vicksburg District in conjunction with the Boeuf-Tensas Regional Water Distribution District is studying the potential to introduce water from the Arkansas River through an 8-foot by 8-foot structure into Bayou Bartholomew and Deep Bayou. Water would gravity flow through the system and not be pumped. The Corps study includes looking at 4 project designs. Concerns being addressed during the study include preventing introduction of Asian carp and zebra mussels to the system, TMDL and other water quality issues, and the design of a water use monitoring system. The project's primary objectives are ecosystem restoration and flood risk reduction with a secondary objective of agricultural water supply.

RED RIVER COMPACT COMMISSION

**State of Louisiana Commissioners' Report
Oklahoma Water Resources Board
3800 N. Classen Boulevard
Oklahoma City, Oklahoma**

April 25, 2011

*** * * * ***

LOUISIANA HOUSE CONCURRENT RESOLUTION NO. 244 (Regular Session, 2010)

To urge and request the State of Arkansas, the Governor of Arkansas, and the Red River Compact Commission to take affirmative action to increase the flow of all streams to the rates agreed to in the Red River Compact (see attachment).

LOUISIANA OFFICE OF THE ATTORNEY GENERAL AND SECRETARY OF THE DEPARTMENT OF NATURAL RESOURCES (Memorandum dated February 5, 2010)

Legal advice and direction regarding the management and sale of surface water owned or controlled by the State of Louisiana and/or its agencies, political subdivisions, etc.

J. BENNETT JOHNSTON WATERWAY, RED RIVER NAVIGATION PROJECT

According to the Corps of Engineers, Vicksburg District, the overall project is approximately 93% complete. Much of the remaining work continues to include refining the revetment and dike system to provide a safe and reliable navigation alignment and to reduce maintenance cost, development of the remaining recreation features as per the master plans and cost-sharing agreements and completion of the required mitigation portions of the overall project.

Federal Budget issues are a major concern, especially in the area of maintenance dredging. Channel reliability is a cornerstone of growth and economic development progress, without the resources to maintain the channel our growth momentum of the past fifteen years will be lost.

The Red River Waterway Commission, who is the local project sponsor, continues to move forward with recreation and economic development on the Louisiana portion of the Red River. Other on-going projects are water issues related to the Haynesville Shale as well as the continued acquisition of mitigation lands and wildlife management development, revetments, and realignments.

Funding assistance with port development continues to be a major priority of the Red River Waterway Commission. The Commission is currently involved with the port commissions of the District allowing them to bring construction projects to fruition faster to help the local economy with job creation and other benefits.

According to official 2009 waterborne commerce statistics, movement of about 10 million tons was reported, an increase of over 34% over 2008. The five operating public port facilities (Port of Shreveport-Bossier, Red River Parish Port - near Coushatta, Port of Natchitoches, Alexandria Regional Port and Avoyelles Parish Port) have over \$220 million of infrastructure in place to handle this traffic. In addition to the public ports, private investment has occurred along the river to exploit the economic potential of the navigation pools.

Flooding problems in the Red Chute Bayou area north of Bossier City continue to be addressed and a plan of improvement has been authorized to minimize flood damages in this region. This study will actually affect all of Bossier Parish to include Bossier City and Barksdale AFB. They are investigating putting control gates in Bodcau Dam to hold back flood waters and release it through the system at a slower rate.

There is an ongoing study to investigate using Red River water for Caddo and Bossier Parishes, especially for municipal use. Shreveport, Bossier Parish and Caddo Parish are the local sponsors for the Corps study. The Feasibility study will investigate where water plants need to be located and what capacity they need to be.

The feasibility of extending the Red River Navigation Project into southwest Arkansas continues to be studied with the Arkansas Red River Commission being a study sponsor. The Corps has to make a re-evaluation of the freight rates, for the benefits. We hope to have a final study by the end of 2011.

The Red River Waterway Commission has completed a Study for the deepening of the Red River to a 12 feet channel. This study shows a Benefit/Cost ratio of 4.7 to 1 that, hopefully, will justify going straight to a Feasibility Study, once the Congress allows new starts.

Red River below Denison Dam (levees): We have been receiving about \$2 million each year to gravel surface Louisiana levees and rehabilitation of Arkansas levees. We have completed the Natchitoches Levees and work has begun on the RRAB Levee System as well as levee sections in Arkansas.

Red River Emergency Bank Stabilization: The Bois d'Arc Revetment will be completed and they will move next to the Dickson Revetment, both in Arkansas.

Chloride Control Project: The last WRDA Bill clarified that 100% of construction AND operations & maintenance is at full federal expense. After a long delay, the Corps of Engineers can now continue with construction of the next features of this project in Texas (on the Wichita River), while the re-evaluation study continues on the Oklahoma sites. However, Budget cuts have eliminated funding for the JBJ Waterway, Red River below Denison Dam, Red River Emergency and Chloride Control for fiscal year 2011 and 2012.

ACADIANA GULF OF MEXICO ACCESS CHANNEL PROJECT

DOTD is the sponsor of the Acadiana Gulf of Mexico Access Channel, a Corps feasibility study to provide deepwater access to the Port of Iberia, by virtue of Act 728 of the 2004 Regular Session of the Legislature. DOTD entered into a cooperative Endeavor Agreement with the Port

of Iberia. The project was authorized in WRDA 2007. The project has been suspended by the Corps because the economics changed for the worse.

MISSISSIPPI RIVER DEEPENING PROJECT

DOTD is the assuring agency for the deepening of the Mississippi River to 55 feet from Baton Rouge to the Gulf of Mexico. The mitigation of salt water intrusion affecting the water supply of Plaquemines Parish is complete. The Chief of Engineers has recommended that the 25% non-Federal cost share for construction be extended for projects from 45 feet to 55 feet and that the cost of maintenance remains at 100% for the Federal share. This project is presently on hold until cost-sharing language is changed in a future WRDA bill. We have submitted the language change to our congressional delegation for inclusion in the next WRDA bill.

STATEWIDE FLOOD CONTROL PROGRAM

Approximately \$284 million of state funds have been appropriated through the Statewide Flood Control Program since its creation in 1984, funding 184 projects designed to bring about flood damage reduction. So far, 218 contracts have been completed. Approximately \$22 in flood damage reduction is being accomplished for every state dollar invested. The funding level for Fiscal Year 2011-12 is anticipated to be \$9.9 million.

PORT CONSTRUCTION AND DEVELOPMENT PRIORITY PROGRAM

Approximately \$532 million of state funds have been committed through the Port Construction and Development Priority Program since it was created in 1989, funding 185 projects. So far 320 separate contracts have been completed. Most projects are constructed with more than one construction contract. When all of the funded projects are completed, they will produce over \$3.6 billion in benefits and will have created or retained 11,445 permanent jobs. This represents a return of \$7.16 in port-related benefits for every state dollar invested. The funding level for FY 2011-12 is anticipated to be \$19.7 million.

DAM SAFETY PROGRAM

Louisiana's Dam Safety Program is approved by the Federal Emergency Management Agency (FEMA) under the Community Rating System (CRS), and has been awarded \$84,639 grant for FY 2010-11. This year's grant will be used to supplement the existing statewide dam safety inspection contract, to reimburse travel expenses related to dam safety workshops and conferences, as well as supplies and small tools. There are presently 559 regulated dams in the dam inventory data base. In FY 2009-10, a total of 182 dams were inspected. Subsequently, inspection reports were prepared, uploaded to a server and hard-copies submitted to owners for their information and use in remedial activities. So far this fiscal year, 141 dams have been inspected.

DOTD's Intranet website allows direct uploading of dam inspection reports, photos, and piezometer readings from various field offices, as well as from the DOTD Headquarters.

LEEVE SAFETY PROGRAM

DOTD's Levee Safety Program was established to verify that all non-coastal levee districts are performing and documenting inspection and maintenance activities in north Louisiana. There are eight (8) non-coastal levee districts under DOTD jurisdiction, six (6) of which are located along the Red River and its tributaries with the other two (2) located along the Mississippi and Ouachita Rivers.

Last year we retained HNTB consultants, specializing in levee inspections and software development, to build an automated, data driven levee inspection/data management system, for use by the levee districts and DOTD. The system which has already been developed is a more advanced tool than the current levee inspection tool (LIS) used by the US Army Corps of Engineers. The DOTD system will assist levee districts not only in their levee inspection and reporting responsibilities, as identified in 33CFR 208.10, but will also provide inventory/asset management as well as maintenance management capabilities. The system is presently being field tested and "de-bugged" in the field. It is also being used to demonstrate to and train DOTD as well as levee district personnel.

RESERVOIR DEVELOPMENT PROGRAM

The Capital Outlay Program for FY 2010-11 reauthorized funding for the completion of the ongoing construction of motel facilities at the Poverty Point Reservoir as well as the planning and/or design of the following: Bayou DeChene, Allen Parish, Ouachita Water Supply, Castor Creek-Little River, and Washington Parish Reservoirs. The program is also providing funds for the design of the Bundicks Lake Level Control Spillway Structure, as well as construction of the D'Arbonne Lake Tainter-Gate Spillway project.

The Capital Outlay Program for FY 2010-11 is providing \$1 million non-cash line of credit for development of a reservoir master plan, including preparation and promulgation of applicable rules and regulations. The first phase, Reservoir Development Priority Program has already been completed.

REHABILITATION AND REPAIR OF STATE-MAINTAINED RESERVOIRS & DAMS

In FY 2009-10, DOTD retained Fenstermaker Consultants, specializing in acoustic imaging and underwater inspections, to identify and evaluate the extent of critical repair needs of 15 State-maintained dams. The Capital Outlay Program had provided \$2 million of funds for Rehabilitation and Repair of the all state-maintained dams and reservoirs.

Acoustic surveying, underwater inspections, structural inspection and evaluation, have been completed for Bundicks Lake dam, Lower Anacoco, Vernon Lake, Grand Bayou Reservoir, Ivan Lake, Iatt Lake, Bayou Cocodrie, Chicot Lake, Lake Claiborne, Black Bayou, Smithport Lake, Kepler Creek, and Turkey Creek dams. Minor underwater maintenance and gate repairs have been performed at Bundicks Creek, Lower Anacoco, Vernon Lake, Ivan Lake, Iatt Lake, and

Bayou Cocodrie dams. Presently, a contract is being prepared to complete the inspection of the remaining 6 dams - Black Lake Bayou, Caney Creek, Chivery, Lake Bistineau, Nantachie Lake, and Saline Lake dams. Identified underwater and spillway repairs for these dams and those at Chicot Lake, Lake Claiborne, Black Bayou, Smithport Lake, Kepler Creek, and Turkey Creek dams will be contracted out by our field offices.

BREACH ANALYSES & EAPs FOR STATE-MAINTAINED RESERVOIRS

Breach analyses, Emergency Action Plans (EAPs) and Table-top exercises have been completed for all 20 state-maintained dams and almost all high hazard dams. We are presently contacting owners of significant hazard dams to prepare and submit EAP for their dams.

FEDERAL PROGRAMS

DOTD is currently the Non-Federal Sponsor with the US Army Corps of Engineers (USACE) in the planning, design, and construction of three flood control projects. These projects will provide protection from various storm events, including hurricane and tidal flooding, and flooding from high waters. The estimated total costs of these projects are currently projected to be over \$3 billion over the next 20 years. These projects are Alexandria to the Gulf of Mexico, Mississippi River Levees and Berms, and Comite River Diversion Canal. As of the end of the 2009 FY, the Alexandria to the Gulf of Mexico Project has been halted at the request of the Local Sponsor.

On the Mississippi River Levees and Berms project, DOTD is assisting US Army Corps of Engineers Vicksburg Division through acquisition of Right of Ways (ROW) along the Mississippi River. La Hwy 131 and La Hwy 603 are two road relocations that will accommodate the alignment of the levee. The La 131 Road Relocation Project was completed in November 2009. The La Hwy 603 Project is under an Environmental Assessment review by the Natural Resource Conservation Service in preparation for the project to be let for construction. Currently, DOTD is coordinating with the 5th Levee District for ROW acquisition. This is an ongoing project that raises the levees from the northern part of Louisiana to the end of the Mississippi River. Since 1994, Louisiana has received over \$126 million in federal funds for the Mississippi River Levee Raising Project.

The Comite River Diversion Canal was designed for the reduction of flood water on the Comite River and within the Amite River Basin. The construction of the Lily Bayou Outfall Structure is virtually complete. DOTD is reviewing the plans and specifications of other structures in the project. Design contracts are being updated to the new design standards and finalized for Highways 19 and 61. Contracts for Channel Phase 1 and Brooks Lake added to list to be finalized. Amite River Basin Commission (ARBC) hired Taylor Engineering to review the amount of degradation along the bottom of the Comite River. With the passing of Act 734 during the 2010 Session of the Louisiana Legislature, the USACE slowed in acquiring mitigation property. Along piece of property acquired for project right-of-way, USACE was able to use 72 acres for mitigation. As of March 2011, 39 acres had trees planted.

DOTD terminated the Memorandum of Understanding with the USACE in December 2010. Subsequently, DOTD took back the role of acquiring all lands, easements, right-of-way,

relocations, and disposals. Working with ARBC, DOTD has started the process of land acquisition for both project right-of-way and mitigation land.

All designs except the Lily Bayou Structure were suspended and eventually terminated in late 2004 since no USACE funds were available. Contracts for the highway bridges were restarted in early 2009. Highways 67 and 964 were first, because they were the closest to completion. Due to a change in the design standards in 2007, DOTD Bridge Section commented that the designs would not be accepted. USACE and DOTD have worked on updating the designs. Final revisions are expected to be re-submitted for review in the summer of 2011.

USACE has established a timeline for all the remaining work. Designs on all the highways are being reworked in accordance with the 2007 design standard changes.

USACE began discussions with the railroads in 2009 to negotiate terms for the Operation and Maintenance of the railroad bridges that will be placed near Highway 67 and 964.

The Office of Coastal Protection and Restoration (OCPR) remains in charge of all Surplus Fund Hurricane Protection projects. These projects are in the coastal zone and were determined to be under the purview of OCPR. The Coastal Zone includes all or part of nineteen parishes. From the west at the Texas/Louisiana state line, the boundary proceeds easterly through the parishes of Calcasieu and Cameron, then south through Vermilion, St. Mary, St. Martin, Assumption, Terrebonne and Lafourche. The boundary goes north to include the parishes of St. Charles, St. John the Baptist, St. James and then goes east again through Livingston, Tangipahoa and St. Tammany parishes to the Mississippi state line. Seven parishes lie completely within the coastal zone area. Those parishes are Orleans, Jefferson, St. Bernard, Plaquemines, St. John the Baptist, St. James, and St. Charles.

FLOODPLAIN MANAGEMENT PROGRAM

The Floodplain Management Section of DOTD operates under a 75% / 25% Federal-State Cooperative Funding Agreement with FEMA to coordinate the National Flood Insurance Program (NFIP) regulations for the 307 participating communities which includes all 64 parishes. The Section also provides assistance to communities interested in participating in the Community Rating System (CRS), a program which reduces flood insurance premiums through more stringent development regulations than the minimum requirements of the National Flood Insurance Program (NFIP). Almost 80% of the flood insurance policies in Louisiana are within the 39 communities participating in the CRS program resulting in an annual savings of over \$31 million dollars in flood insurance premiums statewide.

The Floodplain Management Section traveled over 20,000 miles visiting approximately 50 Louisiana NFIP communities, offering a wide variety of post-disaster assistance, performing Community Assistance Visits (CAVs), providing CRS assistance, General Technical Assistance, NFIP training and delivering and providing guidance regarding the new Preliminary Digitized Flood Insurance Rate Maps (DFIRMs). FEMA estimates Katrina/Rita post-disaster NFIP assistance will be ongoing for the next 5 – 10 years, especially with the inclusion of 2008 Gustav and Ike Hurricanes.

ZB/bo



STATE OF LOUISIANA

ALFRED W. SPEER
CLERK, HOUSE OF REPRESENTATIVES

POST OFFICE BOX 44281
BATON ROUGE, LOUISIANA 70804-4281
(225) 342-7259

June 18, 2010

RECEIVED

JUN 28 2010

WATER RESOURCES PROGRAM
LA DEPT. OF TRANS. & DEV.

Mr. Zahir "Bo" Bolourchi
Public Works & Water Resources Division
Department of Transportation and Development
P.O. Box 94245, Capitol Station
Baton Rouge, LA 70804-9245

Dear Mr. Bolourchi:

Pursuant to the direction of the 2010 Regular Session of the Louisiana Legislature contained in House Concurrent Resolution No. 244, please find enclosed a copy of the resolution.

Sincerely,

A handwritten signature in black ink, appearing to read "Alfred W. Speer", with a long horizontal flourish extending to the right.

Alfred W. Speer

AWS/rj

Enclosure

ENROLLED

Regular Session, 2010

HOUSE CONCURRENT RESOLUTION NO. 244

BY REPRESENTATIVE LITTLE

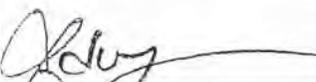
A CONCURRENT RESOLUTION

To urge and request the state of Arkansas, the governor of Arkansas, and the Red River Compact Commission to take affirmative action to increase the flow of all streams to the rates agreed to in the Red River Compact.

=====*ORIGINATED*=====

===== IN THE =====

House of Representatives


Clerk of the House of Representatives

Regular Session, 2010

HOUSE CONCURRENT RESOLUTION NO. 244

BY REPRESENTATIVE LITTLE

A CONCURRENT RESOLUTION

To urge and request the state of Arkansas, the governor of Arkansas, and the Red River Compact Commission to take affirmative action to increase the flow of all streams to the rates agreed to in the Red River Compact.

WHEREAS, negotiations on the Red River Compact were authorized by congress in 1955; and

WHEREAS, Act No. 71 of the 1978 Regular Session of the Legislature of Louisiana authorized the state of Louisiana to enter the Compact; and

WHEREAS, in 1978, 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; and

WHEREAS, the Red River Compact Commission consists of nine members, two members from each of the four states and a federal representative appointed by the president of the United States and serves as commission chairman; and

WHEREAS, various state and federal agencies support the compact commissioners in administering the agreement; and

WHEREAS, while provisions of the Red River Compact specifically state how much water each signatory state is allowed to develop or store on an interstate stream, the compact generally provides a means of working out problems between member states in an orderly manner, thus preventing the likelihood of litigation in most cases; and

WHEREAS, Section 7.03(b) of the Compact sets specific flow rates for certain streams flowing from Arkansas to Louisiana; and

WHEREAS, that provision of the Compact provides that the state of Arkansas does not guarantee a minimum flow for streams in the area the Compact describes as Reach IV,

but requires the state of Arkansas to take affirmative steps to regulate the diversions or flow in such a manner as to permit an equitable apportionment of the runoff of such streams to the state of Louisiana.

THEREFORE, BE IT RESOLVED that the Legislature of Louisiana does hereby urge and request the state of Arkansas, the governor of Arkansas, and the Red River Compact Commission to take affirmative action to increase the flow of all streams to the rates agreed to in the Red River Compact.

BE IT FURTHER RESOLVED that a copy of this Resolution be transmitted to the governor of the state of Arkansas and the members of the Red River Compact Commission.



SPEAKER OF THE HOUSE OF REPRESENTATIVES



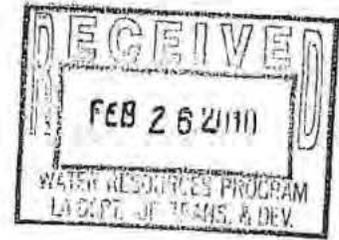
PRESIDENT OF THE SENATE



JAMES D. "BUDDY" CALDWELL
ATTORNEY GENERAL

State of Louisiana
DEPARTMENT OF JUSTICE
P.O. BOX 94005
BATON ROUGE
70804-9005

February 23, 2010



Red River Compact commission
c/o Bo Bolourchi
Dept. of Transportation and Development
P. O. Box 94245
Baton Rouge, LA 70804-9245

Dear Mr. Bolourchi:

The Office of the Attorney General and the Department of Natural Resources have cooperated in an effort to provide legal advice and direction regarding the management and sale of surface water owned or controlled by the State of Louisiana and/or its agencies, political subdivisions, etc.

In connection with such control or ownership, please find attached a Memorandum regarding the Management and Sale of State Surface Waters, which provides legal guidance to you if your entity is approached by a third party desiring to access, use, or buy the surface water within your jurisdiction.

Please review the Memorandum, and if you have any questions or concerns, please call Mr. Ryan Seidemann, Section Chief, Lands & Natural Resources Section, Office of the Attorney General, (225) 326-6085 or via e-mail at seidemannr@ag.state.la.us, or Blake Canfield, Office of Conservation, Dept. of Natural Resources, (225) 342-5540 or via e-mail at blake.canfield@la.gov.

Yours very truly,

JAMES D. "BUDDY" CALDWELL
ATTORNEY GENERAL

BY: 
RICHARD L. MCGIMSEY
Director, Civil Division

JDC:RLM:jv
Attachment

MEMORANDUM

TO: All State Surface Water Managers

FROM: State of Louisiana, Office of the Attorney General and
Secretary, Department of Natural Resources

RE: Management and Sale of State Surface Waters

DATE: February 5, 2010

It has come to the attention of the Office of the Attorney General and the Department of Natural Resources that running water and water in naturally navigable water bodies owned by the State is being removed for private use. In some cases the removal of State surface water is being accomplished pursuant to negotiated agreements between private entities and the public entities statutorily charged with the management of the water body. In other cases the removal of State surface water is being accomplished without the knowledge or consent of the appropriate public entity.

Under Louisiana Law persons, with the possible exception of riparian landowners, are not authorized to remove State owned surface water without obtaining the prior written approval of the State and without paying fair value. The Office of the Attorney General is currently drafting four separate Attorney General's Opinions related to the legal authority to manage and sell State owned surface water. Pending the final approval and release of these opinions, the Office of the Attorney General and the Department of Natural Resources offers the following guidance to State water managers who have been or who may be approached with an offer to buy the State owned surface waters that they manage.

In the event that a State agency or State political subdivision is presented with a request to transfer or sell State owned surface waters within its statutory jurisdiction the State agency or political subdivision should first review its statutory authority to determine if it is in fact authorized to sell the State owned surface waters. If it is so statutorily-authorized, the State agency or political subdivision may enter into negotiations with the private entity for the sale of State owned surface water with the understanding that any such sale must be for fair value and that any agreement must be reduced to writing in the form of a contract or cooperative endeavor agreement and that any such agreement is subject to prior approval by the Office of the Attorney General and the Department of Natural Resources.

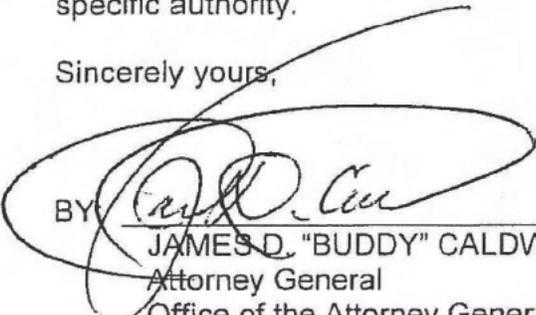
The prior written approval of the Attorney General and the Department of Natural Resources of any such agreement is mandated pursuant to the State constitutional

obligations and mandates set forth in LA Const. Art. IX and which directs and requires these offices protect the natural resources and the environment of the State.

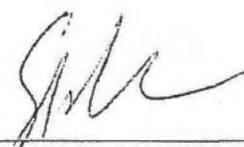
Finally, until such time as the Legislature specifically provides for the allocation of any sums received from the sale of such waters (unless specific direction already exists), any agreement for the sale of State owned surface water must include a provision that provides that all monies paid shall be placed in escrow and not released or expended without the written approval and consent of the Office of the Attorney General and the Department of Natural Resources. If such "specific direction already exists", the public entity claiming same should promptly notify in writing the Office of the Attorney General and the Department of Natural Resources of the statutory authority supporting this specific authority.

Sincerely yours,

BY



JAMES D. "BUDDY" CALDWELL
Attorney General
Office of the Attorney General



SCOTT A. ANGELLE, Secretary
Department of Natural Resources

JDC/RLM/dam

Bo Bolourchi

From: Bo Bolourchi
Sent: Monday, April 05, 2010 3:27 PM
To: Fassett, Jeff (Gordon); William A. Abney (waabney@abneywarwick.com); mvickery@tceq.state.tx.us; Randy Young (randy.young@arkansas.gov); John Upton (jdupton@whiti.net); John Upton (jdupton@whiti.net); Charles L. Dobbs (CharlesDobbs@sbcglobal.net); dasmith@owrb.state.ok.us; Art Theis; Tom Atkinson
Cc: Herman Settemeyer; Earl Smith; Bo Bolourchi; Larry Ardoin; Max Forbes; Gary Ethridge; 'edward.swaim@arkansas.gov'; DACouch@owrb.ok.gov; jane.attwood@oag.state.tx.us
Subject: Management and Sale of Surface Water Owned or Controlled by the State of LA
Attachments: doc20100405134026.pdf

Dear Commissioners and RRCC Engineering and Legal Committee Advisors:

Attached for your information, please find a Memorandum from the Office of LA Attorney General and the Secretary of LA Department of Natural Resources, addressed to "All State Surface Water Managers" regarding Management and Sale of State Surface Waters in Louisiana.

Regards, Bo

Zahir "Bo" Bolourchi, P. E.

Director, P. W. & Water Resources Programs

LA DOTD, P.O. Box 94245

Baton Rouge, LA 70804-9245

Tel. (225) 274-4170 Fax (225) 274-4312

E-mail: Bo.Bolourchi@la.gov

**Red River Compact Commission
Texas Commissioners Report
April 26, 2011**

The report of the Texas Commissioners is presented by Commissioner William A. Abney and Herman R. Settemeyer.

Funding – Proposed funding levels for the TCEQ are approximately \$295 million below the previous two year biennium. This equates to a reduction of 236 FTE's. The agency has reduced hiring new employees to prepare for the reduction. The majority of the reduction is in the Texas Emissions Reduction Plan program (\$140 million) where grants are awarded, in areas where air quality is compromised, to upgrade heavy equipment or trucks and the Low Income Vehicle Repair Assistance, Retrofit, and Accelerated Vehicle Retirement Program (\$100 million).

Drought and Flooding – Hurricane Alex and a tropical storm in South Texas and northern Mexico in late June and early July of 2010 produced record flooding along the Rio Grande. Amistad and Falcon Reservoirs quickly filled and flood waters were released as quickly as possible through the floodways in Texas and Mexico to evacuate waters to the Gulf. Flood waters were released until late August.

Now Texas is dealing with extreme drought. As of April 5, over 60 percent of the state was in severe or critical drought. The TCEQ has sent letters to water right holders advising that rights may have to be curtailed due to low flows.

Proposed Groundwater Legislation – Senate Bill 332. The bill provides that a landowner has a vested ownership interest in the groundwater below the surface as an interest in the landowner's real property. The bill provides that the vested ownership interest entitles the landowner to a fair chance to produce the groundwater below the surface of the real property without causing waste, malicious drainage of other properties, or negligently causing subsidence. The bill provides that the vested ownership interest does not entitle a landowner to the right to capture a specific amount of groundwater below the surface and does not affect the existences of common law defenses or other defenses to liability under the rule of capture. The bill provides that nothing in the Water Code shall be construed as depriving or divesting a landowner of the ownership interest.

The bill provides that nothing in the new statutory language shall be construed to prohibit a Groundwater Conservation District (GCD) from promulgating a rule to limit the exercise of the right of a landowner to produce groundwater; prohibit a GCD from limiting or prohibiting the drilling of a well by a landowner for failure or inability to comply with minimum well spacing or tract size requirements adopted by the GCD; affect the ability of a GCD to regulate groundwater production; or require that a GCD's rules or regulations must allocate to each landowner a proportional share of available groundwater for production based on the number of acres owned by the landowner.

The bill requires GCDs to consider three new factors during their rulemaking process. The bill requires a GCD to consider the landowner's vested ownership interest; to consider the public interest to conserve, preserve, protect, recharge, and prevent waste of groundwater or subsidence caused by groundwater withdrawal; and to consider the goals developed as part of the GCD's management plan. During annual joint management planning, the bill requires the GCDs in a groundwater management area to consider the landowners' vested ownership interest.

Environmental Flows - Senate Bill 3 from the 2007 legislative session changed the environmental review for water rights permitting from a case-by-case basis to an environmental standards-by-rule process. The bill created an Environmental Flows Advisory Group, composed of nine members appointed by the governor and legislative leadership. The Advisory Group appoints members to each bay and basin area stakeholder committees. The Advisory Group also appoints a statewide science advisory committee to develop recommendations to help provide overall direction, coordination and consistency. Each bay and basin area stakeholder committee establishes a bay and basin expert science team that will develop a recommended stream flow regime for their specific bay and basin. The stakeholder committee then provides comments on the recommendations. These recommendations and comments then go to the TCEQ, which adopts rules establishing environmental flow standards. These rules will undergo the normal public process for adoption. In adopting the rules, the TCEQ may consider the expert science team recommendations, the stakeholder committee recommendations, and human and other competing water needs.

This process commenced with the Sabine and Neches River basins (Sabine Lake estuary system) and San Jacinto and Trinity River basins (Galveston Bay estuary system). Environmental flow recommendations have been provided and draft rules have been prepared and published. The recommendations were before the TCEQ on April 20. The process has begun in the Colorado, Guadalupe, Rio Grande, Brazos and Nueces River basins.

ESA Litigation – A lawsuit has been filed by The Aransas Project versus the Texas Commission on Environmental Quality under the Endangered Species Act. The suit seeks injunctive relief to compel the TCEQ to take appropriate steps to protect the wintering Whooping Crane from the negative impacts of water withdrawals from the Guadalupe and San Antonio River systems. The suit was filed in Federal District Court, Corpus Christi, Texas. The litigation is still ongoing with the actual trial expected to start toward the end on 2011.

TCEQ Sunset Review - The TCEQ is undergoing Sunset review during the current legislative session. The overall purpose of the review is to: (1) assess the need to retain the agency, (2) look for potential duplication of programs within our and other state agencies, and (3) consider changes to improve the agency. Legislation to continue the agency with recommendation for changes is pending before the legislature.

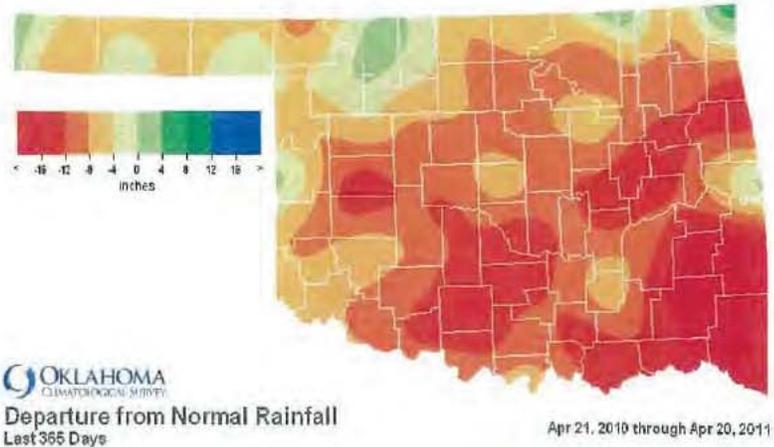
OKLAHOMA COMMISSIONERS' REPORT Arkansas-Louisiana-Texas-Oklahoma Red River Compact Commission



**Annual Meeting: Oklahoma City, Oklahoma
April 25-26 2011**

CLIMATE

Very little rainfall has occurred in the Fall and early Spring months over much of the Red River basin in Oklahoma allowing severe drought conditions already in place to spread and intensify. Southwest Oklahoma had the second driest March on record. Much of the Red River Compact area of Oklahoma has suffered annual rainfall deficits of 4 to 12 inches with temperatures averaging above normal. Long-term outlooks show the drought intensifying over much of the area over the next few months.



UPDATE OF THE OKLAHOMA COMPREHENSIVE WATER PLAN

In advance of Feedback and Implementation Meetings, which will be held throughout the state during April and May, the Oklahoma Water Resources Board has published the Interim Draft of the 2012 Update of the Oklahoma Comprehensive Water Plan. Anchored by the active participation of thousands of citizens, water user groups and other interested parties, the draft features numerous executive, technical, workgroup, and supplemental reports that are being prepared for inclusion in the final 2012 OCWP Update, which will be considered in its entirety by the nine-member Water Board in October 2011.

The draft OCWP Update Executive Report serves as a concise compilation of technical and policy information produced over the planning period. In addition to background information on water planning and management in Oklahoma, the report includes a statewide assessment of water supplies, future projections of demand, and options to alleviate anticipated deficits. The report's Water Policy Recommendations section represents the collective contributions of numerous citizens and experts from state and federal agencies, academia, and



organizations that have spent four years researching and developing numerous suggested recommendations to address Oklahoma's current and future water issues.

The interim statewide water plan will also include draft Watershed Planning Region reports, which is the most unique water planning tool created anywhere. These reports will present fifty-year projections of water use in the state's 13 planning regions and 82 basin watersheds as well as options to meet forecasted deficits in supply or related problems. As the major technical component of the 2012 OCWP Update, it has been carefully designed to allow the water system operator, farmer, irrigator, and casual citizen to make intelligent and informed decisions concerning Oklahoma's most precious natural resource.

Each OCWP Feedback and Implementation Meeting will feature a technical session in the afternoon followed by an evening water policy session. The informal meetings, beginning April 19 in Beaver, seek to gather specific input from citizens, public water suppliers, and other user groups. They will be hosted by the OWRB and Oklahoma Water Resources Research Institute.

WATER RESOURCE STUDIES

Surface Water

- Related to the ongoing **Red River Basin Chloride Control Project** underway in Oklahoma and Texas, the Corps of Engineers continues work on a focused re-evaluation of Elm Fork Area VI. The Corps and OWRB have completed work on collecting water quantity/quality data.
- Through the Oklahoma Comprehensive Water Plan, the OWRB has contracted with the USGS to develop Oklahoma **StreamStats**, a web-based tool that will provide monthly and annual stream flow statistics for delineated Oklahoma watersheds. This project is completed and the USGS is finalizing the web application portion of the project. The USGS is also completing a study and report on Trends in Base and Total Flow for Selected Stream Gages in Oklahoma. Trend analysis will be performed for the following stream flow parameters on an annual (water year) and seasonal (Nov-May and Jun-Oct) basis: total flow volume, base flow volume, base flow index, peak flow volume, number of zero flow days, days below 1.0 cubic feet per second, and precipitation totals (statewide and by climate division).
- Progress has been made in the development of additional **stream water allocation models** for stream systems in Oklahoma. The OWRB is using the Central Resource Allocation Model (CRAM) developed by AMEC Earth & Environmental of Boulder, CO, to support the permitting process in the assessment of water availability and reliability of supply for current water rights and new permit applications. Allocation models for Cache Creek, Beaver Creek, Deep Red, Middle Canadian, Lower Canadian and Little River basins have recently been completed. Hydrologic Investigations for these stream systems are also being updated. Additional models are planned for this fiscal year in the North Canadian River systems
- A joint water resource and water quality study, the **Oxbow Lakes Project** is a cooperative effort with Oklahoma State University and the Oklahoma Conservation Commission to identify and characterize oxbow wetlands in Oklahoma. The objective is to catalogue and initiate an assessment scheme for this unique water resource.
- **Through the OCWP Sedimentation Surveys of Wister, Hulah and Waurika Lakes** are ongoing. This project is in coordination with the Tulsa District Corps of Engineers in support of the Oklahoma Comprehensive Water Plan.
- **Sedimentation Surveys of Pawhuska Lake, Comanche Lake, Tecumseh Lake, Chickasha Lake, Lake Durant, Rocky Lake, Chandler City Lake and Clinton Lakes**

are ongoing. Funded through the Federal Emergency Management Agency these surveys allow for updated breach analysis. Prioritization has enabled surveys to be for those with water quality impairments. This allows for accurate volumetric data for upcoming Total Maximum Daily Load development.

Groundwater

- The **Garber-Wellington Water Management Study** was initiated in June 2008 to address growing concerns about the future of water availability in central Oklahoma. While the OWRB will use information obtained from the investigation to determine the maximum annual yield of the aquifer, a groundwater-flow model is being developed to predict the impacts of long-term groundwater withdrawals on the aquifer as well as simulate water management strategies. The USGS has nearly completed a steady-state model of the aquifer. A major dataset for the model involved compiling water-use data stored in the OWRB's Water Rights database. The focus of efforts in 2011 will be to develop the transient model and completing a Scientific Investigations Report. In March 2011, the USGS published a Scientific Investigations Map titled "Potentiometric Surface in the Central Oklahoma (Garber-Wellington) Aquifer, Oklahoma, 2009". In February and March 2011, staff from the OWRB and USGS, with cooperation from the City of Norman, conducted a week-long aquifer test at one of the City's production well sites. The aquifer test will help derive aquifer properties, such as storage coefficient and transmissivity, for the groundwater flow model.

Water Quality

- Continuing efforts to improve water quality in **Lake Thunderbird**, the OWRB and Central Oklahoma Master Conservancy District (COMCD) are cooperating on an ARRA "green" project that includes implementation of a new system to oxygenate lake water. The OWRB and other agencies are also finalizing a cooperative effort to develop a TMDL addressing Thunderbird water quality impairments, including high turbidity, algae and low dissolve oxygen.
- Through the **OCWP Surface Water Quality Trends Analysis**, OWRB staff is finalizing a long-term assessment of trends in surface water quality in support of the Oklahoma Comprehensive Water Plan.
- Work continues at **Lake Stanley Draper, Grand Lake, and Hudson Lake** to establish and spread the growth of native aquatic plants. These plants serve as a low cost, innovative way to combat erosion and suspended sediment. The OWRB seeks to educate lake managers on the habitat-friendly benefits of establishing aquatic plants to improve water quality and the health of Oklahoma's aquatic communities.
- The OWRB continues to participate in the EPA's Surveys of the Nation's Waters. Work will commence within the year on the next round of the **National Lakes Study**. Sampling on numerous lakes will provide data to assess environmental integrity of the waters.
- Monitoring for the **Grand River Dam Authority (GRDA)** to assist them in management of their reservoirs for ecosystem support continues this year, with additional work being added to the program to more fully understand the dissolved oxygen mechanics in their reservoirs.
- **Modeling of Lake Thunderbird and New Spiro Lake** and their watersheds not only show how excess algae impair water quality but also the impact to water treatment costs. ARRA funds enable the identification of the most feasible implementation option

to improve both water quality and the drinking water treatment train for both drinking water lakes.

- Field staff has adopted stringent **decontamination** procedures to minimize the spread of **Aquatic Nuisance Species** in Oklahoma. Zebra mussels were confirmed throughout Lake Texoma while Golden Algae continues to be a threat in Texoma and Altus City Lake. Bighead carp, sometimes known as "flying carp" have been confirmed in the Neosho River below Hudson Lake and in the Kiamichi River below Hugo Reservoir. It is a certainty that they exist in the Red River. Silver carp have been found in both the Arkansas and Red rivers in Oklahoma. There is a real potential to establish a reproducing population of Asian carp in Lake Texoma which could be devastating to striped bass fishery and paddlefish recovery efforts. "Didymo" (*Didymosphenia geminata*) a diatom also referred to as "rock snot" has become established in the Mountain Fork River of the Little River below Broken Bow Dam. Didymo can completely smother rocks and plants and reduce the area of clean substrate on which fish need to spawn and feed.
- The OWRB continues to participate in the **National Flowing Waters Study**. Sampling on numerous wadeable and non-wadeable streams will provide data to assess environmental integrity of the waters.
- Additional ongoing OWRB water quality projects include:
 - Probabilistic biological monitoring to assess stream ecosystem integrity throughout Oklahoma;
 - Confirmatory stream and reservoir monitoring to assess Water Quality Standards beneficial use attainment status; and
 - Monitoring for the Grand River Dam Authority to assist GRDA in management of their reservoirs for ecosystem support.

BENEFICIAL USE MONITORING PROGRAM

The OWRB's Water Quality Division continues to monitor water quality conditions and trends statewide through the Beneficial Use Monitoring Program (BUMP). Annual BUMP reports are available on the OWRB's Web site at www.owrb.ok.gov and on CD.

The BUMP, recognized by EPA as one of the finest state-run monitoring programs in the nation, facilitates science-based decision-making concerning impaired waters. In tandem with Oklahoma's Water Quality Standards and the National Pollutant Discharge Elimination System (NPDES) program, the BUMP has become a cornerstone of state water quality management. The OWRB has implemented probabilistic monitoring into our BUMP lakes sampling program, which should result in more efficient and effective data collection with enhanced data utility for our public and professional constituencies.

OKLAHOMA WATER QUALITY STANDARDS

The OWRB's Water Quality staff initiated revision of the Water Quality Standards and Implementation and Assessment Rules in October 2010. Most of the revisions focused on addressing issues identified by EPA Region 6 concerning the 2010 303(d) list of impaired waters. Of particular note are revisions to assessment of dissolved oxygen data for determining support status of reservoirs and assessment of bacteria data for body contact recreation. Fecal coli form was removed as a criterion for assessing the States waters in favor of using of E. coli and Enterococcus as indicator bacteria. Those revisions are now pending publication in the Oklahoma Register and approval by EPA Region 6.

Oklahoma will reevaluate the promulgated 0.037 mg/l criterion for total phosphorus applicable to Oklahoma's Scenic Rivers by 2012, based on the best scientific information available with full and timely inclusion of officials from the State of Arkansas representing both point and non point source dischargers. This commitment was established in the *2003 Statement of Joint Principles and Actions* signed by officials for Oklahoma and Arkansas. The process involves a technical advisory group that will include point and non point source agency technical representatives from both states. The specific review and decision process will be established in a quality assurance project plan (QAPP). After QAPP approval by all parties and EPA, a formal request for best scientific information available relevant to the Scenic Rivers phosphorus criterion will be published. Best scientific information will be reviewed according to the QAPP for a recommendation to the OWRB to determine if further action regarding the criterion should be taken. At this time a final report with recommendations is planned by the end of 2011 for Board consideration.

DAM SAFETY PROGRAM

Reclassification of the hazard-potential of dams has become a significant issue in Oklahoma. Approximately 16% of private low hazard dams reviewed have some development in the potential downstream inundation area of those dams. This could result in a significant increase in the number of high hazard dams within Oklahoma. Public outreach and education is a priority for the Dam Safety Program. Four new publications have been developed for owners of dams addressing control of trees on dams, how to conduct inspections, routine maintenance guidelines, and emergency action plans. A comprehensive Dam Safety guidance manual is the latest publication to be released to the public. Dam safety staff has begun scheduling meetings with dam owners to discuss the program and any problems with their individual dams during the past year. Finally, dam safety staff has also been emphasizing the importance of emergency action plans, encouraging owners of high hazard dams to maintain and update their plans, as well as to add detailed breach inundation maps in their plans.

FLOODPLAIN MANAGEMENT ACTIVITIES

In 2010, the OWRB assisted numerous communities with ordinance or regulation adoption associated with new digital floodplain maps provided by Federal Emergency Management Agency (FEMA) in eleven Oklahoma counties. The OWRB enters the 2nd year of Risk Map taking a watershed approach in identifying potential risks in the Grand Lake and Lower North Canadian watersheds. The OWRB enhanced its participation in the Cooperative Technical Partner Program with FEMA which will allow local engineering firms to perform specific initiatives or projects to create and maintain accurate, up-to-date flood hazard data for communities in Oklahoma. The OWRB conducted 18 accreditation training workshops and assisted OFMA with the addition of 25 new Certified Floodplain Managers in an effort to improve floodplain management in Oklahoma.

OKLAHOMA STATE LEGISLATURE

With legislators consumed by budget issues and many wish to postpone water legislation until the Oklahoma Comprehensive Water Plan is complete, there was little formal legislation considered in 2010, and nothing of note was passed. Proposals creating a state water center, mining pit water regulation, and floodplain permitting for the oil and gas industry have been re-filed for 2011. Several permitting fees were ratified during 2010, providing a small boost in revenues to support critical water rights and dam safety permitting activities and hydrologic studies, however, certain fees could be reduced, due to opposition from the Farm Bureau,

during 2011. Lawmakers are anticipating a number of water bills to be pre-filed in December for the 2012 session.

WATER RESOURCES FINANCING

The OWRB administers the State *Financial Assistance Program* (FAP), backed by the Statewide Water Development Revolving Fund, which awards loans and grants for the construction and improvement of water and sewer facilities. In all, through the OWRB’s six loan and grant programs, more than 2.48 billion in financing has been provided for water and sewer projects in Oklahoma with a total estimated savings of more than \$ 869 million to Oklahoma communities.

The Clean Water State Revolving Fund (CWSRF) loan program was created in 1988 to provide a renewable financing source for communities to draw upon for their wastewater infrastructure needs.

Program	Number	Amount
FAP Loans	327	\$706 million
CWSRF Loans	243	\$1 billion
DWSRF Loans	128	\$692 million
REAP Grants	554	\$48million
Emergency Grants	562	\$33 million
Drought Response Grants	2	\$200,000
TOTAL	1,816	\$2.48 BILLION

The CWSRF program is Oklahoma’s largest self-supporting wastewater financing effort. The Drinking Water State Revolving Fund (DWSRF) loan program is an initiative of the OWRB and Oklahoma Department of Environmental Quality to assist municipalities and rural water districts in the construction and improvement of drinking water systems. These projects are often mandated for communities to obtain compliance with increasingly stringent federal standards related to the treatment of drinking water.

The Rural Economic Action Plan (REAP) Program was created by the State Legislature in 1996. REAP grants, used for water/wastewater system improvements, target primarily rural communities with populations of 7,000 or less, but priority is afforded to those with fewer than 1,750 inhabitants. Emergency grants, limited to \$100,000, are awarded to correct situations constituting a threat to life, health, or property and are an indispensable component of the agency’s financial assistance strategy. In addition, through the OWRB Drought Response Program, limited grant funding is available for communities in most dire need during state drought emergencies declared by the Governor.

OKLAHOMA GOVERNOR’S WATER CONFERENCE & SYMPOSIUM

On October 18-19, the OWRB and Oklahoma Water Resources Research Institute will co-host the 32nd Annual Oklahoma Governor’s Water Conference and Water Symposium at the Embassy Suites Hotel and Conference Center, in Norman.

OWRB INTERSTATE STREAM COMPACTS WEBSITE

In 2009, the OWRB established a website that provides interactive, real-time information on USGS streamflow gages in the four interstate compacts to which Oklahoma is party. Visit the site at www.owrb.ok.gov/supply/compacts/compacts.php.

Continued cuts in state appropriations present an ongoing issue with funding gaging efforts in Oklahoma. This issue has partly been addressed through bringing in new tribal partners to the gaging program, such as the Chickasaw and Choctaw Nations. New state and federal partners have also been added to the Cooperative Gaging Program to meet multiple gaging objectives, including the Oklahoma/Arkansas Compact which has picked up the cost of a water compact gage within their area of concern.

Red River Compact Commission

FY 2012 Budget and State Assessments

(July 1, 2011 - June 30, 2012)

	FY 2011	FY 2012
Personnel Services, Office Expenses, Rent, Travel (Mtg. Expenses)	\$ 1,000.00	\$ 1,000.00
Audit	\$ 275.00	\$ 275.00
Postage, Stationery, Office Supplies	\$ 250.00	\$ 250.00
Printing & Reports	\$ 2,250.00	\$ 2,250.00
Contingency	\$ 20,000.00	\$ 20,000.00
Total	\$ 23,775.00	\$ 23,775.00
Per State Assessment¹	\$ 550.00	\$ 550.00

¹ In accordance with Article IX, Section 9.04C, of the Compact, the amount of such budget shall be borne equally by the signatory states.

RED RIVER COMPACT RULES AND REGULATIONS
To Compute and Enforce Compact Compliance
REACH IV, SUBBASIN 2

1. These rules and regulations, to be used to compute and enforce Compact compliance within Subbasin 2 of Reach IV, Red River Compact, are adopted subject to the following conditions and assumptions.
 - a. It is fully understood that these rules and regulations should be modified whenever experience or detailed studies demonstrate the need for modification, and if the Commission should modify its interpretation of Compact provisions relating to this Subbasin.
 - b. Definitions:
 - (1) “*Diversion*” is defined as the net loss to a water source from use by a diverter, and is computed as the diversion from the water source minus the part of the diversion which is returned to the water source. Normally, return flows must be measured to be considered; however, the Engineering Committee may consider and recommend exceptions.
 - (2) “*Representatives*” is defined as Arkansas Natural Resources Commission and Louisiana DOTD officials, or their designee(s), who are either members of the Engineering Committee or involved in normal Compact Commission activities.
 - (3) “*Weekly runoff period*” is defined as the seven consecutive day period beginning and ending on Tuesday at 8:00am, used to compute Compact Compliance in Subbasin 2.

2. **Management of Compact Compliance in Subbasin 2, Reach IV**, will be implemented in accordance with the following requirements:
 - a. Computations for compact compliance will be coordinated between the states of Arkansas & Louisiana. Representatives will compile data and coordinate between the states to ensure timely and accurate computation.
 - b. The Engineering Committee will verify Compact Compliance as described in Article VII, Sections 7.02 and 7.03.
 - c. State representatives will establish a beginning and ending day for the weekly runoff period.
 - d. Computation of compliance shall be completed on Wednesday following the previous weekly runoff period and distributed to state representatives.
 - e. Either state may request verification of compliance at any time.
 - f. The Engineering Committee, when necessary, will evaluate the applicability and accuracy of compliance computations and procedures for Subbasin 2. The evaluation will include review of the following

weekly runoff originating below or flowing from the last downstream major dam site to flow into Louisiana. Where there are no designated last downstream dam sites, Arkansas shall allow a quantity of water equal to forty (40) percent of the total weekly runoff originating above the state boundary to flow into Louisiana. Use of water in this subbasin is subject to low flow provisions of subparagraph 7.03(b).”

- (2) State compliance with Section 7.02 (b) does not need to be determined except when specifically requested by a Compact State.

b. Section 7.03 (a):

- (1) “Arkansas may use the beds and banks of segments of Reach IV for the purpose of conveying its share of water to designated downstream diversions.”

c. Section 7.03 (b):

- (1) The State of Arkansas shall not guarantee to maintain a minimum low flow for Louisiana in Reach IV.
- (2) However, on the following streams when the use of water in Arkansas reduces the flow at the Arkansas-Louisiana state boundary to the following amounts:
 - Ouachita – 780 cfs
 - Bayou Bartholomew – 80 cfs
 - Boeuf River – 40 cfs
 - Bayou Macon – 40 cfs
- (3) The State of Arkansas pledges to take affirmative steps to regulate the diversions of runoff originating or flowing into Reach IV in such a manner as to permit an equitable apportionment of the runoff as set forth herein to flow into the State of Louisiana.
- (4) In its control and regulation of the water of Reach IV any adjudication or order rendered by the State of Arkansas or any of its instrumentalities or agencies affecting the terms of this Compact shall not be effective against the State of Louisiana nor any of its citizens or inhabitants until approved by the Commission.

6) Computation Procedures for Compact Compliance. Compliance computation and monitoring in Subbasin 2 will be conducted in accordance with the following requirements:

- a. State representatives, in verifying compact compliance in Subbasin 2, will compute weekly runoff by the formula, $Q=CIA$; where

Q = weekly runoff
C = weighted runoff value
I = weekly precipitation value
A = watershed area.

Weighted runoff values, including land use/land cover percentages and drainage areas, will be determined for each compact stream listed in Article VII, Section 7.03. National Oceanic and Atmospheric Administration data will be used to determine the weekly precipitation values.

- b. State representatives will utilize a multi-tiered management response, as outlined in the “Monitoring and Management Framework to Compute & Enforce Compliance, Reach IV, Subbasin 2” report, to monitor stream flow and calculate compact compliance, unless otherwise directed by the Engineering Committee.
- c. State representatives will develop and compile historic weekly runoff data for statistical comparison and assessment of streams listed in Article VII, Section 7.03(b) of the Red River Compact.
- d. State representatives will initiate computation and verification of compact compliance when flows at the Arkansas-Louisiana state boundary are equal to or less than 2 times the flow values listed in Article VII, Section 7.03 of the Red River Compact.
- e. State representatives will compute weekly runoff for compact streams in Subbasin 2, when requested, according to the general criteria listed below. In addition, state representatives will incorporate new gages, as available, and will consider upstream and downstream influences when appropriate to improve the accuracy and applicability of compliance computations.

(1) **Ouachita River**

- (a) Felsenthal Lock & Dam tailwater stage (near the AR/LA state boundary) and any future, appropriate flow station data will be utilized for computing compliance.
- (b) Drainage Area will be calculated by subtracting the drainage areas above Lake Catherine, DeGray Lake, Lake Greeson, and Lake Winona from the total drainage area upstream from the Arkansas-Louisiana boundary. This value is 8,898 square miles.
- (c) The Weighted Runoff Value has been calculated as 0.19 (see “Monitoring and Management Framework to Compute & Enforce Compliance, Reach IV, Subbasin 2” report).

(2) **Bayou Bartholomew**

- (a) USGS Gage #07364200 (near Jones, Louisiana) and any future, appropriate flow station data will be utilized for computing compliance. Upstream diversions from Jones, Louisiana to the Arkansas–Louisiana state boundary will be considered when computing compliance.
- (b) Drainage Area for use in these rules is the drainage area above USGS Gage #07364200. This value is 1,187 square miles.
- (c) The Weighted Runoff Value has been computed as 0.21 (see “Monitoring and Management Framework to Compute & Enforce Compliance, Reach IV, Subbasin 2” report).

(3) **Boeuf River**

- (a) USGS Gage #07367700 (near Arkansas-Louisiana state boundary) and any future, appropriate flow station data will be utilized for computing compliance.
- (b) Drainage Area for use in these rules is the drainage area above USGS Gage #07367700. This value is 785 square miles.
- (c) The Weighted Runoff Value has been computed as 0.26 (see “Monitoring and Management Framework to Compute & Enforce Compliance, Reach IV, Subbasin 2” report).

(4) **Bayou Macon**

- (a) USGS Gage #07369680 (at Eudora) and any future, appropriate flow station data will be utilized for computing compliance.
- (b) Drainage Area for use in these rules is the drainage area above USGS Gage #07369680. This value is 500 square miles.
- (c) The Weighted Runoff Value has been computed as 0.25 (see “Monitoring and Management Framework to Compute & Enforce Compliance, Reach IV, Subbasin 2” report).

- f. State representatives will periodically review the weighted runoff, drainage area, stage/discharge, and precipitation data values included in the “Monitoring and Management Framework to Compute & Enforce Compliance, Reach IV, Subbasin 2” report.
- g. State representatives will recommend modification of existing values to the Engineering Committee for consideration, if such modification would improve computational accuracy and applicability.

- h.** State representatives will consider similar monitoring and management processes as outlined in the “Monitoring and Management Framework to Compute & Enforce Compliance, Reach IV, Subbasin 2” report for issues involving Subbasin 2 streams that cross the Arkansas-Louisiana boundary, but are not referenced in Article VII, Section 7.03 of the Red River Compact.

**RESOLUTION
OF THE
RED RIVER COMPACT COMMISSION
REGARDING
THE FUNDING OF STREAMFLOW GAGES**

WHEREAS, the Red River Compact, signed May 12, 1978 and approved by Congress apportions the waters of the Red River basin between the States of Arkansas, Oklahoma, Texas and Louisiana;

WHEREAS, the four states have worked cooperatively together to develop and maintain the streamflow gaging network necessary to administer the provisions of the Compact;

WHEREAS, the cooperation and the establishment of this gaging network has resulted in the administration of this Compact with minimal controversy and no interstate litigation;

WHEREAS, the apportionment and calculations required to administer the Compact necessitate the maintenance of streamflow gages along the Red River and its tributaries at critical locations to measure the flow of water;

WHEREAS, it is critical for the administration of the Red River Compact that these streamflow gages be maintained;

WHEREAS, the U.S. Geological Survey (USGS) has historically entered into cost share agreements with cooperators to maintain a nationwide streamflow gaging network through the Cooperative Water Program (CWP);

WHEREAS, the CWP has served for over 110 years as a federal/non-federal partnership which historically was funded through a 50/50 cost share agreement. Today, the majority of the funding for the CWP comes from non-federal sources;

WHEREAS, the ability to maintain this network of national gages to meet long term federal goals has declined due to a loss of cooperators because of the increased costs of funding which prompted Congressional establishment of the National Streamflow Information Program (NSIP);

WHEREAS, the USGS established goals to satisfy minimum national streamflow information needs with the intent to support these gages entirely with federal funds;

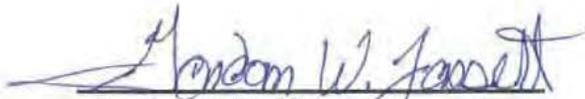
WHEREAS, a priority goal of NSIP is to “meet legal and treaty obligations on interstate compacts and international waters;”

WHEREAS, the streamflow gages necessary to administer the Red River Compact qualify under this priority goal for full federal funding under NSIP.

NOW, THEREFORE, BE IT RESOLVED that, the Red River Compact Commission requests that Congress fully fund the NSIP gages associated with the Red River basin and Red River Compact and the USGS place a priority on funding these gages under NSIP.

BE IT FURTHER RESOLVED that, federal funding for the CWP be restored to ensure the historical partnership match of 50/50.

BE IT FURTHER RESOLVED that, a copy of this resolution be sent to the members of the congressional delegations for the States of Arkansas, Oklahoma, Texas and Louisiana, the Secretary of the Interior, and the Director of the USGS.


Gordon W. "Jeff" Fassett
Federal Commissioner and
Chairman Red River Compact
Commission

4/17/2012
Date Executed
April 17, 2012

Concurred to and supported by:


Wayne Dowd
Commissioner for Arkansas

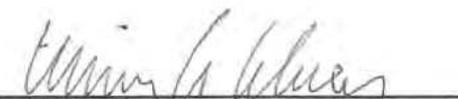

J. Randy Young, P. E.
Commissioner for Arkansas


Arthur R. Theis, P.E.
Commissioner for Louisiana


Zahir "Bo" Bolourchi
Commissioner for Louisiana (Acting)


Charles Lynn Dobbs
Commissioner for Oklahoma


J. D. Strong
Commissioner for Oklahoma


William A. Abney
Commissioner for Texas


Herman R. Settemeyer
Commissioner for Texas (Acting)

RECLAMATION

Managing Water in the West

Reclamation Activity Report

Oklahoma-Texas Area Office



U.S. Department of the Interior
Bureau of Reclamation
Great Plains Region

April 2011

Mission Statements

The mission of the *Department of the Interior* is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the *Bureau of Reclamation* is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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Introduction

The Bureau of Reclamation (Reclamation) is a Department of the Interior agency with a primary mission designated to manage, develop, and protect water and related resources in an environmentally and economically sound manner within the 17 western states.

The Oklahoma-Texas Area Office (OTAO) is responsible for administering 11 reservoir projects and associated water distribution systems in southern Kansas, Oklahoma, and Texas. The combined water deliver is more than 680,000 acre-feet of Municipal and Industrial (M&I) water annually to about 3 million customers, and which also provide fish and wildlife, recreation, and flood control benefits. The area supports two Irrigation Districts, one in Oklahoma and one in Texas.

Reclamation works in conjunction with other federal and State agencies, Indian tribes, and local entities in performing these responsibilities. Significant areas of activity include providing oversight of operations and maintenance of existing facilities and water resources planning along with construction assistance.

The purpose of this Activity Report is to provide a selected summary of current and recently completed activities within the area.

Ongoing and Recently Completed Activities

Planning Program

General Investigations – ONGOING:

Texas Brackish and Impaired Water (TX), Special Study

Status: Ongoing

Description: This study includes four main activities that further the Texas Water Development Board (TWDB) innovative water technologies program:

1. Advancing stormwater harvesting;
2. Advancing water reuse;
3. Advancing Aquifer Storage and Recovery (ASR); and
4. Advancing seawater/brackish desalination.

Activities involve an evaluation of the political, institutional, regulatory, and technical issues associated with the advancement of innovative water management solutions in Texas. Based on data acquired, the TWDB will make recommendations on how to most efficiently implement the Texas innovative water technologies program.

High Plains Ogallala Aquifer (KS), Special Study

Status: Ongoing

Description: Reclamation is collaborating with the Kansas Water Office (KWO), Southwest Groundwater Management District No. 3 (GMD3), and the Kansas Geological Survey (KGS) to study and obtain an understanding of Ogallala Aquifer characteristics through development of a transient groundwater model of the area under the jurisdiction of GMD3. The model will be used to:

1. Characterize Aquifer subunits,
2. Determine water budgets, and
3. Test the possible Aquifer responses to various management scenarios.

The study will also incorporate a regional economic impact analysis to determine the most efficient policy options aimed at achieving sustainability goals to extend the economic life of the Aquifer.

The Kansas State Water Plan set 2010 objectives of reducing water level decline rates within the Ogallala Aquifer and implementing enhanced water management in target areas. Models are anticipated to be completed by the end of FY 2010.

South Central Regional Assessment (OK), Special Study

Status: Ongoing

Description: The study is intended to characterize the Garber-Wellington Aquifer (GWA) in south-central Oklahoma in terms of:

1. Geologic framework,
2. Aquifer boundaries,
3. Hydraulic properties,
4. Water levels,
5. Groundwater flow, and
6. Water budget.

The study will develop a digital, transient groundwater flow model that will be used to evaluate the allocation of water rights and simulate the Aquifer for the purposes of developing management options to ensure a dependable water supply for future growth. Results of the study are expected by the end of FY 2011.

Oklahoma Comprehensive Water Plan (OK), Special Study

Status: Ongoing

Description: The first phase of this study consists of modernizing the State water rights administration database. The second phase consists of developing hydrologic models to update and/or confirm the firm yield of seven Reclamation reservoirs in Oklahoma.

Additional phases include, but are not limited to:

1. Technical and engineering studies to identify areas with aging infrastructure;
2. Evaluation of regional and local water supply/demand gaps, which includes development of multi-parameter models to calculate the maximum sustainable yield of State aquifers;
3. Identification of regional and local water management strategies; and
4. Water allocation modeling to determine the feasibility of implementing water management solutions.

The water plan is scheduled for completion in FY 2012.

Fort Cobb Reservoir (OK), Appraisal Investigation of Alternatives for Water Augmentation**Status:** Ongoing**Description:** This study is an investigation of alternatives to augment the water supply of the Fort Cobb Reservoir Division, Washita Basin Project.

Fort Cobb Reservoir provides Municipal and Industrial (M&I) water to several power generation facilities, the City of Anadarko, and the City of Chickasha. A previously completed appraisal study (2006) evaluated alternatives to expand the capacity of the delivery system and determined that alternatives to augment the water supply of the reservoir should be investigated before any decision is made relating to conveyance system expansion. Previous studies indicate that demand will exceed supply by 2030. Reclamation held a project alternative meeting with the stakeholders to identify potential alternatives.

The draft report is pending subject to the firm yield re-evaluation of all Oklahoma Reservoirs constructed by Reclamation. The firm yield ascertained by the evaluations will address climate change, as well as other changes in reservoir conditions.

General Investigations – RECENTLY COMPLETED***Arbuckle-Simpson Aquifer (OK), Water Resources Management Special Study*****Status:** Complete

Description: During recent years, a number of issues have emerged which have caused concern about the utilization and continued health of the Arbuckle-Simpson Aquifer. These issues include concern over water use, competition for water, pumping water to areas beyond the recharge zones of the Aquifer, and water quality. In order to assure the future well-being of the Aquifer, the Oklahoma Water Resources Board (OWRB) entered into a cost-sharing agreement with Reclamation to undertake a five year study of the hydrology within the Aquifer including detailed assessments of the formation hydrogeology, water quality and vulnerability, as well as groundwater-surface water interactions.

The Aquifer has been designated a sole source Aquifer by the EPA. The health and economic future of a large number of Oklahoma residents is dependent upon protecting the quantity and quality of water in the Aquifer. The Aquifer is an important source of water supply for the citizens of Ada, Sulphur, Mill Creek, and Roff; the Chickasaw National Recreational Area; and many farmers and ranchers owning land overlying the Aquifer. Contributions from the Aquifer also provide perennial flows for many streams and natural springs in the area.

A public meeting was held in August 2009 to discuss the results of the study and seek public comments on potential Aquifer management scenarios. Final steps are being undertaken by OWRB to combine the science with public input to make policy recommendations to the State Legislature on how to manage the Aquifer. The study was completed at the end of FY 2009. Final reports are expected in mid-FY 2010.

Norman Project (OK), Critical Need Water Supply Study**Status:** Complete

Description: This study evaluated the operational changes necessary to store and regulate non-project water purchased from the City of Oklahoma City. Preliminary results indicate that importation of water during times of drought is an effective means to augment the yield of the reservoir with minimal environmental impact and no cost to the Federal Government. The next phases of the study will address the long-term water supply needs and will include an evaluation of other alternatives (i.e., water reuse) that are beyond the short-term solution of purchasing and storing non-Project water.

Lake Thunderbird, located on the Little River in central Oklahoma, was constructed as part of the Norman Project for Municipal and Industrial (M&I) water supply, flood control, recreation, and Fish & Wildlife purposes. The Central Oklahoma Master Conservancy District (COMCD), the project water right holder, currently provides water to the member cities of Del City, Midwest City, and Norman. Reclamation completed an appraisal study in August 2005 which concluded that additional water needs exist and Lake Thunderbird could store and regulate non-project water to augment supplies.

High Plains Ogallala Aquifer (TX), Special Study

Status: Complete

Description: Past land use changes have greatly impacted water resources in the Texas High Plains, often with opposing effects on water quantity and quality. Reclamation, in partnership with the University of Texas, Bureau of Economic Geology, and the Texas Water Development Board undertook the study to increase the understanding of the processes, including irrigated return flows and control of diffuse natural recharge to the Ogallala Aquifer realized by the conversion of rangeland to dry land agriculture. The study is complete, and final results are anticipated to be provided as a report in FY 2011.

Native American Technical Assistance – ONGOING

Kickapoo Tribe of Oklahoma (OK), Defining the extent of radionuclides and trace metals in domestic well water

Status: Ongoing

Description: The radionuclides gross alpha/beta particles, radium 226/228, uranium, and potentially radon in groundwater are a concern for the Kickapoo Tribe in Lincoln and Pottawatomie counties in Oklahoma.

Concentrations of radionuclides in groundwater used by surrounding households of tribal and nontribal members are unknown and may occur at levels causing health problems. The United States Geological Service and the Kickapoo Tribe will determine the extent and concentrations of gross alpha/beta, radon, radium 226/228, uranium, arsenic, chromium, and selenium in domestic well water in selected areas of the Kickapoo Tribal lands in Lincoln and Pottawatomie counties in Oklahoma.

Chickasaw Nation (OK), Beneficial Use of Water from Hydraulic Fracturing

Status: Ongoing

Description: Reclamation will prepare a *Proof of Concept* that reviews water analysis to address the potential beneficial uses of any by-products from water utilized in the Hydraulic Fracturing Treatment Process of oil and gas wells.

The report will attempt to:

1. Quantify the volume and sources of water utilized for hydraulic fracture treatments of shale formations in the local area;
2. Review existing technology being used for treatment and disposal of treatment fluids;
3. Perform an analysis of water used in such fracture treatment processes;
4. Identify and quantify beneficial products from brine concentrate, if any;
5. Identify issues and costs in extracting beneficial products, if any; and
6. Compare value of recovered products to revenue streams generated from the sale of such products.

This investigation may include brackish water treatment and disposal costs saved, or avoided, and discussion of issues in treating concentrate produced from the desalination of brackish groundwater for use in the hydraulic fracture treatment process.

Cherokee Nation (OK), Water Infrastructure Assessment**Status:** Ongoing

Description: A large Native American population is located in northern Adair and southern Delaware counties in northeast Oklahoma and the inhabitants are without access to public water supplies. Currently, this population depends on groundwater wells for supply. A majority of these wells have issues with yield, fecal coliform contamination, and secondary containments such as iron, manganese, and hydrogen sulfide. A small number of homes may use springs or other untreated and unprotected surface water supplies for drinking water.

The Cherokee Nation is interested in providing treatment and distribution services to several communities. This may be accomplished through assistance of the existing rural water districts by expansion or development of a water supply project for the area. The Cherokee Nation is one of the federally recognized Indian Tribes in Oklahoma. The tribal headquarters is located in Tahlequah, Oklahoma, 60 miles east of Tulsa.

Kickapoo Nation of Oklahoma (OK), Assessment of Water Supply Systems**Status:** Ongoing

Description: The Kickapoo Nation requested Reclamation to perform an assessment of their six water supply systems.

The assessment would identify deficiencies in the existing systems and include alternatives for tying the systems together and connecting to service outlying residents.

Alabama-Quassarte Tribal Town (OK), Needs Assessment of Water Supply and Waste Water Systems**Status:** Ongoing

Description: The Alabama-Quassarte Tribal Town has requested Reclamation assistance in determining the current state of the existing water system, assessing the future demand for water and wastewater, and recommending improvements for the development of a water and wastewater system for the tribal trust property.

Caddo Nation (OK), Rush Springs Groundwater/Surface water interaction and Rush Springs Spring Inventory**Status:** Ongoing

Description: The Caddo Nation is concerned with the long term depletion of the Rush Springs Aquifer.

Reclamation has entered into an agreement with the U. S. Geologic Survey (USGS) to begin gathering data for a study to determine the location of springs and wetlands as well as the yield of the Rush Springs Aquifer.

Native American Technical Assistance – RECENTLY COMPLETED:***Seminole Nation (OK), Assessment of the Sasakwa Rural Water System Distribution System*****Status:** Completed

Description: The Sasakwa rural water system is located in the southeastern corner of Seminole County, Oklahoma and is owned by the Seminole Nation. The system provides potable water to approximately 75 residential customers. The system is experiencing long term deterioration. Reclamation completed a report entitled "Evaluation and Repair Recommendation for the Existing Water and Distribution System" in September, 2001. In this evaluation, Reclamation evaluated upgrades to existing water supply production wells, standpipes, pump control systems, and the wells supplying the treatment plant. The

work recommended in the report is now complete, and Reclamation will prepare an additional report addressing any upgrades to the existing distribution system.

Pawnee Nation (OK), Wellhead Protection Plan

Status: Completed

Description: The Pawnee Nation is concerned about contamination of shallow public water supply wells in Pawnee County, Oklahoma. The Nation is preparing a water management plan for Black Bear Creek and would like to include a well protection plan for these public supply wells.

Reclamation will undertake the following task:

1. Identification of the groundwater flow direction,
2. Source water delineation for the existing wells,
3. Identification of the zone of influence in the existing wells, and
4. Potential contaminants within the zone of influence and adjacent surface areas in close proximity to the wells.

Construction Assistance

Lower Rio Grande Valley Water Conservation and Improvement Program (TX)

Status: Ongoing

Description: Construction of 19 projects was authorized by P.L. 106-576 and its amendment, P.L. 107-351 in 2000 and 2002, respectively. The law specifies that the Federal share of the total project costs for each project will be up to 50 percent, capped at \$55 million. Other parties participating in various aspects of the Lower Rio Grande Valley Program are the Texas Water Development Board, North American Development Bank, and Texas A&M University. Thirteen of the 19 authorized projects have begun construction, nine of which are complete and under operation. In general, construction activities have significantly outpaced congressional funding. After the original 19 authorized projects have been constructed, they are expected to save about 83,000 acre-feet of water, 7.5 million kWh of energy, and \$781,000 of operation and maintenance expenses each year.

Equus Beds (KS), Groundwater Recharge Project, Wichita Project, Kansas, City of Wichita

Status: Ongoing

Description: The Equus Beds Aquifer has experienced groundwater declines of up to 40 feet since 1950. P.L. 109-299 authorized Reclamation to fund up to 25 percent, capped at \$30,000,000 (2003 indexed), of the total estimated construction cost to plan, design, and construct infrastructure to divert 100 million gallons per day of flood flows from the Little Arkansas River for storage and recovery in the Equus Beds Aquifer. Reclamation completed an Environmental Impact Statement and the Record of Decision in 2010. Construction is well underway.

See Program Brochure for additional for Water Planning and Construction Assistance information.

Reclamation Wide Programs

WaterSMART Program

Water is our most precious natural resource, and is increasingly stressed by the demands our society places on it. Adequate water supplies are an essential element in human survival, ecosystem health, energy production, and economic sustainability. Significant climate change-related impacts on water supplies are well documented in the scientific literature and scientists are forecasting changes in hydrologic cycles.

Congress recognized these issues with passage of the SECURE Water Act, a law that authorizes federal water and science agencies to work together with state and local water managers to plan for climate change and the other threats to our water supplies, and take action to secure our water resources for the communities, economies, and the ecosystems they support.

To implement the SECURE Water Act, and ensure that the Department of the Interior is positioned to meet these challenges, Secretary Salazar established the WaterSMART program in February 2010. WaterSMART allows all bureaus of the Department to work with States, Tribes, local governments, and non-governmental organizations to pursue a sustainable water supply for the Nation by establishing a framework to provide federal leadership and assistance on the efficient use of water, integrating water and energy policies to support the sustainable use of all natural resources, and coordinating the water conservation activities of the various Interior offices.

Reclamation plays a key role in the WaterSMART program as the Department's main water management agency. Focused on improving water conservation and helping water and resource managers make wise decisions about water use, Reclamation's portion of the WaterSMART program is achieved through administration of grants, scientific studies, technical assistance, and scientific expertise. For more information about WaterSMART program elements please reference the website at <http://www.usbr.gov/WaterSMART/> if you have any questions or need additional information, please contact AOMorgan@usbr.gov

See Program Brochure for additional information on the WaterSMART Program.

WaterSMART Grants

WaterSMART Grants: provide cost-shared funding for the following types of projects:

- Water and Energy Efficiency Grants – for projects that save water, improve energy efficiency, address endangered species and other environmental issues, and facilitate transfers to new uses.
- System Optimization Review Grants – A System Optimization Review is a broad look at system-wide efficiency focused on improving efficiency and operations of a water delivery system, water district, or water basin. The Review results in a plan of action that focuses on improving efficiency and operations on a regional and basin perspective.

- Advanced Water Treatment and Pilot and Demonstration Project Grants – for pilot and demonstration projects that address the technical, economic, and environmental viability of treating and using brackish groundwater, seawater, impaired waters, or otherwise creating new water supplies within a specific locale.
- Grants to Develop Climate Analysis Tools – for research projects focused on the information gaps detailed in the joint Reclamation and United States Army Corps of Engineers (USACE) Report titled “Addressing Climate Change in Long-Term Water Resources Planning and Management: User Needs for Improving Tools and Information” (Section 3). Projects support the ongoing efforts under 9503(b) of the SECURE Water Act and may help narrow uncertainties, provide information in more usable forms, or develop more robust strategies for incorporating uncertainty into water management decision-making.

Basin Studies Program

The Basin Studies Program is a basin-wide effort to evaluate and address the impacts of climate change.

1. Basin Studies – funding is available for comprehensive water studies that define options for meeting future water demands in river basins in the western United States where imbalances in water supply and demand exist or are projected. Each study includes four key segments:
 - a. State-of-the-art projections of future supply and demand by river basin.
 - b. An analysis of how the basin’s existing water and power operations and infrastructure will perform in the face of changing water realities.
 - c. Development of options to improve operations and infrastructure to supply adequate water in the future.
 - d. Recommendations on how to optimize operations and infrastructure in a basin to supply adequate water in the future
2. West-Wide Climate Risk Assessments – West-Wide Climate Risk Assessments identify risks to water supplies and demands and impacts to operations within the eight major river basins: Colorado, Columbia, Klamath, Missouri, Rio Grande, Sacramento, San Joaquin, and Truckee basins.
3. Landscape Conservation Cooperatives (LCCs) - LCCs are partnerships that bring together resource managers and stakeholders for cooperative planning and information sharing to solve regional conservation issues. Reclamation and the Fish and Wildlife Service are co-leading the development of two **Landscape Conservation Cooperatives**, the **Southern Rockies** and the **Desert LCCs**

Reclamation Seeking Partners for WaterSMART Basin Studies

The Bureau of Reclamation is seeking eligible non-federal entities interested in participating in a Basin Study under the WaterSMART Program. Those entities interested in proposing a Basin Study to Reclamation must submit a letter of interest to their respective Reclamation regional office by March 16, 2011.

Basin Studies are comprehensive studies that define options for meeting future water demands in river basins in the western United States where imbalances in supply and demand exist or are projected. Reclamation will work cooperatively with state and local partners to conduct the study.

A Basin Study is comprised of four main elements:

1. Projections of water supply and demand, including the risks of climate change
2. Analysis of how existing water and power infrastructure and operations will perform in response to changing water realities
3. Development of options and mitigation strategies to improve operations and infrastructure to supply adequate water in the future
4. Trade-off analysis of the options identified, findings and recommendations, as appropriate

Information regarding the risks and impacts of climate change may be developed as part of the Basin Studies, or may include baseline analyses developed through the West-Wide Climate Risk Assessments, another activity under the WaterSMART Program. The non-federal entities interested in participating in a Basin Study must contribute at least 50 percent of the total study cost as cash or in-kind services. Basin Studies are not a financial assistance program; therefore, the Reclamation share of the study costs may only be used to support work done by Reclamation staff or Reclamation contractors.

Proposed letters of interest for Basin Studies will be reviewed by Reclamation regional office staff. Those selected for further consideration will work with Reclamation technical experts to develop a joint study proposal for evaluation and prioritization by a Reclamation-wide review committee. The committee will develop a group of final recommendations to be considered for funding within existing budget parameters.

To learn more about proposing a Basin Study or to learn more about the WaterSMART Program, visit www.usbr.gov/WaterSMART/. To determine the Reclamation region in which your specific basin is located, visit www.usbr.gov/main/regions.html.

Title XVI – Water Reclamation and Reuse Program

The Reclamation Water Reclamation and Reuse Program was authorized by the Reclamation Wastewater and Groundwater Study and Facilities Act of 1992 (Title XVI of Public Law 102-575). Also known as Title XVI, the Act directs the Secretary of the Interior to undertake a program to investigate and identify opportunities for water reclamation and reuse. Through the Title XVI Program, Reclamation provides financial and technical assistance for appraisal studies, feasibility studies, research and demonstration projects, and construction projects that reclaim, reuse, or recycle water. Unlike other Reclamation programs, the Title XVI Program provides Reclamation with blanket authorization to participate in planning studies, including appraisal or feasibility investigations, as well as research and demonstration projects. However, Reclamation cannot participate in full-scale construction until Congress provides specific authorization through an amendment to P.L. 102575. The original Act provided construction authorization to five recycling projects. Since then, amendments to P.L. 102-575 have provided construction authorization to about 45 projects in nine states.

For purposes of the Title XVI Program, a water reuse project is a project, including the necessary facilities and features that reclaim and reuse municipal, industrial, domestic, or agricultural wastewater and naturally impaired groundwater and/or surface water. Consistent with State law, reclaimed water can be used for a variety of purposes including, but not limited to, environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, or recreation.

Eligible Recipients

Eligible recipients of Title XVI funding include State, regional, or local authorities; Indian tribes or tribal organizations; or other entities such as water conservation or conservancy districts, wastewater districts, rural water districts, and all must be located within the 17 Western States or Hawaii.

See Program Brochure for additional information on the Water Reclamation and Reuse Program.

Reclamation Rural Water Supply Program

The Rural Water Supply Program is a new program that Reclamation is developing pursuant to the Rural Water Supply Act of 2006, Public Law 109-451. The Act authorized Reclamation to establish a program to work with rural communities, including tribes, throughout the 17 western states to assess potable water supply needs and to identify options to address those needs through appraisal investigations and feasibility studies.

See hand out for additional information on the Rural Water Supply Program.

Current Funding Opportunities

All Reclamation program Funding Opportunity Announcements for Grants or Cooperative Agreements to utilize Reclamation funding are posted on the Grants.gov website: <http://www.grants.gov/>

Any interested applicant can view this site and utilize features that will generate E-Mail notices of all postings based on the agency, or any set of parameters, of interest to the applicant. The applicant is provided with the tools to apply for available funding utilizing this website.

WaterSMART: System Optimization Review Grants for FY2011

<http://www.grants.gov/search/search.do;jsessionid=0IQRNvhfCYhF2cFwF85lpnQhmRL3RYLt82T5CsGfL2tFpjpL318!1451664760?oppId=77633&mode=VIEW>

WaterSMART: Advanced Water Treatment Pilot and Demonstration Project Grants for 2011

<http://www.grants.gov/search/search.do;jsessionid=0IQRNvhfCYhF2cFwF85lpnQhmRL3RYLt82T5CsGfL2tFpjpL318!1451664760?oppId=77613&mode=VIEW>

WaterSMART: Grants to Develop Climate Analysis Tools for FY 2011

<http://www.grants.gov/search/search.do;jsessionid=0IQRNvhfCYhF2cFwF85lpnQhmRL3RYLt82T5CsGfL2tFpjpL318!1451664760?oppId=77593&mode=VIEW>

Desalination and Water Purification Research and Development (DWPR)

<http://www.grants.gov/search/search.do;jsessionid=0IQRNvhfCYhF2cFwF85lpnQhmRL3RYLt82T5CsGfL2tFpjpL318!1451664760?oppId=87993&mode=VIEW>

Reclamation Rural Water Supply Program

<http://www.grants.gov/search/search.do;jsessionid=0lQRNvhfCYhF2cFwF85lpnOhmRL3RYLt82T5CsGfIL2tFpjpL3l8!1451664760?oppId=59067&mode=VIEW>

Science and Technology Program – Research and Development

The Science and Technology (S&T) Program is the primary Research and Development (R&D) arm of Reclamation. The R&D Program is a Reclamation-wide competitive, merit-based program that is focused on innovative solutions for Reclamation water and facility managers to assist western water managers and stakeholders. The program has contributed many of the tools and capabilities in use today by Reclamation and western water managers.

Over the past 7 years, the R&D Office has funded approximately 800 research projects totaling \$50 Million Dollars that have led to many important tools, solutions, and improvements in the way water and power infrastructure and related resources are managed. Effective partnerships are a primary R&D proposal award consideration. The emphasis is on efficiency and effectiveness through collaborative R&D with stakeholders, universities, non-profit organizations, the private sector, and other federal, state, and local agencies with water and water-related roles and capabilities. Collaborative R&D projects achieve cost-sharing with partners through in-kind services and/or direct funding contributions.

For Fiscal Year 2011 funding, the Reclamation call for proposals targeted projects with a focus on:

1. The spread of invasive Zebra and Quagga Mussels;
2. Potential impacts of climate change on water resources; and
3. Advanced water treatment processes and technologies.

However, proposals were considered in all areas affecting Reclamation, including broad categories of:

1. Environmental issues in water delivery/management;
2. Water and power infrastructure reliability;
3. Water operations decision support; and
4. Conserving or expanding water supplies.

To learn more about the Reclamation R&D Program, please visit <http://www.usbr.gov/research/science-and-tech/>, the Reclamation S&T Program brochure, a PDF version, that may be downloaded.

To date, three R&D projects have received funding within OTA0:

1. Evaluation of Joint Influences of Climate Change and Land Cover on Water Availability (Fiscal Year 2009 and 2010)
2. Treatment of Variable Water Sources: Adaptations for a Flexible Desalination System (Fiscal Year 2010)
3. An Analysis of Nano-Filtration Treatment Applications on Recycled and Potable Water Supplies (Fiscal Year 2010)

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Rural Water Supply Program Fact Sheet

Rural Water Supply Program Overview

The Rural Water Supply Program was authorized by Title I of P.L. 109-451, the Rural Water Supply Act of 2006 (Act). This Program enables Reclamation to assist rural communities in the western United States with the planning and design of projects to develop and deliver potable water supplies. Rulemaking to establish the programmatic criteria for the program was conducted with public comment in 2008. The interim final rule became effective in 2009 and the Directives and Standards, which further define Program requirements, responsibilities, and review processes, became effective in 2010.

Under the Program, states (or a political subdivision of a state), Indian tribes, and entities created under state law with water management authority can seek financial and technical assistance to undertake appraisal investigations and feasibility studies to explore potable water supply needs and options for addressing those needs. Reclamation funded 10 appraisal investigations and 3 feasibility studies in Fiscal Year 2010 through the Program.

While the Act provides Reclamation the authority to undertake appraisal investigations and feasibility studies, it does not provide authority to undertake the construction of water delivery facilities recommended for development under the Program. Construction of a project requires a specific Act of Congress.

Federal Assistance for Planning Rural Water Projects

Assistance is available for appraisal investigations and feasibility studies for rural water supply projects intended to serve a community or group of communities, including Indian tribes and tribal organizations, each of which has a population of no more than 50,000 people, with domestic, industrial, municipal, and residential water. Eligible rural water supply projects do not include commercial irrigation or major impoundment structures. While water supply for commercial livestock operations and other industrial uses are allowable under the program, investigations and studies for projects that will provide water primarily for domestic, residential, and municipal uses will receive higher priority consideration.

Eligible entities can participate in the Program by:

1. Working with Reclamation to complete an appraisal investigation or feasibility study;
2. Seeking a grant or entering into a cooperative agreement with Reclamation to complete an appraisal investigation or feasibility study themselves or through their own contractor (both in cooperation with Reclamation); or
3. Submitting an appraisal investigation or feasibility study prepared without any financial or technical support from Reclamation for review and inclusion in the Program. This option provides eligible applicants the opportunity to have Reclamation review a previously completed appraisal investigation or feasibility study and prepare a report with recommendations on whether to proceed to the next step in the planning process.

An appraisal investigation is an analysis of domestic, municipal, and industrial water supply problems, needs, and opportunities primarily using existing data and includes a preliminary assessment of

alternatives to determine if there is at least one viable alternative that warrants a more detailed investigation.

Appraisal investigations will provide a recommendation on whether a feasibility study should be initiated. Reclamation will pay 100-percent of the costs of appraisal studies up to \$200,000 and 50-percent for all costs above that amount.

A feasibility study is generally completed following the completion of an appraisal investigation, and a recommendation for proceeding to a feasibility-level analysis. It is a detailed investigation requiring the acquisition of primary data, and an analysis of a reasonable range of alternatives, including a preferred alternative. A technical and economic analysis is also completed.

Funding for feasibility studies is cost-shared. Reclamation will pay 50-percent and the non-Federal entity will pay 50-percent. Based upon a determination of financial hardship, Reclamation's share of the feasibility study may be increased.

Construction

The Act, the interim final rule, and the Directives and Standards do not impact projects that were authorized for construction prior to enactment.

Based upon the findings of a completed feasibility study, Reclamation will make a recommendation to Congress regarding the construction of a rural water supply project and the appropriate non-Federal share of construction costs. In general, the non-Federal project entities must pay 100 percent of all costs to operate, maintain and repair constructed projects in addition to paying a minimum of 25-percent of the capital construction costs. Non-Federal project entities may be required to pay more depending on the outcome of an analysis of their capability to pay. Indian tribe project beneficiaries may have all or part of their non-Federal construction costs deferred based upon their capability to pay.

Next Steps

To participate in this program, interested non-Federal entities must respond to the Fiscal Year 2011 Reclamation Rural Water Supply Program Funding Opportunity Announcement by January 31, 2011. The Funding Opportunity Announcement outlines all the requirements for requesting program assistance and can be found on www.grants.gov under Funding Opportunity Number R11SF80307.

As noted earlier, eligible entities can also participate by submitting an appraisal investigation or feasibility study prepared without any financial or technical support from Reclamation. If the submitted investigation or study meets the eligibility and prioritization criteria, it will be incorporated into the program. Eligible entities can submit their completed appraisal investigation or feasibility study to their local Reclamation Area Office without having to respond to the FOA. This option provides eligible entities the opportunity to have Reclamation review the previously completed appraisal investigation or feasibility study and, once determined to be complete and technically adequate, prepare an appraisal report or feasibility report, as applicable, on behalf of the entity. Contact your regional representative for additional information on submitting an independent investigation or study for review.

Facts & Information

The Bureau of Reclamation:

- Manages, develops, and protects water and related resources in an environmentally and economically sound manner in the interest of the American public.
- Is the nation's largest wholesale water supplier, operating 348 reservoirs with a total storage capacity of 245 million acre-feet (an acre-foot, 325,851 gallons of water, supplies enough water for a family of four for one year).
- Provides 1 out of 5 (or, 140,000) Western farmers with irrigation water for 10 million farmland acres that produce 60 percent of the nation's vegetables and one quarter of its fresh fruit and nut crops.
- Is the second largest producer of hydropower in the United States and operates 58 hydroelectric powerplants that annually produced, on average, 40 billion kilowatt-hours for the last 10 years.
- Delivers 10 trillion gallons of water to more than 31 million people each year.
- Manages, with partners, 289 recreation areas that have over 90 million visits annually.

The Bureau of Reclamation priorities are to:

- Ensure the continued delivery of water and power benefits in conformity with contracts, statutes, and agreements.
- Operate and maintain projects in a safe and reliable manner, protecting the health and safety of the public and Reclamation employees and improve financial accountability and transparency to our contractors.
- Honor State water rights, interstate compacts, contracts with Reclamation users, further the Secretary of the Interior's Indian Trust responsibilities, and comply with all environmental statutes.
- Plan for the future using programs that focus Reclamation's financial and technical resources on areas in the West where conflict over water either currently exists or is likely to occur in the coming years.
- Enhance the business operations of Reclamation in accord with the *Managing for Excellence* initiative.
- Provide for the implementation of the newly authorized Loan Guarantee Program that can assist districts with large operation and maintenance/replacement projects on Reclamation facilities and facilities used to deliver Reclamation supplies.

The Bureau of Reclamation is:

- Developing strategies to manage and deliver water more efficiently and effectively to our customers in order to help satisfy the many needs of irrigation, municipalities, power and the environment and serving as a technical resource for water users and planners.
- Working in partnership with states, Tribes, water and power customers, and others to seek creative and collaborative solutions to Western water issues.
- Ensuring our dams do not create unacceptable risk to the public by monitoring, evaluating, and when appropriate, performing risk reduction modifications.

RECLAMATION

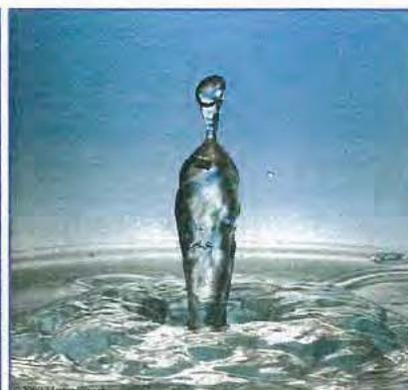
Managing Water in the West

WATER PLANNING AND CONSTRUCTION ASSISTANCE

Program Brochure

Oklahoma-Texas Area Office

May 2010

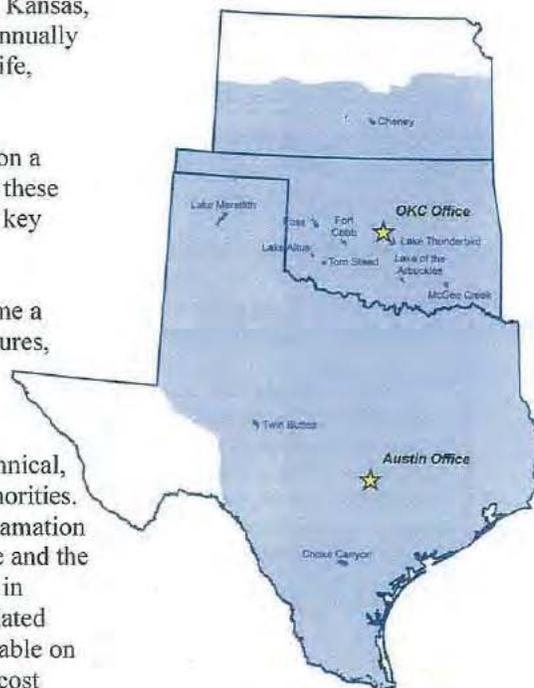


Summary Information

The Bureau of Reclamation (Reclamation) is a Department of the Interior agency whose mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner within the 17 western states. The Oklahoma-Texas Area Office (OTAO) has jurisdiction over 11 reservoir projects across Texas, Oklahoma, and Kansas, which together deliver more than 680,000 acre-feet of M&I water annually to about 3 million customers, and which also provide fish and wildlife, recreation, and flood control benefits.

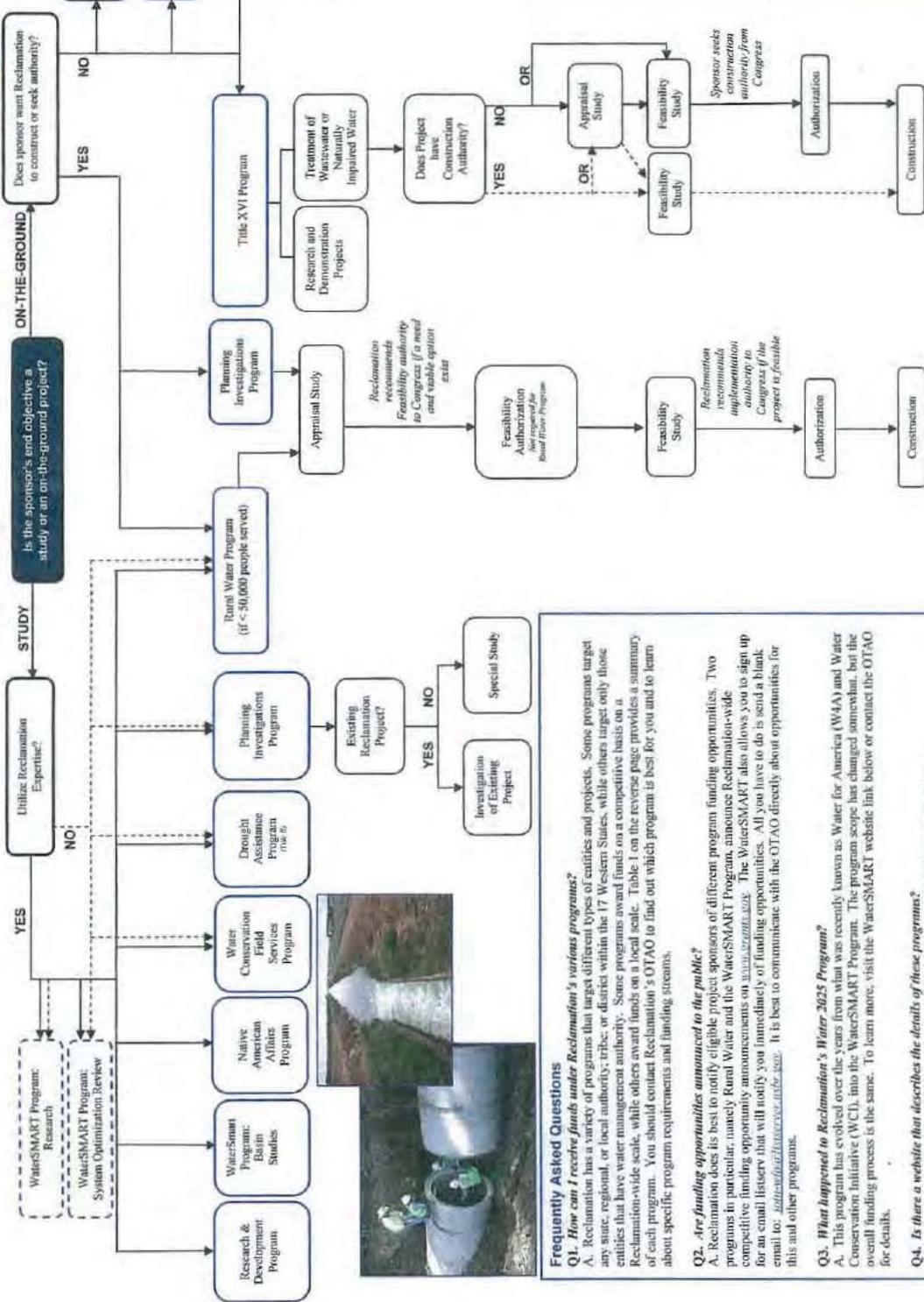
Reclamation's OTAO collaborates with state and local water users on a variety of planning and construction assistance programs. Through these programs, Reclamation can bring its expertise to bear in addressing key water resource issues related to changing water supplies, aging infrastructure, rural water systems, drought management, water conservation, water reuse, aquifer recharge, and desalination, to name a few. Each program varies with regard to its purpose, scope, procedures, eligibility, and funding.

The purpose of this brochure is to briefly highlight the range of opportunities available to water users wishing to seek planning, technical, or construction assistance under one of Reclamation's program authorities. The figure on the bi-fold inset page illustrates various paths of Reclamation assistance one could take depending on the overall project objective and the amount of Reclamation's technical and administrative involvement in implementation. It also illustrates key procedural milestones associated with construction projects that need Congressional authority. The table on the reverse page summarizes the scope, timeframe, cost-share, and cost ceilings associated with various Reclamation programs. The information contained herein is for summary purposes only. Reclamation's OTAO would be pleased to assist you with specific inquiries for any of these programs.



Reclamation's Oklahoma-Texas Area Office has offices in both Austin, TX and Oklahoma City, OK.

Reclamation Water Planning and Construction Assistance Programs



RECLAMATION

Managing Water in the West

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Oklahoma City Field Office
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Visit our website at: <http://www.usbr.gov/otao/>
 Special thanks to Harbo through for cover photo photography

Frequently Asked Questions

Q1. How can I receive funds under Reclamation's various programs?
 A. Reclamation has a variety of programs that target different types of entities and projects. Some programs target any state, regional, or local authority; tribe; or district within the 17 Western States, while others target only those entities that have water management authority. Some programs award funds on a competitive basis on a Reclamation-wide scale, while others award funds on a local scale. Table 1 on the reverse page provides a summary of each program. You should contact Reclamation's OTAO to find out which program is best for you and to learn about specific program requirements and funding streams.

Q2. Are funding opportunities announced to the public?
 A. Reclamation does its best to notify eligible project sponsors of different program funding opportunities. Two programs in particular, namely Rural Water and the WaterSMART Program, announce Reclamation-wide competitive funding opportunity announcements on www.usbr.gov. The WaterSMART also allows you to sign up for an email listserve that will notify you immediately of funding opportunities. All you have to do is send a blank email to: water@usbr.gov. It is best to communicate with the OTAO directly about opportunities for this and other programs.

Q3. What happened to Reclamation's Water 2025 Program?
 A. This program has evolved over the years from what was recently known as Water for America (WAA) and Water Conservation Initiative (WCI), into the WaterSMART Program. The program scope has changed somewhat, but the overall funding process is the same. To learn more, visit the WaterSMART website link below or contact the OTAO for details.

Q4. Is there a website that describes the details of these programs?
 A. The following websites will help you learn more about a few of Reclamation's programs:
 - Rural Water Program: <http://www.usbr.gov/ruralwater/>
 - WaterSMART Program: <http://www.usbr.gov/water-smart/>
 - Native American Affairs: <http://www.usbr.gov/native-american-affairs/>
 - Water Conservation Field Services Program: <http://www.usbr.gov/water-ics/index.cfm>

Summary of Reclamation programs

Program	Scope; Time Frame	Federal Cost-Share; Cost-Ceiling	Eligible Entities
Planning Investigations			State, regional, or local water entities; tribes; water districts; within the 17 Western States; typically collaborated through a Reclamation project partner or state water resource agency
Appraisal Study	A study that determines whether there is a need, Federal interest, and a viable alternative; 1 year	100%; up to \$100,000	
Feasibility Study	A study that requires additional Congressional authority and determines whether an alternative is feasible to implement and/or construct; 2-3 years	50%; none	
Construction	Dependent upon specific Congressional authority and appropriations	none	
Special Study	A study of problems, needs, or opportunities; not intended to lead to construction; 2 years	50%; up to \$300,000	
Native American Affairs	A study of problems, needs, or opportunities; not intended to lead to construction ; 2 years	50%; none	Indian Tribe
Rural Water			State, regional, or local water entities; tribes; water districts; entity with water management authority; within the 17 Western States; must, with some exceptions, serve less than 50,000 people
Appraisal Study	Determines whether there is a need, Federal interest, and a viable alternative; 1 year	100%; up to \$200,000	
Feasibility Study	Determines whether the project is feasible to implement and/or construct; 2-3 years	50%; none	
Construction	Dependent upon specific Congressional authority and appropriations	up to 75%; none	
Water Conservation Field Services	Planning or construction of water conservation efficiency and improvement projects; 1 year	50%; up to \$100,000	Reclamation project partners, with some exceptions
WaterSMART Program			State, regional, local water entities; tribes; water districts; within the 17 Western States; universities/non-profits in some cases (i.e., research)
Basin Study	Basin-wide investigation into climate variability and its impacts on water supply needs; 2 years	50%; none	
System Optimization Reviews	Study that improves water delivery efficiency and operations from a regional/basin-wide level; 2 years	<i>Challenge Grants:</i> 50%; generally up to \$300,000 with some exceptions	
Research	Investigations into climate change and water resources management; 2 years		
Water and Energy Efficiency	Construction – improves water delivery and energy efficiency; creates water markets; 2 years		
Advanced Water Treatment	Pilot & Demonstration – construction projects that demonstrate a new technology; 2 years		
Drought Assistance	Drought contingency planning (Title II); construction activities to minimize/mitigate drought losses (Title I); none	100%; none	State, regional, local water entities; tribes; water districts; within the 17 Western States
Title XVI			State, regional, or local water entities; tribes; water districts; within the 17 Western States
Appraisal Study	Study that identifies water reuse opportunities and technologies; 2 years	100%; none	
Feasibility Study	Study that compares a Title XVI alternative to the no action alternative and determines cost-benefits; none	50%; none	
Construction	Dependent upon specific Congressional authority and appropriations	25%; up to \$20 million	
Research and Development	A new technology or a novel method that affects the outcome of a planning study; 3 years	100%; none	Reclamation staff

RECLAMATION

Managing Water in the West

Water Reclamation and Reuse

Title XVI Program

Oklahoma-Texas Area Office (OTAO)

November 2010

PROGRAM SCOPE

The Bureau of Reclamation's (Reclamation) Water Reclamation and Reuse Program was authorized by the Reclamation Wastewater and Groundwater Study and Facilities Act of 1992 (Title XVI of Public Law 102-575). Also known as Title XVI, the Act directs the Secretary of the Interior to undertake a program to investigate and identify opportunities for water reclamation and reuse. Through the Title XVI program, Reclamation provides financial and technical assistance for appraisal studies, feasibility studies, research and demonstration projects, and construction projects that reclaim, reuse, or recycle water. Unlike other Reclamation programs, the Title XVI program provides Reclamation with blanket authorization to participate in planning studies, including appraisal or feasibility investigations, as well as research and demonstration projects. However, Reclamation cannot participate in full-scale construction until Congress provides specific authorization through an amendment to P.L. 102-575. The original Act provided construction authorization to five recycling projects. Since then, amendments to P.L. 102-575 have provided construction authorization to about 45 projects in nine states, one of which is in OTAO.

For purposes of the Title XVI Program, a water reuse project is a project (including the necessary facilities and features) that reclaims and reuses municipal, industrial, domestic, or agricultural wastewater and naturally impaired groundwater and/or surface waters. Consistent with State law, reclaimed water can be used for a variety of purposes including, but not limited to, environmental restoration, fish and wildlife, groundwater recharge, municipal, domestic, industrial, agricultural, power generation, or recreation.

Eligible Recipients

Eligible recipients of Title XVI funding include State, regional, or local authorities; Indian tribes or tribal organizations; or other entities such as water conservation or conservancy districts, wastewater districts, rural water districts, and all must be located within the 17 Western States or Hawaii.

Program Requirements

Funds for construction projects cannot be disbursed until a Title XVI project receives specific Congressional authorization and all Title XVI pre-construction requirements have been met for that project. These include: (1) completed appraisal and feasibility studies that meet the requirements of Title XVI; (2) completed compliance with the National Environmental Policy Act; (3) an approved determination of financial capability; and (4) an executed cost-share agreement for financial assistance. Project sponsors may carry out or select a third party contractor to conduct planning and environmental compliance activities, or Reclamation may perform these services at the request of the sponsor. However, the construction ownership, operations, and maintenance of a Title XVI project are the sole responsibility of the project sponsor.

Appraisal Studies

An appraisal study may be carried out at the discretion of the project sponsor depending on the status of planning activities. If conducted, an appraisal study considers all potential uses for reclaimed water, methods to increase demand, required permitting, and the current status of water reclamation technology and opportunities for developing improved technologies. The appraisal study will be used to determine if conducting a feasibility study is warranted.

Feasibility Studies

A feasibility study must be conducted in order to receive Federal assistance on a construction project. A feasibility study leads to a decision on whether or not to implement a Title XVI project. Title XVI has specific requirements for the content of the feasibility report. These requirements are identified in the Reclamation's Directive and Standard WTR 11-01, *Water Reclamation and Reuse Program Feasibility Study Review Process*.

Construction Projects

A construction project represents the on-the-ground construction of a planned full-scale Title XVI treatment system, conveyance system or other permanent facility. A construction project is only eligible for funding after it is specifically authorized, environmental compliance is complete, financial capability is demonstrated, and a cost share agreement has been executed.

Research and Demonstration Projects

A demonstration project is a smaller version of a full-scale facility that is sized appropriately to demonstrate the application of a new and innovative technology. Demonstration projects also can establish the feasibility of recycling water to local institutions when an unproven technology is employed. Sponsors should contact OIAO for information on requirements for demonstration projects.

PROGRAM COST-SHARES

The Title XVI program places different cost-share limitations on planning activities, construction projects, and research and demonstration projects (Table 1).

Table 1. Cost-share amounts authorized under the Title XVI Program

	Federal Share	Non-Federal Share	Special Provisions
Appraisal Studies	100%	-	
Feasibility Studies	50%	50%	\$20 million total project cap
Construction Projects	25%	75%	(in general)
Research and Demonstration Projects	25%*	75%	

* 50% cost-share with approval

PROGRAM PROCESS

A Title XVI construction project may be eligible for Federal funding by following a process (Figure 1) that ensures compliance with all Title XVI program requirements. This process allows for some flexibility depending on the specific situation for each project. Interested sponsors should contact OIAO for detailed information regarding the process to implement their project.

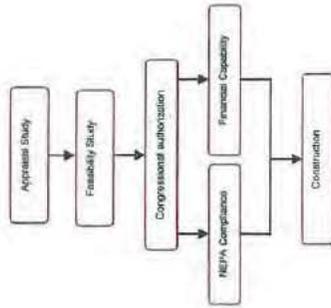


Figure 1. General process and requirements for construction projects under Reclamation's Title XVI program

TITLE XVI ACTIVITIES IN OIAO

Participation in Title XVI activities in OIAO has been dynamic and complex. To date, twelve projects have been at various stages of project planning, six of which are active (Figure 2; Table 2).



Figure 2. Location and status of Title XVI activities in the Oklahoma-Texas Area Office

PROJECT	SPONSOR	PROJECT DESCRIPTION	STATUS	
			Appraisal	Feasibility
1 Brownsville Water Recycling Project	Brownsville Public Utilities Board	Direct non-potable reuse; development of a water reuse distribution system.	Completed FY 02	Closed FY 06 Authorized: NO
2 Brownsville Seawater Desalination Demonstration Project	Brownsville Public Utilities Board	Demonstrating seawater desalination in the Gulf of Mexico/Atlantic Ocean		Potential: N/A Authorized: YES
3 Brownsville Brackish Desalination Project	Southern Regional Water Authority	Addition of 7.5 mgd phase II to existing brackish groundwater desalination treatment plant.	Completed FY 02	Closed FY 06 Authorized: NO
4 Laguna Madre Water District Reuse Project	Laguna Madre Water District	Direct non-potable reuse; infrastructure to convey up to 1 mgd of recycled water for landscape and golf course irrigation	Completed FY 03	Potential: unknown Authorized: NO
5 Leon Creek/Mitchell Lake Water Reuse Project	San Antonio Water System	Expansion of distribution system and storage of recycled water.	Completed FY 03	Completed FY 04 Authorized: NO
6 SAWS Brackish Groundwater Desalination Facility	San Antonio Water System (SAWS)	25 mgd brackish desalination facility and wells (Bexar and Alameda Counties)		Initiated: FY 10 (ongoing) Authorized: NO
7 Austin Wastewater Reclamation and Reuse Project	Austin Water Utility	Direct non-potable reuse; infrastructure to convey up to 20 mgd of recycled water for landscape irrigation throughout Austin	Completed FY 04	Completed FY 10 Authorized: NO
8 Williamson County Water Recycling Project	Round Rock, Georgetown, Leander, Cedar Park	Direct non-potable reuse; Round Rock to construct infrastructure to convey up to 10 mgd of recycled water to service Old Settlers Park, Dell Diamond Ball Park, and other areas	Completed FY 03	Completed FY 10 Authorized: YES
9 Central Texas Water Recycling and Reuse: Flat Creek Project	City of Waco	Direct non-potable reuse; infrastructure to convey up to 2 mgd of recycled water to the Waco Industrial District	Completed FY 10	Completed FY 10 Authorized: NO
10 West Loop Reuse Project	City of Dallas	Direct non-potable reuse; infrastructure to convey up to 5 mgd of recycled water to the Brazos Electric Power Plant, manufacturing and industrial services, and landscaping		Potential: unknown Authorized: NO
11 Dallas Trinity River Recycled Water Project	Dallas Water Utility	Direct non-potable reuse; infrastructure to convey up to 16 mgd of recycled water to the Trinity River Corridor project and downtown area	Completed FY 10	Initiated FY 13 Authorized: NO
12 Central Oklahoma Water Reuse Project	Central Oklahoma Municipal Conservancy District	Evaluation of either a direct non-potable or indirect potable reuse project to service Norman, Midwest City, and Del City		Initiated: FY 10 (ongoing) Authorized: NO

Table 2. Title XVI Projects in the Oklahoma-Texas Area Office

PROGRAM FUNDING

To date, OTAO has received over \$3.5 million in funding to participate in the Title XVI Program (Table 3). Fiscal Year 2009/2010 appropriations indicate that interest in the Title XVI Program continues to grow in OTAO.

The Department of the Interior's new WaterSmart Program included funding in FY 10 for competitive challenge grants for Title XVI pilot and demonstration projects that demonstrate the technical and economic viability of treating and using brackish groundwater, seawater, and other impaired waters. Funding opportunities for these and other grants are posted on www.grants.gov. The President's budget for FY 11 requests \$20 million for the Title XVI program. Sponsors are encouraged to contact OTAO for information on Title XVI program funding opportunities.

CONTACT INFORMATION

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Table 3. Federal appropriation amounts (x 1,000) by Fiscal Year (FY) for Title XVI projects in the Oklahoma-Texas Area Office

Project	FY01	FY02	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	Total
1 Brownsville Water Recycling	46													46
2 Brownsville Seawater Desal/ASR														0
3 Brownsville Brackish Desalination	46													46
4 Laguna Madre Reuse Project														0
5 Leon Creek/Mitchell Lake				354										354
6 SAWS Brackish Desalination Facility														0
7 Austin Wastewater Reclamation			222											222
8 Williamson County Recycled Water Project					96			246	600	1,228				2,170
9 Central Texas Reuse: Flat Creek														0
10 West Loop Reuse Project														0
11 Dallas Trinity River Recycled Water Project					96		492							588
12 Central Oklahoma Water Reuse								121						121
Totals	92		222	354		192		738	721	1,228				3,547



RECLAMATION

Managing Water in the West

WaterSMART Program Grants

Oklahoma-Texas Area Office (OTAO)

October, 2010

OTAO Summary

The Bureau of Reclamation (Reclamation) is a Department of the Interior agency whose mission is to manage, develop, and protect water and related resources in an environmentally and economically sound manner within the 17 western states. The Oklahoma-Texas Area Office (OTAO) has jurisdiction over 11 reservoir projects across Texas, Oklahoma, and Kansas, which together deliver more than 680,000 acre-feet of M&I water annually to about 3 million customers, and which also provide fish and wildlife, recreation, and flood control benefits.

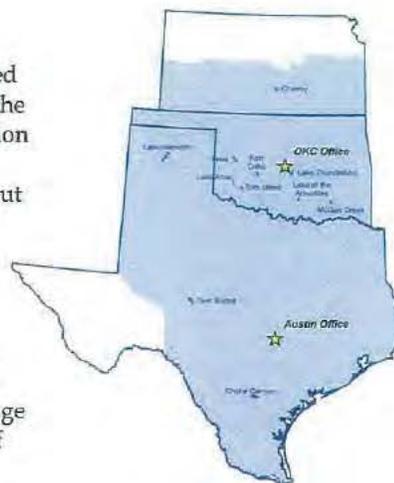
Program Overview

The nation faces many water related challenges including drought, aging infrastructure, impaired water quality, climate change, energy demands, expanding populations and increased environmental needs. Water shortage and water-use conflicts have become more commonplace in many areas of the United States, even in normal water years. As competition for water resources grows - for irrigation of crops, growing cities and communities, energy production, and the environment - the need for information and tools to aid water resource managers also grows.

In response to these challenges, the Department of the Interior's WaterSMART (Sustain and Manage America's Resources for Tomorrow) Program, which is being administered by the Bureau of Reclamation, aims to leverage federal and non-federal funds on projects that improve water management, increase energy efficiency in water delivery, facilitate water marketing projects, protect threatened and endangered species, and carry out activities to address potential climate-related impacts on water resources.

In Fiscal Year (FY) 2010, grant funding opportunities were made available within four project categories:

- **Water and Energy Efficiency:** construction projects that improve conservation and more efficient use of water and energy.
- **System Optimization Reviews:** a broad look at system-wide efficiency focused on improving efficiency and operations of a water delivery system, water district, or water basin. The Review results in a plan of action that focuses on improving efficiency and operations on a regional or basin perspective.
- **Advanced Water Treatment Pilot and Demonstration Projects:** construction of pilot and demonstration projects that address the technical, economic, and environmental viability of treating and using brackish groundwater, seawater, impaired waters, or otherwise creating new water supplies within a specific locale.
- **Research on Development of Climate Analysis Tools:** research activities to develop tools to assess the impacts of climate change on water resources.



Reclamation's Oklahoma-Texas Area Office has offices in both Austin, TX and Oklahoma City, OK.

"With dwindling water supplies, lengthening droughts, and rising demand for water in many areas of the country, a sustainable water strategy for America's water resources is one of my highest priorities. We must ensure stable, secure water supplies for future generations."

Ken Salazar, Secretary of the Interior
Feb 1, 2010



Replacement of manual gates with Rubicon standard programmable flume gate, Cameron County Irrigation District No. 2, TX.

A summary of eligibility and cost-share requirements within each of the four funding categories is provide in Table 1.

Table 1. FY 2010 WaterSMART Grant Categories

Grant Type	Eligible Applicants	Federal Cost-Share	Federal Funding Amount (Per Project)	Amount Available
Water and Energy	Entities with water or power delivery authority in the 17 Western U.S.	Up to 50%	Up to \$1 million	\$12.8 million
Advanced Water Treatment Pilot/Demo	Entities with water or power delivery authority in the 17 Western U.S.	Up to 50%	Up to \$600,000	\$2 million
System Optimization Review (SOR)	Entities with water or power delivery authority in the 17 Western U.S.	Up to 50%	Up to \$300,000	\$665,000
Climate Analysis	Universities, non-profits, entities with water or power delivery authority in the 17 Western U.S.	Up to 50%	Up to \$200,000	\$773,000

Funding Process Overview

The WaterSMART funding award process is illustrated in the Figure 1 below.

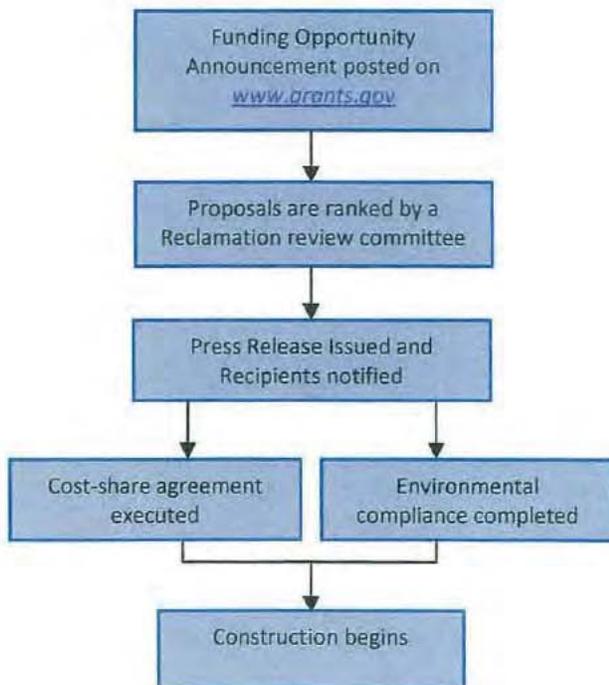


Figure 1. WaterSMART grants funding award process



Installation of a solar powered flow meter and SCADA system, Brownsville Irrigation District, TX.



Replacement of open canal with PVC pipe, Brownsville Irrigation District, TX.

Program Status

Since 2004, Reclamation has leveraged \$87 million in Federal funds with over \$210 million in non-Federal funds to implement almost 200 projects West-wide. This includes \$40 million which was made available under the American Recovery and Reinvestment Act of 2009. Overall, these projects are estimated to have saved over 700,000 acre-feet per year of water. Within OTAO, a total of 19 projects have received funding since 2004, with water savings estimated to be 43,000 acre-feet per year (Table 2).

Table 2. Summary of OTAO projects that have received grant funding.

No.	Recipient	Scope	Award Date (FY)	Federal Share	Total Cost	Acre-feet per year Conserved
1	Hidalgo County ID No. 6, TX	Canal lining and rehabilitation	2010	\$300,000	\$653,525	905
2	Laguna Madre Water District, TX	Direct, nonpotable water reuse	2010	\$300,000	\$2,014,265	336
3	Lower Colorado River Authority, TX	Gulf Coast Irrigation Division gate rehabilitation	2010	\$256,296	\$557,166	2,560
4	Brownsville ID, TX	Conveyance system improvements	2010	\$300,000	\$678,026	160
5	Harlingen Water Works, TX	Direct, nonpotable water reuse	2010	\$142,425	\$284,251	1,120
6	Harlingen Irrigation District, TX	SOR - measuring past water conservation improvements to prioritize future projects.	2010	\$73,022	\$150,887	n/a
7	University of Texas at Austin	Climate analysis on drought in the High Plains Ogallala Aquifer	2010	\$199,999	\$399,999	n/a
8	Oklahoma Water Resources Board	Climate analysis on water resources planning	2010	84,647	\$174,293	n/a
9	Harlingen Irrigation District, TX	Gate Automation	2009	\$162,494	\$484,437	3,143
10	Brownsville ID, TX	Canal conversion and gate automation	2008	\$299,000	\$601,048	147
11	City of McAllen, TX	Conversion of open canal to pipeline	2008	\$296,000	\$2,600,000	700
12	Cameron County ID #2, TX	Gate automation	2008	\$261,923	\$533,843	3,253
13	Cameron County ID #2, TX	Conversion of open canal to pipeline	2007	\$299,000	\$597,000	320
14	Texas Water Development Board, TX	Technical assistance to water purveyors	2005	\$158,250	\$321,527	n/a
15	City of McAllen, TX	Water metering	2005	\$184,868	\$687,352	5,032
16	Cameron County ID #2, TX	SCADA and water metering	2005	\$298,500	\$597,000	8,751
17	Brownsville ID, TX	Gate automation	2005	\$299,761	\$599,521	3,538
18	Lugert Altus ID, OK	Telemetry, gate automation, and check structures	2005	\$254,832	\$511,593	10,000
19	Harlingen Irrigation District, TX	Water metering	2004	\$300,000	\$600,000	3,464
TOTAL				\$4,471,017	\$13,045,733	43,429

Frequent Asked Questions

Q. *What type of information is contained within a WaterSMART grant FOA?*

A. The FOA provides specific scoping requirements, detailed proposal instructions, ranking criteria, and point allocations.

Q. *When are FOA's posted on www.grants.gov?*

A. FOA's for each grant are posted once per year and can be posted at any time throughout the year (depending on the budget cycle).

Q. *Can I be notified when a FOA is posted online?*

A. Yes. To receive notification of new WaterSMART FOAs, simply send a blank email to join-waterSMARTgrants@listserver.usbr.gov.

Q. *Does Reclamation own and operate the project after I receive a WaterSMART grant?*

A: No. The project sponsor retains all ownership and O&M responsibilities for the project.

Q. *What is the role of Reclamation once the field work starts?*

A: Reclamation verifies that the project is being implemented consistent with what was proposed. Minor changes in scope and schedule are acceptable.

Q. *How soon must my project be completed once I receive a grant?*

A. Projects generally must be completed within two years.

Q. *How much money is in the FY 11 budget for WaterSMART grants?*

A: Reclamation requested \$27 million in the President's FY 11 budget for WaterSMART grants. This is an increase of \$9 million from FY 10. However, the House/Senate mark-ups have not been completed and the FY 11 budget is not final.



Using wetlands to treat wastewater effluent, Harlingen Water Works, TX.



Water reuse and manhole lining project, Laguna Madre Water District, TX.



Replacement of manual gates with Rubicon standard programmable flume gate, Cameron County Irrigation District No. 2, TX.



Canal lining project, Hidalgo County ID No. 6, TX.

If you have questions or wish to learn more about specific WaterSMART opportunities, please contact your local Reclamation office at:

Oklahoma-Texas Area Office
5316 Hwy 290 W, Suite 510
Austin, TX 78735-8931
512.899.4150
512.899.4179

RECLAMATION
Managing Water in the West



**U.S. GEOLOGICAL SURVEY SUMMARY SHEET
ARKANSAS, LOUISIANA, OKLAHOMA, TEXAS
WATER SCIENCE CENTERS**

**RED RIVER COMPACT COMMISSION
31th Annual Meeting**

Oklahoma Water Resources Board
Oklahoma City, OK
April 26, 2011

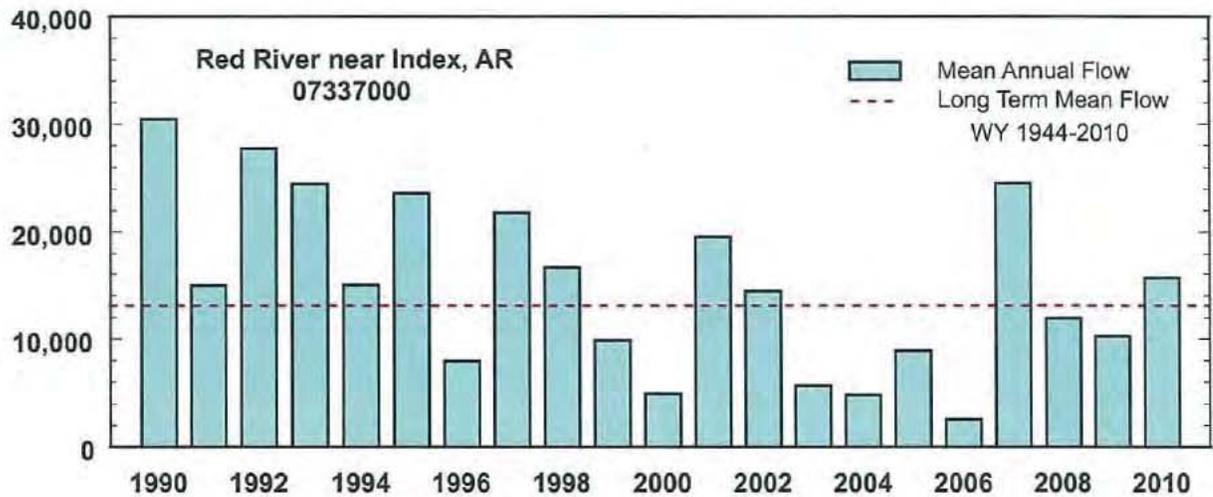
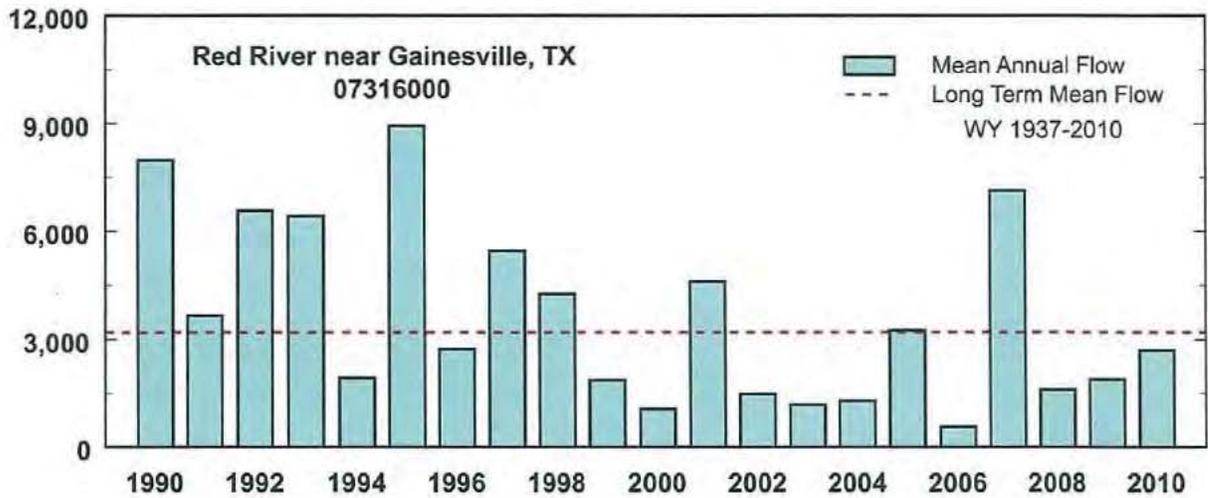
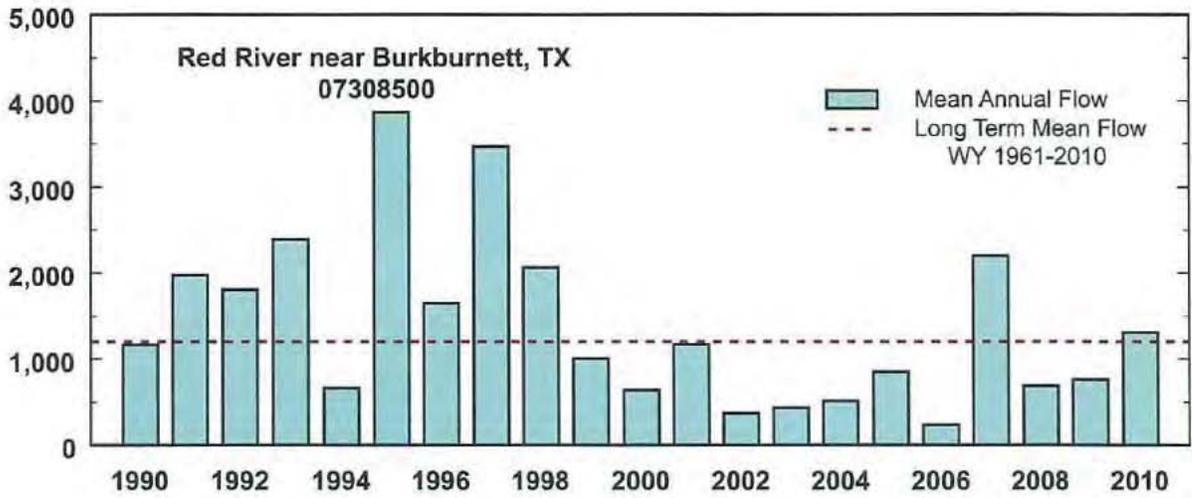
RED RIVER BASIN

	PEAK DISCHARGE (CFS)		AVERAGE DISCHARGE (CFS)	
	MAXIMUM	WY 10	PERIOD OF RECORD	WY 10
07308500 RED RIVER NR BURKBURNETT, TX	174,000 06-06-1995	36,000 07-11-10	1,179 50 YRS	1,308
07315500 RED RIVER NR TERRAL, OK	236,000 06-07-1995	31,000 04-19-10	2,428 72 YRS	2,347
07316000 RED RIVER NR GAINESVILLE, TX	265,000 05-31-1987	26,600 07-13-10	3,189 74 YRS	2,712
07331600 RED RIVER AT DENISON, TX	201,000 05-21-1935	14,000 02-18-10	4,785* 57 YRS+	5,188
07335500 RED RIVER AT ARTHUR CITY, TX	400,000 05-28-1908	47,400 02-19-10	9,118* 66 YRS++	9,712
07336820 RED RIVER NEAR DE KALB, TX	279,000 05-06-1990	48,200 10-29-10	14,256 42 YRS	12,920
07337000 RED RIVER AT INDEX, AR	297,000 02-23-1938	62,200 10-13-10	12,912* 67 YRS+++	15,650
07344370 RED RIVER AT SPRING BANK, AR	140,000 03-14-2001	112,000 10-15-10	20,502* 13 YRS	30,590

* AVERAGE DISCHARGE SINCE DENISON DAM IN OPERATION
+ 78 TOTAL YEARS OF RECORD
++ 79 TOTAL YEARS OF RECORD
+++ 73 TOTAL YEARS OF RECORD

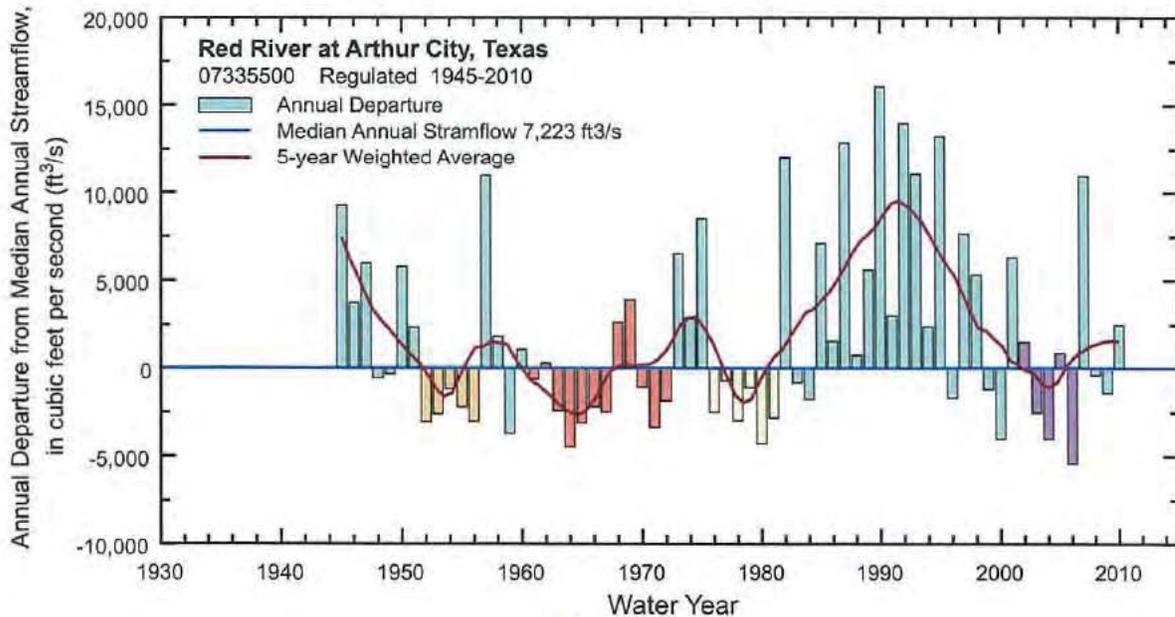
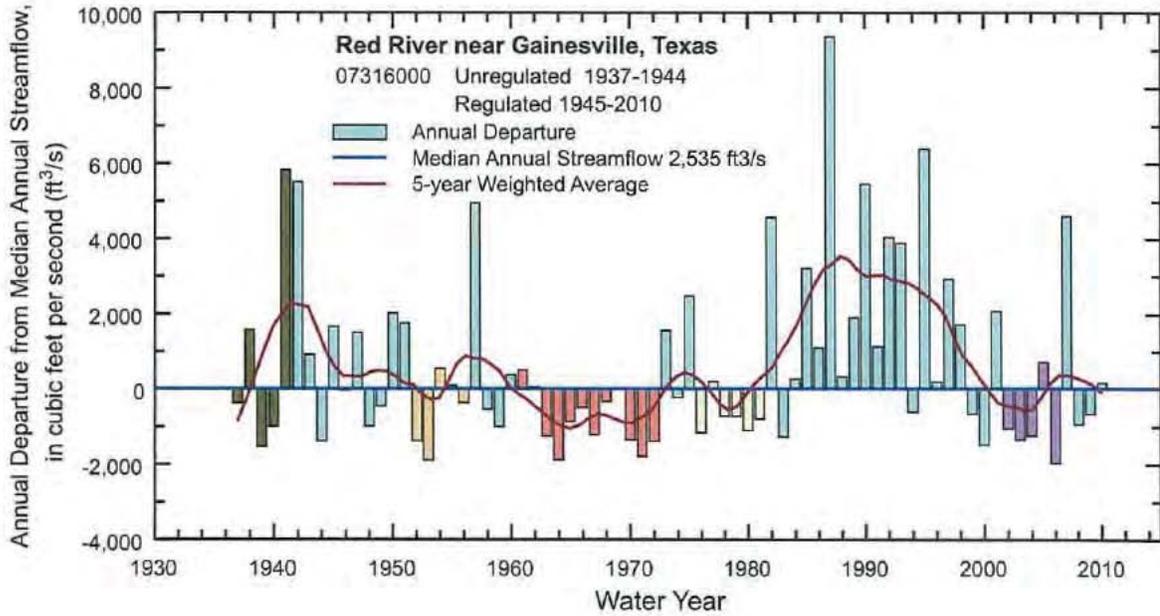
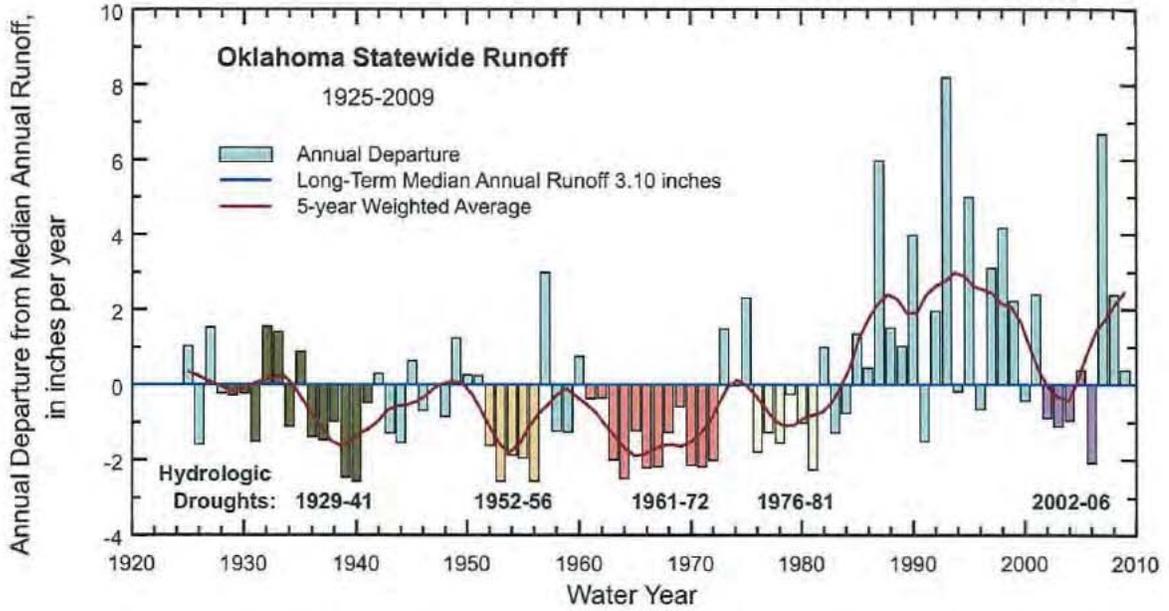
RED RIVER BASIN TRENDS IN STEAMFLOW

MEAN DISCHARGE, IN CUBIC FEET PER SECOND



WATER YEAR

LONG-TERM RED RIVER BASIN TRENDS IN STREAMFLOW



Attachment 14
RED RIVER VALLEY ASSOCIATION

629 SPRING STREET
P.O. BOX 709
SHREVEPORT, LA 71162-0709
(318) 221-5233

April 26, 2011

TO: Red River Compact
FM: Richard Brontoli, Executive Director

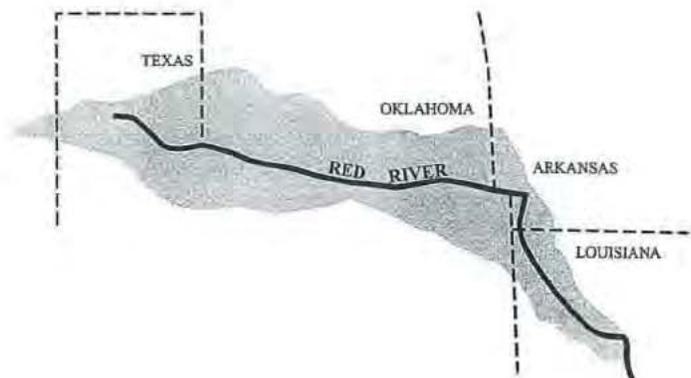
RE: Red River Valley Association Report to the Red River Compact, April 26, 2011

1. **Earmarks:** The Congress has taken a no 'earmark' policy, which means our delegation members can not submit requests for projects. Congress will provide a lump sum budget, by agency and account, and it is up to the Administration to decide what gets funded and at what level. We do not agree with the definition of an earmark and do not believe Corps of Engineer projects that have been through an authorization process are earmarks (Position Paper, Enclosure 1). It is the responsibility of Congress to determine how appropriations are to be spent. It is an issue of who sets the priorities. Sen. Inhofe (R-OK) has SR 23 to define an earmark and exempt any project that has been through an authorization process.

2. **Appropriations:** The Administration has never supported Red River projects, therefore we will not receive any Construction General (CG) funds and our O&M funding will be reduced (project tables, Enclosure 2). All construction projects will cease. Some O&M projects will be negatively impacted.

3. **Navigation Impact:** The greatest impact, due to reduced funding, will be to the O&M for the J. Bennett Johnston Waterway. The Administration has arbitrarily changed the metric used to determine 'low-use waterways. Despite the great success of our Waterway (Position Paper on metrics, Enclosure 3) the change in metrics has placed us in the lower category allowing them to reduce our O&M funding by \$3 million. This reduction will jeopardize dredging funds threatening the reliability of the Waterway and will impact industries. Also attached is the RRVA briefing to the Mississippi River Commission on April 12, 2011, Enclosure 4.

4. **Conferences:** The RRVA will have one day conferences in Texarkana, AR on 1 June; in Durant, OK on 25 August; in Wichita Falls, TX on 16 November and our Annual Convention in Bossier City, LA on 22-24 February 2012. Check our web site for information, www.rrva.org.



RED RIVER VALLEY ASSOCIATION

629 SPRING STREET
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SHREVEPORT, LA 71162-0709
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February 8, 2011

Position Paper

RE: Definition of a Civil Works Earmark

There are varying opinions on the definition of an 'earmark' in appropriation bills. This will have a great impact for the Civil Works portion of the Energy and Water Development Appropriation Bill.

1. Formal Project Development/Authorization Process: Civil Works projects go through a process; reconnaissance study, feasibility study, benefit to cost ratio test, EIS, peer review, review by agencies, public review and comment, final Chief of Engineer approval, authorization by both Houses of Congress in a WRDA bill and signed by the President. No other federal program goes through such a rigorous approval process. Each justified project 'stands alone', are proven to be of national importance and should be funded by project.
2. Local Sponsor Cost-share: For many projects there is a local sponsor cost sharing responsibility during the feasibility study, construction and for O&M. Those who have contributed, in most cases, millions of dollars to the process, must have the ability to have a voice for their projects to get funded. That voice is through their Congressional delegation.
3. An Issue of Priorities: With limited federal funding all authorized projects cannot be funded. The issue becomes one of priorities and the only way our delegation can express that is through 'Congressional Requests', which are considered earmarks. If Congress provides a lump sum appropriation, to the Corps, for GI, CG and O&M, OMB and the Administration will determine what projects get funded, with no input from Congress.
4. Budget Process: The appropriation process is the constitutional responsibility of Congress and they are turning it over to the Administration. They were elected to decide how to spend federal funds.
5. O&M Funding Levels: This is the most serious problem. If the Congressional delegation does not have input into funding levels the fate of our Waterway is left up to the Administration. All the economic development and industries created will be threatened if adequate O&M (dredging) funding is not received. Congress has a responsibility to the communities and local sponsors to keep their commitment to maintain a completed project.
6. Recommendation: The appropriation subcommittees should ask for 'Member Requests'. It is then the responsibility of the subcommittee staff to determine what is an 'earmark', which should not be funded, and what is an authorized projects. Then the subcommittees can determine which projects are funded and at what funding level.

We believe that GI, CG & O&M Projects should be funded by line item project and are **NOT** earmarks, as long as they have gone through the authorization process. Civil Works projects are too important to leave up to OMB to prioritize. Congress must keep the ability to determine what projects get funded and be able to represent their constituents.

RRVA POC: Richard Brontoli, Executive Director
(318) 221-5233
redriverva@hotmail.com

**RED RIVER VALLEY ASSOCIATION
FY 2011/2012 APPROPRIATIONS (\$000)
CIVIL WORKS**

<u>I. Studies (GI)</u>	FY 10 Appro	RRVA FY 11 Req	Pres FY 11 Budget	House Mark up	Sen. Mark up	Pres FY 12
1. Navigation into SW Arkansas: Feasibility	-0-	50	-0-	-0-	-0-	-0-
2. Red River Waterway, LA – 12' Channel, Recon	-0-	100	-0-	-0-	-0-	-0-
3. Bossier Parish, LA	278	250	-0-	-0-	250	-0-
4. Cross Lake, LA Water Supply Supplement	90	50	-0-	-0-	50	-0-
5. SE Oklahoma Water Resource Study: Feasibility	233	500	-0-	-0-	325	-0-
6. SW Arkansas Ecosystem Restoration: Recon Study	170	47	-0-	-0-	-0-	-0-
7. Cypress Valley Watershed, TX	90	175	-0-	-0-	-0-	-0-
8. Sulphur River Basin, TX	-0-	1,000	-0-	-0-	-0-	-0-
9. Washita River Basin, OK	171	500	-0-	-0-	325	-0-
10. Wichita River Basin above Lake Kemp, TX: Recon	-0-	100	-0-	-0-	-0-	-0-
11. Red River Above Denison Dam, TX & OK: Recon	-0-	100	-0-	-0-	-0-	-0-
12. Red River Waterway, Index, AR to Denison Dam	-0-	44	-0-	-0-	-0-	-0-
13. Mountain Fork River Watershed, OK & AR, Recon	-0-	-0-	-0-	-0-	-0-	-0-
14. Walnut Bayou, Little River, AR	-0-	100	-0-	-0-	-0-	-0-
15. Little River County/Ogden Levee, AR, Recon	-0-	100	-0-	-0-	-0-	-0-
16. Red River Waterway, Index to Denison, Bendway	-0-	-0-	-0-	-0-	-0-	-0-
<u>II. Construction General (CG)</u>						
1. Red River Waterway: J. B. Johnston Waterway, LA	6,613	20,000	1,500	1,500	7,000	-0-
2. Chloride Control Project, TX & OK Texas - 7,500 / Oklahoma - 800	1,332	8,300	-0-	-0-	2,800	-0-
3. Red River Below Denison Dam; AR & LA a. Bowie County Levee, TX	2,035 -0-	12,000 -0-	-0-	-0-	2,500	-0-
4. Red River Emergency Bank Protection	1,986	11,300	-0-	-0-	2,000	-0-
5. Big Cypress Valley Watershed, TX: Section 1135	1,450	-0-	-0-	-0-	-0-	-0-
6. Palo Duro Creek, Canyon, TX: Section 205	-0-	90	-0-	-0-	-0-	-0-
7. Millwood, Grassy Lake, AR: Section 1135	181	100	-0-	-0-	-0-	-0-
8. McKinney Bayou, AR, PED	-0-	-0-	-0-	-0-	-0-	-0-
9. Miller County Levee, AR, Sec 1135	-0-	-0-	-0-	-0-	-0-	-0-
<u>III. Operation and Maintenance (O&M)</u>						
1. J. Bennett Johnston Waterway, LA	11,478	23,864	7,745	7,745	12,000	7,717
2. Lake Kemp, TX - Total Need	311	817	467	467	467	183
Basic Annual O&M		214				
Reallocation Study		350				
Service Bridge & Gate Repair		253				
3. Lake Texoma, TX & OK - Total Need	8,740	31,617	10,057	10,057	10,057	6,939
Basic Annual O&M		7,000				
Shoreline Management Plan	1,158					
Backlog Maintenance		24,617				
4. Chloride Control Project, TX & OK	1,481	2,025	1,439	1,439	1,439	1,593
5. Old River Lock, LA (MR&T)	9,854	12,755	9,255	9,255	9,255	6,954

RED RIVER VALLEY ASSOCIATION

CIVIL WORKS PROJECTS

OPERATIONS AND MAINTENANCE (O&M)

FY2011/12 (\$000)

Project	FY10	RRVA FY11 Req.	President FY11	House FY11	Senate FY11	President FY12
DeQueen Lake, AR	1,665	3,393	1,467	1,467	1,467	1,687
Dierks Lake, AR	1,292	2,213	1,570	1,570	1,570	1,421
Gillham Lake, AR	1,298	1,437	1,340	1,340	1,340	1,345
Millwood Lake, AR	4,868	6,690	4,802	4,802	4,802	2,558
Bayou Bodcau Reservoir, LA	907	6,922	1,072	1,072	1,072	2,057
Bayou Pierre, LA	24	49	24	24	24	24
Caddo Lake, LA	213	347	222	222	222	220
Wallace Lake, LA	232	886	241	241	241	239
J. Bennett Johnston Waterway, LA	11,478	23,864	7,745	7,745	7,745	7,717
Old River, LA (MR&T)	9,854	12,755	9,255	9,255	9,255	6,954
Broken Bow Lake, OK	3,043	3,338	2,458	2,458	2,458	2,058
Hugo Lake, OK	1,652	3,768	1,748	1,748	1,748	1,549
Pine Creek Lake, OK	1,213	2,912	1,032	1,032	1,032	1,254
Sardis Lake, OK	1,192	2,230	1,130	1,130	1,130	1,002
Waurika Lake, OK	1,360	4,210	2,568	2,568	2,568	1,537
Chloride Control, Area VIII, TX	1,481	2,025	1,439	1,439	1,439	1,593
Denison Dam & Lake Texoma, TX	8,740	31,617	10,057	10,057	10,057	6,939
Denison Dam, Shoreline Management Plan	1,158	-0-	Working on land conveyances first, will request additional funds in 2012.			
Estelline Springs, TX	43	238	43	43	43	44
Lake Kemp, TX	311	817	467	467	467	183
Pat Mayse Lake, TX	1,148	1,852	992	992	992	1,211
Jim Chapman Lake, TX	1,633	2,100	1,939	1,939	1,939	1,586
Lake of the Pines, TX	3,312	4,200	3,709	3,709	3,709	3,464
Wright Patman Dam & Lake, TX	3,342	4,600	3,804	3,804	3,804	3,847

RED RIVER VALLEY ASSOCIATION

February 8, 2011

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Position Paper

RE: J. Bennett Johnston Waterway O&M Navigation Metrics

Commercial navigation and port operations on the J. Bennett Johnston Waterway are in jeopardy. The President's FY 2011 budget allocated \$7,745,000 for O&M on the Waterway, \$3,000,000 short to maintain year round navigation. Following is an analysis of the metrics for the Waterway. Latest official data is for CY 2009.

1. **Tons:** CY 2009 tonnage is at 9,900,000 tons, a 34.4% increase over CY 2008. According to the project authorization documents (table 1) the projected tonnage for CY 2011 is supposed to be 5,426,000 tons. The Waterway was projected to reach 10,000,000 tons in CY 2031. Actual tonnage has exceeded projected metrics.
2. **Ton-miles (Cargo traveled on Waterway):** In CY 2009 this criteria is at 0.4 billion ton-miles, an increase of 28.6% from CY 2008. The current metric requires greater than 1 billion ton-miles to be considered a 'high use' waterway. This Waterway is 218 miles long; however, most cargo travels only 100 miles. This Waterway is penalized due to its length. This metric alone should not be used to determine a high use waterway.
3. **Trip Ton-miles (Cargo traveled from origin to destination):** This Waterway had 7.9 billion trip ton-miles, an increase of 32.7%. This far exceeds the metric of 1 billion trip ton-miles that was once used to determine 'high use' Waterways. **NOTE:** B/C ratios for navigation project benefits are based on cost savings for trip ton-miles.
4. **O&M Cost per Ton:** Considering the full O&M need of \$11,000,000 and the 9.9 million tons moving on the Waterway this efficiency metric is \$1.11 per ton. This metric was expected to be less than \$2 per ton.
5. **Trends:** It is important to look at the trends of a waterway to determine if it is a high or low use waterway. It is clear, from the November 2010 Facts Card, that this Waterway has an upward trend in all categories, greater than any other inland waterway. We know this upward trend will continue for CY 2010.

A comparison of the J. Bennett Johnston Waterway to the McClellan-Kerr, AR/OK demonstrates an inequity in the primary metric used to determine a high use Waterway, ton-miles (table 2). The McClellan-Kerr is more than twice the length of the J. Bennett Johnston Waterway and the 'ton-miles' shows a large difference, even though we have approximately the same tonnage. We exceed them for 'trip ton-miles'. Even when our Waterway exceeds the tonnage of the McClellan-Kerr we will not come close to their ton-miles or the current 1 billion ton-miles criterion for a high use waterway.

Table 3 displays the comparison of the President's budget to the Enacted Appropriations for FY 2003 thru FY 2010. The House markup for FY 2011 is the same as the President's budget since the House Republicans did not submit any 'Member Requests' or 'Earmarks'. The Senate markup and Omnibus Bill did increase the O&M appropriation to \$10,903,000 for FY 2011. Why did the metric for a high use waterway change in FY 2011?

Recommendation: 1. A national workshop should be held to address the different navigation metrics. The metrics should be quantified and determined how to be used to designate a high use waterway. All the appropriate agencies and industries should be allowed to attend. With tighter budgets looming this is a very important issue for distributing scarce resources. **NOTE: See table 4 for Waterway ratings.**

2. The Administration should allocate funding to maintain completed projects to full operational status, and then allocate remaining funds to CG and GI. How prudent is it to walk away from a \$2 billion investment for an annual \$3 million O&M expense. Especially for a Waterway that is clearly a success.

RRVA POC: Richard Brontoli, Executive Director, (318) 221-5233, redriverva@hotmail.com

TABLE 6-6
 MISSISSIPPI RIVER - BIEREVILLE REACH
 PROJECTED TONNAGE
 (1996 - 2046)

Year	Iron & Steel	Industrial Chemicals	Energy Products	Paper & Allied Products	Sulphur	Miner.	Grain	Other Metals & Ores	Agricultural Chemicals	Total Tonnage
Thousands of Tons										
1996	1,150	900	406	408	147	116	60	58	19	3,327
2001	1,390	1,112	520	508	177	133	65	65	20	3,995
2006	1,627	1,290	612	606	212	148	67	68	21	4,553
2011	1,905	1,495	716	724	255	169	69	71	22	5,426
2016	2,730	1,731	809	864	307	188	73	75	23	6,332
2021	2,610	2,069	982	1,031	369	210	74	79	24	7,390
2026	2,055	2,329	1,150	1,231	440	234	79	80	25	8,629
2031	3,376	2,700	1,346	1,469	533	281	82	87	26	10,090
2036	4,165	3,130	1,575	1,753	640	291	84	92	27	11,779
2041	4,820	3,626	1,864	2,092	770	324	86	97	28	13,769
2046	5,736	4,206	2,159	2,497	926	362	89	102	29	16,106

AVERAGE ANNUAL TONNAGE: 8,015,000

J. Bennett Johnston Waterway O&M

Table 2 displays why the current criteria for ‘ton-miles’ (1 billion) to determine low or high use waterways should be changed from ton-miles (ton-miles is the distance cargo moves within the waterway) back to ‘trip ton-miles’ (trip ton-miles is the distance cargo moves from origin to destination). The JBJ Waterway is penalized for being a short waterway (218 RM v. 462 RM). As compared to the Arkansas River, they have **6 times** the ton-miles than our waterway for little more tonnage. With the known new initiatives on our Waterway we will probably exceed the McClellan-Kerr, in tonnage, in the near future. Yet, we already exceed them on a trip ton-mile comparison.

Table 2: CY 2009 data from ‘The US Waterway System – Transportation Facts, December 2010’

<u>Waterway</u>	<u>Length</u> river miles	<u>Tons</u> millions	<u>Ton-miles</u> billion	<u>Trip Ton-miles</u> billion
J. Bennett Johnston Waterway	218 mi.	9.9	0.4	7.9
McClellan-Kerr AR/OK	462 mi.	10.8	2.4	6.4

Table 3 shows the President’s Budget as compared to the Congressional Enacted Appropriation. It shows that for 7 years the Administration supported the JBJ Waterway at a level that included dredge funding.

Table 3

<u>Fiscal Year</u>	<u>President’s Budget</u>	<u>Enacted Appropriation</u>
FY 2011	\$7,745,000	House markup - \$7,745,000 Senate & Omnibus - \$10,903,000
FY 2010	\$10,598,000	\$11,478,000
FY 2009	\$10,555,000	\$9,797,000
FY 2008	\$10,431,000	\$11,809,000
FY 2007	Corps Work Allowance \$10,936,000	CR for the year
FY 2006	\$10,115,000	\$11,804,000
FY 2005	\$10,600,000	\$13,050,000
FY 2004	\$12,013,000	\$14,000,000
FY 2003	\$7,297,000	\$11,000,000

Table 4

<u>Metric</u>	<u>Successful Criteria</u>	<u>JBJ Waterway</u>	<u>Rating</u>
Tons	5,426,000	9,900,000	GREEN
Ton-Miles	> 1 Billion	.4 Billion	RED
Trip Ton-Miles	> 1 Billion	7.9 Billion	GREEN
O&M Expenditure/Ton	< \$2 / Ton	\$1.11 / Ton	GREEN
Trend	Increase	34% Increase	GREEN

RRVA POC: Richard Brontoli, Executive Director, (318) 221-5233, redriversva@hotmail.com

**Red River Valley Association Presentation to
Mississippi River Commission
13 April 2011**

Slide 1

I want to thank you for the opportunity to make this presentation this morning on behalf of the waterway industries on the J. Bennett Johnston Waterway. We have a navigation committee and local sponsor (Red River Waterway Commission) that have worked hard to insure our Waterway is safe, efficient and reliable. The issue I am presenting to you today concerns the O&M funding for the Corps of Engineers. I briefed you on this issue August 13, 2010 and want to provide you with an update.

Slide 2

This Association, Red River Waterway Commission and users have expressed concern over the drastic reduction of O&M in the FY 2011 and FY 2012 budget requests, from \$10,598,000 in FY 2010 to \$7,745,000 in FY 2011 and \$7,717,000 in FY 2012. From FY 2004 through FY 2010 the President's budget had been in the \$10,500,000 range, which addressed basic O&M needs, including maintenance dredging. The reduction in the FY 2011 and FY 2012 budget jeopardizes funding for dredging.

In my previous briefing to you I discussed that the metric used to determine a High Use Waterway had changed from 'Trip Ton-miles' to 'Ton-miles', which resulted in our Waterway changing from a high use to low use Waterway. With this change in designation our navigation O&M funding was reduced 25% from past years to fund other projects. No justification has been provided for this change except that the Administration can and are not accountable to anyone or need a reason to make this change.

This table shows the Administration funding levels since FY 2003. The Congressional 'adds', of approximately \$1 million per year, have been used for backlog maintenance.

Slide 3

With the no 'earmark' atmosphere in Congress our delegation is unable to provide additional funding for specific projects as was done in the past. I emphasize this because the Administration, which includes the Corps of Engineers, can provide adequate O&M funding if they choose to. Let me be clear; Congress has set the level of O&M funding for the Corps of Engineers, but it is the Administration's decision as to which projects get funded and at what level. It is their decision not to fully fund our Waterway O&M. The budget process and metrics used were developed by the Administration, not Congress.

We do believe that civil works projects are NOT earmarks (see attached position paper) and that is the responsibility of Congress to appropriate funding. Member requests should be submitted to the appropriation subcommittees and it is up to the staff to determine what is or is not an earmark. Congress should determine what projects get funded and at what level, but they have chosen not to do this. We support the efforts of Senator Inhofe (R-OK) and SR 23 that exempts any project that has been through an authorization and vetted process. We remind our delegation that the appropriation process and priorities is their responsibility.

Slide 4

I would like to point out a number of metrics by which you could evaluate any Waterway. On this slide the JBJ Waterway increases are from CY 2008 to CY 2009 (see attached metrics position paper).

* **Tons:** The J. Bennett Johnston Waterway Project, Mississippi River to Shreveport Reach, has a projected tonnage to indicate if the project is successful and meets the benefit to cost ratio that justified the project. We are to be at 5.426 million tons by CY 2011. In CY 2009 we are actually at 9.9 million tons. The projected year to reach 9.9 million tons is CY 2031! We have far exceeded this metric.

* **Ton-Miles:** We are at .4 billion ton-miles. Even though we increased tonnage by 2.5 million tons from CY 2008 to 2009 our ton-miles increased by only .1 billion. This emphasizes that using this metric to determine a low-use waterway is not a valid criterion and penalizes short waterways.

* **Trip Ton-miles:** Our increase in tonnage resulted in an increase of 1.9 billion trip ton-miles. Our total trip ton-miles of 7.9 billion far exceed the 'old' criteria of greater than 1 billion. This metric makes the most sense for identifying a low use waterway since this is the criteria used for calculating national benefits in a feasibility study that analyzes and justifies a navigation project.

* **O&M Cost/Ton:** Another metric recently changed is the cost per ton for the O&M funding received. The cost per ton for the J. Bennett Johnston Waterway is \$1.06 per ton (\$10,500,000 for all O&M and 9.9 m tons), which demonstrates a positive efficiency factor. Just a few years ago less than \$2 per ton criteria was considered a metric goal; however, that \$2 value has been removed leaving this metric as a 'subjective' metric.

Slide 5

We will be taking a number of initiatives to insure our Waterway remains a success.

* **PDT with Vicksburg District:** Our Waterway Navigation Committee is meeting with the Vicksburg District in a series of meetings to determine how the Waterway can be maintained for navigation.

* **Rally Industry:** We will contact our Waterway industries to update them on the O&M issue and request they get involved informing our delegation and the Administration on the negative impacts this reduced funding will have on their industries, especially to job lose.

* **Support Delegation Initiatives:** We will support initiatives from Congress that will provide funding for O&M projects and to make civil works projects exempt from the earmark designation. This includes initiatives by Sen. Inhofe (R-OK), Rep. Boustany (R-LA) and Rep. Landry (R-LA).

* **Educate Our Delegation and Administration:** We will continue to inform our delegation of the success story of our Waterway. It will be important to educate all levels of the Administration on why our Waterway is a great success story and deserves the full level of O&M funding.

* **National Workshop:** The last national workshop to determine navigation metrics was conducted by Corps HQ in May 2004. It was determined that the metric for a high use waterway would be trip ton-miles greater than 1 billion. It was the next year the our Waterway received adequate O&M funding, from the Administration, that lasted 7 years until this metric was arbitrarily changed, for no apparent reason. We request that the Corps conduct another national workshop to evaluate navigation metrics.

Slide 6

We will be pursuing a remedy to this issue through continued meetings with OMB and HQ, Corps of Engineers, to discuss changing the metrics used for determining Waterway ratings and to make them aware of the successes of our Waterway and the impacts of their decisions. You are reminded that the J. Bennett Johnston Waterway has only been fully operational since 1995 and is a very young, developing waterway, as compared to other waterways. This reduction in O&M will jeopardize thousands of existing jobs and hamper economic growth, which is in direct conflict with stated Administration policy.

Thank you for your time and consideration in our issue. We look forward to future meetings where we will demonstrate our continued growth and success.

Richard Brontoli, Executive Director
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Additional Comments

See attached impact Position Paper.

We want to make you aware of the economic impact to this decision. If the President's budget funding level is received the Waterway will not have adequate funding for dredging and commercial navigation will be drastically reduced. This will impact hundreds of jobs at six public ports and three major private terminals. CLECO, a power generation company, completed a \$1 billion plant at Boyce, LA and will be in full operation this year. They located on the J. Bennett Johnston Waterway and constructed their own barge off loading facility to bring in over 2.5 million tons of petroleum coke and limestone to fuel the plant. A funding reduction would be devastating to their operations.

The Haynesville Shale gas operation has created a large demand for construction sand & gravel, which has to be imported. This Waterway share could reach over 1 million tons per year and is just being realized this year. These are just two examples of the consequences of this action.

More important would be the 'unreliability' of the Waterway and the ability to market waterborne transportation. There is a timber company considering construction of a wood pellet plant on the Waterway to use waterborne transportation to export their product overseas. The plant must be in the Red River region to be in proximity to the forest supply for these wood chips. The Administration just announced their goal to increase exports, so needs to be supporting these economic development opportunities not discouraging them. You are reminded that the J. Bennett Johnston Waterway has only been fully operational since 1995 and is a very young, developing waterway, as compared to other waterways. This reduction in O&M will jeopardize thousands of existing jobs and hamper economic growth, which is in direct conflict with stated Administration policy.

There are also the environmental benefits that waterborne transportation provides over rail and truck. If our waterway is closed, due to a lack of O&M funding, the products that move by barge will still move. Instead, it will be moved by rail and truck, which will aggravate an already overloaded highway and rail system. There would be an increase in air pollution and fuel consumption, which is what the Administration states they want to reduce. There is a great environmental benefit and fuel efficiency in promoting our nation's waterways and encouraging cargo shifts from truck and rail to barge. We believe the Administration should be increasing funding for our nation's waterways not cutting them. It is important to note that we are advocates to increase the funding for all our nation's waterways. You can see on this slide that the share of water in the 'energy & water' bill has decreased from 20% to 15% over the years. Congress could redistribute some of these funds.

J. Bennett Johnston Waterway O&M

Table 1 shows the President's Budget as compared to the Congressional Enacted Appropriation. It shows that for 7 years the Administration supported the J. Bennett Johnston Waterway at a level that included dredge funding.

Table 1

<u>Fiscal Year</u>	<u>President's Budget</u>	<u>Enacted Appropriation</u>
FY 2012	\$7,717,000	
FY 2011	\$7,745,000	House - \$7,745,000 Senate - \$12,000,000
FY 2010	\$10,598,000	\$11,478,000
FY 2009	\$10,555,000	\$9,797,000
FY 2008	\$10,431,000	\$11,809,000
FY 2007	Corps Work Allowance \$10,936,000	CR for the year
FY 2006	\$10,115,000	\$11,804,000
FY 2005	\$10,600,000	\$13,050,000
FY 2004	\$12,013,000	\$14,000,000
FY 2003	\$7,297,000	\$11,000,000

Table 2 displays why the current criteria for 'ton-miles' (1 billion) to determine low or high use waterways should be changed from ton-miles (ton-miles is the distance cargo moves within the waterway) back to 'trip ton-miles' (trip ton-miles is the distance cargo moves from origin to destination). The J. Bennett Johnston Waterway is penalized for being a short waterway (218 RM v. 462 RM). As compared to the Arkansas River, they have **8 times** the ton-miles than our waterway for little more tonnage. With the known new initiatives on our Waterway we will probably exceed the McClellan-Kerr, in tonnage, in the near future. We have surpassed them on a trip ton-mile comparison. 'Trip ton-miles' is a more realistic criterion to use to determine 'high use' waterways, which is what the criteria was until recent years.

Table 2: CY 2009 data from 'The US Waterway System – Transportation Facts, December 2010'

<u>Waterway</u>	<u>Length</u> river miles	<u>Tons</u> millions	<u>Ton-miles</u> > 1 billion	<u>Trip Ton-miles</u> > 1 billion
J. Bennett Johnston Waterway	218 mi.	9.9 Up from 7.4 in CY 2008	0.4 Up <u>only</u> .1 from CY 2008	7.9 Up from 6.0 in CY 2008
McClellan-Kerr AR/OK	462 mi.	10.8	2.4	6.4

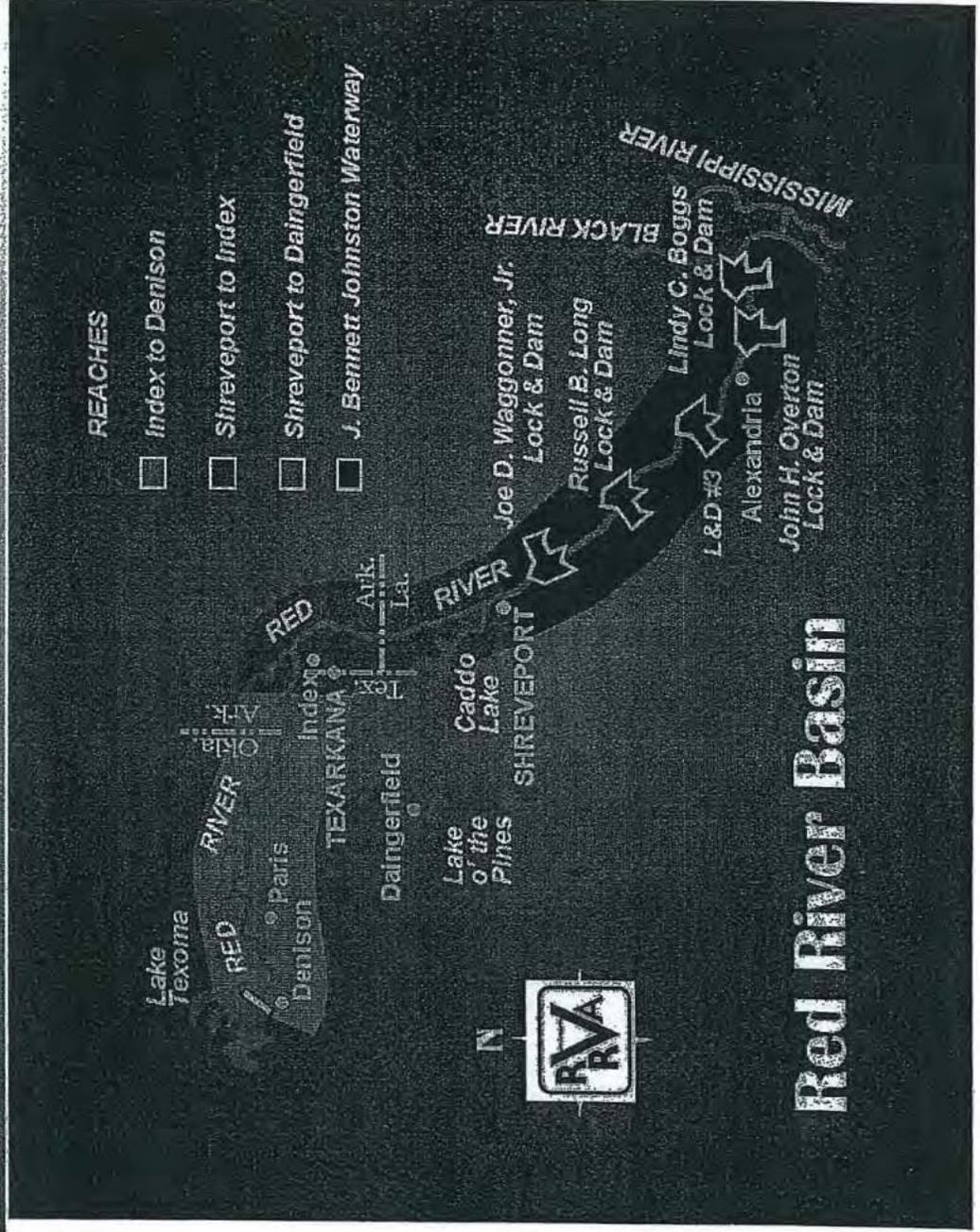
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Waterway O&M Issues

RRVA Briefing to
Mississippi River
Commission

13 April 2011





O&M Funding History

<u>Fiscal Year</u>	<u>President's Budget</u>	<u>Enacted Approp</u>
FY 2012	\$7,717,000	
FY 2011	\$7,745,000	House - \$ 7,745,000 Senate - \$12,000,000
FY 2010	\$10,598,000	\$11,478,000
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FY 2006	\$10,115,000	\$11,804,000
FY 2005	\$10,600,000	\$13,050,000
FY 2004	\$12,013,000	\$14,000,000
FY 2003	\$7,297,000	\$11,000,000



Earmarks

- Civil Works Budget – No Earmarks
- No Ability for Our Delegation to Assist
- Appropriations is a Congressional Responsibility – Not Administration
- Sen. Inhofe (R-OK) – SR 23



J. Bennett Johnston Waterway Metrics

CY 2009 data from 'The US Waterway System – Transportation Facts, December 2010'

<u>Metrics</u>	<u>Criteria</u>	<u>JBJ Waterway</u> Increase from CY 2008	<u>Rating</u>
Tons	5,426,000	9,900,000 Up from 7.4 M	Green
Ton-miles	> 1 Billion	.4 Billion Up from .3	RED Due to Metric Change
Trip Ton-miles	> 1 Billion	7.9 Billion Up from 6.0	Green
O&M Cost / Ton	< \$2 / Ton	\$1.06 / Ton	Green
Trend	Increasing	34% Increase CY 2008 to 2009	Green

NOTE: High Use Waterway Criteria is 'Ton-Miles' Greater Than 1 Billion



Initiatives

- PDT With Vicksburg District
- Rally All Industries Impacted
- Rep. Boustany (R-LA) – RAMP Act
- Rep. Landry (R-LA) – Colleague Letter
- Educate Corps MVD, HQ, ASA (CW) and OMB on Waterway Successes
- Corps – National Waterway Metrics Workshop (Last One in May 2004)



Thank You and ?s

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RED RIVER COMPACT

ARKANSAS-LOUISIANA-OKLAHOMA-TEXAS

MAY 12, 1978

PREAMBLE

The States of Arkansas, Louisiana, Oklahoma, and Texas, pursuant to the acts of their respective Governors or Legislatures, or both, being moved by considerations of interstate comity, have resolved to compact with respect to the water of the Red River and its tributaries. By Act of Congress, Public Law No. 346 (84th Congress, First Session), the consent of the United States has been granted for said states to negotiate and enter into a compact providing for an equitable apportionment of such water, and pursuant to that Act the President has designated the representative of the United States.

Further, the consent of Congress has been given for two or more states to negotiate and enter into agreements relating to water pollution control by the provisions of the Federal Water Pollution Control Act (P.L. 92-500, 33 U.S.C. §§ 1251 et seq.).

The Signatory States acting through their duly authorized Compact Commissioners, after several years of negotiations, have agreed to an equitable apportionment of the water of the Red River and its tributaries and do hereby submit and recommend that this Compact be adopted by the respective Legislatures and approved by Congress as hereinafter set forth:

ARTICLE I

PURPOSES

SECTION 1.01 The principal purposes of this Compact are:

- (a) 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;
- (b) To provide an equitable apportionment among the Signatory States of the water of the Red River and its tributaries;
- (c) 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;
- (d) 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
- (e) 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.

ARTICLE II

GENERAL PROVISIONS

SECTION 2.01 Each Signatory State may use the water allocated to it by this Compact in any manner deemed beneficial by that state. Each state may freely administer water rights and uses in accordance with the laws of that state, but such uses shall be subject to the availability of water in accordance with the apportionments made by this Compact.

SECTION 2.02 The use of water by the United States in connection with any individual Federal project shall be in accordance with the Act of Congress authorizing the project and the water shall be charged to the state or states receiving the benefit therefrom.

SECTION 2.03 Any Signatory State using the channel of Red River or its tributaries to convey stored water shall be subject to an appropriate reduction in the amount which may be withdrawn at the point of removal to account for transmission losses.

SECTION 2.04 The failure of any state to use any portion of the water allocated to it shall not constitute relinquishment or forfeiture of the right to such use.

SECTION 2.05 Each Signatory State shall have the right to:

- (a) Construct conservation storage capacity for the impoundment of water allocated by this Compact;
- (b) Replace within the same area any storage capacity recognized or authorized by this Compact made unusable by any cause, including losses due to sediment storage;
- (c) Construct reservoir storage capacity for the purposes of flood and sediment control as well as storage of water which is either imported or is to be exported if such storage does not adversely affect the delivery of water apportioned to any other Signatory State; and
- (d) Use the bed and banks of the Red River and its tributaries to convey stored water, imported or exported water, and water apportioned according to this Compact.

SECTION 2.06 Signatory States may cooperate to obtain construction of facilities of joint benefits to such states.

SECTION 2.07 Nothing in this Compact shall be deemed to impair or affect the powers, rights, or obligations of the United States, or those claiming under its authority, in, over and to water of the Red River Basin.

SECTION 2.08 Nothing in this Compact shall be construed to include within the water apportioned by this Compact any water consumed in each state by livestock or for domestic purposes; provided, however, the storage of such water is in accordance with the laws of the respective states but any such impoundment shall not exceed 200 acre-feet, or such smaller quantity as may be provided for by the laws of each state.

SECTION 2.09 In the event any state shall import water into the Red River Basin from any other river basin, the Signatory State making the importation shall have the use of such imported water.

SECTION 2.10 Nothing in this Compact shall be deemed to:

- (a) Interfere with or impair the right or power of any Signatory State to regulate within its boundaries the appropriation, use, and control of water, or quality of water, not inconsistent with its obligations under this Compact;
- (b) Repeal or prevent the enactment of any legislation or the enforcement of any requirement by any Signatory State imposing any additional conditions or restrictions to further lessen or prevent the pollution or natural deterioration of water within its jurisdiction; provided nothing contained in this paragraph shall alter any provisions of this Compact dealing with the apportionment of water or the rights thereto; or
- (c) Waive any state's immunity under the Eleventh Amendment of the Constitution of the United States, or as constituting the consent of any state to be sued by its own citizens.

SECTION 2.11 Accounting for apportionment purposes on interstate streams shall not be mandatory under the terms of the Compact until one or more affected states deem the accounting necessary.

SECTION 2.12 For the purposes of apportionment of the water among the Signatory States, the Red River is hereby divided into the following major subdivisions:

- (a) Reach I - the Red River and tributaries from the New Mexico-Texas state boundary to Denison Dam;
- (b) Reach II - the Red River from Denison Dam to the point where it crosses the Arkansas-Louisiana state boundary and all tributaries which contribute to the flow of the River within this reach;
- (c) Reach III - the tributaries west of the Red River which cross the Texas-Louisiana state boundary, the Arkansas-Louisiana state boundary, and those which cross both the Texas-Arkansas state boundary and the Arkansas-Louisiana state boundary;
- (d) Reach IV - the tributaries east of the Red River in Arkansas which cross the Arkansas-Louisiana state boundary; and
- (e) Reach V - that portion of the Red River and tributaries in Louisiana not included in Reach III or in Reach IV.

SECTION 2.13 If any part or application of this Compact shall be declared invalid by a court of competent jurisdiction, all other severable provisions and applications of this Compact shall remain in full force and effect.

SECTION 2.14 Subject to the availability of water in accordance with this Compact, nothing in this Compact shall be held or construed to alter, impair, or increase, validate, or prejudice any existing water right or right of water use that is legally recognized on the effective date of this Compact by either statutes or courts of the Signatory State within which it is located.

ARTICLE III

DEFINITIONS

SECTION 3.01 In this Compact:

(a) ~~The States of Arkansas, Louisiana, Oklahoma, and Texas are referred to as "Arkansas", "Louisiana", "Oklahoma", and "Texas", respectively, or individually as "State" or "Signatory State", collectively as "States" or "Signatory States."~~

(b) The term "Red River" means the stream below the crossing of the Texas-Oklahoma state boundary at longitude 100 degrees west.

(c) The term "Red River Basin" means all of the natural drainage area of the Red River and its tributaries east of the New Mexico-Texas state boundary and above its junction with Atchafalaya and Old Rivers.

(d) The term "water of the Red River Basin" means the water originating in any part of the Red River Basin and flowing to or in the Red River or any of its tributaries.

(e) The term "tributary" means any stream which contributes to the flow of the Red River.

(f) The term "interstate tributary" means a tributary of the Red River, the drainage area of which includes portions of two (2) or more Signatory States.

(g) The term "intrastate tributary" means a tributary of the Red River, the drainage area of which is entirely within a single Signatory State.

(h) The term "Commission" means the agency created by Article IX of this Compact for the administration thereof.

(i) The term "pollution" means the alteration of the physical, chemical, or biological characteristics of water by the acts or instrumentalities of man which create or are likely to result in a material and adverse effect upon human beings, domestic or wild animals, fish and other aquatic life, or adversely affect any other lawful use of such water; provided, that for the purposes of this Compact, "pollution" shall not mean or include "natural deterioration."

(j) The term "natural deterioration" means the material reduction in the quality of water resulting from the leaching of solubles from the soils and rocks through or over which the water flows naturally.

(k) The term "designated water" means water released from storage, paid for by non-Federal interests, for delivery to a specific point of use or diversion.

(l) The term "undesignated water" means all water released from storage other than "designated water."

(m) The term "conservation storage capacity" means that portion of the active capacity of reservoirs available for the storage of water for subsequent beneficial use, and it excludes any portion of the capacity of reservoirs allocated solely to flood control and sediment control, or either of them.

~~(n) The term "runoff" means both the portion of precipitation which runs off the surface of a drainage area and that portion of the precipitation that enters the streams after passing through the portions of the earth.~~

ARTICLE IV
APPORTIONMENT OF WATER - REACH I
OKLAHOMA - TEXAS

Subdivision of Reach I and apportionment of water therein.

Reach I of the Red River is divided into topographical subbasins, with the water therein allocated as follows:

SECTION 4.01 Subbasin 1- Interstate streams - Texas.

(a) This includes the Texas portion of Buck Creek, Sand (Lebos) Creek, Salt Fork Red River, Elm Creek, North Fork Red River, Sweetwater Creek, and Washita River, together with all their tributaries in Texas which lie west of the 100th Meridian.

(b) The annual flow within this subbasin is hereby apportioned sixty percent (60%) to Texas and forty percent (40%) to Oklahoma.

SECTION 4.02 Subbasin 2 - Intrastate and interstate streams - Oklahoma.

(a) This subbasin is composed of all tributaries of the Red River in Oklahoma and portions thereof upstream to the Texas-Oklahoma state boundary at longitude one hundred degrees west, beginning from Denison Dam and upstream to and including Buck Creek.

(b) The State of Oklahoma shall have free and unrestricted use of the water of this subbasin.

SECTION 4.03 Subbasin 3 - Intrastate streams - Texas.

(a) This includes the tributaries of the Red River in Texas, beginning from Denison Dam and upstream to and including Prairie Dog Town Fork Red River.

(b) The State of Texas shall have free and unrestricted use of the water in this subbasin.

SECTION 4.04 Subbasin 4 - Main stem of the Red River and Lake Texoma.

(a) This subbasin includes all of Lake Texoma and the Red River beginning at Denison Dam and continuing upstream to the Texas-Oklahoma state boundary at longitude one hundred degrees west.

(b) The storage of Lake Texoma and flow from the main stem of the Red River into Lake Texoma is apportioned as follows:

(1) Oklahoma 200,000 acre-feet and Texas 200,000 acre-feet, which quantities shall include existing allocations and uses; and

(2) Additional quantities in a ratio of fifty percent (50%) to Oklahoma and fifty percent (50%) to Texas.

SECTION 4.05 Special Provisions.

(a) Texas and Oklahoma may construct, jointly or in cooperation with the United States, storage or other facilities for the conservation and use of water, provided that any facilities constructed on the Red River boundary between the two states shall not be inconsistent with the Federal legislation authorizing Denison Dam and Reservoir project.

(b) Texas shall not accept for filing, or grant a permit, for the construction of a dam to impound water solely for irrigation, flood control, soil conservation, mining and recovery of minerals, hydroelectric power, navigation, recreation and pleasure; or for any other purpose other than for domestic, municipal, and industrial water supply, on the main stem of the North Fork Red River or any of its tributaries within Texas above Lugert-Altus Reservoir until the date that imported water sufficient to meet the municipal and irrigation needs of Western Oklahoma is provided, or until January 1, 2000, whichever occurs first.

ARTICLE V

APPORTIONMENT OF WATER - REACH II

ARKANSAS, OKLAHOMA, TEXAS AND LOUISIANA

Subdivision of Reach II and allocation of water therein. Reach II of the Red River is divided into topographic subbasins, and the water therein is allocated as follows:

SECTION 5.01 Subbasin 1 - Intrastate streams - Oklahoma.

(a) This subbasin includes those streams and their tributaries above existing, authorized or proposed last downstream major damsites, wholly in Oklahoma and flowing into Red River below Denison Dam and above the Oklahoma-Arkansas state boundary. These streams and their tributaries with existing, authorized or proposed last downstream major damsites are as follows: Location Stream Site Ac-ft Latitude Longitude Island-Bayou Albany 85,200 33 51.5°N 96 11.4°W Blue River Durant 147,000 33 55.5°N 96 04.2°W Boggy River Boswell 1,243,800 34 01.6°N 95 45.0°W Kiamichi River Hugo 240,700 34 01.0°N 95 22.6°W

(b) Oklahoma is apportioned the water of this subbasin and shall have unrestricted use thereof.

SECTION 5.02 Subbasin 2 - Intrastate streams - Texas.

(a) This subbasin includes those streams and their tributaries above existing, authorized, or proposed last downstream major damsites, wholly in Texas and flowing into Red River below Denison Dam and above the Texas-Arkansas state boundary. These streams and their tributaries with existing, authorized or proposed last downstream major damsites are as follows: Location Stream Site Ac-ft Latitude Longitude Shawnee Creek Randall Lake 5,400 33 48.1°N 96 34.8°W Brushy Creek Valley Lake 15,000 33 38.7°N 96 21.5°W New Bonham Bois d'Arc Creek Reservoir 130,600 33 42.9°N 95 58.2°W Coffee Mill Coffee Mill Creek Lake 8,000 33 44.1°N 95 58.0°W Sandy Creek Lake Crockett 3,900 33 44.5°N 95 55.5°W Sanders Creek Pat Mayse 124,500 33 51.2°N 95 32.9°W Pine Creek Lake Crook 11,011 33 43.7°N 95 34.0°W Big Pine Creek Big Pine Lake 138,600 33 52.0°N 95 11.7°W Pecan Bayou Pecan Bayou 625,000 33 41.1°N 94 58.7°W Mud Creek Liberty Hill 97,700 33 33.0°N 94 29.3°W KVW Ranch Mud Creek Lakes (3) 3,440 33 34.8°N 94 27.3°W

(b) Texas is apportioned the water of this subbasin and shall have unrestricted use thereof.

SECTION 5.03 Subbasin 3 - Interstate Streams - Oklahoma and Arkansas:

(a) This subbasin includes Little River and its tributaries above Millwood Dam.

(b) The States of Oklahoma and Arkansas shall have free and unrestricted use of the water of this subbasin within their respective states, subject, however, to the limitation that Oklahoma shall allow a quantity of water equal to forty percent (40%) of the total runoff originating below the following existing, authorized or proposed last downstream major damsites in Oklahoma to flow into Arkansas: Location Stream Site Ac-ft Latitude Longitude Little River Pine Creek 70,500 34 06.8°N 95 04.9°W Glover Creek Lukfata 258,600 34 08.5°N 94 55.4°W Mountain Fork River Broken Bow 470,100 34 08.9°N 94 41.2°W

(c) Accounting will be on an annual basis unless otherwise deemed necessary by the States of Arkansas and Oklahoma.

SECTION 5.04 Subbasin 4 - Interstate streams - Texas and Arkansas.

(a) This subbasin shall consist of those streams and their tributaries above existing, authorized or proposed last downstream major damsites, originating in Texas and crossing the Texas-Arkansas state boundary before flowing into the Red River in Arkansas. These streams and their tributaries with existing, authorized or proposed last downstream major damsites are as follows: Location Stream Site Ac-ft Latitude Longitude McKinney Bayou Trib. Bringle Lake 3,052 33 30.6°N 94 06.2°W Barkman Barkman Creek Reservoir 15,900 33 29.7°N 94 10.3°W Sulphur River Texarkana 386,900 33 18.3°N 94 09.6°W

(b) The State of Texas shall have the free and unrestricted use of the water of this subbasin.

SECTION 5.05 Subbasin 5 - Main stem of the Red River and tributaries.

(a) This subbasin includes that portion of the Red River, together with its tributaries, from Denison Dam down to the Arkansas-Louisiana state boundary, excluding all tributaries included in the other four subbasins of Reach II.

(b) Water within this subbasin is allocated as follows:

(1) The Signatory States shall have equal rights to the use of runoff originating in subbasin 5 and undesignated water flowing into subbasin 5, so long as the flow of the Red River at the Arkansas-Louisiana state boundary is 3,000 cubic feet per second or more; provided no state is entitled to more than twenty-five percent (25%) of the water in excess of 3,000 cubic feet per second.

(2) Whenever the flow of the Red River at the Arkansas-Louisiana state boundary is less than 3,000 cubic feet per second but more than 1,000 cubic feet per second, the States of Arkansas, Oklahoma, and Texas shall allow to flow into the

Red River for delivery to the State of Louisiana a quantity of water equal to forty percent (40%) of the total weekly runoff originating in subbasin 5 and forty percent (40%) of undesignated water flowing into subbasin 5; provided, however, that this requirement shall not be interpreted to require any state to release stored water.

(3) Whenever the flow of the Red River at the Arkansas-Louisiana state boundary falls below 1,000 cubic feet per second, ~~the States of Arkansas, Oklahoma, and Texas shall~~ allow a quantity of water equal to all the weekly runoff originating in subbasin 5 and all undesignated water flowing into subbasin 5 within their respective states to flow into the Red River as required to maintain a 1,000 cubic foot per second flow at the Arkansas-Louisiana state boundary.

(c) Whenever the flow at Index, Arkansas, is less than 526 cfs, the States of Oklahoma and Texas shall each allow a quantity of water equal to forty percent (40%) of the total weekly runoff originating in subbasin 5 within their respective states to flow into the Red River; provided however, this provision shall be invoked only at the request of Arkansas, only after Arkansas has ceased all diversions from the Red River itself in Arkansas above Index, and only if the provisions of subsections 5.05 (b) (2) and (3) have not caused a limitation of diversions in subbasin 5.

(d) No state guarantees to maintain a minimum low flow to a downstream state.

SECTION 5.06 Special Provisions.

(a) Reservoirs within the limits of Reach II, subbasin 5, with a conservation storage capacity of 1,000 acre-feet or less in existence or authorized on the date of the Compact pursuant to the rights and privileges granted by a Signatory State authorizing such reservoirs, shall be exempt from the provisions of Section 5.05; provided, if any right to store water in, or use water from, an existing exempt reservoir expires or is cancelled after the effective date of the Compact the exemption for such rights provided by this section shall be lost.

(b) A Signatory State may authorize a change in the purpose or place of use of water from a reservoir exempted by subparagraph (a) of this section without losing that exemption, if the quantity of authorized use and storage is not increased.

(c) Additionally, exemptions from the provisions of Section 5.05 shall not apply to direct diversions from Red River to off-channel reservoirs or lands.

ARTICLE VI

APPORTIONMENT OF WATER - REACH III

ARKANSAS, LOUISIANA, AND TEXAS

Subdivision of Reach III and allocation of water therein. Reach III of the Red River is divided into topographic subbasins, and the water therein allocated, as follows:

SECTION 6.01 Subbasin 1 - Interstate streams - Arkansas and Texas.

(a) This subbasin includes the Texas portion of those streams crossing the Arkansas-Texas state boundary one or more times and flowing through Arkansas into Cypress Creek-Twelve Mile Bayou watershed in Louisiana.

(b) Texas is apportioned sixty percent (60%) of the runoff of this subbasin and shall have unrestricted use thereof; Arkansas is entitled to forty percent (40%) of the runoff of this subbasin.

SECTION 6.02 Subbasin 2 - Interstate streams - Arkansas and Louisiana.

(a) This subbasin includes the Arkansas portion of those streams flowing from subbasin 1 into Arkansas, as well as other streams in Arkansas which cross the Arkansas-Louisiana state boundary one or more times and flow into Cypress Creek-Twelve Mile Bayou watershed in Louisiana.

(b) Arkansas is apportioned sixty percent (60%) of the runoff of this subbasin and shall have unrestricted use thereof; Louisiana is entitled to forty percent (40%) of the runoff of this subbasin.

SECTION 6.03 Subbasin 3 - Interstate streams - Texas and Louisiana.

(a) This subbasin includes the Texas portion of all tributaries crossing the Texas-Louisiana state boundary one or more times and flowing into Caddo Lake, Cypress Creek-Twelve Mile Bayou or Cross Lake, as well as the Louisiana portion of such tributaries.

(b) Texas and Louisiana within their respective boundaries shall each have the unrestricted use of the water of this subbasin subject to the following allocation:

(1) Texas shall have the unrestricted right to all water above Marshall, Lake O' the Pines, and Black Cypress damsites; however, Texas shall not cause runoff to be depleted to a quantity less than that which would have occurred with the full operation of Franklin County, Titus County, Ellison Creek, Johnson Creek, Lake O' the Pines, Marshall, and Black

Cypress Reservoirs constructed, and those other impoundments and diversions existing on the effective date of this Compact. Any depletions of runoff in excess of the depletions described above shall be charged against Texas' apportionment of the water in Caddo Reservoir.

(2) Texas and Louisiana shall each have the unrestricted right to use fifty percent (50%) of the conservation storage capacity in the present Caddo Lake for the impoundment of water for state use, subject to the provision that supplies for existing uses of water from Caddo Lake, on date of Compact, are not reduced.

(3) Texas and Louisiana shall each have the unrestricted right to fifty percent (50%) of the conservation storage capacity of any future enlargement of Caddo Lake, provided, the two states may negotiate for the release of each state's share of the storage space on terms mutually agreed upon by the two states after the effective date of this Compact.

(4) Inflow to Caddo Lake from its drainage area downstream from Marshall, Lake O' the Pines, and Black Cypress damsites and downstream from other last downstream dams in existence on the date of the signing of the Compact document by the Compact Commissioners, will be allowed to continue flowing into Caddo Lake except that any man-made depletions to this inflow by Texas will be subtracted from the Texas share of the water in Caddo Lake.

(c) In regard to the water of interstate streams which do not contribute to the inflow to Cross Lake or Caddo Lake, Texas shall have the unrestricted right to divert and use this water on the basis of a division of runoff above the state boundary of sixty percent (60%) to Texas and forty percent (40%) to Louisiana.

(d) Texas and Louisiana will not construct improvements on the Cross Lake Watershed in either state that will affect the yield of Cross Lake; provided, however, this subsection shall be subject to the provisions of Section 2.08.

SECTION 6.04 Subbasin 4 - Intrastate streams - Louisiana.

(a) This subbasin includes that area of Louisiana in Reach III not included within any other subbasin.

(b) Louisiana shall have free and unrestricted use of the water of this subbasin.

ARTICLE VII

APPORTIONMENT OF WATER - REACH IV ARKANSAS AND LOUISIANA

Subdivision of Reach IV and allocation of water therein. Reach IV of the Red River is divided into topographic subbasins, and the water therein allocated as follows:

SECTION 7.01 Subbasin 1 - Intrastate streams - Arkansas.

~~(a) This subbasin includes those streams and their tributaries above last downstream major damsites originating in Arkansas and crossing the Arkansas-Louisiana state boundary before flowing into the Red River in Louisiana. Those major last downstream damsites are as follows: Location Stream Site Ac-ft Latitude Longitude Lake Ouachita River Catherine 19,000 34 26.6°N 93 01.6°W Caddo River DeGray Lake 1,377,000 34 13.2°N 93 06.6°W Little Missouri River Lake Greeson 600,000 34 08.9°N 93 42.9°W Alum Fork, Saline River Lake Winona 63,264 32 47.8°N 92 51.0°W~~

(b) Arkansas is apportioned the waters of this subbasin and shall have unrestricted use thereof.

SECTION 7.02 Subbasin 2 - Interstate Streams - Arkansas and Louisiana.

(a) This subbasin shall consist of Reach IV less subbasin 1 as defined in Section 7.01 (a) above.

(b) The State of Arkansas shall have free and unrestricted use of the water of this reach subject to the limitation that Arkansas shall allow a quantity of water equal to forty percent (40%) of the weekly runoff originating below or flowing from the last downstream major damsite to flow into Louisiana. Where there are no designated last downstream damsites, Arkansas shall allow a quantity of water equal to forty percent (40%) of the total weekly runoff originating above the state boundary to flow into Louisiana. Use of water in this subbasin is subject to low flow provisions of subparagraph 7.03 (b).

SECTION 7.03 Special Provisions.

(a) Arkansas may use the beds and banks of segments of Reach IV for the purpose of conveying its share of water to designated downstream diversions.

(b) The State of Arkansas does not guarantee to maintain a minimum low flow for Louisiana in Reach IV. However, on the following streams when the use of water in Arkansas reduces the flow at the Arkansas-Louisiana state boundary to the following amounts:

(1) Ouachita - 780 cfs

(2) Bayou Bartholomew - 80 cfs

(3) Boeuf River - 40 cfs

(4) Bayou Macon --40 cfs the State of Arkansas pledges to take affirmative steps to regulate the diversions of runoff originating or flowing into Reach IV in such a manner as to permit an equitable apportionment of the runoff as set out herein to flow into the State of Louisiana. In its control and regulation of the water of Reach IV any adjudication or order rendered by the State of Arkansas or any of its instrumentalities or agencies ~~affecting the terms of this Compact shall not be effective~~ against the State of Louisiana nor any of its citizens or inhabitants until approved by the Commission.

ARTICLE VIII

APPORTIONMENT OF WATER - REACH V

SECTION 8.01 Reach V of the Red River consists of the main stem Red River and all of its tributaries lying wholly within the State of Louisiana. The State of Louisiana shall have free and unrestricted use of the water of this subbasin.

ARTICLE IX

ADMINISTRATION OF THE COMPACT

SECTION 9.01 There is hereby created an interstate administrative agency to be known as the "Red River Compact Commission", hereinafter called the "Commission". The Commission shall be composed of two representatives from each Signatory State who shall be designated or appointed in accordance with the laws of each state, and one Commissioner representing the United States, who shall be appointed by the President. The Federal Commissioner shall be the Chairman of the Commission but shall not have the right to vote. The failure of the President to appoint a Federal Commissioner will not prevent the operation or effect of this Compact, and the eight representatives from the Signatory States will elect a Chairman for the Commission.

SECTION 9.02 The Commission shall meet and organize within sixty (60) days after the effective date of this Compact. Thereafter, meetings shall be held at such times and places as the Commission shall decide.

SECTION 9.03 Each of the two Commissioners from each state shall have one vote; provided, however, that if only one representative from a state attends he is authorized to vote on behalf of the absent Commissioner from that state. Representatives from three states shall constitute a quorum. Any action concerned with administration of this Compact or any action requiring compliance with specific terms of this Compact shall require six concurring votes. If a proposed action of the Commission affects existing water rights in a state, and that action is not expressly provided for in this Compact, eight concurring votes shall be required.

SECTION 9.04 (a) The salaries and personal expenses of each state's representative shall be paid by the government that it represents, and the salaries and personal expenses of the Federal Commissioner will be paid for by the United States.

(b) The Commission's expenses for any additional stream flow gauging stations shall be equitably apportioned among the states involved in the reach in which the stream flow gauging stations are located.

(c) All other expenses incurred by the Commission shall be borne equally by the Signatory States and shall be paid by the Commission out of the "Red River Compact Commission Fund". Such fund shall be initiated and maintained by equal payments of each state into the fund. Disbursement shall be made from the fund in such manner as may be authorized by the Commission. Such fund shall not be subject to audit and accounting procedures of the state; however, all receipts and disbursements of the fund by the Commission shall be audited by a qualified independent public accountant at regular intervals, and the report of such audits shall be included in and become a part of the annual report of the Commission. Each state shall have the right to make its own audit of the accounts of the Commission at any reasonable time.

ARTICLE X

POWERS AND DUTIES OF THE COMMISSION

SECTION 10.01 The Commission shall have the power to:

- (a) Adopt rules and regulations governing its operation and enforcement of the terms of the Compact;
- (b) Establish and maintain an office for the conduct of its affairs and, if desirable, from time to time, change its location;
- (c) Employ or contract with such engineering, legal, clerical and other personnel as it may determine necessary for the exercise of its functions under this Compact without regard to the Civil Service Laws of any Signatory State; provided that such employees shall be paid by and be responsible to the Commission and shall not be considered employees of any Signatory State;
- (d) Acquire, use and dispose of such real and personal property as it may consider necessary;
- (e) Enter into contracts with appropriate state or Federal agencies for the collection, correlation and presentation of factual data, for the maintenance of records and for the preparation of reports;
- (f) Secure from the head of any department or agency of the Federal or state government such information as it may need or deem to be useful for carrying out its functions and as may be available to or procurable by the department or agency to which the request is addressed; provided such information is not privileged and the department or agency is not precluded by law from releasing same.
- (g) Make findings, recommendations or reports in connection with carrying out the purposes of this Compact, including, but not limited to, a finding that a Signatory State is or is not in violation of any of the provisions of this Compact. The Commission is authorized to make such investigations and studies, and to hold such hearings as it may deem necessary for said purposes. It is authorized to make and file official certified copies of any of its findings, recommendations or reports with such officers or agencies of any Signatory State, or the United States, as may have any interest in or jurisdiction over the subject matter. The making of findings, recommendations, or reports by the Commission shall not be a condition precedent to the instituting or maintaining of any action or proceeding of any kind by a Signatory State in any court or tribunal, or before any agency or officer, for the protection of any right under this Compact or for the enforcement of any of its provisions; and
- (h) Print or otherwise reproduce and distribute its proceedings and reports.

SECTION 10.02 The Commission shall:

(a) Cause to be established, maintained, and operated such stream, reservoir and other gauging stations as are necessary for the proper administration of the Compact;

~~(b) Cause to be collected, analyzed and reported such information on stream flows, water quality, water storage and such other data as are necessary for the proper administration of the Compact;~~

(c) Perform all other functions required of it by the Compact and do all things necessary, proper and convenient in the performance of its duties thereunder;

(d) Prepare and submit to the Governor of each of the Signatory States a budget covering the anticipated expenses of the Commission for the following fiscal biennium;

(e) Prepare and submit an annual report to the Governor of each Signatory State and to the President of the United States covering the activities of the Commission for the preceding fiscal year, together with an accounting of all funds received and expended by it in the conduct of its work;

(f) Make available to the Governor or to any official agency of a Signatory State or to any authorized representative of the United States, upon request, any information within its possession;

(g) Not incur any obligation in excess of the unencumbered balance of its funds, nor pledge the credit of any of the Signatory States; and

(h) Make available to a Signatory State or the United States in any action arising under this Compact, without subpoena, the testimony of any officer or employee of the Commission having knowledge of any relevant facts.

ARTICLE XI

POLLUTION

SECTION 11.01 The Signatory States recognize that the increase in population and the growth of industrial, agricultural, mining and other activities combined with natural pollution sources may lead to a diminution of the quality of water in the Red River Basin which may render the water harmful or injurious to the health and welfare of the people and impair the usefulness or public enjoyment of the water for beneficial purposes, thereby resulting in adverse social, economic, and environmental impacts.

SECTION 11.02 Although affirming the primary duty and responsibility of each Signatory State to take appropriate action under its own laws to prevent, diminish, and regulate all pollution sources within its boundaries which adversely affect the water of the Red River Basin, the states recognize that the control and abatement of the naturally-occurring salinity sources as well as, under certain circumstances, the maintenance and enhancement of the quality of water in the Red River Basin may require the cooperative action of all states.

SECTION 11.03 The Signatory States agree to cooperate with agencies of the United States to devise and effectuate means of alleviating the natural deterioration of the water of the Red River Basin.

SECTION 11.04 The Commission shall have the power to cooperate with the United States, the Signatory States and other entities in programs for abating and controlling pollution and natural deterioration of the water of the Red River Basin, and to recommend reasonable water quality objectives to the states.

SECTION 11.05 Each Signatory State agrees to maintain current records of waste discharges into the Red River Basin and the type and quality of such discharges, which records shall be furnished to the Commission upon request.

SECTION 11.06 Upon receipt of a complaint from the Governor of a Signatory State that the interstate water of the Red River Basin in which it has an interest are being materially and adversely affected by pollution and that the state in which the pollution originates has failed after reasonable notice to take appropriate abatement measures, the Commission shall make such findings as are appropriate and thereafter provide such findings to the Governor of the state in which such pollution originates and request appropriate corrective action. The Commission, however, shall not take any action with respect to pollution which adversely affects only the state in which such pollution originates.

SECTION 11.07 In addition to its other powers set forth under this Article, the Commission shall have the authority, upon receipt of six concurring votes, to utilize applicable Federal statutes to institute legal action in its own name against the person or entity responsible for interstate pollution problems; provided, however, sixty (60) days before initiating legal action the Commission shall notify the Governor of the state in which the pollution source is located to allow that state an opportunity to initiate action in its own name.

SECTION 11.08 Without prejudice to any other remedy available to the Commission, or any Signatory State, any state which is materially and adversely affected by the pollution of the water of the Red River Basin by pollution originating in another Signatory State may institute a suit against any individual, corporation, partnership, or association, or against any Signatory State or political or governmental subdivision thereof, or against any officer, agency, department, bureau, district or instrumentality of or in any Signatory State contributing to such pollution in accordance with applicable Federal statutes. ~~Nothing herein shall be construed as depriving any person of any rights of action relating to pollution which such person would have if this Compact had not been made.~~

ARTICLE XII

TERMINATION AND AMENDMENT OF COMPACT

SECTION 12.01 This Compact may be terminated at any time by appropriate action of the Legislatures of all of the four Signatory States. In the event of such termination, all rights established under it shall continue unimpaired.

SECTION 12.02 This Compact may be amended at any time by appropriate action of the Legislatures of all Signatory States that are affected by such amendment. The consent of the United States Congress must be obtained before any such amendment is effective.

ARTICLE XIII

RATIFICATION AND EFFECTIVE DATE OF COMPACT

SECTION 13.01 Notice of ratification of this Compact by the Legislature of each Signatory State shall be given by the Governor thereof to the Governors of each of the other Signatory States and to the President of the United States. The President is hereby requested to give notice to the Governors of each of the Signatory States of the consent to this Compact by the Congress of the United States.

SECTION 13.02 This Compact shall become effective, binding and obligatory when, and only when:

- (a) It has been duly ratified by each of the Signatory States; and
- (b) It has been consented to by an Act of the Congress of the United States, which Act provides that: Any other statute of the United States to the contrary notwithstanding, in any case or controversy:
 - i. which involves the construction or application of this Compact;
 - ii. in which one or more of the Signatory States to this Compact is a plaintiff or plaintiffs; and
 - iii. which is within the judicial power of the United States as set forth in the Constitution of the United States; and without any requirement, limitation or regard as to the sum or value of the matter in controversy, or of the place of residence or citizenship of, or of the nature, character or legal status of, any of the other proper parties plaintiff or defendant in such case of controversy:

The consent of Congress is given to name and join the United States as a party defendant or otherwise in any such case or controversy in the Supreme Court of the United States if the United States is an indispensable party thereto.

SECTION 13.03 The United States District Courts shall have original jurisdiction (concurrent with that of the Supreme Court of the United States, and concurrent with that of any other Federal or state court, in matters in which the Supreme Court, or other court has original jurisdiction) of any case or controversy involving the application or construction of this Compact; that said jurisdiction shall include, but not be limited to, suits between Signatory States; and that the venue of such case or controversy may be brought in any judicial district in which the acts complained of (or any portion thereof) occur.

RULES FOR THE INTERNAL ORGANIZATION
of the
RED RIVER COMPACT COMMISSION

(As Amended April 25, 1984, April 30, 1991, May 4, 1993, and March 24, 1994)

ARTICLE I
THE COMMISSION

1.1 The Commission is the "Red River Compact Commission," which is referred to in Article X of the Red River Compact.

1.2 The credentials of each Commissioner shall be filed with both the Chairman and the Secretary of the Commission. When the credentials of a new Commissioner are received, the Secretary shall promptly notify each of the other Commissioners of the name and address of the new Commissioner.

1.3 Each Commissioner shall advise in writing the office of the Commission as to his address at which all official notices and other communications of the Commission shall be sent to him. Any change of address shall be promptly communicated in writing to the office of the Commission.

1.4 Persons designated to substitute for duly appointed Commissioners at meetings of the Compact Commission shall present the Commission with credentials of authority by letter, or other form of appointment acceptable to the Commission, which states the scope or limitations of the appointment, together with a copy of the state or federal law or Attorney General's opinion which authorizes the appointment.

ARTICLE II
OFFICERS

2.1 The officers of the Commission shall be a Chairman, a Vice-Chairman, Secretary and a Treasurer.

2.2 The Commissioner representing the United States shall be the Chairman of the Commission. The Chairman or the designated representative of the Chairman, shall preside at meetings of the Commission. His duties shall be those usually imposed upon such officers and as may be assigned by these rules or by the Commission from time to time.

2.3 The Vice-Chairman shall be elected at the annual meeting from the Commissioners of the host state for the coming year as reflected by the minutes, and shall hold office for a term of one year, beginning on July 1 following the election, or until a successor is elected. The Vice-Chairman shall serve as Chairman in the event the President of the United States fails to appoint a Federal Commissioner, or in the absence of the Federal Commissioner or the designated representative of the Federal Commissioner.

2.4 The Secretary shall be selected at the annual meeting by the Commission from the state designated to host the next annual meeting as reflected in the minutes. The Secretary shall serve for the term of one year, beginning on July 1 following the selection, and perform the duties as the Commission shall direct. In case of a vacancy in the office of the Secretary, the Commission shall select a new Secretary as expeditiously as possible.

2.5 The Treasurer shall be selected by the Commission for a term of one year, beginning on July 1 following the selection. The Treasurer shall furnish a fidelity bond, the cost of which shall be paid by the Commission. The Treasurer shall receive, hold and disburse all funds which come into the his hands of the Treasurer.

2.6 The Secretary and Treasurer may be members of the Commission, and their offices may be combined by the Commission. Any one person may hold both offices.

~~2.7 Whenever there is a permanent change in the Commander of the Lower-Mississippi Valley Division, Department of the Army Corps of Engineers, or its counterpart in any future reorganization of the Corps, the Vice-Chairman shall immediately request the President to appoint the new Commander as the U.S. Commissioner to the Compact Commission.~~

ARTICLE III PRINCIPAL OFFICE

3.1 The principal office of the Commission shall be either the office of the Chairman or the Secretary, as the Commission shall direct.

3.2 Official books and records of the Commission shall be kept at the principal office.

ARTICLE IV MEETINGS

4.1 The annual meeting of the Commission shall be held on the last Tuesday of April of each year.

4.2 Special meetings of the Commission may be called by the Chairman at any time. Upon the written request of each of the Commissioners of two states setting forth the matters to be considered at such meeting, the chairman shall call a special meeting.

4.3 Reasonable notice of all special meetings of the Commission shall be sent by the Chairman, to all members of the Commission by ordinary mail at least ten days in advance of each meeting and notice shall state the purpose thereof.

4.4 Emergency meetings of the Commission may be called by the Chairman at any time upon the concurrence of at least two states and such meetings may be conducted by long-distance telephone conference call or other electronic means. Any such long-distance telephone conference call or other electronic communication shall be recorded and made available for public inspection in accordance with the laws of the respective signatory states. Each of the signatory states shall be represented by at least one Commissioner during such an emergency conference and concur in the action.

An emergency is defined as a situation involving an eminent threat of injury to persons or damage to property or eminent financial loss when the time requirements for public notice and travel to a special meeting would make such procedure and travel impractical and increase the likelihood of injury or damage or eminent financial loss.

4.5 Notice to the public shall be given of all Commission meetings. Except as otherwise provided, the Chairman shall furnish notice of all meetings to the Commissioners of each signatory state, whose responsibility it shall be to give said notice to the public in accordance with the laws of their respective states.

In the event of an emergency meeting held by telephone or other electronic communication, no advance notice is required. All meetings of the Commission shall be held at the principal office, unless another place shall be agreed upon by the Commissioners.

4.6 Minutes of the Commission shall be preserved in suitable manner. Minutes, until approved, shall not be official and shall be furnished only to members of the Commission, its employees and committees.

~~4.7 Commissioners from three of the signatory states shall constitute a quorum. However, if an emergency meeting is conducted as provided for in rule 4.4, or if a proposed action of the Commission affects existing water rights in a state, and that action is not expressly provided for in the Compact, eight concurring votes shall be required. Any other actions concerned with the administration of the Compact or requiring compliance with specific terms of the Compact shall require six concurring votes.~~

4.8 At each regular or annual meeting of the Commission, the order of business, unless agreed otherwise, shall be as follows:

- Call to order;
- Approval of Agenda;
- Approval of the minutes;
- Report of Chairman;
- Report of Secretary;
- Report of the Treasurer;
- Report of the Commissioners;
- Report of Committees;
- Unfinished business;
- New business;
- Adjournment;

4.9 All meetings of the Commission, except executive sessions and except as otherwise provided, shall be open to the public. Executive sessions shall be open only to members of the Commission and such advisers as may be designated by each member and employees as permitted by the Commission; provided, however, that the Commission may call witnesses before it when in such sessions.

The Commission may hold executive sessions only for the purposes of discussing:

- (1) The employment, appointment, promotion, demotion, disciplining or resignation of a Commission employee or employees, members, advisers, or committee members.
- (2) Pending or contemplated litigation, settlement offers, and matters where the duty of the Commission's counsel to his client, pursuant to the Code of Professional Responsibility, clearly conflicts with the public's right to know.
- (3) The report, development, or course of action regarding security, personnel, plans, or devices.

No executive session may be held except on a vote, taken in public by a majority of a quorum of the members present. At least one Commissioner from each of the signatory states must agree to the holding of an executive session.

Any motion or other decision considered or arrived at in executive session shall be voidable unless, following the executive session, the Commission reconvenes in public session and presents and votes on such motion or other decision.

4.10 In the absence of a Chairman and Vice-Chairman, all of the Commissioners from any two (2) states may call an emergency or a special meeting of the Compact Commission.

ARTICLE V COMMITTEES

5.1 There may be the following standing committees:

- (a) Budget Committee;
- (b) Engineering Committee;
- (c) Environmental and Natural Resources Committee;
- (d) Legal Committee.

5.2 The committees shall have the following duties:

- (1) The Budget Committee shall prepare the annual budget and shall advise the Commission on all fiscal matters that may be referred to it.
- (2) The Engineering Committee shall advise the Commission all engineering matters that may be referred to it.
- (3) The Environmental and Natural Resources Committee shall advise the Commission on all environmental and natural resource matters that may be referred to it.
- (4) The Legal Committee shall advise the Commission on all legal matters that may be referred to it.

5.3 Commissioners may be members of committees. The number of members of each committee shall be determined from time to time by the Commission. The Commissioners of each state shall designate the member or members on each committee representing the State, and each State shall have one vote.

5.4 The Chairman may appoint a non-voting member of each committee.

5.5 The Chairman of each committee shall be designated by the Commission from members of the committee; however, in the event a Chairman is unable to perform his duties, the committee shall appoint an Interim Chairman.

5.6 The Commission may from time to time create special committees and assign it tasks. The Commission may also determine the composition of the special committees.

5.7 Formal committee reports shall be made in writing and filed with the Commission.

ARTICLE VI RULES AND REGULATIONS

6.1 So far as is consistent with the Compact, the Commission may adopt rules and regulations and amend them from time to time. Rules and regulations to be adopted shall be presented by resolution and approved by a quorum as set out in Rule 4.7. Copies of proposed resolutions for rule adoption shall be presented in writing to each of the Commissioners at least thirty days before the meeting upon which they are to be voted. However, at its meeting, by unanimous vote, the Commission may waive this notice requirement.

6.2 Rules and regulations of the Commission may be compiled and copies may be prepared for distribution to the public under such terms and conditions as the Commission may prescribe.

ARTICLE VII FISCAL

7.1 All funds of the Commission shall be deposited in a depository or depositories designated by the Commission under the name of the "Red River Compact Commission Fund".

7.2 Disbursement of funds in the hands of the Treasurer, for items included in the approved budget, shall be made by check signed by him and the Vice-Chairman or by such person as may be designated by the Commission. Disbursement of funds for non-budgeted items shall be made by check signed by the Treasurer and Vice-Chairman upon voucher approved by at least six of the Commissioners, four of whom shall be from different signatory states.

7.3 At the annual meeting of each year, the Commission shall adopt a budget covering an estimate of its expenses for the following two fiscal years.

7.4 The payment of expenses of the Commission and of its employees shall not be subject to the audit and accounting procedures of the states.

7.5 All receipts and disbursements of the Commission shall be audited periodically as determined by the Commission by a qualified independent public accountant to be selected by the Commission and the report of the audit shall be included in and become a part of the annual report of the Commission.

7.6 The fiscal year of Commission shall begin July 1, of each year and end June 30 of the next succeeding year.

ARTICLE VIII ANNUAL REPORT

8.1 The Commission shall make an annual report and transmit it on or before the last day of May to the governors of the signatory states to the Red River Compact and to the President of the United States.

8.2 The annual report shall contain:

- (1) Minutes of all regular, special or emergency meetings held during the year;
- (2) All findings of facts made by the Commission during the preceding year;
- (3) Recommendations for actions by the signatory states;
- (4) Statements as to any cooperative studies made during the preceding year;
- (5) All data which the Commission deems pertinent;
- (6) The budget for current and future years;
- (7) The most recent audit report or current financial statement of the Red River Compact Fund;

- (8) Name, address and phone number of each Commissioner and each member of all standing committees;
- (9) Such other pertinent matters as the Commission may require.

RED RIVER COMPACT RULES AND REGULATIONS
To Compute and Enforce Compact Compliance
REACH I, SUBBASIN 1

(Adopted 4/30/87)

1. **General.** These rules and regulations to be used to compute and enforce Compact compliance within Subbasin I of Reach I, Red River Compact, are adopted subject to the following conditions and assumptions.
 - a. It is fully understood that these rules and regulations should be modified as new or improved gaging stations are constructed, whenever experience or detailed studies demonstrate the need for modification, and if the Commission should modify its interpretation of Compact provisions relating to this Subbasin.
2. **Management of Compact Compliance Computations.**
 - a. **Management Using State Centers:**
 - (1) Texas and Oklahoma representatives will establish State Computation and Control Centers.
 - (a) State representatives will gather data, exchange data and meet prior to the annual Commission meeting to check on computation results.
 - (b) The EAC will determine compliance with Compact.
 - b. **Management Period for Compact Compliance Computations:**
 - (1) Computation will be on the calendar year basis.
 - (2) Water data for a calendar year should be exchanged prior to March 15 of the following year.
 - (3) Compact Compliance Computation for a calendar year should be completed by April 15 of the following year.
3. **Enforcement of Compact Compliance Requirements.** Texas will be responsible for insuring that the sum of Texas uses does not exceed the total Texas water use authorized by the Red River Compact, and Texas will be responsible for establishing clear legal authority within Texas for enforcing the restrictions imposed by the Red River Compact.
4. **Data Reporting Procedures.**
 - a. **Streamflow Gaging Station Records:** The EAC will make arrangements with federal and State agencies, as required, to collect calendar year data as needed, and forward to the Texas and Oklahoma Computation Control Centers.
 - b. **Archived Records:** Records will be archived by the Commission Chairman.
5. **General Compliance Requirements of Section 4.01 Red River Compact.**
 - a. **SECTION 4.01. Subbasin 1 - Interstate Streams - Texas:**
 - (1) **The Compact prescribes:**
 - "(a) This includes the Texas portion of Buck Creek, Sand (Lebos) Creek, Salt Fork Red River, Elm Creek, North Fork Red River, Sweetwater Creek and Washita River, together with all their tributaries in Texas which lie west of the 100th Meridian."
 - "(b) The annual flow within this subbasin is hereby apportioned sixty (60) percent to Texas and forty (40) percent to Oklahoma."

SECTION 4.01 is modified in part by SECTION 4.05. Special Provisions, as follows:

"(b) Texas shall not accept for filing, or grant, a permit, for the construction of a dam to impound water solely for irrigation, flood control, soil conservation, mining and recovery of minerals, hydroelectric power, navigation, recreation and pleasure, or for any other purpose other than for domestic, municipal, and industrial water supply, on the mainstem of the North Fork Red River or any of its tributaries within Texas about Lugert-Altus Reservoir until the date that imported water, sufficient to meet the municipal and irrigation needs of Western Oklahoma is provided, or until January 1, 2000, whichever ever occurs first."

- (2) Pertinent extracts from the Supplemental Interpretive Comments of Legal Advisory Committee, as approved by the Red River Compact Commission on the 19th day of September 1978, are as follows:

Pages 9 and 10 " * * * * *. The flow of interstate tributaries is generally divided 60 percent to the upstream State and 40 percent to the downstream State. Because flows in Reach I are primarily from flood flows, an annual basis of accounting was adopted"

* * * * *

"Section 4.05(b) reflects the compromise of a long-standing dispute between Oklahoma and Texas over the water of the North Fork of the Red River and Sweetwater Creek. * * * * *"

"Under the Compromise Texas will limit development on North Fork and Sweetwater Creek to projects justified on the basis of municipal, industrial, and domestic needs until the year 2000. However, if sufficient imported water becomes available in Western Oklahoma before 2000, Texas will be free to pursue full development of its 60% of these interstate tributaries. * * * * *"

- (2) Until January 1, 2000 (assuming that imported water is not provided prior to that date in sufficient amounts to meet municipal and irrigation needs of Western Oklahoma) special restrictions apply to Texas water use in its North Fork Red River watershed upstream from the Lugert-Altus Reservoir. Therefore, some of the Compact compliance rules for the North Fork Red River watershed upstream from the Lugert-Altus Reservoir (para 5.f.(3) & (4) and g.(3) & (4) below) expire on January 1, 2000, if still in effect at that time.

- b. **Buck Creek Watershed in Texas:** Buck Creek watershed covers about 300 square miles in Texas. There are no existing gaging stations on Buck Creek in Texas or in Oklahoma. Since neither the Texas nor Oklahoma use of flow from Buck Creek is significant at this time, it is not required to make an annual accounting of the flow in Buck Creek. It also appears that establishing gaging stations and channel loss values so that future annual accountings could be made is not economically justified at this time. Annual accounting procedures for this watershed should be developed to provide a 60:40 apportionment whenever requested by either Oklahoma or Texas.

- c. **Sand (Lebos) Creek Watershed in Texas:** Sand Creek watershed covers about 65 square miles in Texas. There are no gaging stations on Sand Creek in Texas or in Oklahoma. Since neither Texas nor Oklahoma makes significant use of flow from Sand Creek, it is not necessary to make an annual accounting of the flow in Sand Creek, and it does not seem to be economically justified at this time to establish gaging stations and determine channel loss values so that future annual accountings could be made. Annual accounting procedures for this watershed should be developed to provide a 60:40 apportionment whenever requested by either Oklahoma or Texas.
- d. **Salt Fork Red River Watershed in Texas:** Salt Fork Red River watershed in Texas covers about 1,380 square miles, of which 209 are non-contributing.

The USGS streamflow gage number 07300000, Salt Fork Red River near Wellington, Texas, is about 16 miles upstream from the Oklahoma-Texas State line and measures flow from a 1,222 sq. mi. drainage area, of which 209 is probably non-contributing. The average annual discharge (1953-1966) was 52,600 AF/yr, and the average annual discharge since Greenbelt Reservoir was completed (1967-1977) has been 33,250 AF/yr.

The USGS streamflow gage 07300500, Salt Fork Red River at Mangum, Oklahoma, is about 29 miles downstream from the Oklahoma-Texas State line and measures flow from a 1,566 sq. mile drainage area, of which 209 is probably non-contributing. The average annual discharge (1937-1977) has been 62,450 AF/yr.

(1) The actual annual delivery at the Oklahoma State line is computed as follows:

- (a) The annual flow at the Wellington gage,
- (b) Minus channel losses to Wellington gage flows between gage and State line (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment),
- (c) Plus Texas' flow between Wellington gage and the State line. (This flow will be computed based on intervening drainage area between Wellington and Mangum gages adjusted for both Texas and Oklahoma man-made depletions.), and
- (d) Minus Texas' man-made depletions downstream from the Wellington gage.

(2) The scheduled annual delivery at the Oklahoma State line is 40 percent of the natural flow at State line without diversions or impoundments, and would be computed as 40 percent of the following:

- (a) The actual annual delivery (para 5.d.(1) above),
- (b) Plus all man-made depletions in Texas, and
- (c) Minus the increased channel losses in Texas which would have incurred had Texas depletions not occurred (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment).

(3) Compact compliance is achieved as long as actual delivery exceeds scheduled delivery.

Creek Watershed in Texas: Elm Creek watershed covers about 360 square miles in Texas which includes the North Elm Creek tributary. There is no streamflow gage on Elm Creek in Texas. The USGS gage number 3400, Elm Fork of North Fork Red River near Carl, Oklahoma, is about 6

miles downstream from the Oklahoma-Texas State line, and was used to measure flow from a 416 square mile drainage area but discharge measurements at this site were discontinued in 1980. The average annual discharge (20 years) was 30,280 AF/yr. No Compact compliance accounts can be made until the Gage near Carl has been reestablished.

- (1) The actual annual delivery at State line is computed as follows:
 - (a) Flow at the State line. (This flow will be computed based on the drainage area and on the flow measured at Carl gage, adjusted for both Texas and Oklahoma depletions.), and
 - (b) Minus Texas' man-made depletions.The scheduled annual delivery at State line is 40 percent of the natural flow at State line without diversions or impoundments and would be computed as 40 percent of the following:
 - (a) The actual annual delivery (para 5.e.(1) above),
 - (b) Plus man-made depletions in Texas, and
 - (c) Minus the increased channel losses in Texas which would have been incurred if Texas had not depleted the flow (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment).
- (3) Compact compliance is achieved as long as the actual delivery exceeds the scheduled delivery.

Washita River Watershed in Texas: There is no streamflow gage on the Washita River in Texas. The USGS streamflow gage number 07316500, Washita River near Cheyenne, Oklahoma, is over 21 miles downstream from the Oklahoma-Texas State line, and measures flow from a 794 square mile drainage area, of which about 441 square miles are in Texas. The average annual discharge at the Cheyenne gage (44 years) has been 20,720 AF/yr.

- (1) The actual annual delivery at Oklahoma State line is computed as follows:
 - (a) The annual flow at the Cheyenne gage,
 - (b) Plus channel losses to the State line flow between the State line and the gage (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment),
 - (c) Minus Oklahoma's flow between the State line and Cheyenne gage. (This flow will be computed based on the drainage area upstream from the Cheyenne gage, adjusted for both Texas and Oklahoma man-made depletions.), and
 - (d) Minus Texas' man-made depletions.
- (2) The annual scheduled delivery at State line is 40 percent of the natural flow at State line without diversions or impoundments, and would be computed as 40 percent of the following:
 - (a) The actual annual delivery at State line (para 5.h.(1) above),
 - (b) Plus man-made depletions in Texas, and
 - (c) Minus the increased channel losses which would have occurred if Texas had not made any diversions (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment).
- (3) Compact compliance is achieved as long as the actual delivery exceeds the scheduled delivery.

**RESOLUTION TO ADOPT
RULES AND REGULATIONS
TO COMPUTE AND ENFORCE COMPACT COMPLIANCE
REACH I, SUBBASIN 1-SWEETWATER CREEK AND NORTH FORK RED RIVER**

THE COMMISSION FINDS:

1. that no projects or diversions have occurred in Texas from Sweetwater Creek or the North Fork Red River above Lugert-Altus Reservoir as of this date which violate Article IV, §§ 4.01(b); 4.05(b) of the Red River Compact;
2. that in compliance with the Compact Texas is entitled to 60% of the state line natural flow on an annual basis of Sweetwater Creek and Oklahoma is entitled to 40% of the state line natural flow on an annual basis of Sweetwater Creek; and
3. that in compliance with the Compact Texas is entitled to 60% of the state line natural flow on an annual basis of the North Fork of the Red River and Oklahoma is entitled to 40% of the state line natural flow on an annual basis of the North Fork of the Red River.

THE COMMISSION HEREBY ADOPTS the rules set forth below to compute and apportion the waters of Sweetwater Creek and the North Fork of the Red River between Texas and Oklahoma in accordance with Article IV, §4.01(b) of the Red River Compact.

**RED RIVER COMPACT RULES AND REGULATIONS
To Compute and Enforce Compact Compliance
REACH I – SUBBASIN 1-SWEETWATER CREEK AND NORTH FORK RED RIVER**

1. General.

These rules and regulations to be used to compute and enforce Compact compliance for Sweetwater Creek and North Fork Red River in Reach I, Subbasin 1 of the Compact are adopted subject to the following conditions and assumptions:

- A. It is fully understood that these rules and regulations should be modified as new or improved gaging stations are constructed, whenever experience or detailed studies demonstrate the need for modification, or if the Commission should modify its interpretation of the Compact provisions relating to this Subbasin.
- B. Texas is apportioned 60% of the annual flow of Sweetwater Creek and Oklahoma is apportioned 40% of the annual flow of Sweetwater Creek. Texas is apportioned 60% of the annual flow of the North Fork of the Red River and Oklahoma is apportioned 40% of the annual flow of the North Fork of the Red River.

2. **Management of Compact Compliance Computations.**

A. **Management Using State Centers:**

(1) Texas and Oklahoma representatives will establish State Computation and Control Centers.

(a) State representatives will gather data, exchange data, and meet prior to the annual Commission meeting to discuss computation results.

(b) The Engineer Advisory Committee will report to the Commission on compliance with the Compact.

B. **Management Period for Compact Compliance Computations**

(1) Computation will be on the calendar year basis.

(2) Water data for a calendar year should be exchanged prior to March 15 of the following year.

(3) Compact Compliance Computation for a calendar year should be completed by April 15 of the following year.

3. **Enforcement of Compact Compliance Requirements.**

A. Texas will be responsible for insuring that the sum of Texas uses does not exceed the total Texas water use authorized by the Red River Compact, and Texas will be responsible for establishing legal authority within Texas for enforcing the restrictions imposed by the Red River Compact.

B. Oklahoma will be responsible for insuring that the sum of Oklahoma uses does not exceed the total Oklahoma water use authorized by the Red River Compact, and Oklahoma will be responsible for establishing legal authority within Oklahoma for enforcing the restrictions imposed by the Red River Compact.

C. **Annual Accounting:** Pursuant to Section 2.11 of the Compact, accounting for apportionment purposes is not mandatory until Texas or Oklahoma deem the accounting necessary.

4 **Data Reporting Procedures.**

- A. **Streamflow Gauging Station Records:** The Engineer Advisory Committee will make arrangements with federal and state agencies, as required, to collect calendar year data as needed, and forward to the Texas and Oklahoma Computation Control Centers.
- B. **Archived Records:** Records will be archived by the Commission Chairman.

5. **Compact Provisions**

- A. Sec. 4.01, Subbasin 1--Interstate streams--Texas, prescribes:
 - (a) This includes the Texas portion of Buck Creek, Sand (Lebos) Creek, Salt Fork Red River, Elm Creek, North Fork Red River, Sweetwater Creek, and Washita River, together with all their tributaries in Texas which lie west of the 100th Meridian.
 - (b) The annual flow within this subbasin is hereby apportioned sixty (60) percent to Texas and forty (40) percent to Oklahoma.
- B. Section 4.01 is modified in part by Section 4.05, Special Provisions, as follows:
 - (b) Texas shall not accept for filing, or grant a permit, for the construction of a dam to impound water solely for irrigation, flood control, soil conservation, mining and recovery of minerals, hydroelectric power, navigation, recreation and pleasure, or for any other purpose other than for domestic, municipal, and industrial water supply, on the mainstem of the North Fork Red River or any of its tributaries within Texas above Lugert-Altus Reservoir until the date that imported water sufficient to meet the municipal and irrigation needs of Western Oklahoma is provided, or until January 1, 2000, whichever occurs first.

6. **Compact Compliance North Fork Red River Watershed**

- A. **Gauges -** USGS streamflow gauge on the North Fork of the Red River near Shamrock, Texas (07301300) is approximately 16 miles from the Oklahoma-Texas State Line and measures flow from a 1,082 square mile drainage area of which 379 square miles are probably non-contributing. USGS streamflow gauge near Carter, Oklahoma (07301500) is approximately 30 miles downstream from the Oklahoma-Texas State Line and measures flow from a 2337 square mile drainage area of which 399 square miles are probably non-contributing. The drainage area of the North

Fork Red River at the Oklahoma-Texas State line is computed as 1229 square miles of which 379 square miles are probably non-contributing.

B. Actual Delivery - The actual annual delivery at the Oklahoma Texas State line shall be computed using the USGS streamflow gauge North Fork Red River near Shamrock (07301300) and the USGS streamflow gauge North Fork Red River near Carter, Oklahoma (07301500) as follows:

- (1) The annual flow at the Shamrock gauge,
- (2) Minus channel losses to Shamrock gauge flows between the gauge and State line (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment),
- (3) Plus Texas' flow between Shamrock gauge and the State line. (This flow will be computed by subtracting the flow of the Shamrock gauge from the flow at the Carter gauge. Then based on the intervening drainage area between the Shamrock and Carter Gauges, adjusted for both Texas and Oklahoma man-made depletions determine the runoff per square mile of contributing drainage which will be applied to the contributing drainage area in Texas below the Shamrock gage.), and
- (4) Minus Texas' man-made depletions downstream from the Shamrock gage.

C. Scheduled Delivery - The scheduled annual delivery at the Oklahoma Texas State line is 40 percent of the natural flow at State line without diversions or impoundments, and shall be computed as 40 percent of the following:

- (1) The actual annual delivery at Oklahoma State line (above),
- (2) Plus man-made depletion in Texas, and
- (3) Minus the increased channel losses in Texas which would have occurred if Texas had not depleted the flows (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment).

D. Compact Compliance - Compact compliance is achieved as long as the actual delivery exceeds the scheduled delivery.

7. Compact Compliance Sweetwater Creek Watershed in Texas

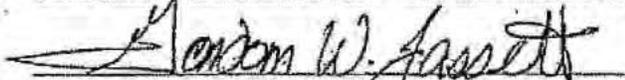
- A. **Gauges** - USGS streamflow gauge on Sweetwater Creek near Kelton, Texas (07301410), is about 8 miles upstream from the Oklahoma Texas State line and measures flow from a 287 square mile drainage area, of which 20 square miles is probably non-contributing. USGS streamflow gage on Sweetwater Creek near Sweetwater, Oklahoma (07301420) is located near the Oklahoma Texas State line and measures flow from a 424 square mile drainage area, of which 20 square miles is probably non-contributing. The drainage area of Sweetwater Creek at the Oklahoma Texas state line is computed as 371 square miles with 20 square miles being non-contributing. The actual annual delivery at Oklahoma Texas state line shall be computed using the USGS streamflow gauge on Sweetwater Creek near Kelton (07301410) and the USGS streamflow gauge on Sweetwater Creek near Sweetwater, Oklahoma (07301420) as follows:
- B. **Actual Delivery** - The actual annual delivery at the Oklahoma Texas State line shall be computed as follows:
- (1) The annual flow at the Kelton gauge,
 - (2) Minus channel losses to Kelton gauge flows between gauge and State line (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment),
 - (3) Plus Texas' flows between the Kelton gage and the State line. (This flow will be computed by subtracting the flow of the Kelton gauge from the flow at the Sweetwater gauge. Then based on Texas' drainage areas between the Kelton gauge and the Sweetwater gauge, adjusted for both Texas and Oklahoma man-made depletions determine the runoff per square mile of contributing drainage which will be applied to the contributing drainage area in Texas below the Kelton gauge.), and
 - (4) Minus Texas' man-made depletions between the Kelton gauge and the state line.
- C. **Scheduled Delivery** - The scheduled annual delivery at the Oklahoma Texas State line is 40 percent of the natural flow at State line without diversions or impoundments, and shall be computed as 40 percent of the following:
- (1) The actual annual delivery at State line (above),
 - (2) Plus man-made depletions in Texas, and

- (3) Minus the increased channel losses in Texas which have occurred if Texas had not depleted the flows (until this specific channel loss value is available, the Compact compliance calculations will be made ignoring this channel loss adjustment).

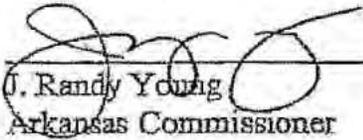
D. **Compact Compliance** - Compact compliance is achieved as long as the actual delivery exceeds the scheduled delivery.

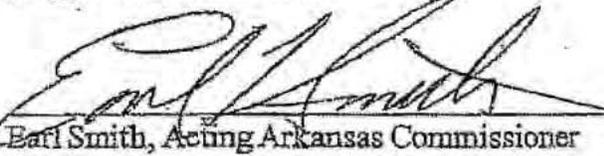
Adopted by unanimous consent of the Commission April 22, 2008 at Marshall, Texas.

RED RIVER COMPACT COMMISSION

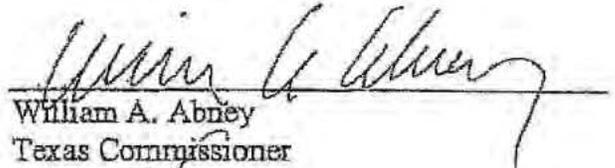

Gordon W. "Jeff" Fassett, Chairman

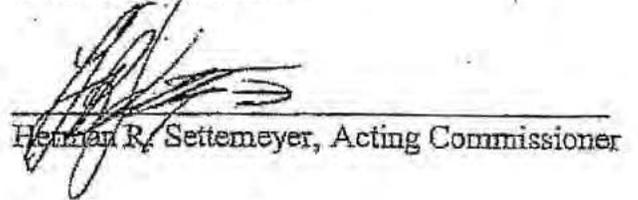
STATE OF ARKANSAS


J. Randy Young
Arkansas Commissioner

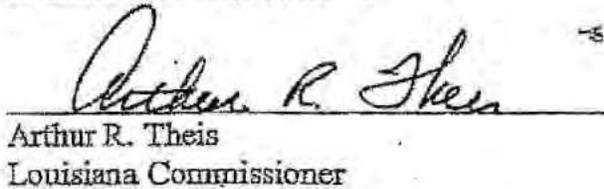

Earl Smith, Acting Arkansas Commissioner

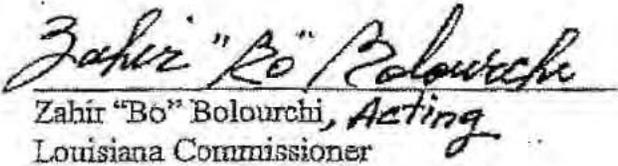
STATE OF TEXAS


William A. Abney
Texas Commissioner

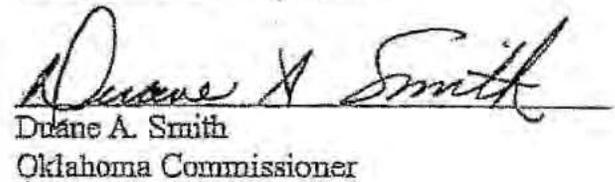

Herman R. Settemeyer, Acting Commissioner

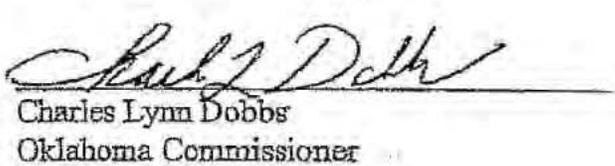
STATE OF LOUISIANA


Arthur R. Theis
Louisiana Commissioner


Zahir "Bo" Bolourchi, Acting
Louisiana Commissioner

STATE OF OKLAHOMA


Duane A. Smith
Oklahoma Commissioner


Charles Lynn Dobbs
Oklahoma Commissioner

RED RIVER COMPACT INTERIM RULES AND REGULATIONS
To Compute and Enforce Compact Compliance
REACH II, SUBBASIN 5

(Adopted 4/30/87)

1. These rules and regulations to be used to compute and enforce Compact compliance within Subbasin 5 of Reach II, Red River Compact, are adopted subject to the following conditions and assumptions:
 - a. It is fully understood that these rules and regulations should be modified as new or improved gaging stations are constructed, whenever experience or detailed studies demonstrate the need for modification, and if the Commission should modify its interpretation of Compact provisions relating to this Subbasin.
 - b. Definitions:
 - (1) "Diversion" as used in these rules and regulations, is the net loss to a water source from use by a diverter, and is computed as the diversion from the water source minus the part of the diversion which is returned to the water source. Normally, return flows must be measured to be considered; however, the EAC may consider and recommend exceptions. As used herein, "diversion" is equivalent to "net diversion" from a water source and to "depletion" or "consumptive use" of a water source.
2. **Management of Compact Compliance Computations.**
 - a. **Management Using State Centers:**
 - (1) State EAC representatives will establish State Computation Control Centers
 - (a) State representatives will gather data, exchange data and meet via conference call to check on computation results, if necessary.
 - (b) EAC will determine compliance with Compact.
 - b. **Management Period for Weekly Flow and Diversions:**
 - (1) Next week's State diversions will be allocated based on last week's compliance computations.
 - (2) It is each State's responsibility to limit its total State diversion allocation among its State diverters.
 - (3) The weekly period for use and flow data will start and end at 8:00 a.m. on Tuesday of each week.
 - (4) Data collection and dissemination will be completed on Tuesday of each week.
 - (5) Computation of Compliance will be completed on Wednesday of each week.
 - (6) Each State can request an update at any time.
 - c. **Management Improvement Studies:** The EAC will monitor the effect on accounting management of the following factors and will report thereon to the Commission whenever procedure changes appears desirable.
 - (1) Errors caused by travel time.
 - (2) Future restrictions computed from past week's data.
 - (3) Failure to consider channel loss.
 - (4) Failure to consider ungaged return flows.
 - (5) Failure to consider flow trends.

- (6) Addition of needed gages.
3. **Enforcement of Compact Compliance Requirements.** Each State will be responsible for insuring that the sum of the diversions by State users does not exceed the total State diversion authorized by the Red River Compact. In this regard, each State will be responsible for establishing clear legal authority within its State for enforcing the restrictions imposed by the Red River Compact.
4. **Data Reporting Procedures.**
- a. **Streamflow Gaging Station Records:** The EAC will make arrangements with the Corps of Engineers, the U.S. Geological Survey and with States as required to collect daily and/or weekly data, as needed, and forward to the State Computation and Control Centers.
 - b. **Diversion Records:** Each State will be responsible to collect daily and/or weekly data, as needed, and forward to the State Computation and Control Centers.
 - c. **Archived Records:** Records will be archived by Commission Chairman.
5. **General Compliance Requirements of Section 5.05, Red River Compact.**
- a. **Section 5.05 (b)(1):**
 - (1) **Compact prescribes:** "The Signatory States shall have equal rights to the use of the runoff originating in subbasin 5 and undesignated water flowing into subbasin 5, so long as the flow of the Red River at the Arkansas-Louisiana state boundary is 3,000 cubic feet per second or more, provided no state is entitled to more than 25 percent of the water in excess of 3,000 cubic feet per second."
 - (2) In computing the Subbasin 5 water allocation, when the flow of the Red River at the Arkansas-Louisiana State Boundary is 3,000 cfs or more and the total runoff and undesignated flow of Subbasin 5 is greater than or equal to 7,500 cfs but less than or equal to 12,000 cfs, Louisiana's allocation shall be 3,000 cfs and each of the three upstream states will equally share the runoff and undesignated flow in excess of 3,000 cfs.
 - (3) When the total runoff and undesignated flow of Subbasin 5 is 12,000 cfs or more, each of the signatory states shall be entitled to 25% of the total runoff and undesignated flow.
 - (4) State compliance with Section 5.05 (b)(1) does not need to be determined except when specifically requested by a Compact State.
 - b. **Section 5.05 (b)(2):**
 - (1) **The Compact states:** "Whenever the flow of the Red River at the Arkansas-Louisiana state boundary is less than 3,000 cubic feet per second, but more than 1,000 cubic feet per second, the States of Arkansas, Oklahoma, and Texas shall allow to flow into the Red River for delivery to the State of Louisiana a quantity of water equal to 40 percent of the total weekly runoff originating in subbasin 5 and 40 percent of undesignated water flowing into subbasin 5; provided, however, that this requirement shall not be interpreted to require any state to release stored water."
 - (2) In computing the Subbasin 5 water allocation to Louisiana when flow of Red River at the Arkansas-Louisiana State boundary is less than 3,000 cfs but more than 1,000 cfs, the Subbasin 5 runoff for each of the three upstream States and the undesignated water flowing into Subbasin 5 from each upstream State totaled, and the three upstream States should allow to pass to Louisiana 40 percent of the total, or 1,000 cfs, whichever is greater.

- (3) When the Subbasin 5 runoff plus undesignated water totals at least 2,500 cfs and not more than 7,500 cfs, each of the three upstream States are allocated 60 percent of its runoff plus undesignated inflow and the other 40 percent is to be allowed to flow into the Red River for delivery to Louisiana.
- (4) When the Subbasin 5 runoff plus undesignated water totals at least 1,000 cfs but less than 2,500 cfs, the allocation to Louisiana is 1,000 cfs because of Compact Section 5.05 (b)(3). The total Subbasin 5 runoff plus undesignated water is compared to the Louisiana allocation of 1,000 cfs and a percentage is established. Each of the three upstream States will be entitled to divert and use a quantity computed using (100 percent minus the established percentage) times (the total of runoff from its Subbasin 5 areas plus undesignated water flowing into its Subbasin 5 areas).
- (5) This Compact compliance determination should be made whenever the flow of the Red River at the Arkansas-Louisiana State boundary falls below 3,000 cfs and is more than 1,000 cfs.

c. **Section 5.05 (b)(3):**

- (1) **The Compact states:** "Whenever the flow of the Red River at the Arkansas-Louisiana state boundary falls below 1,000 cubic feet per second, the States of Arkansas, Oklahoma, and Texas shall allow a quantity of water equal to all the weekly runoff originating in Subbasin 5 and all undesignated water flowing into Subbasin 5 within their respective states to flow into the Red River as required to maintain a 1,000 cubic foot per second flow at the Arkansas-Louisiana state boundary."
- (2) In computing the Subbasin 5 allocation when the flow of the Red River at the Arkansas-Louisiana State boundary falls below 1,000 cfs, and when the Subbasin 5 runoff and undesignated water flowing into Subbasin 5 total 1,000 cfs or less, all flow must be passed to Louisiana.
- (3) When the Subbasin 5 runoff and undesignated water flowing into Subbasin 5 total more than 1,000 cfs but less than 2,500 cfs, Louisiana is allocated 1,000 cfs. This 1,000 cfs Louisiana entitlement is compared to the total runoff plus undesignated water and a percentage is established. Each of the three upstream States will be entitled to divert and use a quantity computed using (100 percent minus the established percentage) times (its total State runoff and undesignated water inflow).
- (4) See rules for Compact Section 5.05 (b)(2) when the Subbasin 5 runoff and undesignated water flowing into Subbasin 5 total 2,500 cfs or more up to 7,500 cfs.
- (5) This Compact compliance determination should be made whenever the flow of the Red River at the Arkansas-Louisiana State boundary falls below 1,000 cfs.

d. **Section 5.05 (c):**

- (1) **The Compact states:** "Whenever the flow at Index, Arkansas, is less than 526 c.f.s., the states of Oklahoma and Texas shall each allow a quantity of water equal to 40 percent of the total weekly runoff originating in Subbasin 5 within their respective states to flow into the Red River, provided however, this provision shall be invoked only at

the request of Arkansas, only after Arkansas has ceased all diversions from the Red River itself in Arkansas above Index, and only if the provisions of Sub-sections 5.05 (b)(2) and (3) have not caused a limitation of diversions in subbasin 5."

- (2) In computing the Subbasin 5 allocation when flow of Red River at Index Arkansas is less than 256 cfs, the States of Oklahoma and Texas are to pass 40 percent of weekly runoff from respective Subbasin 5 areas.
- (3) This Compact compliance determination will be made only when requested by Arkansas, only after Arkansas has ceased all diversions from the Red River, and only if the provisions of subsections 5.05 (b)(2) and (3) have not caused a limitation of diversions in Subbasin 5.

6. **Procedures (Disregarding Designated Flows) to Compute State Runoff, Runoff plus Undesignated Inflows, and Flow of Red River at Arkansas-Louisiana State Boundary.**

a. **Oklahoma.**

(1) **Runoff plus Undesignated Inflows of Denison Dam to DeKalb Gage:**

- (a) Kiamichi River near Hugo, OK, Gage flow, plus Muddy Boggy Creek near Unger, OK, Gage flow plus Blue River near Blue, OK Gage flow, plus
- (b) Fifty percent of (DeKalb Gage flow, plus Texas and Oklahoma diversions, minus gaged flows at Kiamichi River near Hugo, Ok, Muddy Boggy Creek near Unger, OK, Blue River near Blue, OK, and Sanders Creek near Chicota, Texas, streamflow Gages).

(2) **Runoff plus Undesignated Inflows, DeKalb Gage to Oklahoma-Arkansas State line:** Fifteen and one-half (15.5) percent of (Index Gage flow, minus DeKalb Gage flow, plus Oklahoma, Texas and Arkansas diversions downstream from DeKalb Gage).

(3) **Runoff only, Denison Dam to Oklahoma-Arkansas State line.**

- (a) Fifty percent of (DeKalb Gage flow, minus Red River at Denison Dam Gage flow, plus Texas and Oklahoma diversions upstream from DeKalb Gage, minus Blue River near Blue, OK, Gage flow, minus Muddy Boggy Creek near Unger-Okla. Gage flow, minus Kiamichi River near Hugo-Okla. Gage flow minus Gage flow), plus
- (b) Fifteen and one-half (15.5) percent of (Index Gage flow, minus DeKalb Gage flow, plus Oklahoma, Texas and Arkansas diversions between DeKalb and Index Gages).

b. **Texas.**

(1) **Runoff plus Undesignated Inflows, DeKalb Gage to Index Gage:**

- (a) Sanders Creek near Chicota Gage flow, plus
- (b) Fifty percent of: (DeKalb Gage flow, plus Texas and Oklahoma diversions, minus gaged flows at Kiamichi River near Hugo, OK, Muddy Boggy Creek near Unger, OK, Blue River near Blue, OK, and Sanders Creek near Chicota, TX, streamflow Gages).

(2) **Runoff plus Undesignated Inflows, DeKalb Gage to Index Gage:** Fifty (50) percent of (Index Gage flow, minus DeKalb Gage flow, plus Oklahoma, Texas and Arkansas diversions downstream from DeKalb Gage).

(3) **Runoff plus Undesignated Inflows, Sulphur River Gage:** One hundred percent of (Sulphur River near Texarkana Gage flow) minus (Texas diversions from river below gage) plus (Texas diversions below Texarkana Dam).

(4) **Runoff Only, Denison Dam to Index Gage:** Fifty percent of (Index Gage flow, minus Red River at Denison Dam Gage flow, plus Oklahoma and Texas and Arkansas diversions upstream from the Index Gage, minus Blue River near Blue, OK, Gage flow, minus Muddy Boggý Creek near Unger-Okla. Gage flow, minus Kiamichi River near Hugo-Okla. flow, minus Sanders Creek near Chicota-Texas Gage flow).

c. **Arkansas Runoff plus Undesignated Inflows.**

(1) **Oklahoma-Arkansas State Line to Index Gage:** Thirty-four and one-half (34.5) percent of (Index Gage flow, minus DeKalb Gage flow, plus Oklahoma and Texas and Arkansas diversions between DeKalb and Index Gages).

(2) **Index Gage to Hosston Gage:**

(a) Hosston Gage flow, plus Louisiana diversions above Hosston Gage, minus Index Gage flow, minus (Sulphur River near Texarkana Gage flow less Texas diversions from river below gage), plus Arkansas diversions downstream from Index Gage.

d. **Louisiana Streamflow at Arkansas-Louisiana State Boundary.**

(1) **Red River flow at Arkansas-Louisiana State boundary equals** (Gage flow) plus (Louisiana diversions from Red River downstream from the State boundary and upstream from gage).

(2) **Data needed to make interim Louisiana calculations**

(a) **For Red River flows up to 5,000 cfs -** Hosston Gage flow, plus Louisiana diversions from Red River upstream from Hosston Gage.

(b) **For Red River flows of 5,000 cfs or larger -** Shreveport Gage flow, plus Louisiana diversions from Red River upstream from Shreveport Gage, minus Twelvemile Bayou near Dixie-La Gage flow, plus Louisiana diversions from Twelvemile Bayou below Twelvemile Bayou near Dixie-La Gage.

(3) **Effect of Flow Trends, Scheduled Change of Reservoir Releases, and Other Events Certain to Significantly Change Flow at Arkansas-Louisiana State Boundary During Coming Week.**

In addition to the Arkansas-Louisiana State boundary flow estimated based on subparagraph (2) (a) or (b) above, the EAC will also advise the Commission of probable significant changes in State boundary flow which should result from flow trends, scheduled change of reservoir releases, and other such known events.

7. **Procedures (Using Designated Flow Data) to Compute State Runoff plus Undesignated Inflows and Flow of Red River at Arkansas-Louisiana State boundary.** Procedures outlined in paragraph 6 above will be followed except that designated inflows, designated outflows and diversion of designated flows will be accounted for whenever appropriate.

RED RIVER COMPACT RULES AND REGULATIONS
To Compute and Enforce Compact Compliance
REACH III, SUBBASIN 3

(as amended 4/25/89)

1. These rules and regulations to be used to compute and enforce Compact compliance within Subbasin 3 of Reach III, Red River Compact, are adopted subject to the following conditions and assumptions.
 - a. It is fully understood that these rules and regulations should be modified whenever experience or detailed studies demonstrate the need for modification, and if the Commission should modify its interpretation of Compact provisions relating to this Subbasin.
 - b. **Definitions:**
 - (1) "Diversion", as used in these rules and regulations, is the net loss to a water source from use by a diverter, and is computed as the diversion from the water source minus the part of the diversion which is returned to the water source. Normally, return flows must be measured to be considered; however, the Engineering Committee may consider and recommend exceptions. As used herein, "diversion" is equivalent to "net diversion" from a water source and to "depletion" or "consumptive use" of a water source.
 - (2) "Drawdown"; as used in these rules and regulations, means that period commencing on the first day water ceases spilling over the existing Caddo Lake spillway (or the raised spillway, if Caddo Lake is enlarged), and continuing so long as the Caddo Lake surface elevation continues to fall, until the day when appreciable inflow reaches Caddo Lake, causing the Caddo Lake surface elevation to rise leading to a spill from Caddo Lake.
2. **Management of Compact Compliance Computations.**
 - a. **Management Using State Centers:**
 - (1) State Engineering Committee representatives will establish State Computation Control Centers.
 - (a) State representatives will gather data, exchange data and meet via conference call to check on computation results, if necessary.
 - (b) The Engineering Committee will compute compliance with Compact.
 - b. **Management Period for Compact Compliance Computations:**
 - (1) Next week's State diversions will be allocated based on last week's compliance computations.
 - (2) It is each State's responsibility to limit its total State diversion allocation among its State diverters.
 - (3) The weekly period for use and flow data will start and end at 8:00 a.m. on Tuesday of each week.
 - (4) Data collection and dissemination will be completed on Tuesday of each week.
 - (5) Computation of Compliance will be completed on Wednesday of each week.
 - (6) Each State can request an update at any time.
 - c. **Management Improvements Studies:** The Engineering Committee will monitor the effect on accounting management of the following factors and will report thereon to the Commission whenever procedure changes appear desirable.

- (1) Errors caused by travel time.
 - (2) Future restrictions computed from past week's data.
 - (3) Failure to consider channel loss.
 - (4) Failure to consider ungaged return flows.
 - (5) Failure to consider flow trends.
 - (6) Addition of needed gages.
3. **Enforcement of Compact Compliance Requirements.** Each State will be responsible for insuring that the sum of the diversions by State users does not exceed the total State diversion authorized by the Red River Compact Commission. In this regard, each State will be responsible for establishing clear legal authority within its State for enforcing the restrictions imposed by the Red River Compact.
4. **Data Reporting Procedures.**
- a. **Streamflow Gaging Station Records:** The Engineering Committee will make arrangements with Corps of Engineers, the U.S. Geological Survey and with States as required to collect daily and/or weekly data, as needed, and forward to the State Computation and Control Centers.
 - b. **Diversion Records:** Each State will be responsible to collect weekly data, as needed, and forward to the State Computation and Control Centers.
 - c. **Archived Records:** Records will be archived by the Commission Chairman.
5. **General Compliance Requirements of Section 6.03 Red River Compact.**
- a. **Section 6.03 (b)(1):**
 - (1) **The Compact states:** "Texas shall have the unrestricted right to all water above Marshall, Lake O' the Pines, and Black Cypress damsites; however, Texas shall not cause runoff to be depleted to a quantity less than that which would have occurred with the full operation of Franklin County, Titus County, Ellison Creek, Johnson Creek, Lake O' the Pines, Marshall, and Black Cypress Reservoirs constructed, and those other impoundments and diversions existing on the effective date of this Compact. Any depletions of runoff in excess of the depletions described above shall be charged against Texas' apportionment of the water in Caddo Reservoir."
 - (2) Texas may use the bed and banks of the streams or tributaries available within this Subbasin to convey its developed water downstream from the aforesaid dam sites to specified authorized users. Such water would retain its identity and would not be subject to the Caddo Lake drawdown provisions of Section 5.b. of these rules until passing the designated point of diversion. Appropriate transportation losses will be approved by the Red River Compact Commission.
 - (3) Until both Marshall Reservoir (with an estimated capacity of 782,300 acre-feet and yield of 325,000 acre-feet annually) and Black Cypress Reservoir (with estimated capacity of 824,400 acre-feet and yield and 220,000 acre-feet annually) have been constructed, it will be virtually impossible for Texas to deplete runoff in excess of that authorized. In the future, whenever potential Texas depletions above Marshall, Lake O' the Pines, and Black Cypress damsites become a concern to Louisiana, procedures to compute Texas depletion of runoff in excess of that authorized by Section 6.03 (b)(1) of the Compact should be developed by
 - b. **Section 6.03 (b)(2):**
 - (1) **The Compact states:** "Texas and Louisiana shall each have the unrestricted right to use fifty (50) percent of the conservation storage capacity in the present Caddo Lake for the impoundment of water for state use, subject to the provision that supplies for existing uses of water from Caddo Lake, on date of Compact, are not reduced."

- (2) Whenever water is spilling over the existing spillway at 168.5 feet above mean sea level, each state may withdraw or divert water from Caddo Lake without restriction.
- (3) Whenever Caddo Lake is not spilling over the existing spillway at 168.5 feet above mean sea level, the total consumptive use by each state shall not exceed 8,400 acre-feet during the drawdown period, provided that neither state shall divert more than 3,600 acre-feet during any one month or 4,800 acre-feet during any two consecutive months.

c. Section 6.03 (b)(3):

- (1) The Compact states: "Texas and Louisiana shall each have the unrestricted right to fifty (50) percent of the conservation storage capacity of any future enlargement of Caddo Lake, provided the two states may negotiate for the release of each state's share of the storage space on terms mutually agreed upon by the two states after the effective date of this Compact."
- (2) This Compact provision requires no separate computation procedures but other rules may be changed if enlargement of Caddo Lake occurs. If enlargement of Caddo Lake is authorized in the future, the Engineering Committee should review and modify as necessary Rule 5 (b) and Rule 6.

d. Section 6.03 (b)(4):

- (1) The Compact states: "Inflow to Caddo Lake from its drainage area downstream from Marshall, Lake O' the Pines, and Black Cypress damsites and downstream from other last downstream dams in existence on the date of the signing of the Compact document by the Compact Commissioners, will be allowed to continue flowing into Caddo Lake except that any manmade depletions to this inflow by Texas will be subtracted from the Texas share of the water in Caddo Lake."
- (2) As indicated in paragraph 5 a. (2) above, it is virtually impossible for Texas at the present time to reduce inflow to Caddo Lake below that which would occur with both Marshall and Black Cypress Reservoirs constructed and operating. However potential Texas depletions become a concern to Louisiana, procedures to compute excess depletion by Texas of inflow to Caddo Lake should be developed by the Engineering Committee and presented for Commission Consideration.

e. Section 6.03 (c):

- (1) The Compact states: "In regard to the water of interstate streams which do not contribute to the inflow to Cross Lake or Caddo Lake, Texas shall have the unrestricted right to Divert and use this water on the basis of a division of runoff above the state boundary of sixty (60) percent to Texas and forty (40) percent to Louisiana."
- (2) The Engineering Committee will review known Texas diversion data for the previous year and report to the Commission any Texas non-compliance with Compact Section 6.03 (c).

f. Section 6.03 (d):

- (1) The Compact states: "Texas and Louisiana will not construct improvements on the Cross Lake watershed in either state that will affect the yield of Cross Lake; provided, however, this subsection shall be subject to the provisions of Section 2.08."

- (2) The Engineering Committee will renew any known improvements on the Cross Lake watershed and report to the Commission any non-compliance with Compact Section 6.03 (d).

6. Caddo Lake Content Accounting Procedure During Drawdown Periods.

a. Whenever water is spilled from Caddo Lake, both state's accounts are full and no accounting is necessary. Accounting shall start the first day of no-spill following each period of spilling and shall continue until the first day of spill in the next period of spilling. The accounting procedure for computing the quantity of water in Caddo Lake during periods of drawdown belonging to the States of Louisiana and Texas shall be as follows:

- (1) At the beginning of the drawdown, the Caddo Lake contents belong 50 percent to each state. Otherwise, begin with water ownership on Caddo Lake as shown in the most recent previous report.
- (2) Each State shall be credited with one-half of the inflow to Caddo Lake since the previous report.
- (3) Each State's account shall be reduced by its share of Caddo Lake evaporation losses during the period since the previous report.
- (4) Each State's account shall be reduced by its diversions from Caddo Lake since the previous report.
- (5) A State's account shall not exceed 50 percent of the capacity of Caddo Lake. If these accounting procedures result in a greater State content than 50 percent of the total capacity of Caddo Lake, the excess computed quantity shall be "spilled" into the other State's account as needed to bring the other State's account up, but in no case shall either State's account exceed 50 percent of the total capacity of Caddo Lake.

b. Using a stage-area-capacity relationship concurred in by both States, the content of Caddo Lake at the end of each accounting period shall be determined and inflow for that period shall be computed as follows:

- (1) From the present content, as determined above, subtract the content determined at the end of the previous period.
- (2) Add to the figure resulting from Step (1) the total Texas and Louisiana diversions since the end of the previous period.
- (3) Add to the figure resulting from Step (2) the computed gross evaporation since the end of the previous period as determined in c. (2) below. This results in total inflow.

c. **Evaporation will be computed as follows:**

- (1) The Weather Bureau's pan evaporation data shall be used to compute gross lake evaporation using a standard conversion coefficient agreed to by the engineer advisors of each State.
- (2) The average lake surface area for the accounting period shall be determined from the stage-area-capacity relationship concurred in by both States and multiplied by the gross lake evaporation as determined in Step (1) to determine the volume of evaporation for the period.

7. Availability of Diversion Records. Arrangements shall be made for all Texas and Louisiana diverters, during "drawdown" of Caddo Lake, to maintain daily diversion records open for inspection, and to provide weekly use data as required by Rule 2b. (3).

