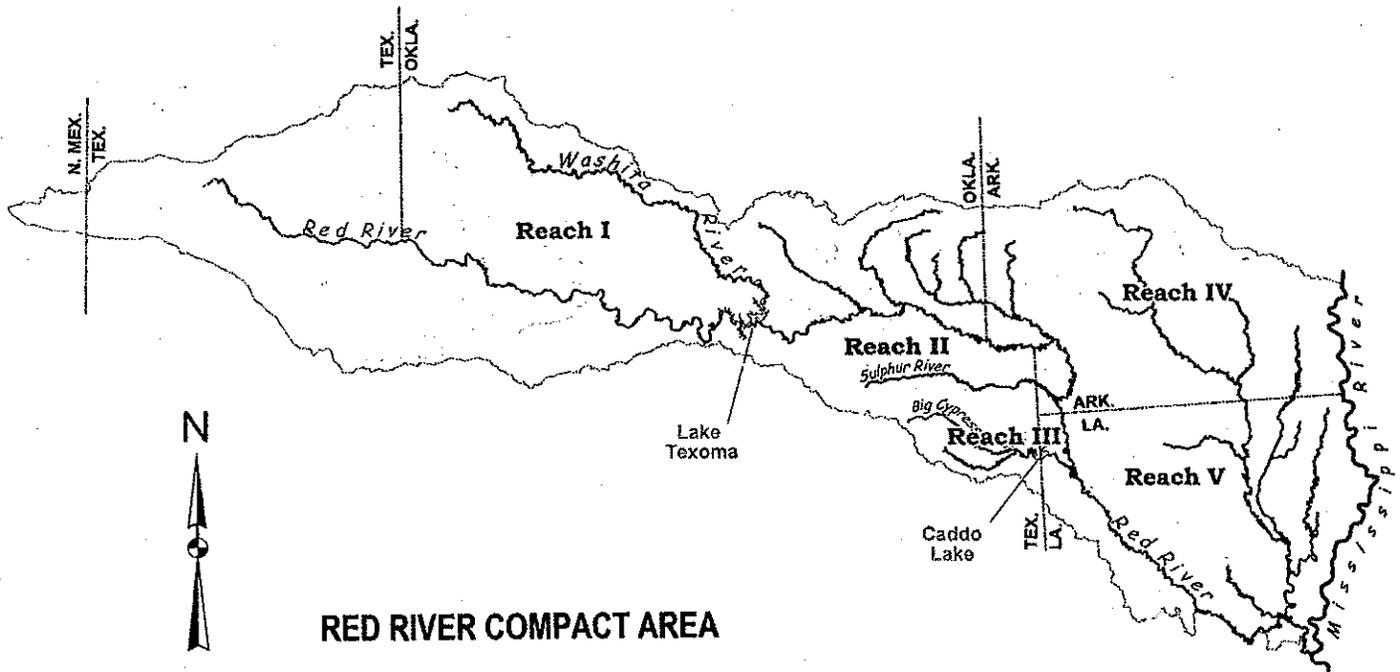


REPORT
OF THE
RED RIVER
COMPACT COMMISSION
2013



RED RIVER COMPACT AREA

Published
June 2014

REPORT

OF THE

**RED RIVER
COMPACT COMMISSION
2013**

Arkansas

Louisiana

Oklahoma

Texas

Published

June 2014

RED RIVER COMPACT COMMISSION

May 21, 2013

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:

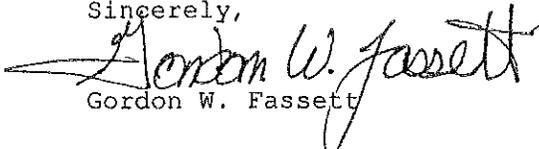
The Red River Compact is an interstate agreement entered into by the States of Arkansas, Louisiana, Oklahoma, and Texas, with the consent of Congress, dealing with the water resources of the Red River Basin.

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 Commission at its Thirty-Third 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 2012 and a budget covering the anticipated expenses of the Commission for FY 2013.

The State of Louisiana hosted the Thirty-Third Annual Meeting on April 23, 2013, in New Orleans, Louisiana.

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 Louisiana accepted the responsibility for both offices for FY 2013. The Office of Treasurer remained with the State of Arkansas.

Sincerely,



Gordon W. Fassett

Chairman/Federal Commissioner

ARKANSAS

LOUISIANA

OKLAHOMA

TEXAS

RED RIVER COMPACT COMMISSION
2013 REPORT

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Bo
04-08-2014

Minutes of the

RED RIVER COMPACT COMMISSION
33RD Annual Meeting

Doubletree Hilton Hotel
300 Canal Street
Crescent Ball Room
New Orleans, Louisiana
April 23, 2013
8:30 AM

I. CALL TO ORDER

The Annual Meeting of the Red River Compact Commission was called to order by Chairman Gordon "Jeff" Fassett at 8:45 a.m. on April 23, 2013, at the Doubletree Hilton Hotel, 300 Canal Street, Crescent Ball Room, in New Orleans, Louisiana.

II. WELCOME AND INTRODUCTIONS

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

Those present at the meeting were:

Red River Compact Commissioners

Jeff Fassett, Federal Chairman, Cheyenne, Wyoming
Randy Young, Little Rock, Arkansas (AR)
Wayne Dowd, Texarkana, Arkansas (AR)
Arthur Theis, Baton Rouge, Louisiana (LA)
Chris Knotts, Baton Rouge, Louisiana (LA)
Julie Cunningham, Oklahoma City, Oklahoma (OK) (Proxy for J.D. Strong)
Charles Dobbs, Altus, Oklahoma (OK)
Bill Abney, Marshall, Texas (TX)
Todd Chenoweth, Austin, Texas (TX) (Proxy for Zak Covar)

Chairman Fassett reported that he had received Official Letters of Proxy from J.D. Strong, Oklahoma City, Oklahoma (OK) appointing Julie Cunningham and from Zak Covar, Austin, Texas (TX) appointing Todd Chenoweth to act on their behalf for today's meeting. The letters are included as ATTACHMENT 1.

Representatives, Federal Agencies and Guests from Arkansas

Edward Swaim, RRCC Treasurer, Arkansas Natural Resources Commission, (ANRC), Little Rock, AR

Ken Brazil, Arkansas Natural Resources Commission (ANRC), Little Rock, AR

Crystal Phelps, Arkansas Natural Resources Commission (ANRC), Little Rock, AR

Chris Soller, Arkansas Natural Resources Commission (ANRC), Little Rock, AR

Dave Freiwald, U.S. Geological Survey (USGS), Arkansas District, Little Rock, AR

Jason Tankhouser, U.S. Geological Survey (USGS), Arkansas District, Little Rock, AR

John F. Gibson, Former Commissioner, RRCC

Representatives, Federal Agencies and Guests from Louisiana

Zahir "Bo" Bolourchi, Louisiana Department of Transportation & Development (LA DOTD), Baton Rouge, LA

Max Forbes, Louisiana Department of Transportation & Development (LA DOTD), Baton Rouge, LA

Brandon Brown, Louisiana Department of Transportation & Development (LA DOTD), Baton Rouge, LA

Michael Celestine, Louisiana Department of Transportation & Development (LA DOTD), New Orleans, LA

Sharon Terrebonne, Louisiana Department of Transportation & Development (LA DOTD), New Orleans, LA

Brad Spicer, Louisiana Department of Agriculture & Forestry (LA DOA&F), Baton Rouge, LA

Bill Branch, Louisiana Department of Agriculture & Forestry (LA DOA&F), Baton Rouge, LA

George Arcement, U.S. Geological Survey (USGS), Louisiana District, Baton Rouge, LA

Ben McGee, U.S. Geological Survey (USGS), Louisiana District, Ruston, LA

Britt Paul, Natural Resources Conservation Service (NRCS), Alexandria, LA.

Rich Brontoli, Red River Valley Association (RRVA), Shreveport, LA

Ken Guidry, Red River Water Commission (RRVA), Shreveport, LA

Mark Davis, Tulane Water Law, New Orleans, LA

Chris Dalbom, Tulane Water Law, New Orleans, LA

Mike Adcock, La. Delta Pride, Rayville, LA

Representatives, Federal Agencies and Guests from Oklahoma

Jerry Barnett, Oklahoma Water Resources Board, (OWRB), Oklahoma City, OK

Representatives, Federal Agencies and Guests from Texas

Suzy Valentine, Texas Commission on Environmental Quality (TCEQ), Austin, TX

Jane Atwood, Office of the Attorney General of Texas, Austin, TX

Mike Rickman, North Texas Municipal Water District, Wylie, TX

Other Attendees

Bill Swanson, MWH

III. APPROVAL OF THE AGENDA

Chairman Fassett pointed out that the agenda had been previously circulated according to the rules of the Compact, with the addition of item No. 10, the Louisiana Reservoir Priority Program. No changes other changes were made to the agenda. He asked if there were any comments or revisions to the agenda, or a motion to approve the agenda, or further discussion.

Commissioner Young moved to approve the agenda as circulated, and Acting Commissioner Cunningham seconded. The motion was unanimously approved with the change. The agenda is enclosed as ATTACHMENT 2.

IV. APPROVAL OF THE MINUTES OF THE APRIL 17, 2012 RRCC MEETING HELD IN AUSTIN, TX

Chairman Fassett stated that the minutes of the April 2012 meeting in Austin, Texas, had been previously distributed and revised per comments by Suzy Valentine. He asked if there were any additions or deletions to the minutes. There being no revisions or amendments.

Commissioner Young moved to approve the minutes, and Commissioner Dowd seconded. Chairman Fassett called for the vote, and the motions were unanimously approved.

V. REPORT OF CHAIRMAN FASSETT

Chairman Fassett stated that his report would be brief as usual since we have not had any meetings since the last Commission meeting. As Chairman, he is staying in the Email loop for activities and actions. A brief discussion will be held later on today to discuss the litigation concerning the Red River Basin regarding Tarrant Regional Water District and the State of Oklahoma. Information is being exchanged between Louisiana and Arkansas concerning the low flow situation on state tributaries. The States are having dialog on separate issues. He had nothing new to report to the Commissioners.

VI. REPORT OF TREASURER

Chairman Fassett asked for the report of the Treasurer, Ed Swaim (AR), who circulated the Treasurer's Report for the Commissioners to review. Mr. Swaim pointed out that this was for the one year reporting period of July 1, 2011 to June 30, 2012. The report is enclosed as ATTACHMENT 3.

Summary of Treasurer's Report:

The total receipts were \$2,204.80

Expenses for the audit were \$275.00.

The Bank Balance as of June 30, 2012, was \$14, 575.71.

The Certificate of Deposit Balance as of June 29, 2011, was \$11,139.90.

The Dividend Income for the CD was \$22.15.

The Certificate of Deposit Balance as of June 30, 2012, was \$11,162.05.

The Total Balance as of June 30, 2012, was \$25,737.76.

Additional information as to the maturity date of the CD and the bank balance is included.

Bank Balance as of March 20, 2013, \$16,501.82

Certificate Balance (Maturity 7/28/2013) \$11,189.80

Total Balance of all accounts is \$27,691.62

A Statement of Cash Receipts and Disbursements (commonly known as the Audit) from July 1, 2011, through June 30, 2012, is enclosed as ATTACHMENT 3 Treasurer Swaim recommends that both his Treasurers Report and the Statement of Cash Receipts and Disbursements be accepted and approved by the Commission.

Chairman Fassett inquired if the Treasurer's Report and the Audit were distributed to the appropriate members. Treasurer Swaim acknowledged that both reports were distributed.

Commissioner Young moved that the Treasurer's Report and Audit be accepted and approved; Commissioner Chenoweth seconded the motion. The motion was carried unanimously with no opposition.

A general discussion followed.

Mr. Bo Bolourchi inquired as to what the \$25,737.76 monies were for. He requested that monies should be made available for setting up meetings. The fee for reserving two conference rooms had to be guaranteed by a credit card. He also inquired as to who should be responsible for signing the contracts for such meeting accommodations. He explained that Ed Swaim had to use his personal credit card to secure the block of rooms, et cetera. With prior approval, should we have an American Express Card for these fees? The host State would use the credit card under established guidelines set forth by the host State regulations. Mr. Bolourchi expressed the thought that State employees should not be using their own monies for Commission activities.

Chairman Fassett spoke on the subject and opened the floor for discussion. "We have a budget for the Commission and funds for line items like meeting expenses and the audit, routine expenses of the Commission. Certainly the cost for putting on our annual meeting or any other meetings is part of what these funds are for, in addition to other things. I think that every State that has taken the turn to host should not be out of pocket for the expenses of hosting the meeting themselves. The Commission has the funds, as you can see, to do that, to cover the meeting expenses. There is a process in place."

Mr. Bolourchi inquired as to what the process was? A discussion was held amongst the Budget Committee members.

Commission Young agreed that no expenses should be out of pocket. He requested that this subject be referred to the Budget Committee to find a solution. The Budget Committee will discuss the procedures that are in place to handle future meetings. A structure should be set up to provide coffee and snacks as well as for projectors, screens, and/or laptops. There is an awkwardness of the credit card issue. Chairman Fassett agreed that a conference call should be held by the Budget Committee to discuss the situation further, to come to a conclusion concerning the mechanics, and to move forward.

Moving forward, Chairman Fassett called for the Reports of the Commissioners, alphabetically in order and not geographically.

VII. REPORT OF THE COMMISSIONERS

- A. Arkansas** – Commissioner Randy Young presented a three page Report of the Arkansas Commissioners. He reported that last year the National Resources Commission initiated the process of updating the Arkansas Water Plan and that good progress has been made. That effort is being led by Ed Swaim of his staff. There will be a second round of regional and Arkansas public meetings presenting information on demands, calculations, and water supply availability in the early summer. They are on schedule to complete the update in November of 2014.

Recent updates have been made to the Nonpoint Source Pollution Management Program (NPS) and Priority Water Shed Program. No changes were made to the top ten priority watershed programs. Watersheds of interest of the Compact include Bayou Bartholomew, Lower Ouachita, Smackover and the Upper Saline.

A brief report on the Red River Navigational feasibility study, which has suffered substantial setbacks, will be given later by Commissioner Dowd.

The Southeast Arkansas Boeuf-Tensas Feasibility Study is being conducted on a cost-share basis with the Corps of Engineers. The ANRC has had discussions with Louisiana counterparts, since they have determined that the project is not feasible for Arkansas alone. There is a small part of the Northern Basin that appears to be feasible. At the same time, the Corps has modified their planning process which is called a "3 by 3 by 3" process. The Corps' commitment is for only the feasibility study, to be completed in 3 years at a cost of \$3 million or less. The Corps has notified the ANRC that if they wish to continue this feasibility study, it will require additional funds. They were given 60 days to make a decision to proceed with the study or not.

The ANRC has had discussions as recently as yesterday with their Louisiana counterparts concerning a significant area in northeastern Louisiana which is in need of an agricultural water supply. They are in negotiations with Louisiana to cost share with the Corps to take another regional look at northeast Louisiana, as well as southeastern Arkansas, to develop additional water supplies via a basin transfer from the Arkansas River.

Both states must be considered for more utilization of farm water storage because there is a lot of water on an annual basis, but during the irrigation season, it is not uncommon for there to be a shortage of water.

The ANRC has requested a 60-day extension from the Corps to allow time to develop a joint two State request to the Corps.

Also included in the Arkansas report is information related to the National Flood Insurance Program (NFIP) along with their Safe Dams Program.

Commissioner Dowd then spoke about their concerns about the Red River Navigation Study. He reported on the navigational channel setbacks on the Red River. Arkansas is in the process of a 5-year (now 6-year) feasibility study with the Corps. One phase of the contract remains, an investigation of rail traffic which could be switched to barge traffic. They have received approval from Randy Young for a \$1 million disbursement to continue the study and for general office operations. They have been waiting nine months for the Corps to approve their spending for their cost share of the project, which is a 50/50 match. The Corps has exhausted monies for this budgetary year with no appropriations. The contract is ready; however, in this legislative session, the Arkansas

Legislature filed a bill and reallocated all of the monies for the Arkansas Red River Commission, which includes all funding for projects and operations. The State Legislature then put the monies into education. There was \$10.2 million which had been gradually set aside over a period of years with expectations to use as a match for the Federal projects in the future. The money is now gone, and no funds are available even for general operations. The State Legislature required an immediate transfer of the funds. Therefore, Southwest Arkansas cannot complete the study due to funds being removed from the project. No funds will be available to pick up the study at a later date because the Corps is ready to shut the program down. However, the Corps will allow the Arkansas Red River Commission to utilize its own funds in escrow to complete the last phase of the study. If the funding is not restored, Arkansas will be through with the prospective navigation of the Red River in Arkansas.

Chairman Fassett opened the floor for discussions or questions for Arkansas.

Commissioner Theis noted that the Corps has been dragging their feet for 10 to 15 years now, and this procrastination is unreasonable. The plans and specs have been ready for the Corps to match funding. Commissioner Young agreed that the Corps has carried this process on far too long.

The Arkansas Commissioners' written report is included as ATTACHMENT 4.

Having no further questions from the floor, Chairman Fassett called for the report from the Louisiana Commissioners.

B. Louisiana - Commissioner Theis reported on ten items in the Louisiana Commissioner's Report:

1. Louisiana House Concurrent Resolution No. 13 (Regular Session, 2011). Attachment 1.
2. Status of stream flows at ARK/LA Stateline. Attachment 2.
3. The Louisiana Petition to the Arkansas Natural Resources Commission (ANRC) – the State's position is noted in Attachments 3-5.
4. Louisiana Attorney general opinions.
5. The improvement in Louisiana USGS stream gaging along the ARK/LA Stateline.
6. The J. Bennett Johnston Waterway, Red River Navigation Project, Phase 1.
7. Louisiana's Statewide Flood Control Program and the Flood Plain Management Program.

8. The Port Construction and Development Priority Program.

9. The Levee and Dam Safety Program - a three page report is available.

10. The Reservoir Development Program including rehabilitation, repair and maintenance of 20 State-maintained dams.

Chairman Fassett opened the floor for discussions or questions of Louisiana.

Commissioner Cunningham asked if the rehabilitation of dams was done with State or local funds. Commissioner Theis responded that State capital outlay funds are used for DOTD-maintained dams and that owners are responsible for their own dams.

The Louisiana Commissioners written report is included as ATTACHMENT 5.

- C. Oklahoma** – Commissioner Cunningham reported on several items from the Oklahoma report, such as climate changes and the Oklahoma Comprehensive Water Plan. Major drought conditions have persisted in Oklahoma and in much of the Red River Compact region since October 2010. As part of lowered lake conditions, a drought grant program to construct new water wells was implemented. Voluntary curtailment of water usage and subsequent abandoning of crops ensued. Drought warning letters were issued. Reported authorized water use summaries were also issued. Page 1 of Oklahoma’s report contains the U.S. Drought Monitor dated April 16, 2013.

The Oklahoma Comprehensive Water Plan (OCWP) - Over eighty bills were introduced and all four out of the eight priority recommendations requesting funding were funded.

The Water Monitoring and Analysis Network – The FY 2013 budget included an additional \$2 million in appropriations for the Oklahoma Water Resources Board (OWRB) and Conservation Commission to expand and integrate the State’s Water Quality and Monitoring Program. In addition, in the FY 2013 budget the Oklahoma Legislature extended utilization of the Gross Protection Tax proceeds for Oklahoma Comprehensive Water Plan (OCWP) implementation for update of hydraulic studies and modeling tools. A completion or update of all surface and ground water basins studies across the state will be completed within ten years (by 2022).

A Water for 2060 Advisory Council is to be appointed to establish statewide goals of consuming no more fresh water in 2060 than is consumed today.

State Question 764 was passed in November 2012 and allows OWRB’s Financial Assistance Program to meet much of the State’s projected \$82 billion water and wastewater financing needs. Water Resources Financing - Five primary programs provide funding (loans and grants) for water resources activities.

Surface water studies, ground water studies, and water quality studies were commented on. There was an emphasis on activities in Lake Texoma.

The Beneficial Use Monitoring Program was described.

The Staff continues to refine and improve Oklahoma's Water Quality Standards.

The Dam Safety Program features dam inspections and public outreach for dam owners, emergency management officials, and floodplain administrators.

New rules on oversight of water from mines were approved and implemented (Pg. 6 of report). There is an emphasis on the protection of aquifers from mine waters.

Water Resources Financing - Five primary programs provide funding (loans and grants) for water resources activities.

The Oklahoma Legislature addressed individual drought relief for rural citizens, regional planning groups, wastewater reuse, and expanded Water Board membership and representation.

Legal Matters were presented including the Tarrant Regional Water District vs. Herrmann appeal issue and the Chickasaw and Choctaw Nations vs. Governor Fallin, OWRB, and Oklahoma City lawsuit.

Dean Couch has retired as OWRB General Counsel, and Jerry Barnett will serve as Acting General Counsel.

Chairman Fassett opened the floor for discussions or questions of Oklahoma.

A question was asked if mineral water activities were included. The response was that mineral activities are handled through other Oklahoma agencies.

"How many irrigation districts are there in Oklahoma?" There is just one irrigation district.

Commissioner Dowd inquired as to the crude oil pipeline running to the coast. He asked if water quality has anything to do with the crude oil pipeline to the coast and if Oklahoma participated. Commissioner Cunningham replied that water quality would get involved if the pipeline ruptured in a residential area. It would then be referred to the appropriate State environmental agency to follow up.

The Oklahoma Commissioners written report is included as ATTACHMENT 6.

- D. **Texas** – Commissioner Abney stated that the U.S. Drought Monitor continues to show that over 69% of Texas is experiencing extreme or exceptional drought conditions, and over 30% of the state is experiencing severe drought conditions.

The 2012 Texas Water Plan was adopted and sent to the Governor on January 5, 2012. The Red River Basin in Texas was evaluated a part of five regional groups which prepare proposals for submission to the Texas Water Development Board for funding.

Water Masters – There is no Red River Water Master. The TCEQ is going to assess the situation to determine whether or not there is a need to appoint additional water masters. The Red River Basin will come under review in 2015, and the Sulphur River and Cypress Creek basins will be reviewed in 2016.

In 2012, there were seven water use permits issued in the Red River Basin, and four temporary permits were issued – mostly for oil and gas activities in Harrison County. These include the Keystone pipeline permit and some minor permits in various areas of the basin. There are two reservoir permits pending, Lake Ralph Hall on the North Sulphur River and Lower Bois d’Arc Creek Reservoir.

Commissioner Abney stated that Herman Settemeyer retired after 25 years and now is working for the Rio Grande Compact. Suzy Valentine replaced Herman and prepared the 2012 Annual Report. He thanked her for her hard work and the excellent report that she has prepared.

Commissioner Abney turned the reporting over to Commissioner Chenoweth concerning complaints received through permit holders.

Commissioner Chenoweth stated that surface water permitting in the State of Texas is based on prior appropriations. All permitting comes with a date of issuance which determines the priority during times of shortage; “First in time, first in right.” When there is a water shortage, TCEQ reacts proactively. When a priority call comes in, TCEQ investigates by ground level and aerial investigations, and by stream monitoring. They have reached out to the Legislature and to the water rights holders to determine the minimum amount of water needed and how to curtail the water shortage. The Drought Information Hotline is in place to disseminate to the public instructions on how to handle the situation, what their responsibilities are, and what they can do. In 2012, TCEQ received 15 priority calls. The priority calls resulted in TCEQ no longer issuing temporary permits. They worked with the water rights holders and stake holders above the Sabine Pass and have found that it is largely a coordination problem. Everyone is trying to get their water at the same time. By shifting the demands and taking turns, they have been able to satisfy everyone.

Chairman Fassett opened the floor for discussions or questions for Texas.

Commissioner Dowd asked how TCEQ will determine if a water master is needed in a basin. Commissioner Chenoweth replied that the water master system is set up under State law and water masters are appointed by the Court and commissioned by motion. A dual system is in place for responses to complaints concerning water rights. In areas having no water master, complaints are made to TCEQ and action is taken. In areas having a water master, complaints go to that person. All water rights holders in a basin with a water master are assessed a fee, and that fee goes to support the water master obligations. Otherwise, TCEQ is a General Revenue operation. With the fee on the water right holders in water master areas, TCEQ has extra funds to build staff and to be more proactive in the water rights administration. TCEQ has to step in and coordinate to make sure everybody is not trying to access the water at the same time.

Staff building is funded through the State water masters. Since the last Legislative session, a Committee is looking at the five-year cycle to determine if there is a need for a water master in any basin. The Legislature will respond by motion of the Commission. TCEQ looks at several things when they do an evaluation. Most importantly, TCEQ looks at how often they are getting priority calls concerning water rights. Are calls coming in just in times of drought, or are even more calls occurring during normal conditions? How many water rights holders are there, and how difficult is it to administer water rights? What are the specifics, conditions, or difficulties, et cetera? It is a complaint-based system.

Commissioner Abney stated that the District Judge adjudication process works to determine water rights and enforcement processes for that District. A water master is created to administer the water rights of everyone in that District. It would be an outcome of a private action to enforce a water right. The court could order actions.

Commissioner Cunningham asked if the participation with the water master by a water rights holder is an optional process. Is the fee for a water rights holder optional? Are these optional or voluntary actions? Commissioner Chenoweth responded that no, participation in the water rights process and the associated fees are not optional.

Chairman Fassett asked if there were any other questions for the State of Texas.

Commissioner Dowd had a question for the Legal Counsel for the State of Texas or the State of Oklahoma, either one. He read that the decision in the Tarrant suit was that Texas was trying to acquire its water rights from the Oklahoma stream which is mentioned in the report under the provisions of the Red River Compact. He did not know if it was a decision of the Supreme Court or a decision from the Court of Appeals opinion. It basically states that Texas cannot reach over to Oklahoma and get Texas' share of the water from there. The Red River has high salinity content such that water is expensive to process for human consumption. Texas wanted to take water from another state where you can use it. The Oklahoma boundary is at the southern watermark on

the Texas side of the river, and Texas has taken water out of the river even though it is in another state. He asked if anyone knew the answer to this issue.

Oklahoma Legal Counsel Jerry Barnett stated that the Supreme Court was scheduled to hear that argument in a few minutes. In fact, it had been going on for about five minutes now, and the matter will be addressed later on in the meeting.

The Texas Commissioners' written report is included as ATTACHMENT 7

Chairman Fassett, having finished with all the state reports called to move on to the Budget Committee Report.

VIII. REPORT OF THE COMMITTEES

Budget Committee - Mr. Ed Swaim presented the Budget Committee Report. For FY 2013, meeting expenses should be raised from \$1,000 to \$5,000 to cover costs. This year \$350 was spent for the projector screen and \$400 for coffee and king cakes. This increase in meeting expenses would result in lowering the contingency from \$20,000 to \$16,000. Mr. Swaim has conferred with Mr. Bo Bolourchi concerning this, and they feel the line items should be realigned. This change would apply in future years, also.

Commissioner Cunningham asked about the total cost of the meeting for this year.

Mr. Bolourchi responded that the total meeting costs for this year were \$750, but the costs could have been as high as \$5,000. However, they didn't have to pay for the conference rooms because a sufficient number of attendee rooms were occupied, and they chose not to rent a PA system.

Mr. Ed Swaim stated that Mr. Bolourchi is the Chairman of the Budget Committee and that he is reporting for the Committee. The Committee would like the authority to explore the issue of obtaining a credit card for a Commission representative (State Budget Chairman) to use for meeting expenses, with protections like dual signatures.

Commissioner Chenoweth moved to accept the report from the Budget Committee and acceptance of the option to raise the funding for meeting expenses as recommended by the Budget Committee. Seconded by Commissioner Dowd.

Chairman Fassett stated that this will be adopting a new FY 2013 budget reflecting an increase in the meeting expense item and a corresponding decrease in contingency, with the same total budget. The Budget Committee was directed to evaluate the credit card situation. Hearing no further discussions the Chairman called for a vote.

Commissioner Abney requested a clarification. The motion includes exploring the credit card option and not implementing the credit card option at this time?

Chairman Fassett stated that yes, it is his understanding that we need more details concerning the credit card before we could do it.

Hearing no further discussion, the Chairman called for a vote. The motion passed unanimously.

Commissioner Abney asked if they were agreeing that the meetings need to have microphones and recordings.

Chairman Fassett stated that he believed they are leaving that option open based on the setting, the size of the room, and the venue, since microphones and recording are not always necessary. If it is necessary, that would be a reasonable expense.

Commissioner Abney stated that he thought it is very good idea to have the meetings recorded since they certainly have the money. As time goes by, the Commission will have more and more important issues with details to be remembered. As the Budget Committee decides, he suggested that they try to have the meetings recorded.

Suzy Valentine stated that she suggested that the Commissioners consider having a court reporter to record the meeting because it is a tedious process. It took more time and expense to put together the minutes for 2012 than it would have cost to pay for a court reporter to take and prepare the meeting minutes.

Mr. Bolourchi said that it was very expensive for a court reporter, something like \$4.00 a page.

Chairman Fassett stated that if he understood the motion which just passed, the Commissioners would have the Budget Committee look into to the need to have a credit card. They are approving the Budget to increase the amounts for the meeting expenses and are looking for the Budget Committee to circulate materials or perhaps have a conference call to evaluate credit cards, evaluate the recording options, microphones and all of the details that were discussed today. The Committee is to come back with some recommendations which is a better process than taking all of that on today.

Mr. Swaim stated that, as Treasurer, he would hesitate to be the single signature on the credit card.

Chairman Fassett responded that they have voted on simply modifying the budget with directions to the budget committee to evaluate credit cards, use of microphones and recordings, and etc., all of which are needed for our meetings.

Commissioner Dodd asked about FY 2014 since it was still FY 2013, and would the new process start July 1, 2013.

A discussion was held concerning the dates of the FY 2013/2014 budget. It was confirmed by Mr. Swaim that the present FY budget is 2012/2013.

Commissioner Young moved to re-title the Budget Report to reflect FY 2013 to 2104. The motion was seconded by Commissioner Knotts. The motion passed unanimously.

The Audit and Budget Committee written reports are included as ATTACHMENT 8.

A meeting break was held at 10:30 for coffee and king cake.

Continuing with the meeting, Chairman Fassett called upon the Legal Committee for their report.

Legal Advisory Committee - Brandon Brown, LA DOTD, reported that there were no legal assignments in the last year; therefore, no report by the Legal Committee was given.

Chairman Fassett called upon the Engineering Committee for their report.

Engineering Committee - Mr. Bolourchi commented on the facilities and how nice a place the venue was this year. He stated that he was glad to have the Red River Compact Commission meeting here and that "New Orleans is "Back for business!" He assured everyone that they did not have to rush to check out as the hotel was accommodating late checkout at 2:00 pm.

The Engineering Committee had two tasks from last year. First was the report preparation for 2012, and the second was the consideration of the Rules and Regulations for Reach IV, Sub-Basin 2. A meeting of the Engineering Committee was held yesterday with 22 people in attendance.

Mr. Bolourchi requested that each Engineering Advisor to please brief the Commission on subjects that they covered at the meeting.

A summary was given by Suzy Valentine (TX) of the 2012 Red River Compact Commission Report. The report has been assembled and all attachments are submitted and hopefully everyone has commented. The report is finalized and ready for signature. It will be given to Louisiana in Word document format for the 2013 report preparation.

A second topic of discussion was the 2013 RRCC Resolution concerning the USGS Stream Gaging Program, previously discussed at last year's annual meeting. The Resolution was presented to the Chairman and Commissioners for consideration.

Commissioner Chenoweth moved to adopt the Resolution, and Commissioner Cunningham seconded. The motion passed unanimously without opposition.

Mr. Bolourchi requested that the Commissioners please sign the Resolution.

The Resolution, signed by the Chairman and Commissioners, is included as ATTACHMENT 9.

Ms. Valentine then moved on to the next topic discussed by the Engineering Committee, the development of new drainage areas for the North Fork, Red River, and Sweetwater Creek (Reach I, Sub Basin 1) which the Commission has been discussing for a number of years. The preliminary numbers have been provided by the USGS, and the final numbers for consideration have been reviewed.

Commission Abney asked for a review of the data to determine if Reach I, Sub Basin 1 requires the data for Texas. The Engineering Advisors will look at it and provide recommendations as to whether the Rules and Regulations for that Reach and Sub-Basin need to be revised by USGS to provide a draft version of those Rules and Regulations.

Commissioner Abney requested that a draft version of those Rules and Regulations, showing the changes that the USGS intends to publish and use, be made available before the Commission amends its Rules and Regulations. Then, Texas would be able to make recommendations for approval at the next meeting.

Commissioner Cunningham noted that they just received the notes on the changes and did not know the publishing timeline for this year. Commissioner Dobbs noted that it is the duty of each State to publish their notes.

Commissioner Cunningham (OK) stated that there was a discussion on the Compact website that Oklahoma hosts. An inquirer was directed to the website, and it was found to be outdated. Hopefully, it has now been updated. Mr. Bolourchi thanked Commissioner Cunningham for the updating, and she noted that they have several links on the website. If any state wishes to provide direct links to Oklahoma, Oklahoma would add them to the website. Ms. Valentine said she would provide this information for the Texas Commission on Environmental Quality (TCEQ).

Commissioner Young stated that next year's meeting would be held in Arkansas.

Mr. Ken Brazil, ANRC, discussed Reach IV, Sub Basin 2. On the Arkansas side, they need to identify methods for the computation of runoff to be in compliance with the Compact. Chris Soller, ANRC, has been working on modeling basins using the Corps' Hydrologic Modeling System (HMS, from the HEC) to determine processes for the calculation of runoff. Recommendations have been made to continue the dialog and to

discuss the technical details with Louisiana over the summer. Also, ANRC is looking into policy and legal issues that would be involved in the runoff calculations to be compliant with the Compact.

Mr. Bolourchi recommended removal of the provisionally approved Rules for Reach IV, Sub Basin 2, prepared by Arkansas and Louisiana. The Rules would require advance notification and a 90-day waiting period before being adopted. The Provisional Rules have not worked as Louisiana expected. Mr. Bolourchi requested that the Rules be redone since they are Provisional and have not been approved. Louisiana is prepared to work with Arkansas in re-working the Rules.

Commissioner Theis moved to delete the Rules from the record; the motion was seconded by Commissioner Knotts.

Commissioner Young noted that they were reversing the 2011 action, and he agreed with the motion.

Commissioner Abney stated that he did not think that the Commissioners took any action previously. He didn't think they are valid Rules. Therefore, they cannot vote because they were never told that the Rules were satisfactory.

Mr. Bolourchi said that the record reflects that the Rules have not been adopted. Chairman Fassett agreed that the Rules have not been adopted. But he recalled that there was some action taken to put them in the Provisional status. He did not have the minutes of the 2011 meeting there to affirm what was done, but they have been calling them Provisional Rules for a couple of years now. They were not final. He agreed with Bo that they have not been formally adopted. He thought that at the time, the Commission was urging Arkansas and Louisiana to continue to work on this issue through some Provisional approval. Now, he thinks they are asking for that Provisional status to be undone.

Ms. Jane Atwood stated that she had the 2011 Minutes, and reading from the 2011 Minutes: "Commissioner Theis asked the Commission to adopt the rules subject to the legal requirements of various states, and final approval by telephonic means 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 are to be approved on a provisional basis subject to proper legal notice, and a 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.

Mr. Bolourchi stated that under state law, a 30-day waiting period is required by Louisiana and Texas. Arkansas requires a 45-day period.

Commissioner Abney stated that he had looked at that closely, and he guessed everyone has their own opinion. Clearly it was not adopted permanently. Chairman Fassett agreed, "No, it was not."

After continued discussions, Chairman Fassett stated to clarify for the record, the Provisional Rules and Regulations for Reach 2, Sub Basin 2 need to be removed as they have not been adopted.

Ms. Jane Atwood stated that, based on the discussions, the Commission needed to officially withdraw the motion from the record.

Chairman Fassett stated that since the work is still continuing, any final Rules make may look entirely different.

Commissioner Young: My substitute motion is to withdraw the Provisional rules for Reach 4, sub basin 2. Seconded by Commissioner Knotts.

Chairman Fassett: Okay, we have a motion and a second. Hearing no further discussion or comments, the Chairman calls for a vote. Hearing no opposition, the motion passed unanimously.

Mr. Bolourchi reported on the Louisiana Petition to the ANRC concerning deficient flow conditions in the Beouf River at the Arkansas/Louisiana Stateline. A Petition was submitted to the ANRC for an allocation of stream flow in the Beouf River. They believe that sufficient flow conditions exist up river from the Stateline. The Petition was based on Section 307.01 and 308.2 Subtitle VII of ANRC, "Rules for the Utilization of Surface Water." It was Louisiana's desire to have this Petition considered at the next ANRC meeting, and it was done so.

In 2011, there were 190 days with a stream flow of less than 40 cubic feet per second (CFS), the stream flow specified in the Red River Compact. The Regulatory Committee (ANRC) considered this and provided deficient flow data at the January 9th, and January 30th meetings. At the January 23rd meeting, a discussion was held concerning the Petition. The Committee Chair, Ann Cash, was to further discuss how to resolve the issues set forth in the Petition. The project was discussed on April 22nd. The ANRC notes that "The Red River Compact Commission has no requirement (regulatory power), but I believe that we (ANRC) should meet with the RRCC to discuss the issue."

Mr. Max Forbes presented stream flow data for the Boeuf River. See Page 1 of the Louisiana Commissioner's Report – "Status of Stream Flows at ARK/LA Stateline." Following are comments from that document:

When the Red River Compact was promulgated in 1978, there was agreement among the signatory States that the specifications of the Compact with regard to minimum stream flows crossing State lines could and would be maintained. In the period since then, there has been little reason to question the validity of that understanding.

However, in recent years, and as a result of increased withdrawals from Compact specified Stateline streams, deficient flow conditions during low flow periods have been the rule rather than the exception.

The Compact specifies minimum flows that the upstream State is to "take affirmative steps" to allow to flow into Louisiana. It is Louisiana's contention that these flows were originally calculated to be 95% time flows, with the designated flow being equaled or exceeded 95% of the time.

Bayou Macon receives Corps of Engineer releases of water from Lake Chicot. If withdrawals between the Lake and Stateline are not excessive, the 40 CFS flow (Compact specification) can be reasonably maintained.

Bayou Bartholomew – Withdrawals from the Bayou have seemingly been increasing; the 80 CFS flow (Compact specification) is now being satisfied about 80% of the time. However, in 2010, there were 201 days with flow less than 80 CFS.

Boeuf River is the stream of concern among those Compact streams. In the years since 1986, the percentage of time that the flow was greater than 40 CFS (Compact specification) was about 60 %. Zero flows occur in every year and for longer periods of time. In 2011, flows less than 40 CFS occurred in 190 days.

Weirs have been in place in Boeuf River since the 1950's or 1960's, supposedly installed to maintain channel efficiency for runoff removal. From aerial photos, we can see that a two-weir installation exists about 4 miles upstream from the Stateline. A weir is in place near Stateline, with the USGS gage on the upstream side. See Diagram No. 2 of the Louisiana Commissioners' Report.

It is our contention that the significant number of days of zero flow and flows less than 40 CFS are the result of increased withdrawals from Boeuf River in Arkansas. The Louisiana contingent is further of the opinion that future demands for water are likely to produce even more serious flow deficiencies at Stateline. Therefore, we request that Arkansas implement effective and real-time

withdrawal control measures to provide the "equitable apportionment of such waters" as is stated in the Preamble to the Red River Compact.

Commissioner Young asked if the stage of gage changed. Mr. Forbes answered, "No."

Ken Guidry, Red River Water Commission, inquired about zero flow and if you can look at the condition of the water in Red River.

Mr. Ben McGee, LA. United States Geological Survey, (USGS) stated that the Ruston, Louisiana USGS office operates a discharge station on Boeuf River with real-time connection via the Internet; 30-plus years of past hydrologic records are available. He reported that two gages are in new locations. The USGS reestablished the gage in 2011 on Bayou Mason near Kilbourne (also a real time connection) to provide flow data near Stateline. The Boeuf River gage was moved to near Stateline to better calculate discharge. A weir near Stateline is in between the "old" and "new" USGS gaging station location on Boeuf River. Bayou Bartholomew near Jones (also a real time connection) also has 30-plus years of data.

Commissioner Young asked if there was any data from before the weirs. He was told that the weirs pre-date the USGS stations. The Corps may have some pre-weir data.

Mr. McGee continued. A baseline assessment was done for Louisiana streams (Boeuf River, Bayou Macon, and Bayou Bartholomew) by the USGS to assess demand for water from these streams. We tried to determine what the water was used for, where it was used, and how much was used. Water from these streams is primarily used for irrigation; some of the water is used to fill ponds for duck hunting activity. The assessment was conducted from April to August of 2012 and produced the following results:

Boeuf River had 19 withdrawers and total withdrawal was about 18.7 billion gallons (about 57,275 acre-feet) in the period.

Bayou Macon had 14 withdrawers and total withdrawal was about 2.5 billion gallons (about 7,750 acre-feet) in the period.

Bayou Bartholomew had 47 withdrawers and total withdrawal was about 17,954 billion gallons (about 55,109 acre-feet) in the period.

Weirs are owned by the Corps. There was a question if Arkansas has control over the weirs.

Commissioner Theis stated that on the Boeuf River, the weirs were put in for channel efficiency. The weir acts as a dam. The Corps is working to put back original elevation

on the weirs about four (4) miles upstream of Stateline. The NRCS and Corps do not recognize the RRCC.

Hearing no further discussions from the Engineering Committee, the Chairman moved on to the Environmental Committee Reports.

Environmental and Natural Resources Committee – Max Forbes (LA) discussed water quality conditions (for dissolved oxygen and chloride) in the Ouachita and Red Rivers.

Ouachita River at Sterlington, La.: Two samples (of 19) had Dissolved Oxygen (DO) readings less than the 5.0 mg/l standard, at 3.8 and 3.88 milligrams per liter (mg/l). This is an acceptable DO record. The maximum chloride was 32.9 mg/l; the chloride standard is 250 mg/l.

DO standards for the Stateline to Columbia Lock and Dam reach are: 3.0 mg/l for June and July; 4.5 mg/l for August; and 5.0 mg/l for September through May. The 5.0 mg/l standard holds for the reach downstream of Columbia.

Red River north of Shreveport, La.: For 15 samples, there were no chlorides above 250 mg/l; the maximum concentration was 191 mg/l. All DO readings were in excess of the 5.0 mg/l standard (maximum – 5.65 mg/l)

Of interest is an irrigation district (Red Bayou) north of Shreveport that pumps from the Red River to irrigate about 12,000 acres.

Suzy Valentine submitted the Texas Water Quality and Environmental Report. The written report is included as ATTACHMENT 10.

Commissioner Cunningham reported that activities involving nutrient criteria are on-going in Lake Texoma.

With the report of the Environmental and Natural Resources Committee concluded, Chairman Fassett then invited representatives of the Federal agencies to make comments to the Commissioners about the work their agencies are performing in the basin.

IX. FEDERAL AGENCY REPORTS

U.S. Army Corps of Engineers – no reports were given.

Bureau of Reclamation - no reports were given.

US Geological Survey Report – George Arcement (Baton Rouge) thanked the Commission for the Stream Gauging Resolution promulgated by the Commission. An amount of \$53 million will be cut due to sequestration. There will be a 5% cut in Federal programs. There will be no cuts in the Co-op program. The National Stream Program will be cut, but they were not sure of the amount. Some stream gages will be cut out of the program. Furloughs of employees anywhere from 2 to 7 days will occur

The USGS report on stream flow conditions is included as ATTACHMENT 11.

Natural Resources Conservation Service (NRCS) – Britt Paul – There has been a funding extension to the Farm Bill. Mr. Britt commented on Red River Valley projects and discussed the Red Bayou irrigation activity under the North Caddo Conservation District.

X. Discussion Topics

A. Tarrant vs. Herrmann

Jerry Barnett (OK) discussed the Tarrant Regional Water District (TX) vs. Herrmann (OK) suit. For detail see ATTACHMENT 12.

Discussion of the noted suit at the U.S. Supreme Court began on April 23, 2013 (RRCC meeting date); the Supreme Court decision came on June 13, 2013. A copy of the Supreme Court decision is included as ATTACHMENT 13.

B. Bill Swanson of MWH, A Global Water Planning Design Company

The Louisiana Reservoir Program

Are we using Louisiana's water resources to their highest beneficial use? There are instances where ground water is being utilized for once-through industrial and cooling processes and valued resources are being depleted. Drought conditions in the early 2000s made the situation worse and highlighted some problem areas that needed attention. In areas where ground water is impacted by salt water encroachment, increased groundwater accelerated the encroachment. Baton Rouge is a good example of that. Salt water encroachment accelerated where ground water levels declined in areas of over utilization. There is also a significant problem in the aquifers in northern Louisiana due to over pumping that became even more critical during the drought.

Why is there a need for a Reservoir Development Program? Rapid development for economic growth has caused concerns about water availability. During the drought, the State Legislature began to get questions. Do we have a water management plan? Should we encourage people to apply for State funding to help pay for surface water

reservoir development? How would the State go about doing that? What is the State's decision making process? Are existing criteria established?

The State acted and authorized DOTD-Public Works and Water Resources Division to develop programs to prioritize State investments in reservoirs. At the time, there were no formal processes or procedures to guide State investment in reservoirs. So, DOTD established three guidelines or objectives of this program:

- 1) Establish procedures and assist applicants in the process of applying for State funds for reservoir development.
- 2) Establish guidelines on how applications would be evaluated consistently.
- 3) Provide to the Legislature on a recurring basis a prioritized list of recommended projects.

DOTD or other State agencies would not be in a position to authorize construction of reservoirs. Applications would be ranked according to the benefit they would provide to the State. The State already has Highway, Port Priority, and Flood Control Programs and those were reviewed for guidance in preparing the reservoir program. However, reservoirs are more complex because they can have multiple purposes and can provide many different kinds of benefits (as: water supply, flood protection, recreation, power generation, et al) whereas, a flood control program typically only provides flood protection.

We saw an opportunity to model the approach for reservoirs after existing programs, but also saw the need to comprehensively show the different kinds of benefits that reservoirs could provide. When we began, there wasn't a lot of awareness or recognition about State wide water resource issues. Problems that triggered this need for this program flared up in localities around the state, and there was general understanding about the state that improved water resource management was needed locally. So, from a State wide point of view there was a widespread understanding of the need for improved management of surface and ground water resources, but not clarity on the priorities.

One of the goals of this program is to encourage multi-purpose projects. To do this, we needed consistent procedures that could be used by applicants and reviewers in considering the need for a reservoir, in accurately describing the technical details of a reservoir, and in evaluating the benefits of a reservoir. We also needed guidance for applicants, decision makers, and participating agencies in all aspects of the process. This is not a small undertaking. Several Federal and State agencies have participated in the development of the program so far. Coordination with Federal and State agencies to help them understand what the program includes and does not include is continuing.

Three critical elements are available to applicants as they prepare an application.

1. All available information on the site for the potential reservoir should be easily accessible by applicants, with directions on access and explanations on how to use that information. Information for major surface water basins has been compiled from existing sources.
2. The application form should be easy to understand and have clear instructions on filling it out. From the State's perspective, there should be a consistent way for the information to be evaluated to aid DOTD and other agencies review applications.
3. Lastly, there is great value in providing observation and insight as to where the greatest needs are with reference to statewide water resources. Summary reports covering existing and emerging problems would be provided to aid applicants in framing appropriate applications.

What is being done? In Phase 1, the following topics have been addressed:

- 1) Broad assessments of all basins in the State have been prepared.
- 2) Applicant guidelines (procedures and schedule instructions, forms and sample cost benefit calculations) have been framed.
- 3) Water resources issues with regard to surface water have been identified. Basin information from the USGS, including land use and past and current water use, has been considered. Legal entities that have responsibility for surface water management in each basin are listed. Generalized water needs, including water quantity and quality, or other water needs, have been identified for each basin.
- 4) Ground water aquifers underlying the basins also are identified and described. The basin reports identify groundwater use, groundwater quality, and areas of concern regarding groundwater sustainability.
- 5) The roles of State and Federal agencies that have responsibilities for water resources management are described, particularly with respect to their roles for in-reservoir management.
- 6) An applicant guidance manual was prepared that provides information to potential applicants. It includes a description of a two-step application process that facilitates feedback from State agencies early on to avoid unnecessary work. It identifies the type of information that is needed in the application and provides references for information.

7) A reviewer guidance manual was prepared to provide information to DOTD or other State agencies in the review of applications, and in providing recommendations to the Legislature.

8) Lastly, Phase 1 included preparation of the summary document entitled "Statewide Perspectives on Water Resources". This report summarizes key information from the basins reports and provides several recommended strategies to help address state-wide water resources management. Some of these strategies address the need for increased awareness about the need for state-wide water resources management policies, education about the Reservoir Prioritization Program, and the need to regularly re-visit statewide water needs and policies because conditions change.

Phase 2 of the program would proceed (as funding becomes available). We plan to test the program and see how it works with input from stakeholders and applicants, and the communities that are using it. Lastly, with regards to streams, reservoirs, and lakes, we plan to evaluate some key locations where possible reservoirs might make sense. For a copy of this presentation, see ATTACHMENT 14.

Chairman Fassett asked if there were any questions or comments concerning the presentation. Mr. Ed Swaim asked about the reservoirs and criteria for all types of water projects.

Mr. Swanson replied that the thinking was that Louisiana has continued to evolve its water policies, and the Legislature in this current session is debating a bill to require or direct the development of a statewide integrated water resource management plan. It's foundational to develop a more comprehensive statewide plan.

C. Red River Valley Association

Richard Brontoli submitted the Red River Valley Association report. The earmarks are still a serious issue. Nothing is being done about prioritizing and funding of projects. There are three environmental projects on the Columbia River, Missouri River and Everglades totaling \$260 million, that's 20% of the Corps construction budget. In the President's 2014 budget, there is no funding for construction or studies. For operation and maintenance projects like J. Bennett Johnston Waterway, they received more this year than last year, but these numbers do not include sequestration. So, you will most likely have to cut everything by 5% due to the sequestration.

The biggest issue on the J. Bennett Johnston Waterway on the Red River is that when funding is reduced, it's going to come out of dredging. Therefore, reducing available funds for dredging.

The second issue is a new mandate that the Corps has to reduce the hours of lock service. The number of annual commercial lockages for a given lock will determine how many hours a day that lock will be operated. Locks 1 and 2 have over a thousand annual lockages, so they will be operated 24/7. Locks 3, 4, and 5 have less than 500 annual lockages, so they will be operated basically 20 hours a day. When a tow sits there and waits, it costs them money that will be added on for the cost of transportation. It is lucky in one sense that the locks and dams are operated by Corps of Engineers contractors. They are the only ones in the nation to operate our locks in this manner. All other locks are operated by Corps employees, federal employees. They have flexibility with a contractor to allow tows to pass through the locks.

Navigation into Arkansas Feasibility Study - The Corps finally accepted the \$1 million (from the Arkansas Red River Commission), which took a year. That study is now in jeopardy because the Arkansas State legislators took all the funds from the Red River Trust Fund, including the \$1 million for the Corps. This would advance the study to the point where they would have known if the project was feasible or not.

Chloride Control Project, Good Earth Mechanics, LLC (GEM), a private company wants to commercially fund and install chloride solar ponds to generate the power for sale. GEM is having a problem finding a 25-year buyer for the power. They thought the U.S. Air Force was going to purchase it. Shepard AFB (near Wichita Falls) wants to buy the power, but they are getting resistance up the Air Force management. They have met resistance on doing a long term contract even though they need to find renewable energy. One of the goals of the Administration is to have renewable energy. GEM needs a long term contract to get the private funding to start on the project. A meeting was held on March 11th in DC involving the RRVA, GEM, and the Congressional Delegations of Texas and Oklahoma; progress has been made on having meetings with the Air Force. GEM would like to know why the Air Force is being resistant and would like to explain to them why it is a good deal for all.

The Oklahoma location is really where the highest source of chloride is located. Siting the effort there would alleviate the need for a reservoir and solar ponds elsewhere, pump stations and pipelines over private lands. The facility would be built on private lands and land owners would be paid for it. GEM is trying to set up meetings with Tom Buchannan and look at the sight and perform tests. There are a lot of Army and Air Force facilities in Oklahoma and Texas that could buy all the power and get credit for using renewable energy.

Chairman Fassett asked if there were any questions or comments concerning the presentation by Mr. Brontoli. Hearing no further questions or discussions the Chairman moved on to the other Discussion Topics. The report is included as ATTACHMENT 15.

Chairman Fassett called for questions; hearing no further questions or discussions the Chairman moved on to New Business.

XI. NEW BUSINESS

A. Annual Report - Ms. Suzy Valentine reported that the Annual Report 2013 will be produced by Louisiana, and Mr. Bo Bolourchi requested that everyone update their contact information.

B. Recognition of Service – Commissioner Cunningham requested that a resolution of appreciation be prepared for Dean Couch (OK) for his services to the Commission. Commissioner Abney requested that a resolution of appreciation be prepared for Commissioner Herman Settemeyer (TX) for his services to the Commission. Commissioner Dowd requested that a resolution of appreciation be prepared for Earl Smith (AK) for his services to the Commission.

Chairman Fassett, taking the requests as motions and seconds, called for a vote and the motions were passed unanimously.

A motion was made by Commission Dowd that the appropriate resolutions of appreciation for Herman, Dean, and Earl be drafted by the host state, approved, and circulated for signature by Chairman Fassett. The motion was seconded by Commissioner Cunningham. The motion passed unanimously.

C. Assignment to Committees - Ms. Suzy Valentine was assigned to take over Herman Settemeyer's committee assignments.

Mr. Bolourchi reported that Brandon Brown, DOTD General Counsel, would be taking over the responsibilities of Mr. Jason Placke on the Legal Committee.

D. **Election of Officers** –Chairman Fassett noted that the 34th Annual Meeting will be held in the State of Arkansas, and as such, the Committee Chairs and Officers will shift to Arkansas.

Commissioner Chenoweth moved to elect Wayne Dowd as Vice-Chairman, Seconded by Mr. Young. The motion passed unanimously.

The schedule is to be adjusted by the host state to accommodate the meeting to be held in Hot Springs Arkansas the first week in April, as requested by Ms. Suzy Valentine.

XII. PUBLIC COMMENT

Mr. Bolourchi thanked all participants and the LA DOTD District 02 Administrator Mr. Michael Stack, and Mr. Mike Celestine and Ms. Sharon Terrebonne for helping out with today's meeting. Hearing no further comments Chairman Fassett called for meeting adjournment.

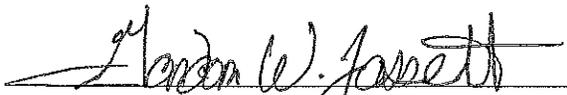
XIII. ADJOURNMENT

There was no further business to discuss, and the Commission moved to adjourn the meeting. Chairman Fassett adjourned the 33rd Annual Meeting of the Red River Compact Commission at 1:30 pm., on Tuesday, April 23, 2013.

Respectfully submitted,


Sharon Terrebonne
2013 Secretary (For minutes only)

5/30/2014
Date


Federal Chairman Gordon "Jeff" Fassett

6/9/2014
Date

**RED RIVER COMPACT COMMISSION
33rd Annual Meeting**

**Doubletree Hilton Hotel
New Orleans, Louisiana
April 23, 2013
8:30 AM**

Monday, April 22, 2013, Doubletree Hilton Hotel

2:00 p.m. Engineering Committee
3:30 p.m. Environmental and Natural Resources Committee
3:30 p.m. Legal Committee
4:00 p.m. Budget Committee
6:30 p.m. Dinner – on your own

Tuesday, April 23, 2013, Doubletree Hilton Hotel

8:30 a.m. Red River Compact Commission Meeting

- I. Call to Order – Chairman Fassett
- II. Welcome and Introductions
- III. Approval of the Agenda
- IV. Approval of the Minutes of the April 17, 2012 RRCC Annual Meeting held in Austin, Texas
- V. Report of Chairman Fassett
- VI. Report of the Treasurer – Edward Swaim, Arkansas
- VII. Report of the Commissioners
 - A. Arkansas
 - B. Louisiana
 - C. Oklahoma
 - D. Texas
- VIII. Report of the Committees
 - A. Budget Committee – Edward Swaim (AR)
 - B. Legal Committee – Jason Placke (LA)
 - C. Engineering Committee – Bo Bolourchi (LA)
 - a. LA Petition, Boeuf River deficient flow condition at AK-LA stateline
 - b. Reach IV, Subbasin 2, Provisional Commission rules
 - D. Environmental and Natural Resources Committee – Max Forbes (LA)

-
- IX. Federal Agency Reports
 - A. U.S. Army Corps of Engineers
 - B. Bureau of Reclamation
 - C. U.S. Geological Survey
 - D. Natural Resources Conservation Service

 - X. Discussion Topics
 - A. Tarrant vs. Hermann – issues on appeal to USSC
 - B. Louisiana Petition to Arkansas Natural Resources Commission
 - C. RRCC – Rules for Reach IV, Subbasin 2

 - XI. New Business
 - A. Annual Report – Schedule and Assignments
 - B. Commission assignments to Committees
 - C. Election of Officers
 - D. Appointments or Changes to Committees
 - E. 34rd Annual Meeting – Arkansas to host

 - XII. Red River Valley Association – Rich Brontoli
 - A. Navigation Issues
 - B. Chloride Control Projects
 - C. Legislation/Budget
 - D. Annual meeting of RRVA

 - XIII. Public Comment

 - XIV. Adjournment

J. D. STRONG
EXECUTIVE DIRECTOR

MARY FALLIN
GOVERNOR



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

April 19, 2013

Mr. Gordon W. "Jeff" Fassett
Chairman, Red River Compact Commission
Doubletree Hotel
300 Canal Street
New Orleans, Louisiana 70130

Re: Designee of Commissioner During Temporary Absence

Dear Mr. Fassett:

This will confirm that because of a scheduling conflict involving the oral argument of the *Tarrant Regional Water District v. Herrmann* case before the U.S. Supreme Court, I will be absent from the annual meeting of the Red River Compact Commission ("Commission") to be held April 23, 2013. Pursuant to the provisions of Title 82 Oklahoma Statutes Section 1085.12a, during this absence I am delegating the exercise of my powers and duties as an Oklahoma Commissioner to Julie Cunningham, Chief of the Planning and Management Division of the Oklahoma Water Resources Board, for all purposes of this meeting of the Commission.

Sincerely,

J.D. Strong
Executive Director, Oklahoma Water Resources Board

Bryan W. Shaw, Ph.D., *Chairman*
Carlos Rubinstein, *Commissioner*
Toby Baker, *Commissioner*
Zak Covar, *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 21, 2013

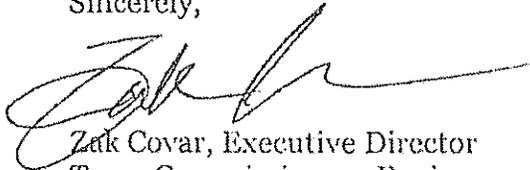
Mr. Gordon W. "Jeff" Fassett
Chairman and Federal Representative
Red River Compact Commission
Fassett Consulting LLC
1720 Carey Avenue, Suite 612
Cheyenne, Wyoming 82001

Dear Chairman Fassett,

I regret that I am unable to participate in the 2013 annual meeting of the Red River Compact Commission due to previous commitments. In my absence, I grant my support and proxy vote, as Commissioner of the Compact Commission, for any considerations of the Commission to Todd Chenoweth, J.D., Special Counsel 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,



Zak Covar, Executive Director
Texas Commission on Environmental Quality
Commissioner, Red River Compact Commission

ZC/DB

Cc: Suzy Valentine, P.E., Engineer Advisor to Compact Commission
William Abney, Commissioner, Red River Compact Commission

ATTACHMENT 3

Report of the Treasurer
 July 1, 2011 – June 30, 2012
 Red River Compact Commission
 April 23, 2013

Bank Balance as of 7/1/2011 **\$12,645.91**

RECEIPTS

Member Assessments	\$2,200.00
Dividend Income	\$ 4.80
TOTAL	\$2,204.80

EXPENSES

Audit	275.00
Meeting Expense	
TOTAL	\$ 275.00

Bank Balance as of 6/30/2012 **\$14,575.71**

Certificate of Deposit Balance as of 6/29/2011 **\$11,139.90**

RECEIPTS

Dividend Income	\$ 22.15
-----------------	----------

Certificate of Deposit Balance as of 6/30/2012 **\$11,162.05**

TOTAL BALANCE as of 6/30/2012 **\$25,737.76**

Bank Balance (3/20/13)	\$	\$16,501.82
Certificate Balance (Maturity 7/28/13)	\$	<u>\$11,189.80</u>
	\$	\$27,691.62

Red River Compact Commission
Statement of Cash Receipts
and Disbursements
July 1, 2012 through June 30, 2013

Bob Johnson, CPA

Certified Public Accountant

511 N First, Suite 8
Jacksonville, AR 72076

Phone (501) 982-1975

Fax (501) 982-8165

Red River Compact Commission
Little Rock, Arkansas

I have audited the accompanying statement of cash receipts and disbursements of the Red River Compact Commission for the period July 1, 2010 through June 30, 2011. The financial statement is the responsibility of the commission's management. My responsibility is to express an opinion on this financial statement based on my audit.

I conducted my audit in accordance with generally accepted auditing standards for cash basis statements. Those standards require that I plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. I believe that my audit provides a reasonable basis for my opinion.

The commission's policy is to prepare its financial statements on the basis of cash receipts and disbursements; consequently, certain revenue and related assets are recognized when received rather than when earned, and certain expenses are recognized when paid rather than when the obligation is incurred. Accordingly, the accompanying financial statement is not intended to present results of operations in conformity with generally accepted accounting principles.

In my opinion, the financial statement referred to above presents fairly, in all material respects, the recorded cash transactions of the Red River Compact Commission for the period ended June 30, 2011 on the basis of accounting described in the preceding paragraph.



Bob Johnson, CPA
Certified Public Accountant
October 28, 2011

Red River Compact Commission
Statements of Cash Receipts and Disbursements
For the Period July 1, 2010 through June 30, 2011

Cash in bank, checking as of July 1, 2010	\$	<u>12,853</u>
Cash Receipts		
Member Assessments		2,200
Interest Income - checking		<u>10</u>
Total Cash Receipts	\$	<u>2,210</u>
Cash Disbursements		
Audit Fee		275
Bank Charge		36
Meeting Cost		548
Printing/Postage Costs		<u>1,558</u>
Total Cash Disbursements	\$	<u>2,417</u>
Cash in bank, checking as of June 30, 2011	\$	<u>12,646</u>
Cash in certificate of deposit as of July 31, 2010	\$	11,050
Interest Income - certificate of deposit		79
Cash in certificate of deposit as of June 30, 2011		<u>11,129</u>
Cash and cash equivalents as of June 30, 2011	\$	<u><u>23,775</u></u>

Red River Compact Commission

FY – 2013 Budget

(July 1, 2012 – June 30, 2013)

	<u>FY 2012</u>	<u>FY 2013</u>
Personnel Services, Office Expenses, Rent, Travel* (Mtg. Expenses)	\$1,000.00	\$1,000.00 [#] 5,000 <i>ECS</i>
Audit	\$275.00	\$275.00
Postage, Stationery, Office Supplies	\$250.00	\$250.00
Printing & Reports	\$2,250.00	\$2,250.00
Contingency	<u>\$20,000.00</u>	<u>\$20,000.00</u> [#] 16,000 <i>ECS</i>
TOTAL	\$23,775.00	\$23,775.00

State Assessments

In accordance with Article IX, Section 9.04.C, of the Compact the amount of such budget shall be borne equally by the signatory states in an equal amount. Therefore, the FY 2013 assessments are \$550.00 per state.

**RED RIVER COMPACT COMMISSION
STATE OF ARKANSAS
COMMISSIONER'S REPORT
2013**

ARKANSAS WATER PLAN UPDATE

The Arkansas Water Plan update is fully underway. Our first round of public meetings in late 2012 was well attended. Since then, we have engaged stakeholders to help draft the water supply and demand calculation and forecasting methods. Subgroups are working on industrial, agricultural, municipal, navigation, and thermoelectric demands. A fish and wildlife flows subgroup has been working to review the "Arkansas Method" of calculating instream flow needs and to suggest refinements and improvements.

Our next round of regional public meetings will be in June, when our engineering contractors, CDM Smith and FTN Associates, will, with agency support, present the demand calculations and forecasts to the general public for feedback.

The full Supply Availability Workgroup will convene on April 25, and the Demand Workgroup will meet on May 9 in Lonoke, Arkansas. To see the meeting schedules, documents, and other information, please go to arwaterplan.arkansas.gov.

The USGS is working with our staff to produce a comprehensive atlas of groundwater conditions and models in Arkansas. Additionally, USGS is analyzing long-term precipitation data, and is working with the Corps of Engineers Little Rock District on a study of streamflow trends over the past several decades.

We are pleased to have the support of all our state, federal, and local partners. From the Arkansas Game and Fish Commission that is helping finance the study, to our 75 conservation districts who are each working on assessments of water resources and issues in their counties, we have an impressive level of participation in the process.

**NONPOINT SOURCE (NPS) POLLUTION MANAGEMENT PROGRAM
Priority Watershed Program**

The Environmental Protection Agency has recently instituted changes within the NPS Program nationally. These changes were initiated based upon a United States General Accountability Office audit and EPA's own internal review. Based upon these changes EPA has conditionally accepted the Arkansas Natural Resources Commission's (ANRC) NPS Management Plan (Plan). The conditional approval provides Arkansas with a schedule to modify specific portions of the previously submitted Plan. An update to the Plan was submitted to EPA in January 2011. Since the original submittal, ANRC has addressed the initial and follow-up set of comments. New comments relative to the Program changes will be addressed systematically over the next two years. Most of

EPAs comments are related to the administrative function and the effective evaluation of the Program. There will be no change to the ten priority watersheds that were identified utilizing a Risk Assessment matrix. Those watersheds of interest include: Bayou Bartholomew, Lower Ouachita – Smackover and Upper Saline.

GROUNDWATER PROGRAM SUMMARY

The Groundwater 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 Groundwater 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 Groundwater 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 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.

In 2012, the Groundwater Section assisted with contracting, scoping, and work plan development for the update of the Arkansas Water Plan. A comprehensive groundwater effort was initiated with the USGS to develop a report on the aquifers of Arkansas which will provide information on groundwater quality, quantity, use, sustainability, and law. Additional work included collection of statewide groundwater data and producing the annual groundwater report. The staff also performed water well program licensing, well inspection, and construction report database management tasks. Six meetings of the Arkansas Water Well Construction Commission were held. The section also provided hydrogeologic data and technical assistance to other agencies, the public, and other divisions of ANRC.

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. 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 has issued a 60-day deadline for the district and ANRC to commit to additional financial contributions. We are exploring Louisiana's interest in supporting the project to alleviate shortages for agricultural irrigation.

NATIONAL FLOOD INSURANCE PROGRAM (NFIP)

The Arkansas Natural Resources Commission (ANRC) is the State Coordinating Agency for the NFIP in the State of Arkansas. The Commission maintains a database of 577 communities in Arkansas, which includes 75 counties and 502 cities and towns. Sixty-five counties and 351 cities and towns participate in the NFIP. Each participating community has a local floodplain administrator. Local floodplain administrators are required by State law to attend eight hours of training per year. Training may take the form of ten or more State-sponsored one-day workshops or other approved training provided by the State or other qualified provider. Sixty-six communities have at least one Certified Floodplain Manager (CFM).

SAFE DAMS PROGRAM

The Arkansas Natural Resources Commission manages the Safe Dams Program for the State of Arkansas. At present ANRC has 411 active permitted dams that it inspects on a routine basis. Of the 411 active permit dams, 111 are high hazard, 92 are significant hazard, and 208 are low hazard.

ANRC staff inspected 51 dams in 2012. Of the inspected dams, 35 were high hazard, 12 were significant hazard, and 4 were low hazard.

There are a total of 1,326 dams in ANRC's database. Of the total, the State regulates 411, 61 of these dams are regulated by Federal agencies, and the remainder do not meet size or hazard criteria for regulation. In the counties lying in the Red River Compact area, ANRC permits 104 dams.

RED RIVER COMPACT COMMISSION

**Doubletree Hotel
New Orleans, Louisiana**

Louisiana Commissioners' Report

April 23, 2013

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**RED RIVER COMPACT COMMISSION
Louisiana Commissioners' Report
April 23, 2013**

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RED RIVER COMPACT COMMISSION

**State of Louisiana Commissioners' Report
Doubletree Hotel
New Orleans, Louisiana**

April 23, 2013

LOUISIANA HOUSE CONCURRENT RESOLUTION NO.13 (Regular Session, 2011)

The House Concurrent Resolution No. 13 (see attachment 1) states: "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."

STATUS OF STREAM FLOWS AT AR/LA STATELINE WITH RELATION TO THE SPECIFICATIONS OF THE RED RIVER COMPACT

In 1978, the year that the Red River Compact was promulgated, there was an understanding among the participants in the Compact that the specifications of the Compact with regard to minimum stream flows crossing Statelines could and would be maintained. In the period since then, there has been little reason to question the validity of that understanding.

In 2010, there were complaints from North Louisiana concerning extremely low flow conditions in Bayou Macon. The complaints were addressed at the 2011 annual meeting of the Red River Compact Commission. In 2011, Mr. Herman Settemeyer, P.E., Texas representative to the RRCC, reported that Texas had to withdraw the water use allocations (permits) of some 15 withdrawers as a result of deficient stream flows. It is apparent that the States involved in the Compact are beginning to experience deficient stream flows at times during the year as a result of climatic conditions and increased withdrawals.

The Louisiana contingent of the Compact Commission at the moment is greatly concerned with deficient stream flows on some streams at the AR/LA Stateline. The portion of the Compact dealing with Reach IV- ARKANSAS and LOUISIANA, (specifically Sections 7.02 and 7.03) defines the stream flows at Stateline. There is a general requirement of 40% of the weekly natural runoff in Arkansas for streams crossing the AR/LA Stateline.

The Red River itself and some streams in the extreme Northwestern part of Louisiana are covered in Reach II (Section 5.05, Subbasin 3) and Reach III (Section 6.02, Subbasin 2) of the Compact.

Of greater concern to Louisiana are the deficient flow conditions of the streams in Reach IV, for which a weekly minimum flow is specified in the Compact. These streams are Ouachita River, Boeuf River, Bayou Bartholomew, and Bayou Macon. In looking into this, we have concluded

that the original specifications were for a 95% flow at Stateline; that is, 95% of the time, the flow would be equal to or greater than the specified flow value. This percentage value for the period is obtained by dividing the number of days with published daily discharge less than 40 CFS by the total number of days.

While climatic change might have had some effect on flow deficiencies, Louisiana contends that most of the deficiencies are the result of increased withdrawals in Arkansas from the streams covered by the Compact.

Of the four streams mentioned, Boeuf River is of the greatest concern to the Louisiana contingent at this time; comments on this stream come later.

The Corps of Engineers operates Felsenthal Lock & Dam which in general controls flow into Louisiana in the Ouachita River. The Corps' intention is to deliver more than about 1,000 CFS downstream and that would satisfy Compact specifications. Occasionally, flows will be and have been less, as a result of Dam operations.

The number of days in a year when flow of Bayou Bartholomew is less than 80 CFS has been increasing with time; from about 2000 on, the 80 CFS Compact specification has been satisfied about 80% of the time. However, in 2010, there were 201 days with flow less than 80 CFS (see the attached data summary sheets for Bayou Bartholomew).

Low flows in Bayou Macon are largely the result of Corps of Engineers releases from Lake Chicot with a minimum discharge of 50 CFS (15 September to 15 May); if withdrawals downstream are not excessive, the 40 CFS Compact specification at Stateline should be satisfied (see the attached data summary sheets for Bayou Macon).

These attached summary sheets indicate to Louisiana that withdrawals upstream are increasing with sharply decreased flows at Stateline, on most streams at times.

As an example of those conditions, a summary of minimum flow conditions for Boeuf River at Stateline is offered and commented on (see attachment 2, data summary sheets for Boeuf River). The summary shows significant numbers of days when average daily flow at Stateline was zero (0.0 CFS), and also significant numbers of days when that flow was less than 40 CFS. From this summary, you will note that in the early years before the Compact (1957 to about 1978), flows at Stateline generally met the flow specification stated in the Compact. Examination of the summary will reveal that in the years after 1978, the percentage of time crept downward. In the years since about 1986, the percent of time when flow was less than 40 CFS is 60%.

We repeat that we cannot attribute this change solely to climatic changes as a result of decreased rainfall and subsequent decreased runoff.

From aerial photos, we have become aware of a two-weir system about four miles upstream from Stateline on Boeuf River (see attachment 2, aerial photo). This system was supposedly put in place in the 1950's or 1960's by the Corps of Engineers to control vegetation in the channel and promote better drainage. If so, these weirs were in place when the Compact was implemented.

It is our contention that the significant numbers of days of zero flow and flows less than 40 CFS currently being experienced in Boeuf River at Stateline, are the direct result of increased withdrawals in Arkansas coupled with storage of water in the weir system.

To highlight Louisiana's concern with the deficient flow conditions in Boeuf River at the State line, the Louisiana Commissioners made a formal petition to the Arkansas Natural Resources Commission (ANRC) on January 9, 2013, requesting that the minimum flow specification for that stream (40 CFS, as cited in the Compact) be maintained. There is an understanding that extreme drought conditions could reduce natural runoff to a condition that precludes providing that flow; this is covered in the Compact.

The Louisiana contingent is of the opinion that future demands for water are likely to produce even more serious flow deficiencies at Stateline. Therefore, we request that Arkansas implement effective and real-time withdrawal control measures to provide the "equitable apportionment of such waters" at the Stateline, as is stated in the Preamble to the Red River Compact.

With its almost 34 years of cooperative action, the Red River Compact Commission could be instrumental in providing well-thought-out water apportionments among our Member States.

LOUISIANA PETITIONS ARKANSAS NATURAL RESOURCES COMMISSION (ANRC)
ON JANUARY 9, 2013 FOR ALLOCATION OF STREAM FLOW IN THE BOEUF RIVER

For the petition and responses, please see Attachments 3 – 5.

LOUISIANA ATTORNEY GENERAL OPINIONS

According to Louisiana Ground Water Resources Commission's March 15, 2012 Interim Report to the Louisiana Legislature, since 2008, the Office of the Louisiana Attorney General has issued seven key opinions interpreting Louisiana water law.

<u>Year</u>	<u>Opinion</u>	<u>Summary</u>
2008	(08-0176)	There is no right to private ownership of running waters in Louisiana.
2009	(09-0028)	If a lake's water is considered "running water," it is owned by the State.
2009	(09-0066)	Any sales of water must be for fair market value.
2009	(09-0291)	Political subdivisions of the State may only sell running waters with specific legislative authority.
2010	(10-0173)	A riparian owner may access and "use" running water for his estate, but the water remains a public thing owned by the State.
2010	(10-0289)	Statutory language that authorizes a political subdivision to "regulate the use of water" establishes regulatory control over the waters, but does not grant any rights with regard to selling the waters at issue.
2010	(10-0297)	The Sabine River Authority has a special statutory exemption from the limitations set in Opinion 10-0173.

STREAM GAGING IMPROVEMENT ALONG THE AR-LA STATE LINE

In an effort to improve the accuracy and reporting of discharge along the Arkansas – Louisiana State line, the U.S. Geological Survey, in cooperation with the Louisiana Department of Transportation and Development, relocated an existing stream gage on the Boeuf River and installed a new stream gage on Bayou Macon. These streams, in addition to Bayou Bartholomew and the Ouachita River, are named in the Red River Compact, Article VII, Section 7.03, with their associated minimum discharges.

Historically, discharge on the Boeuf River was measured at the Boeuf River near the AR-LA State line gage (07367700), which was located 2.4 miles south of the state line. The reach of the Boeuf River between this gage and the state line contains several low-water “dams” used to impound water for irrigation (fig. 1). At low stages, these “dams” impede flow and do not allow for the accurate measurement of discharge.

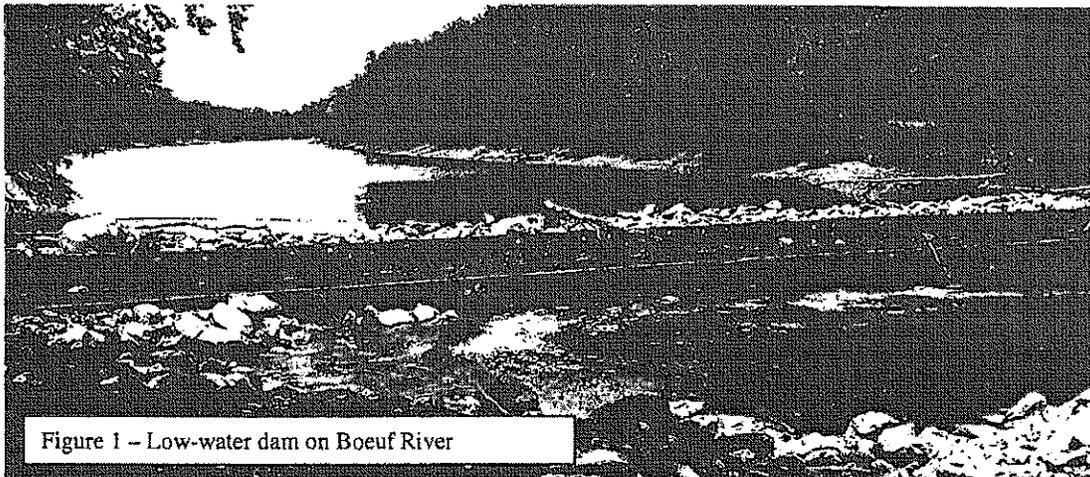


Figure 1 – Low-water dam on Boeuf River

As a result, the Boeuf River near the AR-LA State Line gage (07367700) was relocated on September 15, 2011 to a new location just downstream of the state line. The new gage is Boeuf River at the AR-LA State line (07367690).

The new gage allows for the measurement of discharge at low stages as no low-water “dams” exist between the state line and the gage. Initially, both gages were operated concurrently for the purpose of comparison and continuity of data. That being accomplished, the Boeuf River near AR-LA State line gage (07367700) has been discontinued in favor of the Boeuf River at AR-LA State line gage (07367690).

Also in an effort to improve the accuracy and reporting of discharge along the Arkansas – Louisiana State line, a new gage was established on Bayou Macon near Kilbourne, LA (07369700). The gage on Bayou Macon was established on November 12, 2011 and has associated historical stage and discharge data. Both gages record stage continuously and transmit those data to the Internet. Data associated with these gages may be viewed at:

http://waterdata.usgs.gov/la/nwis/current?multiple_site_no=07367700%0A07367690%0A07369700

700&index_pmcode STATION NM=1&index_pmcode DATETIME=2&index_pmcode 00065=3&index_pmcode 00060=4&format=station list&sort key=site no&group key=NONE&sort key 2=site no&html table_group key=NONE&rdb_compression=file&list of search criteria=multiple site no%2Crealtime parameter selection

J. BENNETT JOHNSTON WATERWAY, RED RIVER NAVIGATION PROJECT

According to the Corps of Engineers, Vicksburg District, the overall project is still approximately 93% complete because of funding deficiencies. 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 completion of the required mitigation portions of the overall project.

Federal Budget issues for the Corps are a major concern, especially in the area of maintenance dredging. Channel reliability is a cornerstone of business growth and economic development progress, without the resources to maintain the channel our growth momentum of the last few years will be lost. The Corps is attempting to implement a nationwide guideline system for lock and dam operations which could be detrimental to the whole inland waterway system.

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. Funding assistance with port development continues to be a major priority. The Commission continues to be 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.

The IMTS has mandated reduced lock service on all locks and dams based on annual commercial lockages. This mandate could have impacts to the systems reliability.

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 benefits. The State of Arkansas provided \$1,000,000 in contributed funds to the Corps to reach a decision point to determine if the project is feasible.

Red River below Denison Dam (levees) and Red River Emergency Bank Stabilization: These projects are not supported by the President's budget and with the earmark scenario in place have not received funding in FY 2012, 2013 or 2014.

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 has eliminated construction funding for the JBJ Waterway, Red River below Denison Dam, Red River Emergency and Chloride Control for fiscal year 2012, 2013 and 2014.

STATEWIDE FLOOD CONTROL PROGRAM

The final recommended construction program for FY 2013/14 was presented to and approved by the Joint Transportation Committee on April 09, 2013. The approved program has a total of 13 projects with a remaining balance of \$56,190,268. The legislature appropriates about \$10 million dollars a year for the Statewide Flood Control Program.

Approximately \$304 million of state funds have been authorized through the Statewide Flood Control Program since its creation in 1982, funding 176 projects designed to bring about flood damage reduction. This represents a return of \$11.2 in flood control benefits for every state dollar invested. So far 222 construction contracts have been completed. Most projects have more than one construction contract in this program.

PORT CONSTRUCTION AND DEVELOPMENT PRIORITY PROGRAM

On March 13, 2013, a Public Hearing was held by the Joint Transportation Committee whereby the Port Priority Program presented its FY 2013-14 Construction Program. This Program consists of 13 projects requiring \$78 Million in State funding and with an estimated construction cost of \$180 million. The Joint Transportation Committee approved the Port Priority Program list of construction projects on April 9, 2013. The funding level for FY 2013-14 is anticipated to be \$19.7 million.

Approximately \$574 million of state funds have been committed through the Port Construction and Development Priority Program since it was created in 1989, funding 188 projects. Most projects are constructed with more than one construction contract. When all of the funded projects are completed, they will produce over \$4.1 billion in benefits and will have created or retained 12,075 permanent jobs. This represents a return of \$7.2 in port-related benefits for every state dollar invested.

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 \$84,638 grant for FY 2012-13. This year's grant will be used to supplement the existing statewide dam safety inspection and emergency action plan preparation contract, to reimburse travel expenses related to dam safety inspections, workshops, and conferences, as well as office supplies. There are presently 548 regulated dams in the updated dam inventory data base. In FY 2011-12, a total of 197 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, 110 dams have been inspected.

LEVEE 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.

In 2009 DOTD 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 DOTD system assists levee districts not only in their levee inspection and reporting responsibilities, as identified in 33CFR 208.10, but also inventory/asset management as well as maintenance management capabilities.

DOTD HQ Staff has accompanied Corp of Engineers in performing periodic inspections on Federal Levees in the Bossier, Red River, Atchafalaya and Bayou Boeuf (RRABB) and 19th Levee Districts. Additionally, DOTD has used the system for quarterly inspections in all of the non-coastal levee districts. So far this year, 60% of inspections have been completed and documented.

RESERVOIR DEVELOPMENT PROGRAM

The Capital Outlay Program for FY 2012-13 reauthorized funding for the planning and/or design of the following reservoirs: Bayou DeChene, Allen Parish, Ouachita Water Supply, Castor Creek-Little River, and Washington Parish Reservoir.

The program had previously provided funds for the construction of the D'Arbonne Lake new Tainter-Gate Spillway project which is presently 87% complete.

The Capital Outlay Program for FY 2012-13 also provided \$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 studies and procedures have already been completed and posted on the DOTD-Public Works and Water Resources web site.

REHABILITATION AND REPAIR OF STATE-MAINTAINED RESERVOIRS & DAMS

The Capital Outlay Program had previously provided \$2 million of funds for Rehabilitation and Repair of the state-maintained dams and reservoirs. A portion of these funds were used to retain a consultant to perform acoustic surveying, underwater inspections and evaluation, and gate replacement, spillway and other repairs to the DOTD-maintained dams.

Currently the DOTD District Office in Shreveport has obtained a contractor to remediate the embankments on two (2) state-maintained dams.

BREACH ANALYSES AND EMERGENCY ACTION PLANS (EAPs) FOR HIGH HAZARD POTENTIAL DAMS

Breach analyses, Emergency Action Plans (EAPs) and Table-top exercises had previously been completed for all 20 DOTD-maintained dams. Of the 38 High Hazard (HH) potential dams, presently 36 (95%) have EAPs. The remaining two (2) EAPs are under preparation at this time.

Efforts to develop EAPs for the Significant Hazard (SH) potential dams are presently on-going. The EAPs for 18 of these dams are in final review.

FEDERAL PROGRAMS

DOTD is currently the Non-Federal Sponsor with the US Army Corps of Engineers (USACE) in the planning, design, and construction of two flood control projects. The estimated total costs of these projects are currently projected to be over \$3 billion over the next 20 years. These projects are as follow:

Mississippi River Levee Raising Project - DOTD is currently assisting USACE, and coordinating with the 5th Louisiana Levee District in Northeast LA, to acquire Right-of-Way (ROW) along the Mississippi River at a cost of \$8 million in State funds. LA Hwy 131 relocation was completed in November 2009, and relocation of LA Hwy 603 is schedule to be completed in 2013. Since 1994, the USACE has spent approximately \$126 million on design and construction of the levee raising project.

Comite River Diversion Canal - This project 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 complete. With the passing of Act 734 during the 2010 Session of the Louisiana Legislature, the acquisition of mitigation property has moved slowly. Seventy five acres have been acquired, and another 2,000 acres are being negotiated. Working with Amite River Basin Commission (ARBC), DOTD has started the process of land acquisition for both right-of-way and mitigation land.

Due to a change in the design standards in 2007, DOTD Bridge Design Section did not accept the designs provided by USACE. The Corps have been working on updating the designs. Updated 95% plans for LA Hwy 67 and Hwy 61 bridges were reviewed in November 2011 and November 2012, respectively.

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 312 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). Over 80% of the flood insurance policies in Louisiana are within the 41 communities participating in the CRS program resulting in an annual savings of over \$36 million dollars in flood insurance premiums statewide.

The Floodplain Management Section traveled over 20,000 miles visiting approximately 100 Louisiana NFIP communities, offering a wide variety of post-disaster assistance, performing

Community Assistance Visits (CAVs), providing CRS assistance, General Technical Assistance and NFIP training. With the completion of the HSDRSS, the updated Preliminary Flood Insurance Rate Maps were released for the Big five Parishes in the Greater New Orleans Area- Jefferson, Orleans, Plaquemines, St. Bernard and St. Charles Parishes, with Public Open Houses providing extra education and outreach information. The 2012 NFIP Reform Act is bringing significant changes to the Program and will require more emphasis on education and training.

Katrina/Rita post-disaster NFIP assistance is still ongoing, as is Gustav and Ike and most recently Isaac.

ZB/Bo
04/19/2013

Attachments

**Louisiana Commissioners' Report
New Orleans, Louisiana**

April 23, 2013

ATTACHMENT 1



STATE OF LOUISIANA

RECEIVED

JUL 08 2011

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

ALFRED W. SPEER
CLERK, HOUSE OF REPRESENTATIVES

POST OFFICE BOX 44281
BATON ROUGE, LOUISIANA 70804-4281
(225) 342-7259
speera@legis.state.la.us

July 6, 2011

Zahir "Bo" Bolourchi
Louisiana 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 2011 Regular Session of the Louisiana Legislature contained in the House Concurrent Resolution No. 13, please find enclosed herein 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/ap
Enclosure

ENROLLED

Regular Session, 2011

HOUSE CONCURRENT RESOLUTION NO. 13

BY REPRESENTATIVE LITTLE AND SENATORS THOMPSON AND WALSWORTH

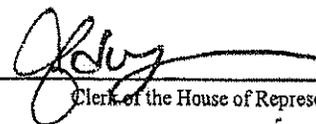
A CONCURRENT RESOLUTION

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, 2011

HOUSE CONCURRENT RESOLUTION NO. 13

BY REPRESENTATIVE LITTLE AND SENATORS THOMPSON AND WALSWORTH

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,

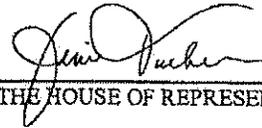
HCR NO. 13

ENROLLED

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

ATTACHMENT 2

BAYOU BARTHOLOMEW NEAR JONES, LA.
(USGS STATION 07364200)

RED RIVER COMPACT CALLS FOR A DESIRED MINIMUM FLOW OF 80 CFS.

ANALYSIS OF WATER YEAR FLOWS FROM ORIGIN (1957) TO DATE

YEAR (WTR)	MINIMUM FLOW (CFS)	DAYS <80 CFS
1958	260	0
1959	165	0
1960	100	0
1961	134	0
1962	124	0
1963	95	0
1964	55	102
1965	50	74
1966	34	141
1967	52	60
1968	38	70
1969	84	0
1970	82	0
1971	93	0
1972	71	5
1973	62	15
1974	153	0
1975	285	0
1976	99	0
1977	94	0
1978	50	54
1979	58	49
1980	51	41
1981	34	23
1982	52	31
1983	27	68
1984	56	46
1985	63	19
1986	2.3	66
1987	22	72
1988	7.9	105
1989	41	24
1990	49	32
1991	94	0
1992	99	0
1993	55	13

BAYOU BARTHOLOMEW NEAR JONES, LA.
(USGS STATION 07364200)

RED RIVER COMPACT CALLS FOR A DESIRED MINIMUM FLOW OF 80 CFS.

ANALYSIS OF WATER YEAR FLOWS FROM ORIGIN (1957) TO DATE

YEAR (WTR)	MINIMUM FLOW (CFS)	DAYS <80 CFS
1994	97	0
1995	31	51
1996	18	106
1997	56	17
1998	34	49
1999	15	124
2000	3.7	182
2001	3.0	74
2002	22	35
2003	36	12
2004	7.4	78
2005	22	32
2006	0.11	164
2007	13	73
2008	16	87
2009	30	20
2010	13	40
2011	0.55	201
2012	0.36	93

BAYOU MACON NEAR KILBOURNE, LA.
(USGS STATION 07369700)

RED RIVER COMPACT SPECIFIED A MINIMUM DESIRED FLOW OF 40 CFS FOR THIS SITE.

ANALYSIS OF WATER YEAR* FLOWS FROM ORIGIN (1957) TO DATE

YEAR (WTR)	MINIMUM FLOW (CFS)	DAYS <40 CFS	
1958	90	0	
1959	60	0	
1960	29	11	
1961	75	0	
1962	34	5	
1963	0	39	
1964	18	49	
1965	17	9	
1966	15	58	
1967	26	13	
1968	29	27	
1969	55	0	CORPS RELEASES BEGIN HERE?
1970	55	0	
1971	90	0	
1972	90	0	
1973	76	0	
1974	116	0	
1975	156	0	
1976	65	0	
1977	59	0	
1978	60	0	
1979	60	0	
1980	54	0	
1981	41	0	
1982	30	3	
1983	58	0	
1984	31	10	
1985	33	1	
1986	16	107	LAKE CHICOT STRUCTURE BEING BUILT?

This station was discontinued in September 1986.

This station was re-established in November 2011. On the following page are statistics from November 3, 2011 through the 2012 Water Year..

BAYOU MACON NEAR KILBOURNE, LA.
(USGS STATION 07369700)

YEAR (WTR)	MINIMUM FLOW (CFS)	DAYS <40 CFS
2012	35	11

NOTES: * The "Water Year" runs from October 1 through September 30.

From October 1968 through September 1986, only daily discharges below 200 CFS were published.

The COE Lake Chicot Structure was put into operation in 1986, with releases ranging from 50 to 90 CFS on a scheduled basis.

Were there COE releases from Lake Chicot in the period 1968-1981?

In the period November 3, 2011 through the 2012 Water Year, the USGS station Bayou Macon at Eudora, Ark. had a minimum flow of 20 CFS and 28 days with flows less than 40 CFS.

BOEUF RIVER NEAR ARKANSAS/LOUISIANA STATELINE
 (USGS STATIONS 07367700 & 07367690)
 RED RIVER COMPACT SPECIFIES A DESIRED MINIMUM FLOW OF 40 CFS

ANALYSIS OF CALENDAR YEAR FLOWS FROM ORIGIN (1957) TO DATE

YEAR (CAL)	MINIMUM FLOW (CFS)	DAYS OF ZERO FLOW PARTIAL YEAR OF RECORD	LENGTH OF LONGEST ZERO FLOW PERIOD	DAYS <40 CFS
1957	55			
1958	85	0	0	0
1959	62	0	0	0
1960	30	0	0	9
1961	42	0	0	0
1962	7.1	0	0	14
1963	49	0	0	0
1964	13	0	0	39
1965	25	0	0	19
1966	0.0	19	17	69
1967	31	0	0	26
1968	32	0	0	2
1969	49	0	0	0
1970	11	0	0	10
1971	20	0	0	22
1973	9.0	0	0	54
1974	0.0	1	1	18
1975	25	0	0	4
1976	9.0	0	0	14
1977	0.0	28	15	43
1978	0.0	27	10	94
1979	20	0	0	9
GAGE HEIGHT RECORD ONLY				
1986	0.0	97	60	121
1987	0.0	105	52	146
1988	0.0	129	78	156
1989	0.0	79	32	113
1990	0.0	79	34	106
1991	0.0	37	9	103
1992	0.0	82	32	105
1993	0.0	77	18	110
1994	0.0	54	13	81
1995	0.0	179	69	294
1996	0.0	116	25	163
1997	0.0	108	31	132
1998	0.0	179	55	198
1999	0.0	170	76	188
2000	0.0	135	53	167

BOEUF RIVER NEAR ARKANSAS/LOUISIANA STATELINE
(USGS STATIONS 07367700 & 07367690)

ANALYSIS OF CALENDAR YEAR FLOWS FROM ORIGIN (1957) TO DATE

YEAR (CAL)	MINIMUM FLOW (CFS)	DAYS OF ZERO FLOW	LENGTH OF LONGEST ZERO FLOW PERIOD	DAYS <40 CFS
2001	0.0	122	54	147
2002	0.0	119	79	152
2003	0.0	73	26	130
2004	0.0	51	31	88
2005	0.0	89	23	171
2006	0.0	145	85	184
2007	0.0	129	37	186
2008	0.0	110	38	153
2009	0.0	47	36	111
2010	0.0	56	23	167
2011	0.0	150	45	190
2012	0.0	63	33	127



ATTACHMENTS 3 - 5



BOBBY JINDAL
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

www.dotd.la.gov
(225) 379-3015



SHERRI H. LEBAS, P.E.
SECRETARY

January 9, 2013

Arkansas Natural Resources Commission
101 East Capitol, Suite 350
Little Rock, Arkansas 72201

Dear Commissioners:

We, the undersigned Louisiana Commissioners for the Red River Compact Commission (RRCC), do petition the Arkansas Natural Resources Commission (ANRC) for an allocation of stream flow in the Boeuf River (Crooked Bayou) to relieve the deficient flow conditions that exist at times at Stateline in the Boeuf River. This petition is based on Sections 307.1 and 308.2, Subtitle VII, of ANRC "Rules for the Utilization of Surface Water." It is our desire that this petition be considered in the next meeting of the ANRC.

The Red River Compact, to which Arkansas is signatory, calls for Louisiana to receive 40% of the weekly natural runoff of the Boeuf River, with a minimum flow target of 40 CFS. We can well understand the difficulty in arriving at a weekly natural runoff; therefore, this petition focuses on low-flow events. We have concluded that 40 CFS represented a flow that was equaled or exceeded about 95% of the time at the time of the inception of the Compact (1978).

The attached report, based on records for the USGS gauging station just south of Stateline, shows by calendar year the minimum flow, the number of days of zero (0.00 CFS) flow, the length of the longest period of zero flows, and the number of days when flow was less than 40 CFS. Daily stream flow data was available from 1958 to 1980 and from 1986 to 2011.

From the report, it seems that substantial changes took place in the Boeuf River (Crooked Bayou) basin north of Stateline beginning in about the 1970's. Zero flow events began to occur with long periods of that absence of flow. This condition was expanded from 1986 on with greatly increasing numbers of days with flow less than 40 CFS. You may note that in 2011, there were 150 days of zero flow and 190 days with flow less than 40 CFS.

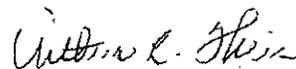
From aerial photos, we can see that a two-weir installation exists on the River about 4 miles upstream from Stateline. Phone contacts indicate that the weirs are fixed and that plans of the Corps of Engineers to restore the weir crests to the original elevations are underway. Aerial photographs of the reach from Arkansas State Highway 8 south to Stateline also indicate the possible locations of a number of pumping plants on the River. Very noticeable is a plant near Stateline (west bank) that we feel pumps to a large open water area reportedly used to store water for irrigation.

Arkansas Natural Resources Commission
January 9, 2013
Page -2-

Contact with the Operations Division, COE, Vicksburg, revealed that the construction of weirs in the streams crossing the ARK/LA Stateline had the purpose of keeping the streams open for drainage; pools created by the weirs prevented trees and brush from growing in stream bottoms. We also were informed that the weirs were likely constructed in the late 1950's or early 1960's, prior to the Red River Compact.

Our conclusion is that between the noted weirs (and perhaps others upstream) and increases in withdrawal in Arkansas, the water in Boeuf River can no longer reach Stateline during lower flow conditions. This condition has come to our attention as well as the attentions of agricultural, environmental, and fish/wildlife interests in Louisiana.

We respectfully request that the Commission consider this petition and act to satisfy the specifications in the Red River Compact with regard to flows in Boeuf River. We are available to meet with you at a mutually acceptable location and time if necessary.


Arthur R. Theis, P.E.
LA Commissioner, RRCC
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Zahir ("Bo") Bolourchi, P.E.
For: LA Commissioner, RRCC
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cc: Honorable James D. Caldwell, Attorney General
Honorable Mike Strain, DVM, Commissioner of Agriculture & Forestry
Honorable Senator Francis C. Thompson
Honorable Senator Gerald Long
Mr. Richard Savoie, P.E., DOTD Chief Engineer
Mr. Chris Knotts, P.E., DOTD Administrator, Public Works & Water Resources
Mr. Brandon Brown, DOTD General Counsel
Mr. Jason Placke, DOTD Attorney
Mr. Randy Young, Exec. Dir. ANRC

BOEUF RIVER NEAR ARKANSAS/LOUISIANA STATELINE
(USGS STATION 07367700)

ANALYSIS OF CALENDAR YEAR FLOWS FROM ORIGIN (1957) TO DATE

YEAR (CAL)	MINIMUM FLOW (CFS)	DAYS OF ZERO FLOW	LENGTH OF LONGEST ZERO FLOW PERIOD	DAYS <40 CFS
1957	55	PARTIAL YEAR OF RECORD		
1958	85	0	0	0
1959	62	0	0	0
1960	30	0	0	9
1961	42	0	0	0
1962	7.1	0	0	14
1963	49	0	0	0
1964	13	0	0	39
1965	25	0	0	19
1966	0.0	19	17	69
1967	31	0	0	26
1968	32	0	0	2
1969	49	0	0	0
1970	11	0	0	10
1971	20	0	0	22
1973	9.0	0	0	54
1974	0.0	1	1	18
1975	25	0	0	4
1976	9.0	0	0	14
1977	0.0	28	15	43
1978	0.0	27	10	94
1979	20	0	0	9
GAGE HEIGHT RECORD ONLY				
1986	0.0	97	60	121
1987	0.0	105	52	146
1988	0.0	129	78	156
1989	0.0	79	32	113
1990	0.0	79	34	106
1991	0.0	37	9	103
1992	0.0	82	32	105
1993	0.0	77	18	110
1994	0.0	54	13	81
1995	0.0	179	69	294
1996	0.0	116	25	163
1997	0.0	108	31	132
1998	0.0	179	55	198
1999	0.0	170	76	188
2000	0.0	135	53	167

BOEUF RIVER NEAR ARKANSAS/LOUISIANA STATELINE
(USGS STATION 07367700)

ANALYSIS OF CALENDAR YEAR FLOWS FROM ORIGIN (1957) TO DATE

YEAR (CAL)	MINIMUM FLOW (CFS)	DAYS OF ZERO FLOW	LENGTH OF LONGEST ZERO FLOW PERIOD	DAYS <40 CFS
2001	0.0	122	54	147
2002	0.0	119	79	152
2003	0.0	73	26	130
2004	0.0	51	31	88
2005	0.0	89	23	171
2006	0.0	145	85	184
2007	0.0	129	37	186
2008	0.0	110	38	153
2009	0.0	47	36	111
2010	0.0	56	23	167
2011	0.0	150	45	190
2012	0.0			



Arkansas Natural Resources Commission



J. Randy Young, PE
Executive Director

101 East Capitol, Suite 350
Little Rock, Arkansas 72201
<http://www.anrc.arkansas.gov/>

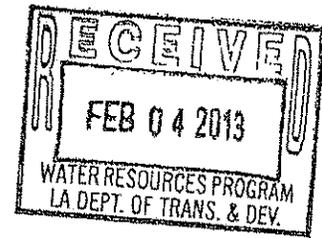
Phone: (501) 682-1611
Fax: (501) 682-3991
E-mail: anrc@arkansas.gov

Mike Beebe
Governor

January 30, 2013

Mr. Arthur R. Theis, P.E.
Louisiana Commissioner, RRCC
688 S. Lakeview Drive
Baton Rouge, LA 70810

Mr. Zahir ("Bo") Bolourchi, P.E.
Louisiana Commissioner, RRCC
Louisiana Dept. of Transportation
and Development
Post Office Box 94245
Baton Rouge, LA 70804-9245



Dear Commissioners:

I received your petition for allocation of stream flow in the Boeuf River and forwarded it to the members of the Arkansas Natural Resource Commission (ANRC). ANRC met Wednesday, January 23, 2013, and discussed responses to your petition.

We are of the opinion that ANRC cannot begin allocating Boeuf River stream flow until the Red River Compact Commission adopts the rules for Compact compliance, specifically the amount of water that is equivalent to "weekly runoff." This amount is an integral part of our allocation calculation because our state law recognizes that water reserved for federal compacts must be subtracted from the total amount of water available for allocation before we can begin our allocation process.

Also, ANRC believes that construction of the Boeuf-Tensas Irrigation Project could bring water into Louisiana, and that the support of Louisiana might be the catalyst needed to direct federal funding to the Corps of Engineers to move forward with the project.

Commissioners Theis and Bolourchi
January 30, 2013
Page 2

ANRC's Chair, Ann Cash, appointed a committee to further discuss how to amicably resolve issues brought forth in your petition. I believe it would be beneficial for the committee to visit with the Louisiana Red River Compact Commissioners after the Compact's annual meeting in April.

Sincerely,



J. Randy Young, P.E.
Executive Director

JRY:CP:ps

Cc: Arkansas Commissioner Wayne Dowd, RRCC
ANRC Commissioners
Edward Swaim, ANRC
Crystal Phelps, ANRC



BOBBY JINDAL
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

P.O. Box 94245
Baton Rouge, Louisiana 70804-9245

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(225) 379-3015



SHERRIH LEGAS, P.E.
SECRETARY

February 15, 2013

Mr. J. Randy Young, P.E.
Executive Director
Arkansas Natural Resources Commission
101 East Capitol, Suite 350
Little Rock, Arkansas 72201

Dear Mr. Young:

Reference is made to your letter of January 30, 2013, informing Louisiana Red River Compact Commissioners of the action taken by the Arkansas Natural Resources Commission (ANRC) at its January 23, 2013 meeting, with regards to our January 9, 2013 request pertaining to stream flow in Boeuf River. Your letter indicates that ANRC cannot take any action related to stream allocation on Boeuf River until the RRCC adopts rules for compact compliance, specifically the amount of water equivalent to "weekly runoff". However, our request was specifically related to the RRCC provisions of Article VII, Apportionment of water – Reach IV, Arkansas-Louisiana, Section 7.02 – Subbasin 2 – Interstate Streams – Arkansas and Louisiana.

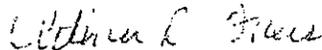
In your dual role as Executive Director of ANRC and also an Arkansas Red River Compact Commissioner, we feel sure you are fully aware of the provisions for Reach IV. Please note that the Compact has no specific requirements that the Compact adopt "rules of compliance" to enable each state to meet the terms of the Compact. It is the responsibility of each state to provide the scientific (engineering, etc.) data to develop the information required to enable that state to comply with the Compact provisions.

Our letter to ANRC was not a request for allocation of water for Louisiana. The flow requirements to Louisiana are already defined in the Compact. Our request was an effort to get Arkansas to recognize their responsibility under the terms of the Compact and to take whatever action is necessary to meet that need.

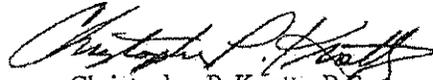
Mr. J. Randy Young, P.E.
February 15, 2013
Page -2-

We will be glad to meet with the ANRC Committee appointed by Ms. Ann Cash and with you to resolve our continuing deficient flows in Reach IV. A meeting prior to our April RRCC meeting might help us to expedite a resolution to this problem.

Sincerely,



Arthur R. Theis, P.E.
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cc: Honorable James D. Caldwell, Attorney General
Honorable Mike Strain, DVM, Commissioner of Agriculture & Forestry
Honorable Senator Francis C. Thompson
Honorable Senator Gerald Long
Mr. Richard Savoie, P.E., DOTD Chief Engineer
Mr. Zahir "Bo" Bolourchi, P.E., DOTD Director, Water Resources Program
Mr. Brandon Brown, DOTD General Counsel
Mr. Gordon W. "Jeff" Fassett, P.E., RRCC Chairman

OKLAHOMA COMMISSIONERS' REPORT

Red River Compact Commission
 New Orleans, Louisiana
 April 23, 2013



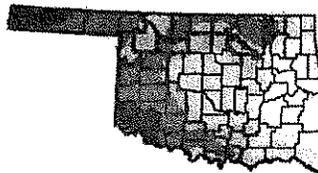
CLIMATE

According to the most recent U.S. Drought Monitor, the recent abundant moisture has helped alleviate, at least temporarily, drought conditions that have persisted in Oklahoma, and in much of the Red River Compact region, since October 2010. During the past 365 days, the Southwest climate division has received less than 21 inches of precipitation (68 percent of normal rainfall). The South Central climate division has received about 16 inches of rainfall during that period (61 percent of normal). In contrast, the adjacent Southeast region has received 34 inches of rainfall (67 percent of normal).

U.S. Drought Monitor Oklahoma

April 16, 2013
 7:04 P.M. EDT

	Drought Conditions (Percent Area)						
	None	D0	D1	D2	D3	D4	D5
Current	8.00	91.81	81.81	57.41	33.47	7.09	
Last Week (04/09/2013 - 04/15/2013)	0.70	99.30	85.41	61.00	36.44	8.58	
3 Month Ago (01/15/2013 - 01/21/2013)	0.00	100.00	100.00	100.00	91.80	58.88	
Start of Calendar Year (01/01/2013 - 01/01/2013)	0.00	100.00	100.00	100.00	94.80	37.08	
Start of Water Year (09/01/2012 - 08/31/2012)	0.20	100.00	100.00	89.88	95.33	42.69	
One Year Ago (04/16/2012 - 04/16/2012)	86.51	33.47	18.37	8.72	3.25	0.21	



Legend:
 D0 Abnormally Dry
 D1 Drought - Moderate
 D2 Drought - Severe
 D3 Drought - Extreme
 D4 Drought - Exceptional
 D5 Drought - Catastrophic

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text commentary for forecast statements.

<http://droughtmonitor.unl.edu>



Released Thursday, April 18, 2013
 David Miskus, NOAA/NWS/NCEP/Climate Prediction Center

OKLAHOMA
 CLIMATE SERVICE CENTER
 Percentage of Normal Rainfall
 Last 336 Days

Apr 14, 2012 through Apr 17, 2013

OKLAHOMA COMPREHENSIVE WATER PLAN

State Legislative leaders responded positively to the 2012 Update of the Oklahoma Comprehensive Water Plan, which was released early in 2012. With both substantive water policy legislation and funding for implementation, the OWRB and related agencies now possess both the directive and tools necessary to meet Oklahoma's water challenges through revitalized and innovative water management and protection programs. In all, accomplishments from the 2012 legislative session will accelerate implementation of at least half of the eight priority recommendations included in the 2012 OCWP Update (Water Quality and Quantity Monitoring; Water Supply Reliability; Water Conservation, Efficiency, Recycling and Reuse; and Water Project and Infrastructure Funding). Additional legislation providing for improved enforcement of water well drilling regulations and enhanced floodplain management rules address at least two OCWP supporting recommendations.

Through the OCWP Executive Report, 13 Watershed Planning Region Reports, and other OCWP products resulting from the detailed analysis of water resources, limitations, and options statewide, the 2012 OCWP Update provides an invaluable source of information for dealing with drought and related water supply issues. Water managers and decision-makers at every level will benefit from this extensive groundwork as they develop plans for meeting their long-term water needs.

Water Monitoring and Analysis

The FY-2013 budget included an additional \$2 million in appropriations to the OWRB and Conservation Commission to expand and integrate the state's water quality and quantity monitoring programs, a key grass-roots provision of the OCWP. OWRB staff are implementing Oklahoma's first holistic, long-term, aquifer-based Groundwater Monitoring and Assessment Program (GMAP). The agency's existing network of water wells has been refined and expanded and has added a specific component to assess groundwater quality—another first for Oklahoma. Long-term monitoring will provide essential data to assess trends over time and assist in water supply management decisions. Initial sampling is underway.

The Legislature also extended utilization of Gross Production Tax proceeds for OCWP implementation, particularly updates of hydrologic studies and enhancement of water management and modeling tools. Through the resulting \$1.3 million, the OWRB and its many partners will address the OCWP's specific recommendation calling for completion or update of all surface and groundwater basin studies across the state within 10 years (by 2022). Advanced tools and resources applied to this effort will provide fundamental information to ensure accurate allocation of waters by enhancing the forecasting of potential water shortages in a stream basin or aquifer and enabling a more accurate evaluation of various water use scenarios.

Water for 2060 Advisory Council

With passage of the Water for 2060 Act (HB 3055), Oklahoma became the first state in the nation to establish a bold, statewide goal of consuming no more fresh water in 2060 than is consumed today. The OWRB has partnered with the U.S. Army Corps of Engineers to begin preliminary work required to support the new Water for 2060 Advisory Council, chaired by the OWRB Executive Director. The Council's fifteen appointed members are charged with studying and recommending appropriate water conservation practices, incentives, and educational programs to moderate statewide water usage while preserving Oklahoma's population growth and economic development goals. Council meetings will commence once appointments are completed.

Passage of State Question 764

Passage of State Question 764 in November 2012 allows the OWRB's Financial Assistance Program to meet much of the state's projected \$82 billion water and wastewater financing need. The new Water Infrastructure Credit Enhancement Reserve Fund, created through a constitutional amendment approved by voters, essentially establishes a \$300 million pledge of credit that enables the OWRB to leverage funds in the bond market as water and sewer projects become ready for construction.

OCWP Public Water Supply Planning Guide

Late in 2012, the OWRB published the OCWP Public Water Supply Planning Guide, which provides more than 770 water systems with a primer for data collection, identifying gaps between existing infrastructure and supply and future needs, and strategies to close looming water deficits identified during the 2012 OCWP update. Planning Guides - along with copies of the OCWP Executive Report, Planning Guide, and appropriate Regional Reports - were mailed to all identified water systems in the state.

WATER RESOURCES STUDIES

Surface Water Studies

Stream water allocation models for stream systems in Oklahoma provide the OWRB and its partners with an integral planning and water rights management tool. Allocation models have been developed for the Blue River; Muddy Boggy River and Clear Boggy Creek; Kiamichi River; Little River (state line); Upper Canadian;

Deep Red, Cache Creek, and Beaver Creek; and Middle Canadian, Lower Canadian and Little River (central Oklahoma) basins. Hydrologic investigations for these basins are also being completed. Models are currently being developed for basins in the Washita River, Verdigris River, Deep Fork of the Red River, and North Canadian River systems.

The OWRB and Bureau of Reclamation recently announced a cooperative study of western Oklahoma's Upper Washita River Basin. The study will augment an ongoing hydrologic investigation of the Rush-Springs aquifer and ongoing development of the Washita surface water allocation model. Reclamation will directly contribute to the study by identifying the water supply impacts posed by climate variability scenarios as well as formulating options to augment the ability of Foss and Fort Cobb Master Conservancy Districts to satisfy the region's growing water needs.

Groundwater Studies

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 will also be used to anticipate the impacts of long-term groundwater withdrawals on the aquifer as well as simulate water management strategies. A draft of the USGS Scientific Investigations Report is currently under review. The report is scheduled to be finalized by the end of 2013. The study was funded with state monies through the Oklahoma Comprehensive Water Plan and federal funds through the Bureau of Reclamation and U.S. Geological Survey.

The OWRB initiated a study on the Rush Springs aquifer in west-central Oklahoma in October 2011 and will be collecting groundwater and surface water information to better understand the groundwater-flow system. The major goals of the project are to 1) better define the aquifer boundaries; 2) develop a groundwater-flow model; and 3) determine the Maximum Annual Yield of the aquifer. The groundwater-flow model will be used to simulate water management scenarios, project current use impacts, and assess climate variability utilizing available climate modeling information. The OWRB will be working with the Bureau of Reclamation as part of the WaterSMART Program as part of the Bureau's Washita Basin River Basin Water Supply Study. The project is scheduled to be complete by the end of 2015.

The OWRB entered into a cooperative agreement with the USGS to fund a 20-year Maximum Annual Yield update on the North Canadian River Alluvium and Terrace Groundwater Basin Reach I and II. The objective of this project is to update the 1981 (Reach I) and 1983 (Reach II) hydrologic survey from the Oklahoma Panhandle to Lake Overholser and to develop new groundwater-flow models that will be used to simulate the effects of groundwater withdrawals. The simulations will be used to evaluate the allocation of water rights within the groundwater basin. The two-year project will be completed by the end of 2013. Similar agreements have been made with the USGS to complete work on the 20 year update of the North Fork of the Red River alluvium and terrace, to be finished by the end of 2014, as well as the Canadian River alluvium and terrace, to be completed by the end of 2016.

WATER QUALITY PROJECTS & MONITORING

In response to the potential for severe impacts resulting from toxin-producing algae, OWRB staff are working with various states, local, and volunteer monitoring entities to assess the risk from harmful algae blooms. At Lake Texoma, where blue-green algae have become a concern, the Tulsa District Corps of Engineers has been conducting monthly sampling. (Updates are available to the public on the Tulsa District's website.) Test results

from samples taken in March 2012 indicate that cell densities exceed the Advisory level at multiple locations. A lake-wide Advisory remains in effect and caution is advised regarding bodily contact with lake water. More recent results indicate three locations above the Advisory threshold of 20,000 cells per milliliter of water, established by the World Health Organization's guidelines for recreational waters. In addition, a Warning remains in effect in the Lebanon Pool and Brier Creek areas. The Warning only pertains to these two areas and additional test results are forthcoming. The blue-green algae sampling data breakdown includes:

Washita River Arm:

- Johnson Creek (7,496 cells/ml); Little Glasses Creek/Marina (13,927 cells/ml); Lakeside PUA/Rock Creek (26,017 cells/ml)

Main Lake Body in front of the dam:

- Eisenhower State Park (2,756 cells/ml); Little Mineral Arm (2,756 cells/ml)

Red River Arm:

- Treasure Island (12,862 cells/ml); HWY 377/HWY 99 Bridge/Willis Bridge (22,048 cells/ml); Sheppard Annex (27,561 cells/ml)

Consistent with the 2003 interstate agreement with Arkansas, OWRB staff initiated the ten-year review of Oklahoma's 0.037 milligram/liter phosphorus standard for Oklahoma's six Scenic Rivers. A technical advisory group consisting of state, federal, and tribal officials and point and nonpoint source dischargers from both states was formed to evaluate the current appropriateness of the numerical standard based on the latest, best scientific information available. The reevaluation was completed in 2012.

OWRB staff continue to work cooperatively with the Central Oklahoma Master Conservancy District to monitor and improve water quality in Lake Thunderbird where a new system to oxygenate lake water was implemented. The OWRB and other agencies are also finalizing cooperative development of a total maximum daily load (TMDL) calculation to address Thunderbird water quality impairments, including high turbidity, algae, and low dissolved oxygen. Lake re-vegetation projects included the establishment of wetland plants at Fort Cobb and floating islands consisting of recycled plastic and aquatic plants at Eucha. Staff will complete the bathymetric mapping of the Ardmore City lakes once Mountain Lake refills and then complete the firm yield estimate for all city lakes. OWRB staff has also collected data needed to determine the feasibility of dredging the intake water supply channel in Lake Waurika to ensure access to raw water during extreme drought conditions. The OWRB also works to educate lake managers on the many benefits of establishing aquatic plants..

In response to the potential for severe impacts resulting from toxin-producing algae, OWRB staff is working with various Federal, State, and Local entities to assess the risk from harmful algae blooms.

The OWRB has completed work on the National Lakes Assessment Study and is beginning work on the National Rivers and Streams Assessment Study. Sampling on numerous lakes across Oklahoma provided data to assess environmental integrity of the waters. Work will begin this year on the "next round" of the National Rivers and Streams Assessment Study collecting data to assess wadeable and non-wadeable streams over a two year time frame.

Through an ongoing successful partnership with the Grand River Dam Authority, the OWRB continued dissolved oxygen monitoring on both Grand and Hudson Lakes to support Federal Energy Regulatory Commission (FERC) relicensing, and began work on W.R. Holway Reservoir to support its relicensing.

The OWRB's groundwater monitoring team assessed Swine Licensed Managed Feeding Operations compliance in an additional 550 wells through a continuing partnership with the Oklahoma Department of Agriculture, Food and Forestry (ODAFF). Staff also acquired a wealth of historical groundwater quality data—now available to the public—to support the Garber-Wellington aquifer study.

Additional 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;
- Monitoring for the Grand River Dam Authority to assist GRDA in management of their reservoirs for ecosystem support;
- Completing cooperative work for ODAFF to investigate pesticides in certain Oklahoma streams.

BENEFICIAL USE MONITORING PROGRAM

OWRB staff also continue to monitor water quality conditions and trends statewide through the Beneficial Use Monitoring Program (BUMP). 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 2011, BUMP lake sampling underwent a thorough reevaluation and modification to incorporate a probabilistic sampling approach to maximize benefits and efficiencies in the program while reducing expenses. Monitoring staff partnered with EPA to conduct the National Lakes Assessment and are currently partnering with EPA on the National Rivers and Streams Assessment with field work initiating this summer. These national studies are designed to establish comparable lake, river and stream conditions between states to facilitate standardized assessment.

OKLAHOMA WATER QUALITY STANDARDS

OWRB Water Quality staff continue to refine and improve Oklahoma's Water Quality Standards, which were adopted by the nine-member Water Board at its February 2013 meeting. Revisions adopted include upgrading the recreation beneficial use of the Canadian River in the Oklahoma City metropolitan area to Primary Body Contact Recreation and segments of Wewoka and Rush Creeks to Warm Water Aquatic Community. The majority of the human health criteria in Appendix G of the standards were revised with calculations using up-to-date guidance, scientific information and the current recommended EPA fish consumption rate. The Standards amendments were approved by the Governor on April 8, 2013 and are now subject to review and approval by the State Legislature, Oklahoma Attorney General, and U.S. Environmental Protection Agency.

DAM SAFETY PROGRAM

The OWRB Dam Safety Program ensures the safety of more than 4,600 dams in the state and implements statewide hazard prevention through the National Flood Insurance Program. The OWRB conducts inspections and provides public outreach for dam owners, emergency management officials, and floodplain administrators. Currently, special emphasis is being provided to emergency action plans (EAP), high-hazard reclassification, dam breach inundation maps, and rehabilitation of dams. The OWRB has developed a Dam Inventory Viewer available online at: www.owrb.ok.gov/maps/server/wims.php. In 2012, the OWRB received 9 new/updated Emergency Action Plans, 15 construction/rehabilitation applications, and 325 inspection reports for high, significant, and low hazard dams.

Downstream development has become a significant problem in Oklahoma, as in other states, with nearly 26 percent of the state's low hazard dams requiring reclassification to a more protective and costly hazard level. Considering both low and significant hazard classifications, there are approximately 615 dams that could be reclassified. Simplified breach inundation maps will be made for dams which, based on field inspections and structural information, appear most likely to be reclassified as high hazard. Site visits have been conducted at approximately 306 dams and 80 simplified breach inundation maps have been completed in the past year.

In the past year, the OWRB Dam Safety Program conducted two workshops in Tulsa and Oklahoma City where private and local government dam owners, as well as dam safety engineers, learned about the operation and maintenance of dams, emergency action plans, and breach inundation maps. In addition, in February 2013 the OWRB partnered with the Association of State Dam Safety Officials (ASDSO) to host a technical seminar in Oklahoma City on Soil Mechanics for Dam Safety.

FLOODPLAIN MANAGEMENT

The OWRB continues to assist communities in adopting new Flood Insurance Rate Maps (FIRM) through the Federal Emergency Management Agency (FEMA) Map Modernization and RiskMAP program. Updated FIRM maps have been issued for nine counties and 106 participating communities in Oklahoma. Staff also participated in FEMA RiskMAP Discovery projects for the Polecat-Snake, Middle North Canadian, Lower Canadian-Walnut, and Lower Cimarron-Skeleton Watersheds. Meetings were held with communities and the public to collect data and information for use in identifying areas that may be eligible for mapping, mitigation, and compliance projects. The OWRB continues to train accredited floodplain administrators in Oklahoma's 394 participating National Flood Insurance Program (NFIP) member communities. With assistance from the Oklahoma Floodplain Managers Association, the OWRB conducted 18 training opportunities in 2012.

The OWRB is also an active participant with FEMA in the Cooperating Technical Partnership (CTP) Program, an innovative approach to fostering federal mapping partnerships between FEMA and participating NFIP communities, regional agencies, state agencies, tribes, and universities. The OWRB is currently assisting the communities of Broken Arrow and El Reno through the CTP program. The OWRB and the U.S. Army Corps Engineers have also partnered in the Silver Jackets program, which fosters data-sharing and flood resiliency.

NEW RULES ON OVERSIGHT OF WATER FROM MINES

New OWRB rules and regulations regarding oversight of water from mines were formally approved by Governor Fallin on April 8. The rules resulted from more than 20 meetings over two years with stakeholders, a formal public hearing process, and several modifications in response to comments. The new law formally implements provisions of SB 597, which regulates use of groundwater trapped in a producing mine pit that emanates from a sensitive sole source groundwater basin, including the Arbuckle-Simpson Aquifer in south central Oklahoma.

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 five primary financing programs—which provide Bond, CWSRF and DWSRF loans and REAP, Emergency and Drought Response grants—more than \$2.9 billion has been awarded for water and sewer projects in Oklahoma with a total estimated total savings of more than \$1 billion to Oklahoma communities. In 2012, the Board approved approximately \$300,000 in grants to provide drought-related emergency aid for rural and municipal water facilities.

OKLAHOMA STATE LEGISLATURE

The State Legislature convened on February 4, 2013. While last year's unprecedented water legislation provides reassurance that Oklahoma is on a constructive path toward a more secure future, this session appears to be much more subdued from a water perspective. Notable bills filed reference such topics as

individual drought relief funding for farmers, ranchers and other rural citizens, establishment of regional water planning groups, wastewater reuse, and expanded Water Board membership and representation.

LEGAL MATTERS

Tarrant Regional Water District v. Herrmann

In *Tarrant Regional Water District v. Herrmann*, the Tarrant Regional Water District (TRWD) had sought declaratory and injunctive remedies against Oklahoma laws that placed conditions on the use of compacted stream water outside of the state. The district court had granted summary judgment and dismissal in favor of OWRB members. On appeal, the Court of Appeals affirmed the district court on several grounds. The Court of Appeals held that the Red River Compact provides Congressional consent and gives the Oklahoma Legislature latitude to impose conditions on stream water apportioned to Oklahoma under the compact. The Court further held that TRWD lacks standing to assert claims for groundwater located in Oklahoma because, among other things, the statutes challenged by TRWD do not apply to groundwater. On January 19, 2012, TRWD filed a final appeal with the United States Supreme Court seeking review of the Court of Appeals decision. Following comment by the Solicitor General, in January 2013 the Supreme Court agreed to hear the case. Arguments are scheduled for April 23.

Chickasaw and Choctaw Nations v. Gov. Fallin, OWRB, and Oklahoma City

On August 18, 2011, the Chickasaw Nation and Choctaw Nation of Oklahoma filed a lawsuit in the U.S. District Court for the Western District of Oklahoma. The lawsuit names as defendants Gov. Mary Fallin, the members and Executive Director of the OWRB, the City of Oklahoma City and the Oklahoma City Water Utility Trust (OCWUT). The lawsuit alleges the Tribes have federally-protected rights to the water within a 22-county territory in southeastern Oklahoma. Among other things, the lawsuit seeks (1) declaratory judgments against any action by the OWRB on a pending application by Oklahoma City and OCWUT for a permit to use stream water from Sardis Reservoir in southeastern Oklahoma, or any other withdrawal or export of water from the area at issue, unless and until there is initiated a general stream adjudication that satisfies the requirements of the federal law known as the McCarran Amendment; and (2) permanent injunctions against any such action unless and until a general stream adjudication that satisfies the McCarran Amendment is completed. On February 10, 2012, the Oklahoma Attorney General filed on behalf of the OWRB to initiate such McCarran Amendment adjudication proceedings in the Supreme Court of Oklahoma to protect and accurately determine all rights to the use of water in the Kiamichi, Clear Boggy, and Muddy Boggy stream systems and moved to dismiss the Tribes' federal court action as a premature effort to have federal courts usurp Oklahoma's management of waters of the State. On February 23, 2012, the Oklahoma Supreme Court granted the application to assume original jurisdiction. However, on March 12, 2012, the United States filed a Notice of Removal with the federal district court in Oklahoma City so that the Oklahoma Supreme Court no longer has jurisdiction. Since that time, a joint motion to stay proceedings has been granted for both cases (*Chickasaw Nation and Choctaw Nation v. Fallin* and *OWRB v. United States*) and has been renewed on a continual basis to allow further efforts in mediation and negotiation. The stay currently has been extended until May 20, 2013.

OWRB Office of General Counsel

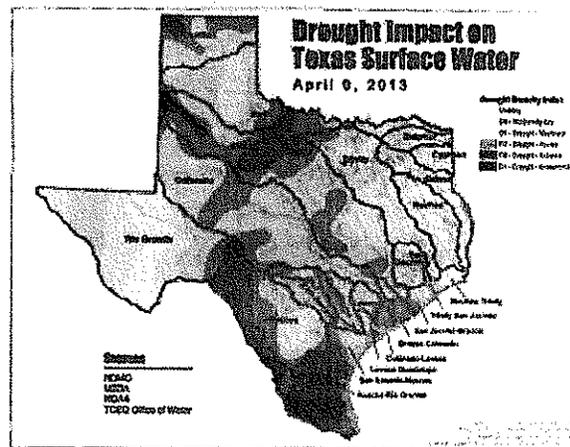
After 30 years of state service, Dean Couch retired as OWRB General Counsel on January 31, 2013. Veteran staff attorney and now Acting General Counsel Jerry Barnett will oversee the Office of General Counsel as it transitions to a more collaborative working relationship with the Oklahoma Attorney General's office and engages other legal resources to address the growing number of lawsuits involving the management and protection of Oklahoma's water resources.

Red River Compact Commission Texas Commissioner's Report April 23, 2013

Drought Conditions

Texas has experienced some serious dry spells in recent years, but the drought of 2011 turned out to be a record breaker. By October, all 254 counties in Texas were experiencing some stage of drought—most in the “exceptional” category. Although recent rains have resulted in some improvement, as of April 9, 2013, the United States Drought Monitor continues to show over 69% of Texas in extreme or exceptional drought conditions, with almost 30% of the state in severe drought conditions. The state climatologist continues to state that seasonal forecasts predict the drought will persist or intensify in many areas of the state.

As the state agency charged with managing surface water rights in Texas, the Texas Commission on Environmental Quality (TCEQ) carries out this responsibility primarily through issuing and enforcing water-right permits guided by the priority doctrine: “first in time, first in right.” Domestic and livestock users have superior rights to any permitted surface water right holders. Among permitted water right holders, those permit holders that obtained their authorization first (senior water rights) are entitled to receive their water before those water right holders that obtained their authorization later (junior water rights). If a water right holder is not getting water that they are entitled to, they can call upon the TCEQ to take action to enforce the priority doctrine – a priority or senior call.



As reported in 2012, TCEQ received 15 priority calls on surface water from municipal, industrial, irrigation, and domestic and livestock users during the 2011 drought. These priority calls resulted in the suspension or curtailment of more than 1,200 water-right permits, and the TCEQ stopped issuing temporary water-right permits.

TCEQ field personnel enforced curtailments during the drought through ground-level and aerial investigations and conducted streamflow monitoring to aid agency decisions regarding curtailments and management of priority calls. As concerns intensified over the extreme drought conditions, TCEQ initiated proactive steps, including providing information about drought conditions and permit suspensions to state leadership, legislative officials, county judges, county extension agents, holders of water-right permits, and the media. When drought conditions began to abate, priority calls were rescinded and suspensions lifted, allowing junior water-right holders the opportunity to use and store water.

Because drought conditions remain widespread across the state, the TCEQ issued a news release and alert on April 5, 2013, that the agency is closely monitoring the situation and may need to take action when necessary to control diversions. A drought information hotline is open during business hours to answer questions at 800-447-2827, and additional information on drought conditions is available at <http://www.tceq.texas.gov/response/drought>.

Drought Rulemaking

A new section (11.053) of the Texas Water Code was established by TCEQ's Sunset Bill, House Bill 2694, which requires that the TCEQ Executive Director (ED) may temporarily suspend or adjust water rights during a time of drought or other emergency shortage of water, in accordance with the priority of water rights. The new section also requires that the TCEQ enact rules to define "drought" and "emergency shortage of water," as well as establish procedures for notices, hearings, and appeals to the Commission. Chapter 36, "Suspension or Adjustment of Water Rights during Water Shortage," was adopted on April 11, 2012 and became effective on May 3, 2012. TCEQ began a stakeholder process related to implementation of the new rule. The first stakeholder meeting was held July 10, 2012, and the meeting date of the second meeting will be posted soon.

The link to the rule is:

<http://www.tceq.texas.gov/assets/public/legal/rules/rules/pdflib/36%60.pdf>

Environmental Flows

Senate Bill 3 (SB 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 environmental flow standards must consist of a schedule of flow quantities, reflecting seasonal and yearly fluctuations that may vary geographically by specific location in a river basin and bay system. SB 3 legislation divides the effort into 11 basins. Priority basins, those containing an associated estuary, began the process, and have either completed or are in the process of developing their first-round of environmental flow recommendations. No date has been set for the Red River Basin to consider environmental flow requirements.

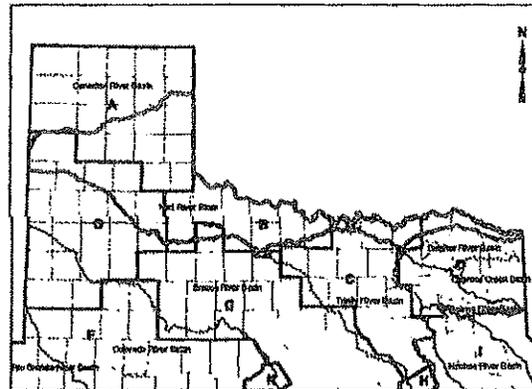
2012 Texas Water Plan

The 2012 State Water Plan for Texas was adopted by the Texas Water Development Board (TWDB) in December 2011, and sent to the Governor on January 5, 2012. This plan presented the information regarding the recommended conservation and other types of water management strategies that would be necessary to meet



the state's needs in drought conditions, the cost of such strategies, and estimates of the state's financial assistance that would be required to implement these strategies. In addition to incorporating the regional water plans, the state water plan serves as a guide to state water policy and includes legislative recommendations that are needed and desirable to facilitate voluntary water transfers. The plan also identifies river and stream segments of unique ecological value and sites of unique value for the construction of reservoirs that the Board recommends for protection.

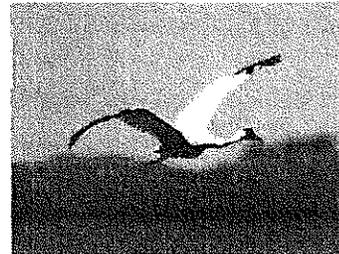
The Red River Basin in Texas was evaluated as part of five regional planning groups: Region A, Panhandle; Region O, Llano Estacado; Region B; Region C; and Region D, North East Texas. Regional water planning groups are currently working in the Fourth Cycle of Regional Water Planning (2011-2016) to prepare proposals for submission to the Texas Water Development Board. An



expected increase in population and the ongoing drought, which has affected the entire Red River Basin, particularly in the western reaches, are influencing much of the planning. Water management strategies for the basin include conservation efforts, construction of new reservoirs, and the re-use of wastewater effluent.

ESA Litigation

A lawsuit was filed in Federal District Court in 2011, in Corpus Christi, Texas, by The Aransas Project (TAP) versus the TCEQ under the Endangered Species Act (ESA). 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 which could damage the whooping cranes' habitat in San Antonio Bay. A resulting significant shortfall in blue crab production (their favorite food) could cause an increase of crane mortality rates which might constitute a "taking," contrary to the prohibitions of the ESA. The proceedings were completed in December 2011, and in early December 2012, the presiding judge declined to reopen the case based on a new report from U.S. Fish and Wildlife Service that might cast additional uncertainty on previous estimates of whooping crane mortality. The decision of the judge was handed down in March 2013, which according to TCEQ, could impact the way the State regulates surface water rights. The Fifth Circuit Court of Appeals has granted a stay of the TAP Decision pending appeal. A schedule will be set such that reply briefs will be required by mid-June.



Texas Watermaster Reviews

The TCEQ Sunset legislation, HB 2694, also included the requirement for the TCEQ to evaluate and issue a report for all river and coastal basins that do not have a watermaster. The report will assess whether or not there is a need to appoint a watermaster. This assessment is required at least once every five years, and the TCEQ developed a schedule to consider several basins each year. The Red River Basin in Texas will come under review in 2015, and the Sulphur River and Cypress Creek basins will be reviewed in 2016.

Water Use Permitting Activity

During 2012, there have been seven water rights issued in the Red River Basin in Texas: three water use permits on tributaries of the Red River, three temporary mining permits in the Cypress Creek Basin, one temporary industrial permit in the Sulphur River Basin, and one amendment to an existing permit on a tributary of the Red River, as shown in the attached table.

There are twelve water use permits, temporary permits or amendments pending. Currently, the pending applications include one temporary industrial permit, one permit abandonment, and two permit applications to move or add diversion points for existing permits. Other pending applications include one application for several on-channel reservoirs for agricultural, recreational, and industrial purposes and one re-use application for irrigation purposes. In addition, the Red River Authority has requested another permit for an inflatable weir and diversion from the North Wichita River for the U.S. Army Corps of Engineers' Truscott Brine Lake operations for salinity control. There are two significant reservoir permit applications which include Lake Ralph Hall on the North Sulphur River and Lower Bois d'Arc Creek Reservoir. In January 2013, a contested case hearing was held for the Lake Ralph Hall permit, which is currently under consideration by the State Office of Administrative Hearings' judges. A decision regarding their recommendations to TCEQ is anticipated in the coming months. Bois d'Arc Creek Reservoir is still under technical review by TCEQ staff.

Additional information regarding a specific pending application, the list and project manager's name are provided on the TCEQ website at www.tceq.texas.gov/permitting/water_rights/pending.html.

ATTACHMENT 8

Red River Compact Commission

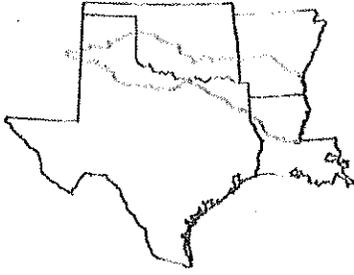
FY – 2014 Budget

(July 1, 2013 – June 30, 2014)

	<u>FY 2013</u>	<u>FY 2014</u>
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	<u>\$20,000.00</u>	<u>\$20,000.00</u>
TOTAL	\$23,775.00	\$23,775.00

State Assessments

In accordance with Article IX, Section 9.04.C, of the Compact the amount of such budget shall be borne equally by the signatory states in an equal amount. Therefore, the FY 2014 assessments are \$550.00 per state.



RED RIVER COMPACT COMMISSION

August 8, 2013

The Red River Compact is an interstate agreement entered into by the States of Arkansas, Louisiana, Oklahoma and Texas with the consent of Congress to equitably apportion the waters of the Red River and its tributaries. The Compact is administered by the Red River Compact Commission (Commission).

The Commission adopts rules and regulations to administer the different reaches of the Compact. These rules rely, in large part, on the U.S. Geological Survey (USGS) streamflow gaging network for data to ensure compliance with the Compact and rules adopted by the Compact. As costs to maintain these critical gages increase, it is becoming an increasing burden for many entities to bear the cost share expenses to continue funding these critical gages. The Commission is becoming increasingly concerned about the ability to continue to have the data necessary to properly administer the Compact and prevent controversial disputes or even litigation over water deliveries and Compact compliance.

Attached is a Resolution unanimously approved by the Commission during their annual meeting on April 23, 2013, which requests that Congress fully fund the National Streamflow Information Program (NSIP) gages associated with the Red River basin and Red River Compact. The Resolution requests that the USGS place a priority on funding these gages under NSIP. The Commission believes that the gages necessary to administer the Red River Compact qualify for the NSIP and should be funded through this effort. Also, the Commission requests that funding for the Cooperative Water Program be restored to ensure the historical partnership match of 50/50.

Attached please find a list of streamflow gages that the Commission has found to be critical to administering the Red River Compact. These are the gages the Commission believes should be funded through the NSIP.

Thank you for consideration of this important matter. If you have any questions, please contact me at (307) 778-9500, Jeff.Fassett@hdrinc.com or any of the Compact member state representatives.

Respectfully,

A handwritten signature in black ink that reads "Gordon W. Fassett".

Federal Commissioner and Chairman
Red River Compact Commission

ARKANSAS

LOUISIANA

OKLAHOMA

TEXAS

**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.

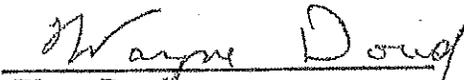


Gordon W. "Jeff" Fassett
Federal Commissioner and
Chairman Red River Compact
Commission

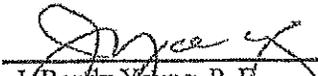
4/23/2013

Date Executed
April 23, 2013

Concurred to and supported by:



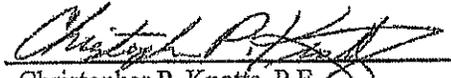
Wayne Dowd
Commissioner for Arkansas



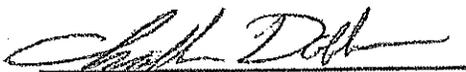
J. Randy Young, P. E.
Commissioner for Arkansas



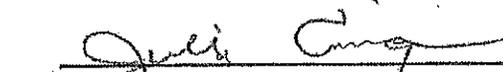
Arthur R. Theis, P.E.
Commissioner for Louisiana



Christopher P. Knotts, P.E.
Commissioner for Louisiana



Charles Lynn Dobbs
Commissioner for Oklahoma



J. D. Strong
Commissioner for Oklahoma



William A. Abney
Commissioner for Texas



Zak Covat ~~Todd Chewoneth~~
Acting Commissioner for Texas

RED RIVER BASIN STREAMFLOW AND WATER QUALITY GAGES

Number	Name
<u>07300000</u>	Salt Fork Red River near Wellington, TX*
<u>07300500</u>	Salt Fork Red River at Mangum, OK
<u>07301300</u>	North Fork Red River near Shamrock, TX
<u>07301410</u>	Sweetwater Creek near Kelton, TX
<u>07301500</u>	North Fork Red River near Carter, OK*
<u>07303400</u>	Elm Fork of North Fork Red River nr Carl, OK
<u>07308500</u>	Red River near Burkburnett, TX*
<u>07315500</u>	Red River near Terral, OK*
<u>07316000</u>	Red River near Gainesville, TX*
<u>07316500</u>	Washita River near Cheyenne, OK
<u>07331000</u>	Washita River near Dickson, OK*
<u>07331600</u>	Red River at Denison Dam nr Denison, TX*
<u>07332500</u>	Blue River near Blue, OK
<u>07335300</u>	Muddy Boggy Creek near Unger, OK
<u>07335500</u>	Red River at Arthur City, TX
<u>07336820</u>	Red River near De Kalb, TX
<u>07337000</u>	Red River at Index, AR*
<u>07340000</u>	Little River near Horatio, AR
<u>07344210</u>	Sulphur River near Texarkana, TX
<u>07344370</u>	Red River at Spring Bank, AR
<u>07346310</u>	(COE) Caddo Lake at Dam near Mooringsport, LA
<u>07348000</u>	Twelvemile Bayou near Dixie, LA
<u>07348500</u>	(COE) Red River at Shreveport, LA
<u>07350500</u>	Red River at Coushatta, LA*
<u>07355500</u>	Red River at Alexandria, LA*
<u>07362000</u>	Quachita River at Camden, AR*
<u>07362100</u>	Smackover Creek near Smackover, AR
<u>07363500</u>	Saline River near Rye, AR
<u>07364100</u>	Quachita River near Arkansas-Louisiana State Line
<u>07364150</u>	Bayou Bartholomew near McGehee, AR*
<u>07369680</u>	Bayou Macon at Eudora, AR

* Indicates water quality monitoring station

For more information see:

<http://waterwatch.usgs.gov/index.php?r=ar&m=real>

<http://waterwatch.usgs.gov/?m=real&r=la>

<http://waterwatch.usgs.gov/?m=real&r=ok>

<http://txpub.usgs.gov/public/BasinMap/BasinMap.html?basinselect=2>

**Red River Compact Commission
Texas Water Quality and Environmental Report
April 22, 2013**

Zebra Mussels and Lake Texoma

As reported in 2012, the Texas Parks and Wildlife Department (TPWD) adopted new rules in March 2012, designed to prevent further spread of exotic aquatic species into Texas waterways, including the spread of zebra mussels. "Failure to

immediately remove and lawfully dispose of any harmful or potentially harmful aquatic plant that is clinging or attached to a vessel, watercraft, trailer, motor vehicle, or other device used to transport or launch a vessel or watercraft can result in a fine of \$25-\$500." The rules apply to the Red River from the I-44 Bridge in Wichita County to the Arkansas/Texas border, including the Texas waters of Lake Texoma, Lake Lavon and Elm Fork of the Trinity River above the Lake Lewisville dam including lakes Ray Roberts and Lewisville.



In Texas, the presence of zebra mussels was first confirmed in April 2009 in Lake Texoma in the Red River Basin. According to the TPWD, they were most likely introduced into Lake Texoma through overland transport from an infested water body. The presence of zebra mussels has been reported in both the Red River and Washita River arms of Lake Texoma. Ongoing studies are being conducted to determine if this is a reproducing zebra mussel population. (U.S. Geological Survey (USGS) Fact Sheet 2012-3077, August 2012)



The USGS Zebra Mussel Monitoring Program for north Texas provides early detection and monitoring of zebra mussels using: (1) SCUBA diving, (2) water-sample collection with plankton tow nets (followed by laboratory analyses), (3) artificial substrates, and (4) water-quality sampling. Monitoring under this program began in April 2010 at Lake Texoma, the City of Sherman plant, Sister Grove Creek, and Lavon Lake. Ray Hubbard Lake was added to the program in October 2010 and Lake Lewisville in June 2011. Grapevine and

Ray Roberts Lakes were added in October 2011, and Lake Fork Reservoir and Lake Tawakoni were added in November 2011. Surveys at Lake Palestine began in April 2012. Data collected will assist rapid response efforts and can be used to quantify the economic and ecological effects of zebra mussels in the north Texas area. (USGS, 2012)

Buck Creek Study

Buck Creek is a small water body located in the Red River Basin, specifically in the sub-watershed of the Lower Prairie Dog Town Fork of the Red River. Buck Creek was first listed on the CWA Section 303(d) List as impaired for *E. coli* in 2000. The Texas State Soil and Water Conservation Board (TSSWCB), Texas Water Resources Institute (TWRI), Texas Agricultural Experiment Station (TAES), and Hall-Childress, Salt Fork

and Donley County SWCDs have collaborated on the Bacterial Monitoring for the Buck Creek Watershed Project in an effort to determine temporal and spatial variations in bacteria levels in Buck Creek and provide educational meetings where local stakeholders can learn more about the project and its goals. Monitoring was conducted every two weeks and after rainfall events at 15 locations along the creek. Water quality sampling has ceased and the final report has been published.



A second phase of this project has focused on identifying the sources of bacteria in Buck Creek, evaluating potential management alternatives, and developing a watershed protection plan (WPP) to restore the waterbody through a stakeholder driven process. The Buck Creek WPP is in the final stages of preparation.

Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d)

The TCEQ, in keeping with its mission to protect the state's natural resources, regularly monitors the condition of the state's surface waters and assesses water quality. The *Texas Integrated Report for Clean Water Act, Sections 305(b)*



and 303(d) is a statewide report on the status of state surface waters and is prepared and submitted to the U.S. Environmental Protection Agency (EPA) every two years. TCEQ accepted public comments on the 2012 Integrated Report from October 19 through November 19, 2012. Summaries of the comments and the TCEQ's responses are included with the submittal of the Integrated Report and are available on the agency website. The 2012 Integrated Report was submitted in February for EPA review. Preparations for the 2014 Integrated Report have already begun in order to submit the report to EPA by the April 1, 2014 deadline.

The Draft 2012 Integrated Report includes a comprehensive water quality evaluation of 1214 classified and unclassified water bodies throughout the State (freshwater streams, reservoirs, tidal streams, bays, estuaries, and the Gulf of Mexico). The number of impairments decreased in 2012 by 53 as compared to 2010. Impairments due to elevated bacteria represented the highest percentage (45%) included in Category 5. Dissolved oxygen and organics in fish tissue had the next highest percentages (16% and 17% respectively).

For more information, the Texas Integrated Report for Clean Water Act Sections 305(b) and 303(d) is compiled and published on the TCEQ Web site page at:
http://www.tceq.texas.gov/waterquality/assessment/305_303.html.

Fish Kills on the Red River

The Oklahoma Department of Wildlife Conservation fisheries staff was alerted of a fish kill on the Red River in July 2011. The affected area covered nearly 100 river miles centered near Oscar, OK. Multiple state agencies from Oklahoma and Texas, along with EPA Region 6 staff, were involved in sampling and attempting to determine the cause. The final cause has yet to be determined. EPA region 6 was notified on June 6, 2012, about a fish kill in the same area due to unknown causes similar to the previous fish kill reported in 2011. As in 2011, multiple state agencies from Oklahoma and Texas assisted EPA with water sampling and fish necropsies in an attempt to determine the cause. No cause has been determined to date, however recommendations for a response to future fish kills in the area has been formulated, including: timeliness, coordination and notification, airboat expeditions, water sample analysis, sediment sampling, gas sampling, and low-flow baseline sampling during the summer.

2013 Canadian and Red River Basins Highlights Report

In 1991, the Texas Legislature enacted the Texas Clean Rivers Act (Senate Bill 818) in order to assess water quality for each river basin in the state. The Clean Rivers Program (CRP) was also created and has become one of the most successful cooperative efforts between federal, state, and local agencies and the citizens of the State of Texas. It is implemented by the TCEQ through local partner agencies to achieve the CRP's primary goal of maintaining and improving the water quality in each river basin. The Red River Authority of Texas is the partner agency for both the Red and Canadian River Basins. The most recent draft Basins Highlights Report can be found at the following link:

<http://www.rra.dst.tx.us/Publications/CRP/crp2013/2013%20BHR%20Draft.pdf>

Red River Authority link:

<http://www.rra.dst.tx.us/>

Red River Valley Association link:

<http://www.rrva.org/>



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

**RED RIVER COMPACT COMMISSION
33rd Annual Meeting**

Doubletree Hilton Hotel
New Orleans, LA
April 23, 2013

RED RIVER BASIN

	PEAK DISCHARGE (CFS) MAXIMUM	WY 12	AVERAGE DISCHARGE (CFS) PERIOD OF RECORD	WY 12			
07308500 RED RIVER NR BURKBURNETT, TX	174,000	06-06-1995	4,300	11-10-11	1,140	52 YRS	190
07315500 RED RIVER NR TERRAL, OK	236,000	06-07-1995	12,000	04-05-12	2,372	74 YRS	416
07316000 RED RIVER NR GAINESVILLE, TX	265,000	05-31-1987	16,100	04-06-12	3,117	76 YRS	673
07331600 RED RIVER AT DENISON, TX	201,000	05-21-1935	11,700	09-06-12	4,663*	59 YRS+	1,219
07335500 RED RIVER AT ARTHUR CITY, TX	400,000	05-28-1908	57,700	03-21-12	8,930*	68 YRS++	3,562
07336820 RED RIVER NEAR DE KALB, TX	279,000	05-06-1990	68,800	03-23-12	13,740	44 YRS	5,777
07337000 RED RIVER AT INDEX, AR	297,000	02-23-1938	57,300	03-24-12	12,670*	69 YRS+++	6,197
07344370 RED RIVER AT SPRING BANK, AR	140,000	03-14-2001	94,800	03-25-12	19,230*	15 YRS	14,030

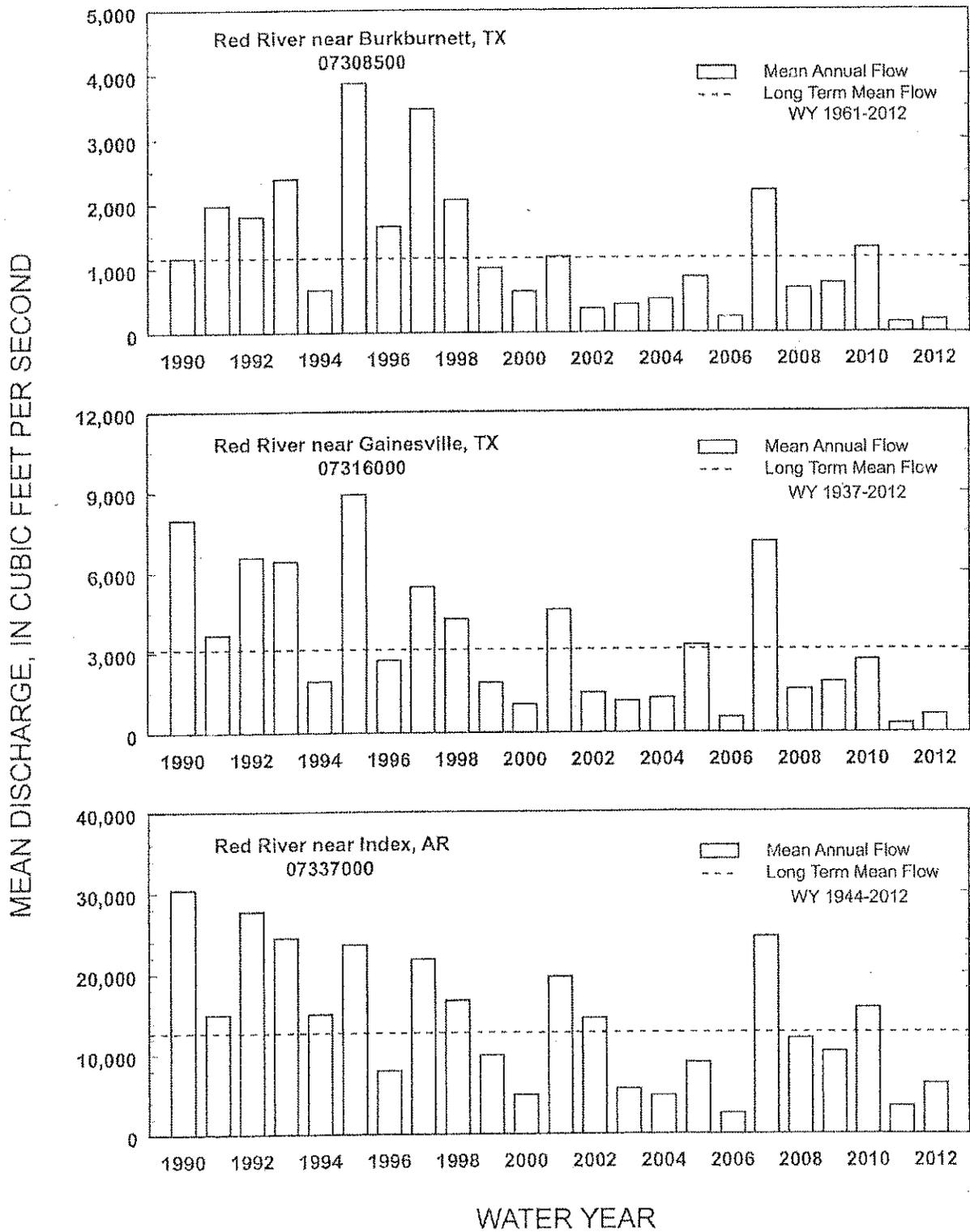
* AVERAGE DISCHARGE SINCE DENISON DAM IN OPERATION

+ 80 TOTAL YEARS OF RECORD

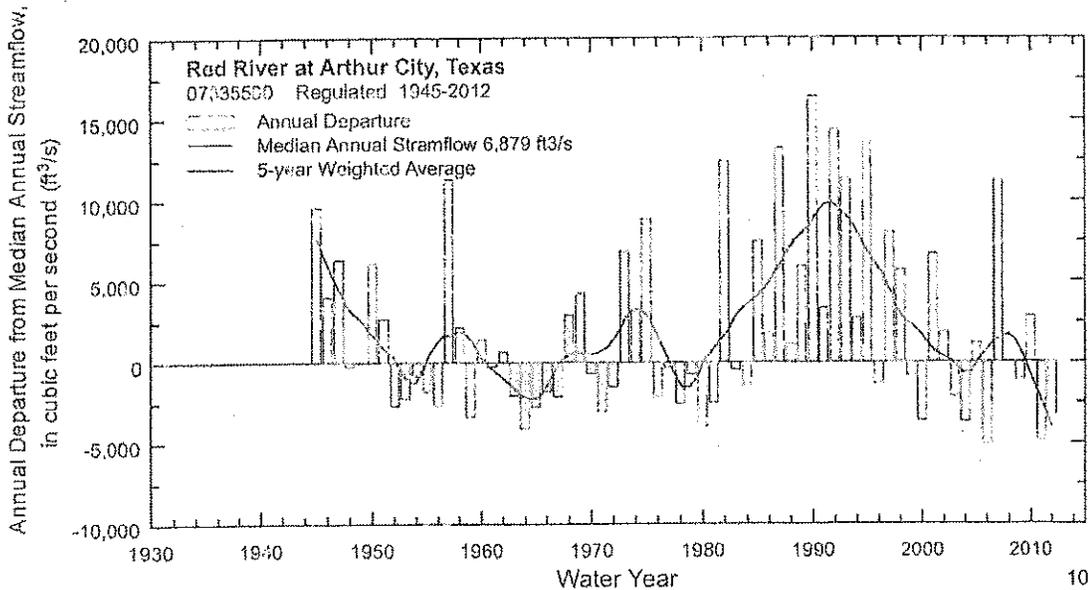
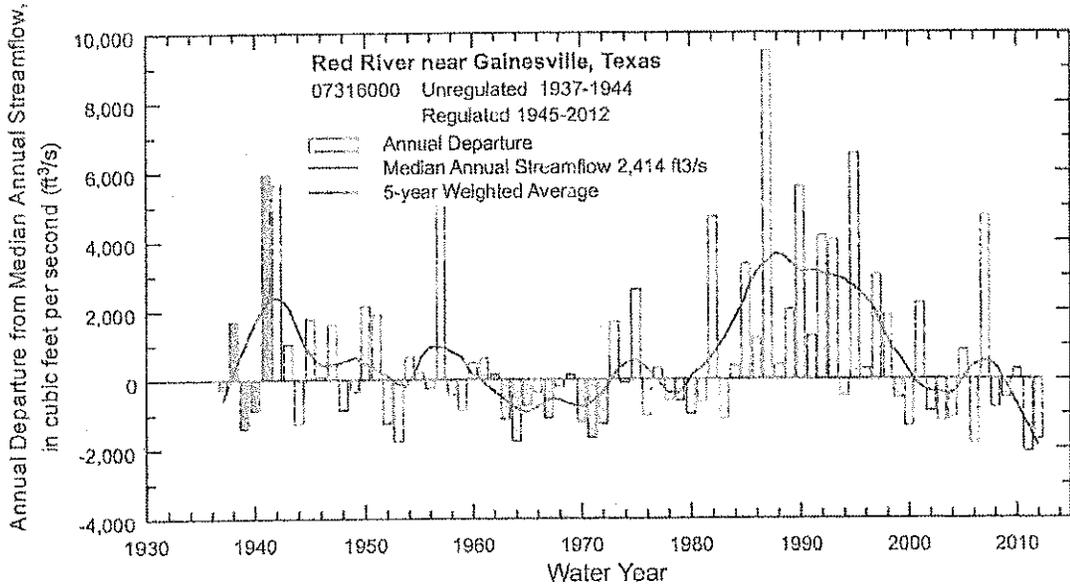
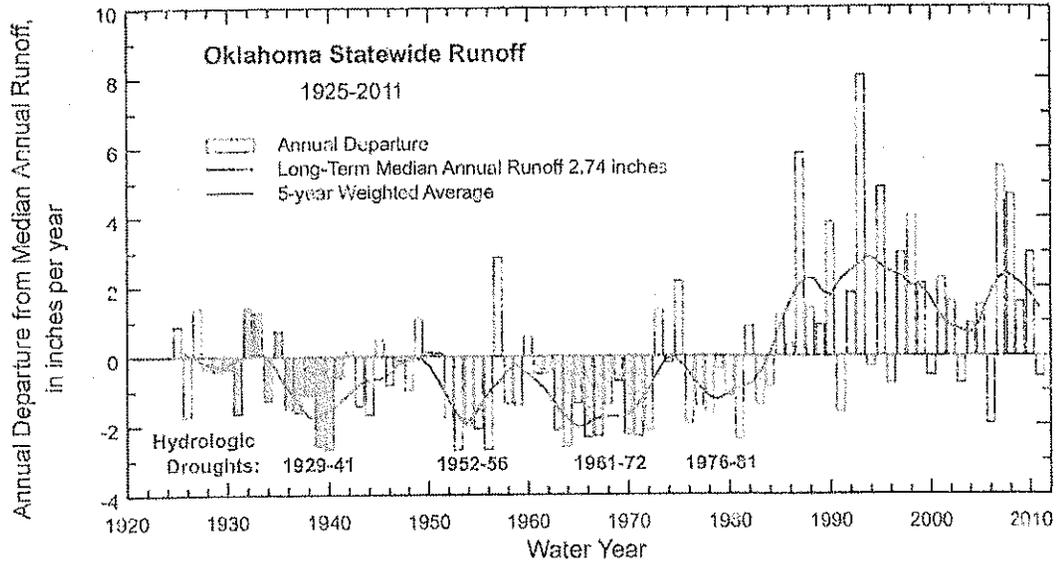
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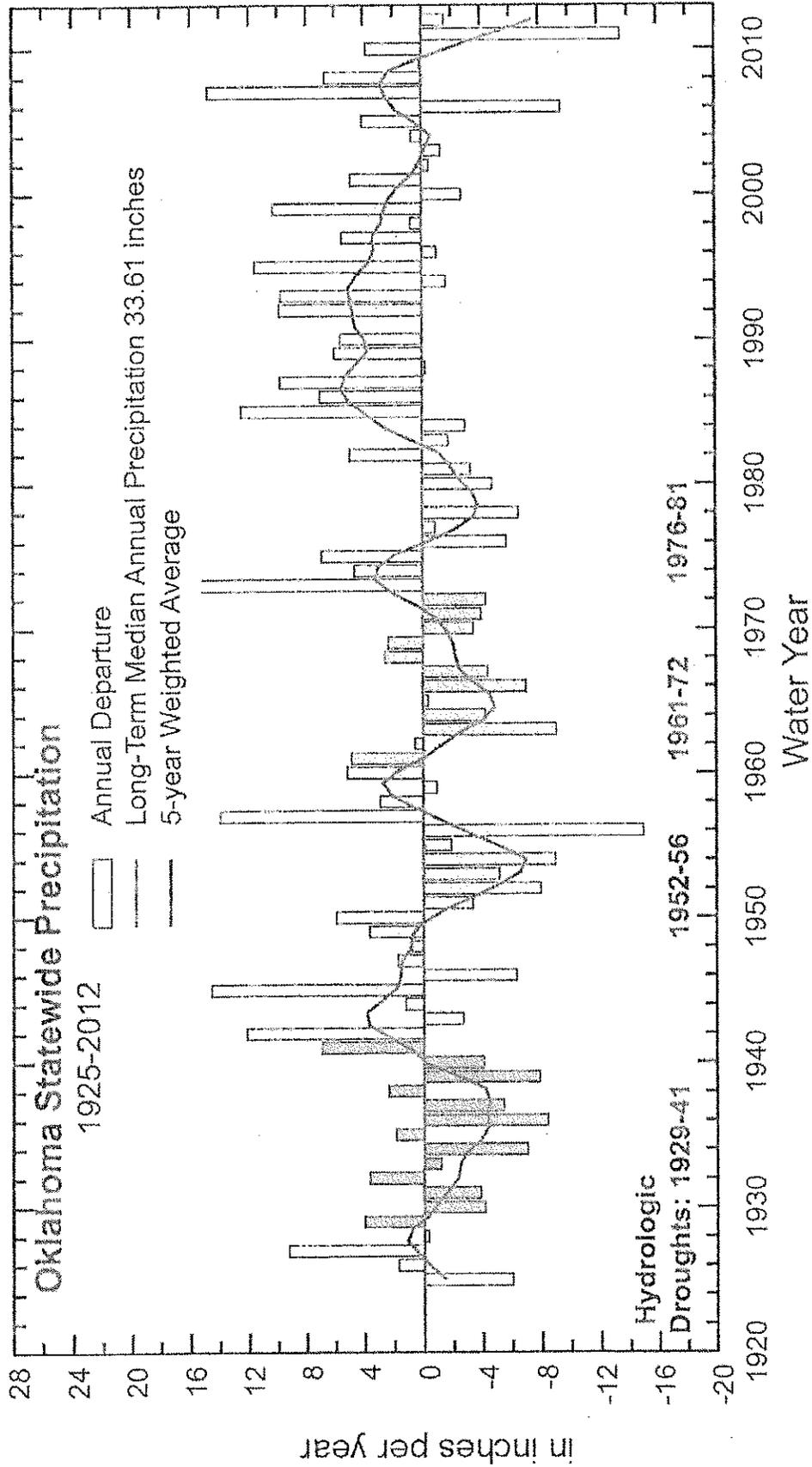
RED RIVER BASIN TRENDS IN STEAMFLOW



LONG-TERM RED RIVER BASIN TRENDS IN STREAMFLOW



Annual Departure from Median Annual Precipitation,



Outline of Remarks by Jerry Barnett, Oklahoma Legal Committee Representative, to Red River Compact Commissioners at April 23, 2013 Annual Meeting of Red River Compact Commission

The case of *Tarrant Regional Water District v. Herrmann* involves claims by Tarrant, a Texas state agency, against multiple Oklahoma statutory provisions which place restrictions on use of Oklahoma stream water outside of Oklahoma. The defendants are the members of the Oklahoma Water Resources Board ("OWRB") as the officials who administer those Oklahoma statutes. In January 2007 Tarrant filed an application with the OWRB for a permit to use 310,000 acre feet of stream water per year from two diversion points on the Kiamichi River in southeastern Oklahoma between the Hugo Lake dam and the Kiamichi's confluence with the Red River. The water is proposed to be used for Tarrant's public water supply provider customers in north central Texas. The court action was commenced in January 2007 in the U.S. District Court for the Western District of Oklahoma. Tarrant asserted that the Oklahoma statutory restrictions interfere with interstate commerce in violation of the Commerce Clause and in violation of the Red River Compact. Tarrant sought declaratory and injunctive remedies. Ultimately the district court granted summary judgment to the OWRB members, holding that to the extent the water sought to be used out of the state is apportioned by the Red River Compact, the dormant Commerce Clause does not preclude Oklahoma's restrictions or requirements concerning such use.

On appeal, in September 2011 the U.S. Court of Appeals for the 10th Circuit affirmed the district court's summary judgment on several grounds. Among other holdings, the Court of Appeals held to the effect that the Red River Compact provides Congressional consent and gives the Oklahoma Legislature wide latitude to impose restrictions on interstate commerce in stream water apportioned to Oklahoma under that compact.

Tarrant subsequently petitioned for and the U.S. Supreme Court granted a writ of certiorari.

In its filings in the Supreme Court, Tarrant primarily asserts that the language of the

Compact, particularly Section 5.05(b)(1)¹ which grants the State of Texas and each other Signatory State "equal rights to the use of" 25% of runoff originating in and undesignated water flowing into Reach II, Subbasin 5 when the flow in the Red River at the Arkansas-Louisiana state line is 3000 cfs or more, entitles Texas to obtain that water wherever it is located in the Subbasin and to cross the state boundary into Oklahoma to do so. Tarrant's secondary argument is that Oklahoma's statutes violate the dormant Commerce Clause and that the Compact does not constitute Congressional consent to Oklahoma's statutes. Tarrant is asking the Supreme Court to reverse the Court of Appeals judgment and let its applications be pursued before the OWRB.

The OWRB members' response in the Supreme Court is that (1) the Compact text, drafting history and three decades of course of conduct all foreclose a right to cross state boundaries to obtain water in Reach II Subbasin 5; and (2) the dormant Commerce Clause does not apply and the Compact insulates Oklahoma's laws from scrutiny. The OWRB members are asking the Supreme Court to affirm the Court of Appeals judgment.

¹ "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."

(Slip Opinion)

OCTOBER TERM, 2012

1

Syllabus

NOTE: Where it is feasible, a syllabus (headnote) will be released, as is being done in connection with this case, at the time the opinion is issued. The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Timber & Lumber Co.*, 200 U. S. 321, 337.

SUPREME COURT OF THE UNITED STATES

Syllabus

TARRANT REGIONAL WATER DISTRICT *v.*
HERRMANN ET AL.

CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR
THE TENTH CIRCUIT

No. 11–889. Argued April 23, 2013—Decided June 13, 2013

The Red River Compact (or Compact) is a congressionally sanctioned agreement that allocates water rights within the Red River basin among the States of Oklahoma, Texas, Arkansas, and Louisiana. The area it governs is divided into five separate subdivisions called “Reaches,” each of which is further divided into smaller “subbasins.” At issue here are rights under the Compact to water located in Oklahoma’s portion of Reach II, subbasin 5. In Reach II, the Compact—recognizing that Louisiana lacks suitable reservoir sites to store water during high flow periods and that the upstream States (Texas, Oklahoma, and Arkansas) were unwilling to release their own stored water for the benefit of a downstream State—granted control over the water in four upstream subbasins (subbasins 1 through 4) to the States in which each subbasin is located and required that water in a fifth subbasin, subbasin 5, be allowed to flow to Louisiana at certain minimum levels. Section 5.05(b)(1) of the Compact gives the States “equal rights” to the use of subbasin 5’s waters when the flow is 3,000 cubic feet per second (CFS) or more, “provided no state is entitled to more than 25 percent of the water in excess of 3,000 [CFS].” Under the Compact, States are also entitled to continue with their intrastate water administration.

Petitioner Tarrant Regional Water District (Tarrant) is a Texas state agency responsible for providing water to north-central Texas and its rapidly growing population. After unsuccessfully attempting to purchase water from Oklahoma and others, Tarrant sought a water resource permit from the Oklahoma Water Resources Board (OWRB), respondents here, to take surface water from a tributary of the Red River at a point located in Oklahoma’s portion of subbasin 5

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of Reach II. Knowing that the OWRB would likely deny its permit application because of Oklahoma water laws that effectively prevent out-of-state applicants from taking or diverting water from within Oklahoma's borders, Tarrant filed suit in federal court simultaneously with its permit application, seeking to enjoin the OWRB's enforcement of the state statutes on grounds that they were pre-empted by federal law in the form of the Compact and violated the Commerce Clause by discriminating against interstate commerce in water. The District Court granted summary judgment for the OWRB, and the Tenth Circuit affirmed.

Held:

1. The Compact does not pre-empt the Oklahoma water statutes. Pp. 9–22.

(a) Tarrant claims that §5.05(b)(1) creates a borderless common in subbasin 5 in which each of the signatory States may cross each other's boundaries to access a shared pool of water. Tarrant observes that §5.05(b)(1)'s "equal rights" language grants each State an equal entitlement to subbasin 5's waters, subject to a 25 percent cap, and argues that its silence concerning state lines indicates that the Compact's drafters did not intend the provision to allocate water according to state borders. The OWRB counters that §5.05(b)(1)'s "equal rights" afford each State an equal opportunity to use subbasin 5's excess water within each State's own borders, but that its silence on cross-border rights indicates that the Compact's drafters had no intention to create any such rights in the signatory States. Pp. 9–11.

(b) Because interstate compacts are construed under contract-law principles, see *Texas v. New Mexico*, 482 U. S. 124, 128, the Court begins by examining the Compact's express terms as the best indication of the parties' intent. However, §5.05(b)(1)'s silence is, at the very least, ambiguous regarding cross-border rights under the Compact, so the Court turns to other interpretive tools to shed light on the drafters' intent. Three things persuade the Court that the Compact did not grant cross-border rights: the well-established principle that States do not easily cede their sovereign powers; the fact that other interstate water compacts have treated cross-border rights explicitly; and the parties' course of dealing. Pp. 11–22.

(1) The sovereign States possess an "absolute right to all their navigable waters and the soils under them for their own common use." *Martin v. Lessee of Waddell*, 16 Pet. 367, 410. So, for example, "[a] court deciding a question of title to [a] bed of navigable water [within a State's boundaries] must . . . begin with a strong presumption against defeat of a State's title." *United States v. Alaska*, 521 U. S. 1, 34. It follows, then, that "[i]f any inference at all is to be drawn from" silence in compacts touching on the States' authority to

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control their waters, "it is that each State was left to regulate the activities of her own citizens." *Virginia v. Maryland*, 540 U. S. 56, 67. Tarrant contends that §5.05(b)(1)'s silence infers that the signatory States dispensed with the core state prerogative to control water within its borders. But since States rarely relinquish their sovereign powers, the better understanding is that there would be a clear indication of such devolution, not inscrutable silence. Tarrant counters that its interpretation would not intrude on any sovereign prerogative of Oklahoma, which would retain its authority to regulate the water within its borders. But adopting Tarrant's reading would necessarily entail assuming that Oklahoma and three other States silently surrendered substantial control over their waters when they agreed to the Compact. Pp. 14–16.

(2) Looking to the customary practices employed in other interstate compacts also helps in ascertaining the parties' intent. See, e.g., *Alabama v. North Carolina*, 560 U. S. 330, _____. Many compacts feature unambiguous language permitting signatory States to cross each other's borders to fulfill obligations under the compacts, and many provide for the terms and mechanics of how such relationships will operate. The absence of comparable provisions in the Red River Compact strongly suggests that cross-border rights were never intended to be part of the agreement. Tarrant claims that not all interstate compacts have such explicit language, but cites only one such compact, and even it sets out a detailed scheme that would apply to any contemplated diversions. Similarly, even if §2.05(d) of the Compact, which gives "[e]ach Signatory State . . . the right to" "[u]se 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," is read to establish cross-border diversions, it does so through express language, not through an inference from silence. Pp. 16–20.

(3) The parties' conduct under the Compact also undermines Tarrant's position. See *Alabama v. North Carolina*, 560 U. S., at _____. Once the Compact was approved in 1980, no signatory State pressed for a cross-border diversion until Tarrant filed suit in 2007. And Tarrant's earlier offer to purchase water from Oklahoma was a strange decision if Tarrant believed the Compact entitled it to demand water without payment. Nor is there any indication that Tarrant, any other Texas agency, or Texas itself previously made any mention of cross-border rights within the Compact; and none of the other signatory States has ever made such a claim. P. 20.

(4) Tarrant's remaining arguments—that its interpretation is necessary to realize the "structure and purpose of Reach II"; and that §5.05(b)(1)'s 25 percent cap on each State's access to subbasin 5's ex-

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cess water implies that if a State cannot access sufficient water within its borders to meet the cap, it must be able to cross borders to reach that water—are unpersuasive. Pp. 20–22.

2. The Oklahoma water statutes also do not run afoul of the Commerce Clause. Tarrant claims that the statutes discriminate against interstate commerce by preventing water left unallocated under the Compact from being distributed out of State. But Tarrant's assumption that some water is left "unallocated" is incorrect. The interpretive comment for Article V of the Compact makes clear that when the flow is above 3,000 CFS, "all states are free to use whatever amount of water they can put to beneficial use," subject to the requirement that if the amount of available water cannot satisfy all of those uses, "each state will honor the other's right to 25% of the excess flow." If more than 25 percent of subbasin 5's water is located in Oklahoma, that water is not "unallocated"; rather, it is allocated to Oklahoma unless and until another State calls for an accounting and Oklahoma is asked to refrain from utilizing more than its entitled share. Pp. 22–24.

656 F. 3d 1222, affirmed.

SOTOMAYOR, J., delivered the opinion for a unanimous Court.

Opinion of the Court

NOTICE: This opinion is subject to formal revision before publication in the preliminary print of the United States Reports. Readers are requested to notify the Reporter of Decisions, Supreme Court of the United States, Washington, D. C. 20543, of any typographical or other formal errors, in order that corrections may be made before the preliminary print goes to press.

SUPREME COURT OF THE UNITED STATES

No. 11-889

TARRANT REGIONAL WATER DISTRICT,
PETITIONER *v.* RUDOLF JOHN
HERRMANN ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF
APPEALS FOR THE TENTH CIRCUIT

[June 13, 2013]

JUSTICE SOTOMAYOR delivered the opinion of the Court.

The Red River Compact, (or Compact), 94 Stat. 3305, allocates water rights among the States within the Red River basin as it winds through Texas, Oklahoma, Arkansas, and Louisiana. Petitioner Tarrant Regional Water District (Tarrant), a Texas agency, claims that it is entitled to acquire water under the Compact from within Oklahoma and that therefore the Compact pre-empts several Oklahoma statutes that restrict out-of-state diversions of water. In the alternative, Tarrant argues that the Oklahoma laws are unconstitutional restrictions on interstate commerce. We hold that Tarrant's claims lack merit.

I

A

The Red River (or River) begins in the Llano Estacado Mesa on the border between New Mexico and Texas. From this broad plain, it first runs through the Texas Panhandle and then marks the border between Texas and Oklahoma. It continues in an easterly direction until it reaches the shared border with Arkansas. Once the River

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enters Arkansas, it turns southward and flows into Louisiana, where it empties into the Mississippi and Atchafalaya Rivers.

As an important geographic feature of this region, the Red River has lent its name to a valley, a Civil War campaign, and a famed college football rivalry between the Longhorns of Texas and the Sooners of Oklahoma. But college pride has not been the only source of controversy between Texas and Oklahoma regarding the Red River. The River has been the cause of numerous historical conflicts between the two States, leading to a mobilization of their militias at one time, *Oklahoma v. Texas*, 258 U. S. 574, 580 (1922), and the declaration of martial law along a stretch of the River by Oklahoma Governor "Alfalfa Bill" Murray at another, see Okla. H. Res. 1121, 50th Legislature, 2d Sess. (2006) (resolution commemorating "Alfalfa Bill" Murray's actions during the "Red River Bridge War"). Such disputes over the River and its waters are a natural result of the River's distribution of water flows. The River's course means that upstream States like Oklahoma and Texas may appropriate substantial amounts of water from both the River and its tributaries to the disadvantage of downstream States like Arkansas and especially Louisiana, which lacks sufficiently large reservoirs to store water.

Absent an agreement among the States, disputes over the allocation of water are subject to equitable apportionment by the courts, *Arizona v. California*, 460 U. S. 605, 609 (1983), which often results in protracted and costly legal proceedings. Thus in 1955, to forestall future disputes over the River and its water, Congress authorized the States of Arkansas, Louisiana, Oklahoma, and Texas to negotiate a compact to apportion the water of the Red River basin among themselves. See Act of Aug. 11, 1955, Pub. L. 346, 69 Stat. 654. These negotiations lasted over 20 years and finally culminated in the signing of the Red

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River Compact in 1978. Congress approved the Compact in 1980, transforming it into federal law. See Act of Dec. 22, 1980, 94 Stat. 3305; Compact, 1 App. 7–51.

One of the Compact's principal purposes was "[t]o provide an equitable apportionment among the Signatory States of the water of the Red River and its tributaries." §1.01(b), *id.*, at 9. The Compact governs the allocation of water along the Red River and its tributaries from the New Mexico and Texas border to its terminus in Louisiana. §§2.12(a)–(e), *id.*, at 13. This stretch is divided into five separate subdivisions called "Reach[es]," *ibid.*, each of which is further divided into smaller "subbasins," see, e.g., §§5.01–5.05, *id.*, at 22–26 (describing subbasins 1 through 5 of Reach II). (See Appendix A, *infra*, for a map.)

At issue in this case are rights under the Compact to water located in Oklahoma's portion of subbasin 5 of Reach II, which occupies "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." §5.05(a), 1 App. 24–25. (See Appendix B, *infra*, for a map.) The Compact's interpretive comments¹ explain that during negotiations, Reach II posed the greatest difficulty to the parties' efforts to reach agreement. Comment on Art. V, 1 App. 27. The problem was that Louisiana, the farthest downstream State, lacks suitable reservoir sites and therefore cannot store water during high flow periods to meet its future needs. The upstream States (Texas, Oklahoma, and Arkansas), which control the River's flow, were unwilling to release water stored within their own reservoirs for the benefit of any downstream States, like

¹Interpretive comments were included in the Compact so that future readers "might be apprised of the intent of the Compact Negotiation Committee with regard to each Article of the Compact." Compact, Comment on Preamble, 1 App. 9.

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Louisiana. Without any such release, there would be no guaranteed flow of water to Louisiana.

The provisions of the Compact relating to Reach II were crafted to address this problem. To this end, Reach II was divided into five subbasins. The upstream subbasins, numbered 1 through 4, were drawn to end at "existing, authorized or proposed last downstream major damsites," see, e.g., §5.01(a), *id.*, at 22, on the tributaries leading to the Red River before reaching the main stem of the River. These dams allow the parties managing them to control water along the tributaries before it travels farther downstream and joins the flow of the main stem of the River. For the most part, the Compact granted control over the water in these subbasins to the States in which each subbasin is located.² The remaining subbasin, subbasin 5, instead requires that water be allowed to flow to Louisiana through the main stem of the River at certain minimum levels, assuring Louisiana an allocation of the River's waters and solving its flowthrough problem.

The provision of the Compact central to the present dispute is §5.05(b)(1), which sets the following allocation during times of normal flow:

"(1) The Signatory States shall have equal rights to the use of runoff originating in subbasin 5 and un-

²Within subbasins 1, 2, and 4, water was fully apportioned to a single State. See Compact §5.01(b), *id.*, at 22-23 (apportioning water of subbasin 1 and its "unrestricted use" to Oklahoma); §5.02(b), *id.*, at 23 (same for Texas with respect to subbasin 2); §5.04(b), *id.*, at 24 (same for Texas with respect to subbasin 4). Only subbasin 3, which includes portions of Oklahoma and Arkansas, breaks from this pattern and was divided along the lines of a 60-to-40 split, with both States having "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 the 40 percent of the total runoff originating below the following existing, authorized or proposed last major downstream damsites in Oklahoma to flow into Arkansas." §5.03(b), *id.*, at 23-24.

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designated 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 [hereinafter CFS] or more, provided no state is entitled to more than 25 percent of the water in excess of 3,000 [CFS].”³ *Id.*, at 25.

In these normal circumstances (*i.e.*, when flows at the Arkansas-Louisiana border are above 3,000 CFS), this provision and its interpretive comment make clear that “all states are free to use whatever amount of water they can put to beneficial use.” Comment on Art. V, *id.*, at 30. But if the amount of water above 3,000 CFS cannot satisfy all such uses, then “each state will honor the other’s right to 25% of the excess flow.” *Ibid.* However, when the flow of the River diminishes at the Arkansas-Louisiana border, the upstream States must permit more water to reach Louisiana.⁴ Subbasin 5’s allocation scheme allows up-

³The Compact defines “undesignated water” as “all water released from storage other than ‘designated water.’” §3.01(l), *id.*, at 17. “[D]esignated water” means “water released from storage, paid for by non-Federal interests, for delivery to a specific point of use or diversion.” §3.01(k), *ibid.*

⁴In such circumstances, the two relevant paragraphs provide:

“(2) Whenever the flow of the Red River at the Arkansas-Louisiana state boundary is less than 3,000 [CFS], but more than 1,000 [CFS], 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.

“(3) Whenever the flow of the Red River at the Arkansas-Louisiana state boundary falls below 1,000 [CFS], 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 in subbasin 5 within their respective states to flow into the Red River as required to maintain a 1,000 [CFS] flow at the Arkansas-Louisiana state boundary.” §5.05(b), *id.*, at 25.

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stream States to keep the water that they have stored, but also ensures that Louisiana will receive a steady supply of water from the Red River, with each upstream State contributing during times of low flow.

To ensure that its apportionments are honored, the Compact includes an accounting provision, but an accounting is not mandatory “until one or more affected states deem the accounting necessary.” §2.11, *id.*, at 13; see Comment on Art. II, *id.*, at 15–16. This is because the “extensive gaging and record keeping required” to carry out such an accounting would impose “a significant financial burden on the involved states.” *Id.*, at 16. Given these costs, the signatory States did “not envisio[n] that it w[ould] be undertaken as a routine matter.” *Ibid.* Indeed, it appears that no State has ever asked for such an accounting in the Compact’s history. See Brief for Respondents 45; Reply Brief 11–12.

While the Compact allocates water rights among its signatories, it also provides that it should not “be deemed to . . . [i]nterfere 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.” §2.10, 1 App. 12. Rather, “[s]ubject to the general constraints of water availability and the apportionment of the Compact, each state [remains] free to continue its existing internal water administration.” Comment on Art. II, *id.*, at 14. Even during periods of water shortage, “no attempt is made to specify the steps that will be taken [by States to ensure water deliveries]; it is left to the state’s internal water administration.” *Ibid.*

B

In the years since the Red River Compact was ratified by Congress, the region’s population has increased dramatically. In particular, the population of the Dallas-Fort

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Worth metropolitan area in north Texas has grown from roughly 5.1 million inhabitants in 2000 to almost 6.4 million in 2010, a jump of over 23 percent and among the largest in the United States during this period. See Dept. of Commerce, Census Bureau, P. Mackun & S. Wilson, *Population Distribution and Change: 2000 to 2010* (Mar. 2011). This growth has strained regional water supplies, and north Texas' need for water has been exacerbated in recent years by a long and costly drought. See generally Galbraith, *A Drought More Than Texas-Size*, *International Herald Tribune*, Oct. 3, 2011, p. 4.

Against this backdrop, petitioner Tarrant, a Texas state agency responsible for providing water to north-central Texas (including the cities of Fort Worth, Arlington, and Mansfield), has endeavored to secure new sources of water for the area it serves. From 2000 to 2002, Tarrant, along with several other Texas water districts, offered to purchase water from Oklahoma and the Choctaw and Chickasaw Nations. See 2 App. 336–382. But these negotiations were unsuccessful and Tarrant eventually abandoned these efforts.

Because Texas' need for water only continued to grow, Tarrant settled on a new course of action. In 2007, Tarrant sought a water resource permit from the Oklahoma Water Resources Board (OWRB),⁵ respondents here, to take 310,000 acre feet⁶ per year of surface water from the

⁵Under §2.10 of the Compact each signatory State retains “the right or power . . . to regulate within its boundaries the appropriation, use, and control of water.” *Id.*, at 12. Thus, the Compact does not expressly pre-empt any state laws that address the control of water. Oklahoma law, in turn, requires that any “state or federal governmental agency” that “intend[s] to acquire the right to the beneficial use of any water” in Oklahoma must apply to the OWRB for “a permit to appropriate” water before “commencing any construction” or “taking [any water] from any constructed works.” Okla. Stat., Tit. 82, §105.9 (West 2013).

⁶An acre-foot is equivalent to the volume of one acre of surface area filled to a depth of one foot. Webster's Third New International Dic-

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Kiamichi River, a tributary of the Red River located in Oklahoma. Tarrant proposed to divert the Kiamichi River, at a point located in subbasin 5 of Reach II, before it discharges into the Red River and, according to Tarrant, becomes too saline for potable use.

Tarrant knew, however, that Oklahoma would likely deny its permits because various state laws (collectively, the Oklahoma water statutes) effectively prevent out-of-state applicants from taking or diverting water from within Oklahoma's borders. These statutes include a requirement that the OWRB consider, when evaluating an application to take water out of State, whether that water "could feasibly be transported to alleviate water shortages in the State of Oklahoma." Okla. Stat., Tit. 82, §105.12(A)(5) (West 2013). The statutes also require that no permit issued by the OWRB to use water outside of the State shall "[i]mpair the ability of the State of Oklahoma to meet its obligations under any interstate stream compact." §105.12A(B)(1). A separate provision creates a permitting review process that applies only to out-of-state water users. §105.12(F). Oklahoma also requires legislative approval for out-of-state water-use permits, §105.12A(D), and further provides that "[w]ater use within Oklahoma . . . be developed to the maximum extent feasible for the benefit of Oklahoma so that out-of-state downstream users will not acquire vested rights therein to the detriment of the citizens of this state," §1086.1(A)(3). Interpreting these laws, Oklahoma's attorney general has concluded that "we consider the proposition unrealistic that an out-of-state user is a proper permit applicant before the [OWRB]" because "[w]e can find no intention to create the possibility that such a valuable resource as water may become bound, without compensation, to use by an out-of-state user." 1 App. 118.

tionary 19 (1966).

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When Tarrant filed its permit application, it also filed suit against respondents in Federal District Court. As relevant here, Tarrant sought to enjoin enforcement of the Oklahoma water statutes by the OWRB. Tarrant argued that the statutes, and the interpretation of them adopted by Oklahoma's attorney general, were pre-empted by federal law and violated the Commerce Clause by discriminating against interstate commerce in water.

The District Court granted summary judgment for the OWRB on both of Tarrant's claims. See No. CIV-07-0045-HE, 2010 WL 2817220, *4 (WD Okla., July 16, 2010); No. CIV-07-0045-HE (WD Okla., Nov. 18, 2009), App. to Pet. for Cert. 72a-73a, 2009 WL 3922803, *8. The Tenth Circuit affirmed. 656 F. 3d 1222, 1250 (2011).⁷

We granted Tarrant's petition for a writ of certiorari, 568 U. S. ____ (2013), and now affirm the judgment of the Tenth Circuit.

II

A

Tarrant claims that under §5.05(b)(1) of the Compact, it has the right to cross state lines and divert water from Oklahoma located in subbasin 5 of Reach II and that the Oklahoma water statutes interfere with its ability to exercise that right. Section 5.05(b)(1) provides:

"The Signatory States shall have equal rights to the use of runoff originating in subbasin 5 and undesignated water following into subbasin 5, so long as the flow of the Red River at the Arkansas-Louisiana state boundary is 3,000 [CFS] or more, provided no state is entitled to more than 25 percent of the water in excess of 3,000 [CFS]." 1 App. 25.

⁷The parties have stipulated that OWRB will not take action on Tarrant's application until this litigation has concluded. Brief for Petitioner 16.

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In Tarrant's view, this provision essentially creates a borderless common in which each of the four signatory States may cross each other's boundaries to access a shared pool of water. Tarrant reaches this interpretation in two steps. First, it observes that §5.05(b)(1)'s "equal rights" language grants each State an equal entitlement to the waters of subbasin 5, subject to a 25 percent cap. Second, Tarrant argues §5.05(b)(1)'s silence concerning state lines indicates that the Compact's drafters did not intend to allocate water according to state borders in this section. According to Tarrant, "the '25 percent' language [of §5.05(b)(1)] makes clear that, in exercising its 'equal rights' to the common pool of water, no State may take more than a one-quarter *share*," Reply Brief 3, but any of the signatory States may "cross state lines to obtain [its] shar[e] of Subbasin 5 waters," Brief for Petitioner 32.

The OWRB disputes this reading. In its view, the "equal rights" promised by §5.05(b)(1) afford each State an equal opportunity to make use of the excess water within subbasin 5 of Reach II but only within each State's own borders. This is because the OWRB reads §5.05(b)(1)'s silence differently from Tarrant. The OWRB interprets that provision's absence of language granting any cross-border rights to indicate that the Compact's drafters had no intention to create any such rights in the signatory States.

Unraveling the meaning of §5.05(b)(1)'s silence with respect to state lines is the key to resolving whether the Compact pre-empts the Oklahoma water statutes.⁸ If

⁸The Compact Clause of the Constitution provides that "[n]o State shall, without the Consent of Congress, . . . enter into any Agreement or Compact with another State." Art. I, §10, cl. 3. Accordingly, before a compact between two States can be given effect it must be approved by Congress. See *Virginia v. Maryland*, 540 U. S. 56, 66 (2003). Once a compact receives such approval, it is "transform[ed] . . . into a law of the United States." *Ibid.* (internal quotation marks omitted). The

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§5.05(b)(1)'s silence means that state borders are irrelevant to the allocation of water in subbasin 5 of Reach II, then the Oklahoma water laws at issue conflict with the cross-border rights created by federal law in the form of the Compact and must be pre-empted. But if §5.05(b)(1)'s silence instead reflects a background understanding on the part of the Compact's drafters that state borders were to be respected within the Compact's allocation, then the Oklahoma statutes do not conflict with the Compact's allocation of water.

B

Interstate compacts are construed as contracts under the principles of contract law. *Texas v. New Mexico*, 482 U. S. 124, 128 (1987). So, as with any contract, we begin by examining the express terms of the Compact as the best indication of the intent of the parties, see also *Montana v. Wyoming*, 563 U. S. ____, ____, and n. 4, ____, (2011) (slip op., at 5, and n. 4, 17); Restatement (Second) of Contracts §203(b) (1979).

Tarrant argues that because other provisions of the Compact reference state borders, §5.05(b)(1)'s silence with respect to state lines must mean that the Compact's drafters intended to permit cross-border diversions. For example, §5.03(b), which governs subbasin 3 of Reach II, provides that

“[t]he 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 . . . 40 percent of the total runoff origi-

Supremacy Clause, Art. VI, cl. 2, then ensures that a congressionally approved compact, as a federal law, pre-empts any state law that conflicts with the Compact. See *Fidelity Fed. Sav. & Loan Assn. v. De la Cuesta*, 458 U. S. 141, 152–153 (1982).

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nating below the following existing, authorized or proposed last major downstream damsites in Oklahoma to flow into Arkansas." 1 App. 23-24 (emphasis added).

Section 6.03(b), which covers subbasin 3 of Reach III, similarly provides that "Texas and Louisiana *within their respective boundaries* shall each have the unrestricted use of the water of this subbasin subject to the following [conditions]." *Id.*, at 33 (emphasis added). Thus, §5.03(b) and §6.03(b) mimic §5.05(b)(1) in allocating water rights within a subbasin, but differ in that they make explicit reference to water use "within" state boundaries. Relying on the *expressio unius* canon of construction, Tarrant finds that §5.05(b)'s silence regarding borders is significant because "[w]here Congress includes particular language in one section of a statute but omits it in another section of the same Act, it is generally presumed [that] Congress acts intentionally and purposely in the disparate inclusion or exclusion." Brief for Petitioner 29 (quoting *Russello v. United States*, 464 U. S. 16, 23 (1983)).

But Tarrant's argument fails to account for other sections of the Compact that cut against its reading. For example, §5.05(b)(3), which governs the waters of subbasin 5 in Reach II when flows are below 1,000 CFS, requires that during such periods, Arkansas, Texas, and Oklahoma allow water "*within their respective states* to flow into the Red River as required to maintain a 1,000 [CFS] flow at the Arkansas-Louisiana state boundary." 1 App. 25 (emphasis added). Obviously none of the upstream States can redirect water that lies outside of their borders, so the phrase "within their respective states" is superfluous in §5.05(b)(3). In contrast, §5.05(b)(2), which governs when the River's flow at the Arkansas-Louisiana border is above 1,000 CFS but below 3,000 CFS, requires that upstream States allow a flow to Louisiana equivalent to 40 percent

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of total weekly runoff originating within the subbasin and 40 percent of undesignated water flowing into subbasin 5 of Reach II. *Id.*, at 25. This language can only refer to water within each State's borders because otherwise *each* State would have to contribute 40 percent to the total water flow, which would add up to more than 100 percent. Read together and to avoid absurd results, §§5.05(b)(2) and (3) suggest that each upstream State is individually responsible for ensuring that sufficient subbasin 5 water located *within its respective* borders flows down to Louisiana, even though §5.05(b)(2) lacks any explicit reference to state lines.

Applying Tarrant's understanding of §5.05(b)(1)'s silence regarding state lines to other of the Compact's provisions would produce further anomalous results. Consider §6.01(b). That provision states that "Texas is apportioned sixty (60) percent of the runoff of [subbasin 1 of Reach III] and shall have unrestricted use thereof; Arkansas is entitled to forty (40) percent of the runoff of this subbasin." *Id.*, at 32. Because Texas is upstream from Arkansas, water flows from Texas to Arkansas. Given this situation, the commonsense reason for §6.01(b)'s 60-to-40 allocation is to prevent Texas from barring the flow of water to Arkansas. While there is no reference to state boundaries in the section's text, the unstated assumption underlying this provision is that Arkansas must wait for its 40 percent share to go through Texas before it can claim it. But applying Tarrant's understanding of silence regarding state borders to this section would imply that Arkansas could enter into Texas without having to wait for the water that will inevitably reach it. This counterintuitive outcome would thwart the self-evident purposes of the Compact. Further, other provisions of the Compact share this structure of allocating a proportion of water that will

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flow from an upstream State to a downstream one.⁹ Accepting Tarrant's reading would upset the balance struck by all these sections.

At the very least, the problems that arise from Tarrant's proposed reading suggest that §5.05(b)(1)'s silence is ambiguous regarding cross-border rights under the Compact. We therefore turn to other interpretive tools to shed light on the intent of the Compact's drafters. See *Oklahoma v. New Mexico*, 501 U. S. 221, 235, n. 5 (1991).¹⁰ Three things persuade us that cross-border rights were not granted by the Compact: the well-established principle that States do not easily cede their sovereign powers, including their control over waters within their own territories; the fact that other interstate water compacts have treated cross-border rights explicitly; and the parties' course of dealing.

1

The background notion that a State does not easily cede its sovereignty has informed our interpretation of interstate compacts. We have long understood that as sovereign entities in our federal system, the States possess an

⁹See Compact §4.01(b), 1 App. 18 ("The annual flow within this sub-basin is hereby apportioned sixty (60) percent to Texas and forty (40) percent to Oklahoma"); §6.02(b), *id.*, at 32 ("Arkansas is apportioned sixty (60) percent of the runoff of this subbasin and shall have unrestricted use thereof; Louisiana is entitled to forty (40) percent of the runoff of this subbasin").

¹⁰There is, however, one interpretive tool that is inapplicable here: the presumption against pre-emption. The Court of Appeals repeatedly referenced and relied upon the presumption in its opinion. See 656 F. 3d 1222, 1239, 1242, 1245–1246 (CA10 2011). Yet the presumption against pre-emption is rooted in "respect for the States as 'independent sovereigns in our federal system'" and "assume[s] that 'Congress does not cavalierly pre-empt'" state laws. *Wyeth v. Levine*, 555 U. S. 555, 565–566, n. 3 (2009). When the States themselves have drafted and agreed to the terms of a compact, and Congress' role is limited to approving that compact, there is no reason to invoke the presumption.

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“absolute right to all their navigable waters and the soils under them for their own common use.” *Martin v. Lessee of Waddell*, 16 Pet. 367, 410 (1842). Drawing on this principle, we have held that ownership of submerged lands, and the accompanying power to control navigation, fishing, and other public uses of water, “is an essential attribute of sovereignty,” *United States v. Alaska*, 521 U. S. 1, 5 (1997). Consequently, “[a] court deciding a question of title to [a] bed of navigable water [within a State’s boundaries] must . . . begin with a strong presumption’ against defeat of a State’s title.” *Id.*, at 34 (quoting *Montana v. United States*, 450 U. S. 544, 552 (1981)). See also *Solid Waste Agency of Northern Cook Cty. v. Army Corps of Engineers*, 531 U. S. 159, 174 (2001); *Utah Div. of State Lands v. United States*, 482 U. S. 193, 195 (1987).

Given these principles, when confronted with silence in compacts touching on the States’ authority to control their waters, we have concluded that “[i]f any inference at all is to be drawn from [such] silence on the subject of regulatory authority, we think it is that each State was left to regulate the activities of her own citizens.” *Virginia v. Maryland*, 540 U. S. 56, 67 (2003). Cf. *New Jersey v. New York*, 523 U. S. 767, 783, n. 6 (1998) (“[T]he silence of the Compact was on the subject of settled law governing avulsion, which the parties’ silence showed no intent to modify”).

Tarrant asks us to infer from §5.05(b)(1)’s silence regarding state borders that the signatory States have dispensed with the core state prerogative to control water within their own boundaries.¹¹ But as the above demon-

¹¹Of course, the power of States to control water within their borders may be subject to limits in certain circumstances. For example, those imposed by the Commerce Clause. See *Sporhase v. Nebraska ex rel. Douglas*, 458 U. S. 941, 954–958 (1982). Here we deal only with whether the parties’ silence on state boundaries in the allocation of water under a compact suggests that borders are irrelevant for that

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strates, States rarely relinquish their sovereign powers, so when they do we would expect a clear indication of such devolution, not inscrutable silence. We think that the better understanding of §5.05(b)(1)'s silence is that the parties drafted the Compact with this legal background in mind, and therefore did not intend to grant each other cross-border rights under the Compact.

In response, Tarrant contends that its interpretation would not intrude on any sovereign prerogative of Oklahoma because that State would retain its authority to regulate the water within its borders. Because anyone seeking water from Oklahoma would still have to apply to the OWRB, receive a permit, and abide by its conditions, Tarrant argues that Oklahoma's sovereign authority remains untouched by its interpretation. But Tarrant cannot have it both ways. Adopting Tarrant's reading would necessarily entail assuming that Oklahoma and three other States silently surrendered substantial control over the water within their borders when they agreed to the Compact. Given the background principles we have described above, we find this unlikely to have been the intent of the Compact's signatories.

2

Looking to the customary practices employed in other interstate compacts also helps us to ascertain the intent of the parties to this Compact. See *Alabama v. North Carolina*, 560 U.S. 330 ___, ___ (2010) (slip op., at 9); *Oklahoma*, 501 U.S., at 235, n. 5; *Texas v. New Mexico*, 462 U.S. 554, 565 (1983). See also Restatement (Second) of Contracts §203(b) (explaining that "usage of trade" may be relevant in interpreting a contract). Many of these other compacts feature language that unambiguously permits

allocation. As noted *infra*, at 23–24, Tarrant has not raised any Commerce Clause challenge to Oklahoma's control of the water allocated to it by the Compact.

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signatory States to cross each other's borders to fulfill obligations under the compacts. See, e.g., Amended Bear River Compact, Art. VIII(A), 94 Stat. 12 (“[N]o State shall deny the right of another signatory State . . . to acquire rights to the use of water . . . in one State for use of water in another”).¹² The absence of comparable language in the Red River Compact counts heavily against Tarrant’s reading of it.

Tellingly, many of these compacts provide for the terms and mechanics of how such cross-border relationships will operate, including who can assert such cross-border rights, see, e.g., Kansas-Nebraska Big Blue River Compact, Art. VII(1), 86 Stat. 198, who should bear the costs of any cross-border diversions, see, e.g., Belle Fourche River Compact, Art. VI, 58 Stat. 96–97, and how such diversions should be administered, Arkansas River Basin Compact, Kansas-Oklahoma, Art. VII(A), 80 Stat. 1411. See also Brief for Professors of Law and Political Science as *Amici Curiae* 11–14 (giving more examples).

Provisions like these are critical for managing the complexities that ensue from cross-border diversions. Consider the mechanics of a cross-border diversion or taking of water in this case. If Tarrant were correct, then appli-

¹²See also Amended Costilla Creek Compact, Art. III(2), 77 Stat. 353 (“Each State grants for the benefit of the other . . . the rights . . . in one State for use in the other”); Klamath River Basin Compact, Art. V(A), 71 Stat. 500 (“Each state hereby grants for the benefit of the other . . . the right . . . in one state for use in the other”); Snake River Compact, Art. VIII(A), 64 Stat. 32 (“[N]either State shall deny the right of the other State to acquire rights to the use of water . . . in one State for use in the other”); South Platte River Compact, Art. VI(1), 44 Stat. 198 (“Colorado consents that Nebraska and its citizens may . . . divert water from the South Platte River within Colorado for use in Nebraska”); Upper Colorado River Basin Compact, Art. IX(a), 63 Stat. 37 (“[N]o State shall deny the right of another signatory State . . . to acquire rights to the use of water . . . in an upper signatory State for consumptive use in a lower signatory State”).

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cants from Arkansas, Texas, and Louisiana could all apply to the OWRB for permits to take water from Oklahoma. The OWRB would then be obligated to determine the total amount of water in Oklahoma beyond the 25 percent cap created in §5.05(b)(1), given that the Compact would only obligate Oklahoma to deliver water beyond its quarter share. This alone would be a herculean task because the Compact does not require ongoing monitoring or accounting, see Compact §2.11, 1 App. 13, and not all of the water in subbasin 5 is located or originates in Oklahoma. Moreover, the OWRB would be tasked with determining the priority under the Compact of applicants from other States. This would almost certainly require the OWRB to not only determine whether Oklahoma had received more or less than its 25 percent allotment, but whether other States had as well. Put plainly, the end result would be a jurisdictional and administrative quagmire. The provisions in the other interstate water compacts resolve these complications. The absence of comparable provisions in the Red River Compact strongly suggests that cross-border rights were never intended to be part of the States' agreement.

Tarrant counters that not all interstate compacts that permit cross-border diversions have explicit language to this effect. On this front, Tarrant manages to identify one interstate compact that it contends permits cross-border diversions without express language to that effect, the Upper Niobrara River Compact, Pub. L. 91-52, 83 Stat. 86. Tarrant observes that this compact, which deals with a river mostly located in Nebraska with only a small portion in Wyoming, provides that "[t]here shall be no restrictions on the use of the surface waters of [the river] by Wyoming." See Art. V(A)1, *id.*, at 88. Tarrant suggests that this language, coupled with the fact that the bulk of the river is in Nebraska, implicitly indicates that the compact grants Wyoming a right to enter Nebraska and

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use the river's water. First, we are not convinced that a single compact's failure to reference state borders does much to detract from the overall custom in this area. See *supra*, at 16–18, and n. 12. Second, the Upper Niobrara River Compact is not a helpful counterexample for Tarrant. The general provision that Tarrant quotes is paired with a host of detailed conditions. See Arts. V(A)1(a)–(f), 83 Stat. 88. Contrary to Tarrant's position, then, assuming that the Upper Niobrara River compact does create any cross-border rights, it does so not through silence, but through the detailed scheme that would apply to any such contemplated diversions.

Tarrant also argues that §2.05(d) of the Red River Compact, which provides that “[e]ach Signatory State shall have the right to” “[u]se 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,” 1 App. 11, in fact authorizes cross-border diversions. Because the present border between Texas and Oklahoma east of the Texas Panhandle is set by the vegetation line on the south bank of the River, Red River Boundary Compact, 114 Stat. 919, Tarrant contends that §2.05(d) reflects an understanding on the part of the Compact's drafters that state borders could be crossed. But the issue is not as simple as Tarrant makes it out to be. When the Compact was drafted, the Texas-Oklahoma border was fixed at the south bank of the River. See *Texas v. Oklahoma*, 457 U. S. 172 (1982). If Texas was able to access water through the south bank of the River—an issue left unbriefed by the parties—the Compact's framers may have believed that Texas could reach the River and take water from it without having to enter Oklahoman land, casting doubt on Tarrant's theory. In any event, even if §2.05(d) is read to establish a cross-border right, it does so through express language setting forth the location and purposes under which such an incursion is permissible.

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This is different from the inference from silence that Tarrant asks us to draw in §5.05(b)(1).

3

The parties' conduct under the Compact also undermines Tarrant's position. A "part[y's] course of performance under the Compact is highly significant" evidence of its understanding of the compact's terms. *Alabama v. North Carolina*, 560 U. S., at ___ (slip op., at 14). Since the Compact was approved by Congress in 1980, no signatory State had pressed for a cross-border diversion under the Compact until Tarrant filed its suit in 2007. Brief for Respondents 26, 49–51. Indeed, Tarrant attempted to purchase water from Oklahoma over the course of 2000 until 2002, see *supra*, at 7, a strange offer if Tarrant believed it was entitled to demand such water without payment under the Compact.

In response, Tarrant maintains that there were "compelling business reasons" for it to purchase water. Reply Brief 17. We are unpersuaded. If Tarrant believed that it had a right to water located in Oklahoma, there would have been "compelling business reasons" to mention this right given that billions of dollars were at stake. See 2 App. 362–363 (summarizing Texas purchase proposal). Yet there is no indication that Tarrant or any other Texas agency or the State of Texas itself previously made any mention of cross-border rights within the Compact, and none of the other signatory States has ever made such a claim.

4

The Compact creates no cross-border rights in Texas. Tarrant's remaining arguments do not persuade us otherwise.

First, Tarrant argues that its interpretation of the Compact is necessary to realize the "structure and purpose

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of Reach II.” Brief for Petitioner 34–38. Tarrant contends that because the boundary of subbasin 5 is set by the location of the last existing, authorized, or proposed sites for a downstream dam before the Red River, see Compact §§5.01(a), 5.02(a), 5.03(b), 5.04(a), 1 App. 22–24, the Compact allows each of the States upstream from Louisiana to prevent water from flowing from its tributaries into subbasin 5. Tarrant reasons that each State will therefore hold whatever water it needs in its upstream basins. Given this, Tarrant maintains that any water that a State voluntarily allows to reach subbasin 5 must be surplus water that State did not intend to use, and if the upstream State has no need for that water, then there is no reason not to allow other States to access and use it, even across borders.

This argument is founded on a shaky premise: It assumes that flows from these dammed-up tributaries are the sole source of water in subbasin 5. But §5.05(b)(1) explains that “[s]ignatory States shall have equal rights to the use of runoff originating in subbasin 5,” as well as “water flowing into subbasin 5,” which would include flows from the main stem of the River itself. *Id.*, at 25. Thus, there are waters that are specific to subbasin 5 separate from those originating in the tributaries covered by subbasins 1 through 4. Tarrant’s account of the purposes of subbasin 5 does not explain how these waters were to be allocated.

Tarrant’s second argument regarding the purposes of Reach II is that §5.05(b)(1)’s 25 percent cap on each State’s access to excess water in subbasin 5 should be read to imply that if a State cannot access sufficient water within its borders to meet its share under the cap, then it must be able to cross borders to reach that water. Were it otherwise, Tarrant explains, the 25 percent cap would have no purpose. To support this argument, Tarrant draws on a 1970 engineering report that it contends shows that only

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16 percent of the freshwater flowing into subbasin 5 was located in Texas. Brief for Petitioner 9, n. 5. The OWRB challenges this percentage with its own calculations drawn from the report, and asserts that Texas had access to at least 29 percent of the excess water in subbasin 5 within its own borders. Brief for Respondents 26, 47-48, and n. 17.

Fortunately, we need not delve into calculations based on a decades-old engineering report to resolve this argument. As we have explained, *supra*, at 4-6, Texas does not have a minimum guarantee of 25 percent of the excess water in subbasin 5. If it believes that Oklahoma is using more than its 25 percent allotment and wishes to stop it from doing so, then it may call for an accounting under §2.11 of the Compact and, depending on the results of that accounting, insist that Oklahoma desist from taking more than its provided share. See Compact §2.11, and Comment on Art. II, 1 App. 13-16. This is the appropriate remedy provided under the Compact. But Texas has never done so and Tarrant offers no evidence that in the present day Texas cannot access its 25 percent share on its own land.

C

Under the Compact's terms, water located within Oklahoma's portion of subbasin 5 of Reach II remains under Oklahoma's control. Accordingly, Tarrant's theory that Oklahoma's water statutes are pre-empted because they prevent Texas from exercising its rights under the Compact must fail for the reason that the Compact does not create any cross-border rights in signatory States.

III

Tarrant also challenges the constitutionality of the Oklahoma water statutes under a dormant Commerce Clause theory. Tarrant argues that the Oklahoma water

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statutes impermissibly “discriminat[e] against interstate commerce” for the “forbidden purpose” of favoring local interests” by erecting barriers to the distribution of water left unallocated under the Compact. Brief for Petitioner 47–48 (quoting *Department of Revenue of Ky. v. Davis*, 553 U. S. 328, 338 (2008)). Tarrant’s argument is premised on the position that if we “adopt the Tenth Circuit’s or respondent’s interpretation [of the Compact], . . . a substantial amount of Reach II, Subbasin 5 water located in Oklahoma is not apportioned to *any* State and therefore is available to permit applicants like Tarrant.” Brief for Petitioner 47. So, Tarrant continues, because Oklahoma’s laws prevent this “unallocated water” from being distributed out of State, those laws violate the Commerce Clause.

Tarrant’s assumption that that the Compact leaves some water “unallocated” is incorrect. The interpretive comment for Article V of the Compact makes clear that when the River’s flow is above 3,000 CFS, “all states are free to use whatever amount of water they can put to beneficial use,” subject to the requirement that “[i]f the states have competing uses and the amount of water available in excess of 3000 CFS cannot satisfy all such uses, each state will honor the other’s right to 25% of the excess flow.” 1 App. 29–30. If more than 25 percent of subbasin 5’s water is located in Oklahoma, that water is not “unallocated”; rather, it is allocated to Oklahoma unless and until another State calls for an accounting and Oklahoma is asked to refrain from utilizing more than its entitled share.¹³ The Oklahoma water statutes cannot discriminate against interstate commerce with respect to unallocated waters because the Compact leaves no

¹³Moreover, even if Oklahoma utilized less than 25 percent of the excess subbasin 5 water within its territory and allowed the rest to flow down the River, that water would pass from Reach II into Reach V, see Compact §2.12, 1 App. 13, the waters of which are completely allocated to Louisiana, §8.01, *id.*, at 38. Again, no water is left “unallocated.”

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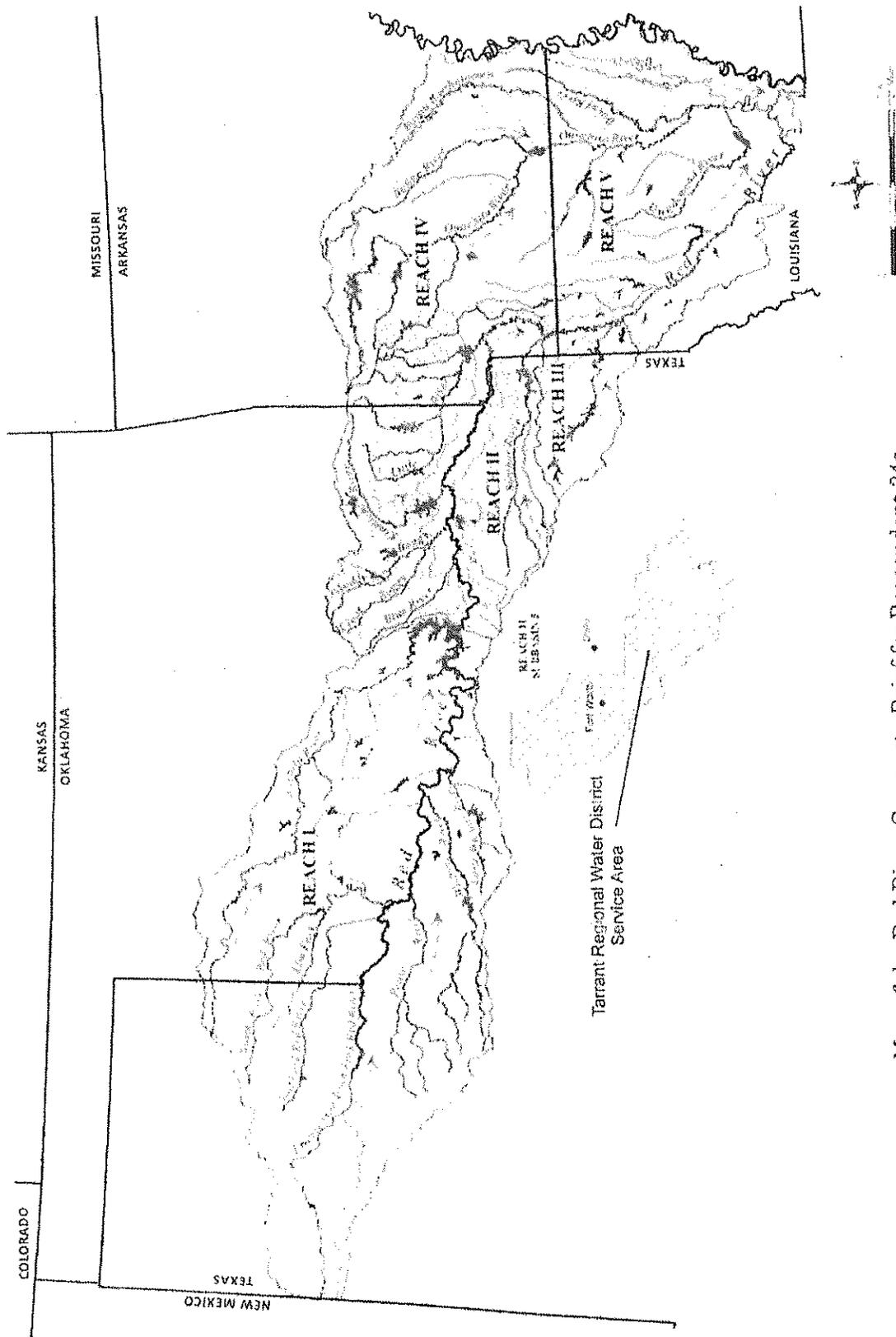
waters unallocated. Tarrant's Commerce Clause argument founders on this point.

* * *

The Red River Compact does not pre-empt Oklahoma's water statutes because the Compact creates no cross-border rights in its signatories for these statutes to infringe. Nor do Oklahoma's laws run afoul of the Commerce Clause. We affirm the judgment of the Court of Appeals for the Tenth Circuit.

It is so ordered.

APPENDIX B



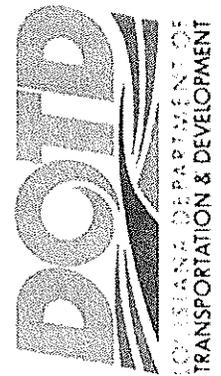
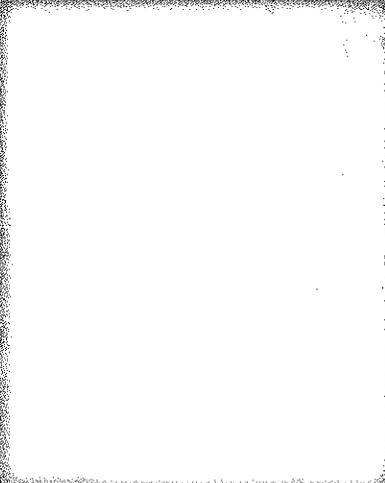
Map of the Red River Compact. Brief for Respondent 34a.

State Reservoir Priority and Development Program

PRESENTED BY
Bill Swanson, P.E.

Red River Compact Commission Meeting

April 23, 2013



MWH

ENHANCING A BETTER WORLD

Why Would Louisiana Need a Reservoir Development Program?

Water Resources in Louisiana

- Water is abundant and concerns about supply were typically low

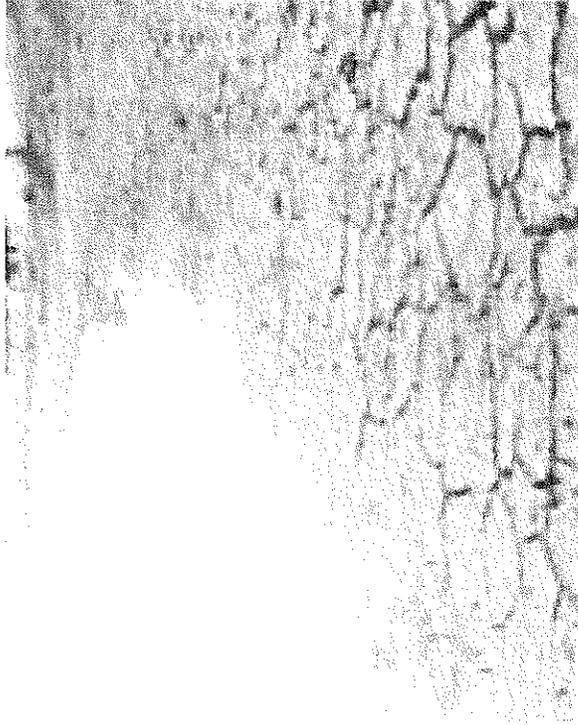
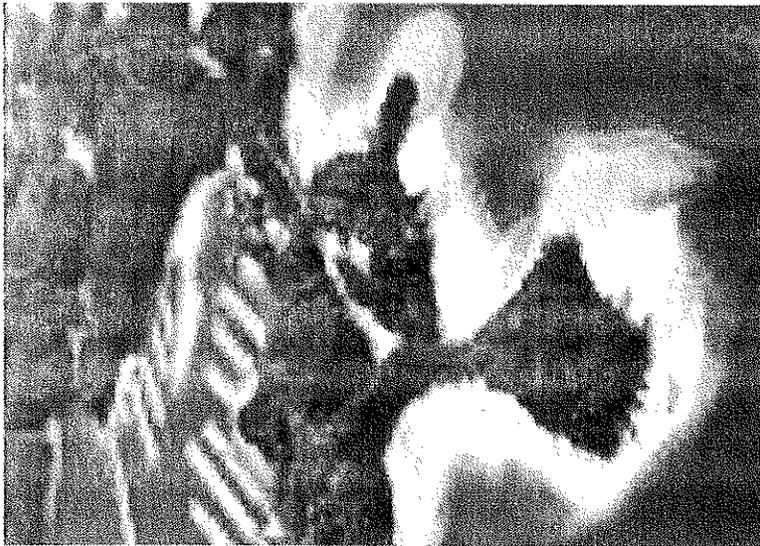
Rapid demand growth for economic development

- Pulp and Paper
- Merchant Power Plants
- Shale Gas Development
- Other



*Atlanta, GA.
It can't happen here?*

A Severe Drought in 1998 - 2000 Raised Awareness



- Saltwater encroachment accelerated
- Ground water levels continued to decline
- Economic growth concerns grew

The State Legislature Acted

- Received requests to fund reservoir projects
- No formal evaluation or prioritization of projects to determine best use of state funds
- Recognized need for process and procedures to prioritize and fund reservoirs
- 2007 authorized DOTD to develop a program to prioritize statewide investment in reservoirs

Objectives of the Reservoir Priority Development Program

- Establish procedures
 - Applying for state funds
 - Evaluating applications
 - Providing a prioritized list to the Legislature for funding
- Apply established successful approaches
 - Highway and Port Priority Program
 - Flood Control Program
- Provide information and raise awareness about state-wide water resources issues

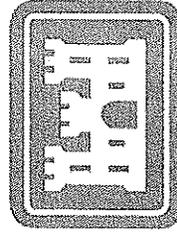
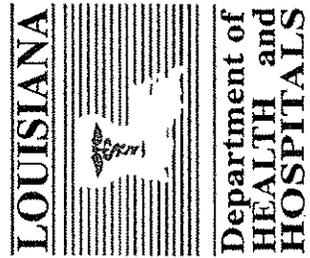
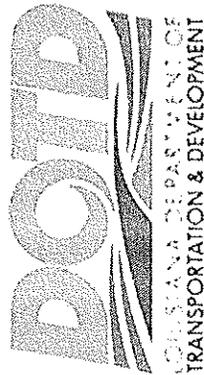
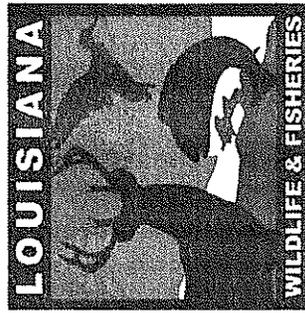
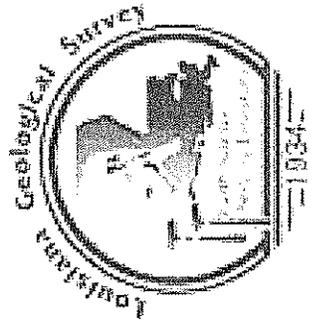
RPDP Goals

- **Encourage Multiple Purpose Projects**
 - Select projects that promote State priorities
 - Water supply, flood control, environmental enhancement, socioeconomic development, recreation, etc.

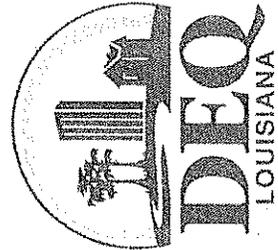
- **Provide Tools for Applicants and Decision Makers**
 - Consistent summary of state-wide water resource issues
 - Sound scientific criteria for decisions
 - Build on similar approaches from other agencies and states

- **Provide Guidance on State Water Resource Management Strategies**

Participating Agencies

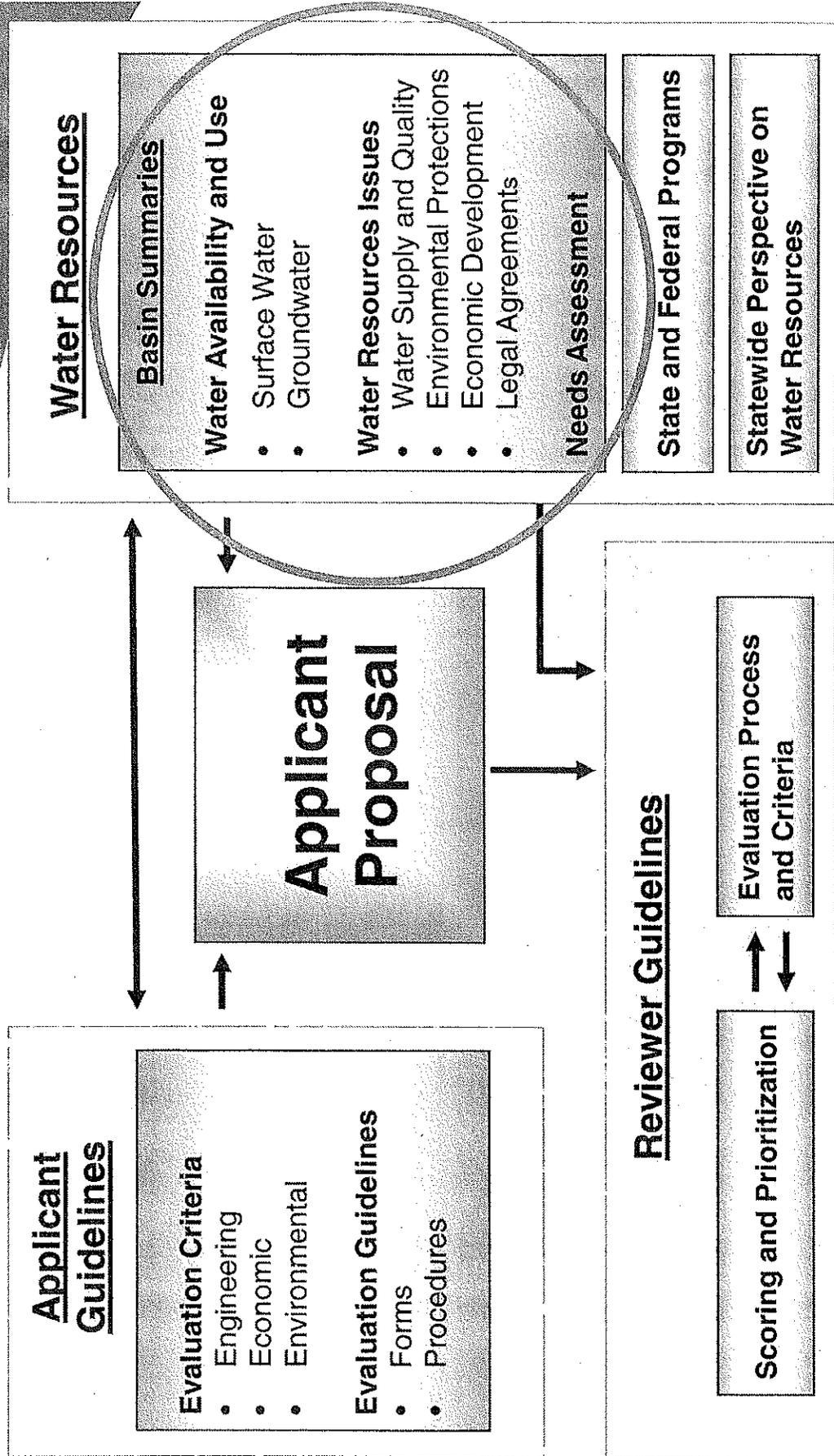


**US Army Corps
of Engineers®**



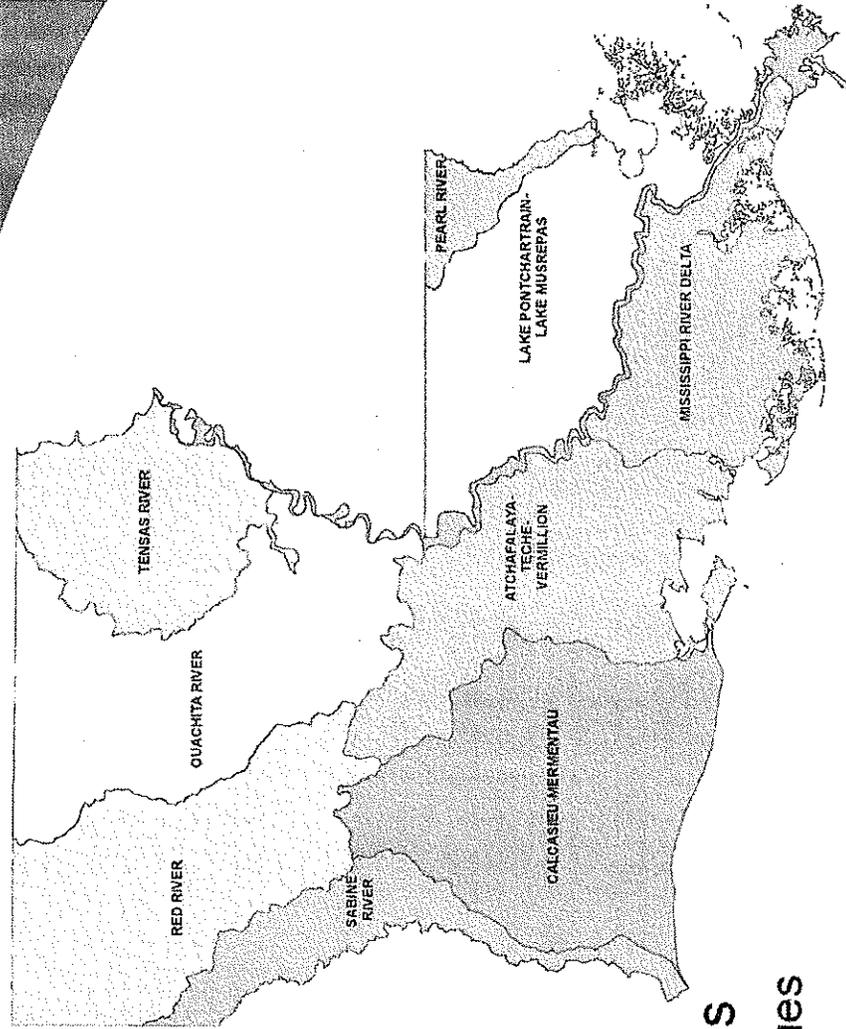
**LOUISIANA
ECONOMIC DEVELOPMENT**

Reservoir Priority Development Program Approach



Basin Characterization Reports Provide Consistent Information Statewide

- **Water Availability and Use**
 - Surface Water
 - Groundwater
- **Water Related Issues**
 - Water quality
 - Groundwater Overdraft
 - Environmental and Cultural
 - Flooding
 - Recreation
 - Navigation
 - Hydropower
- **Land Use and Legal Entities**
 - Inter-basin and Inter-state Issues
- **Needs Assessment**

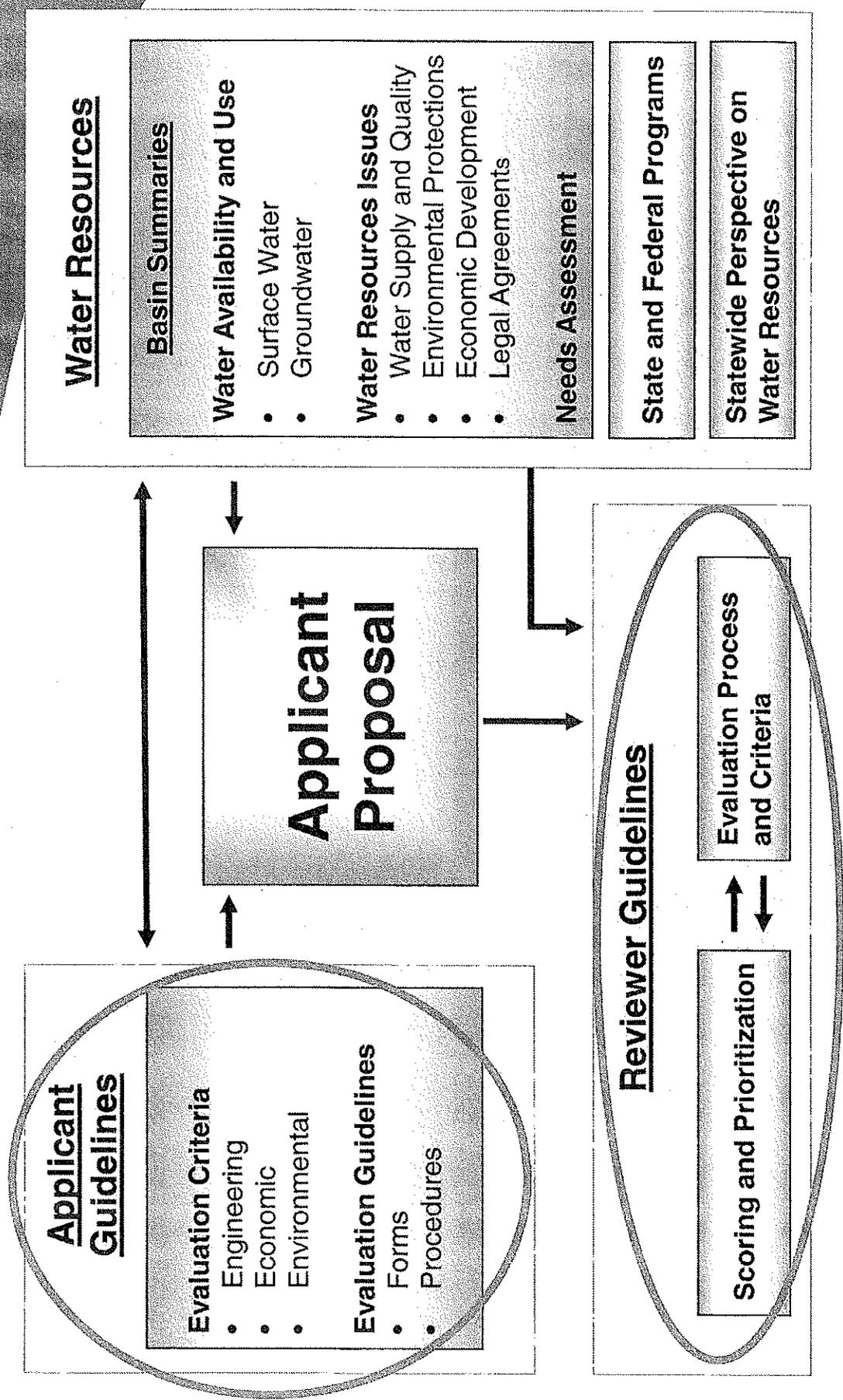


Water Resources Needs Were Ranked Based on Relative Urgency

Major water resource needs within each basin

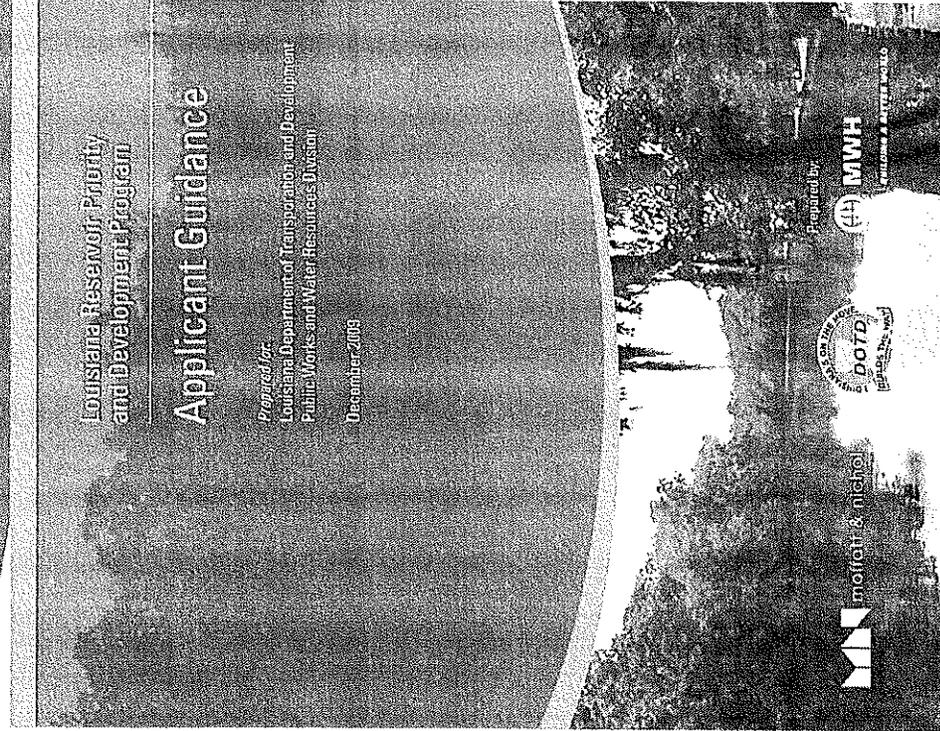
- Surface water supply / quality
- Ground water supply / quality
- Environmental protection / enhancement
- Flood control / recreation / navigation

Reservoir Priority Development Program Approach

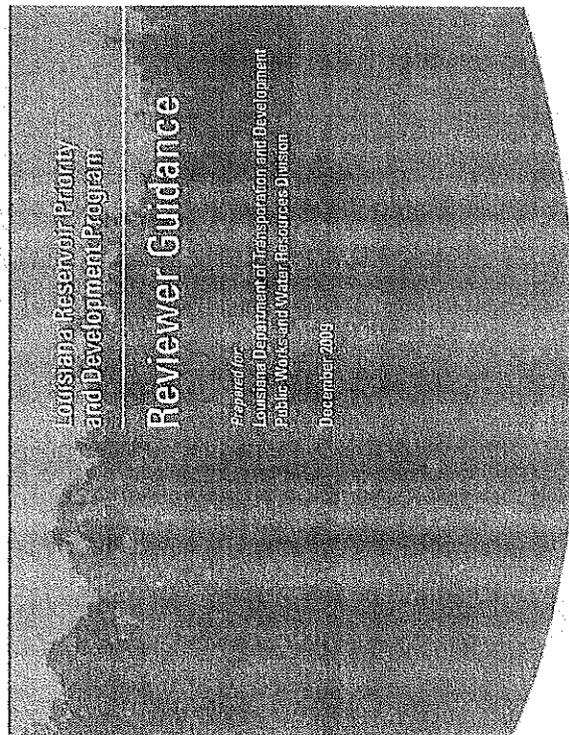


Applicant Guidance

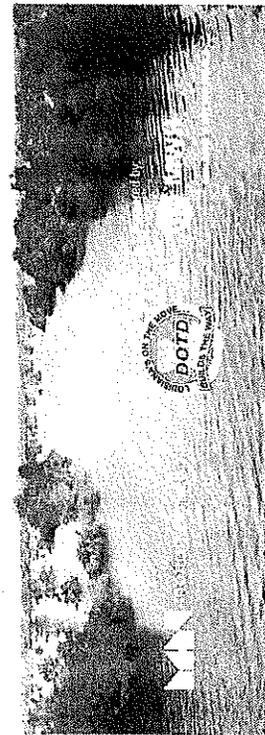
- Procedures and Schedules
- Instructions for Applicants
- Application Forms
- Sample Cost and Benefit Calculations
- Two Phases



Reviewer Guidance



- Program Background
- Evaluation and Scoring Guidance
- Information on Permitting Requirements
- Review Worksheets



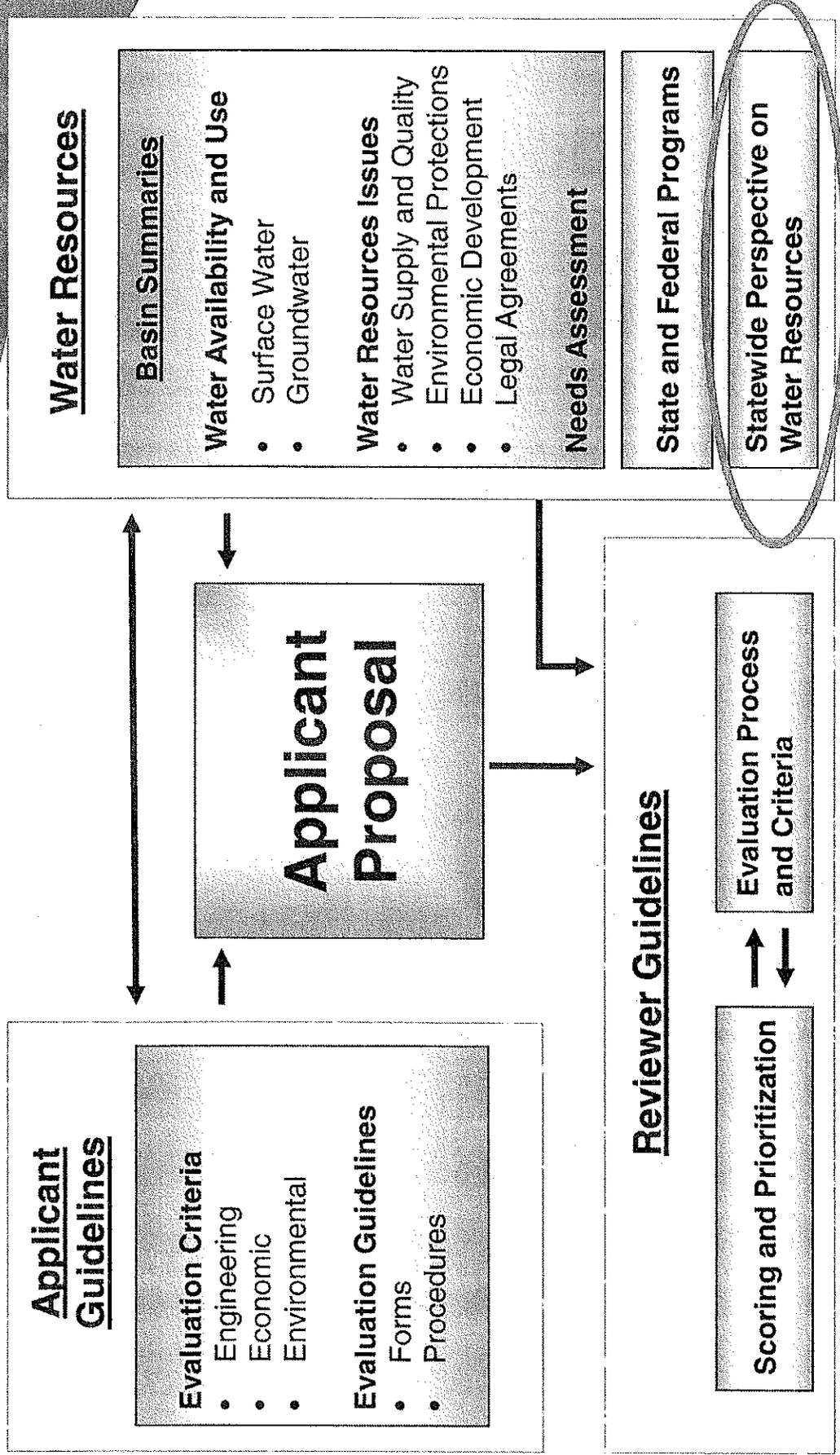
A Two-Phase Application Process Was Selected to Help Focus Applicant Effort

- Phase 1 Application - Feasibility
 - Review general project description
 - Receive input from State and Federal agencies
 - Provide guidance to applicant on project feasibility
 - Apply for Phase 2 funds (seed money)

- Phase 2 Application – Quantitative Ranking
 - Application for design and construction funds
 - Detailed evaluation and scoring by advisory committee for prioritization for Legislature*

Note: The role of the evaluation committee is prioritization, not selection

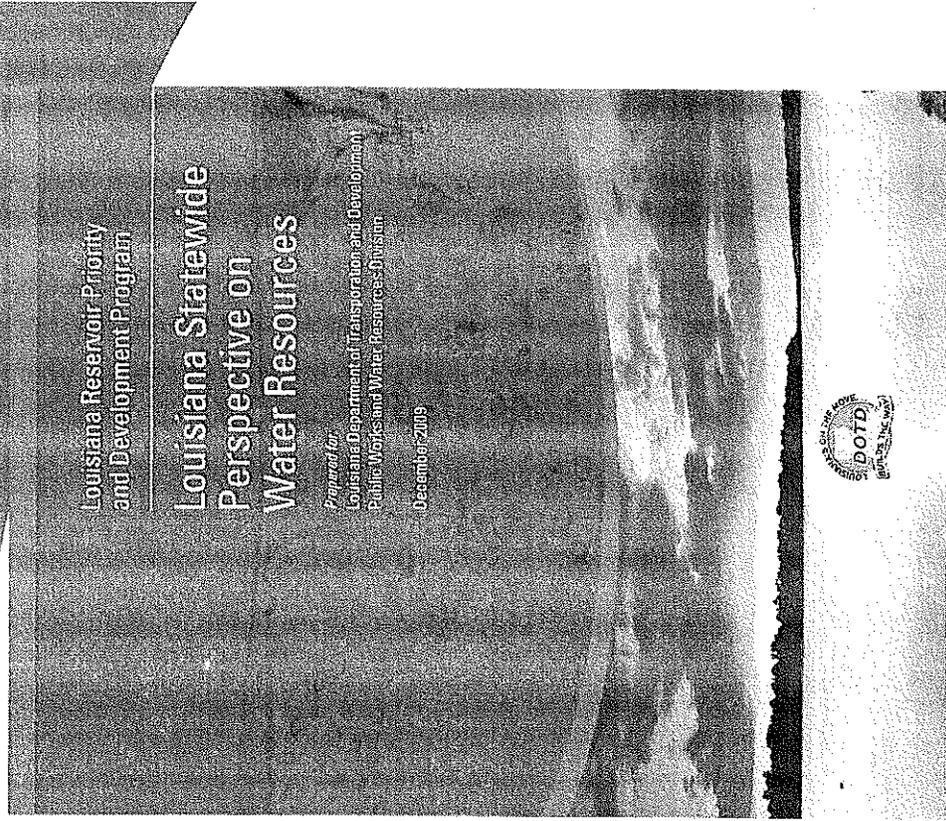
Reservoir Priority Development Program Approach



Statewide Perspective on Water Resources

- Summary of water resource issues at a state-wide level
 - Areas of groundwater concern
 - Areas of changing water demand
 - Declining water quality

- Strategies for water resource management



Recommended Water Resources Management Strategies

- Build on existing resources
 - Coordinate activities of state agencies
- Work with local entities for regional solutions
 - Water conservation and education
 - Alternative water sources
 - Intra-basin transfers
- Adopt collaborative vs. regulatory approaches
- Apply scenario-based planning
- Regular updates to needs assessments

Next Steps in RPD Development

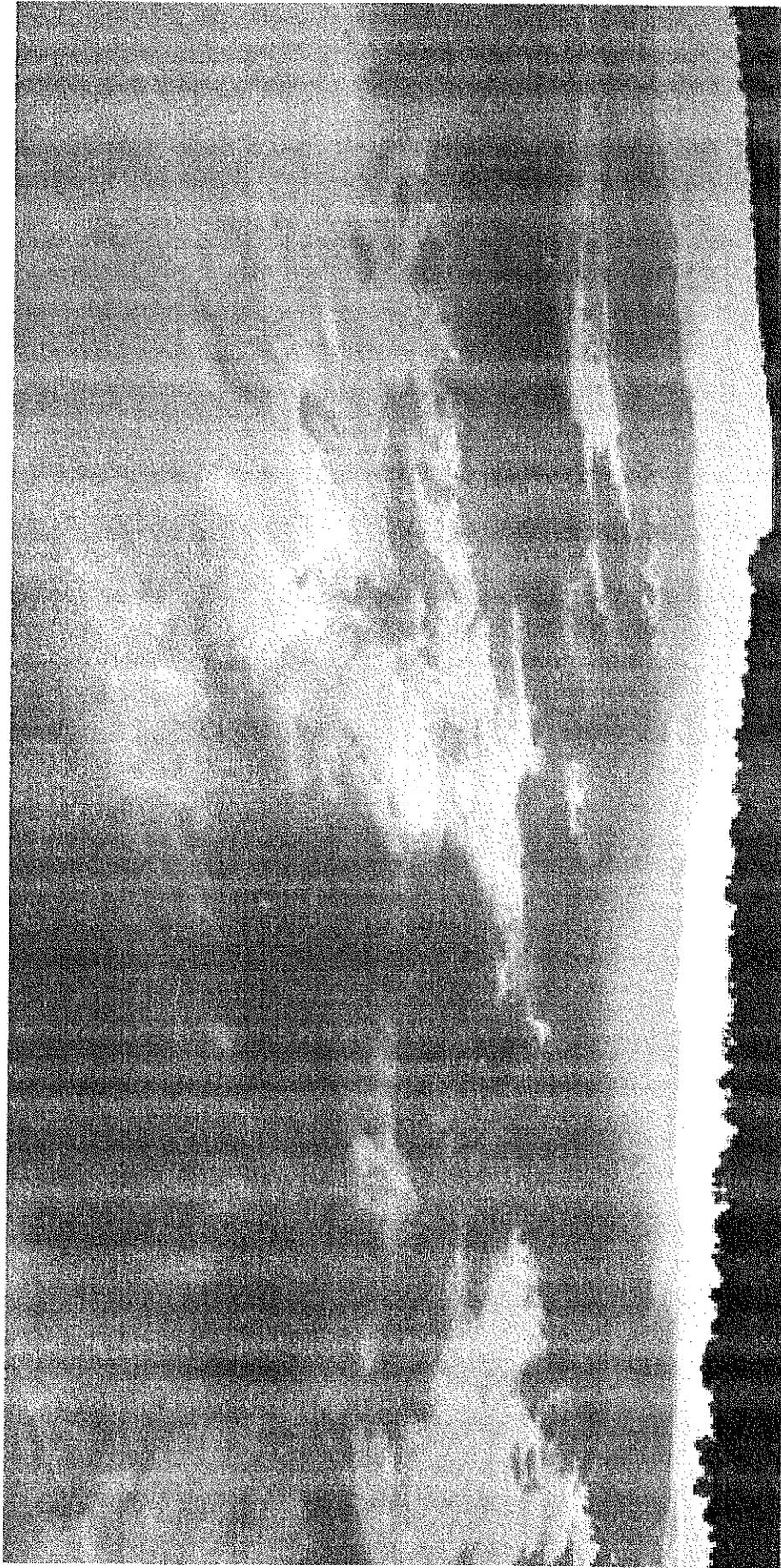
Stage 2 – Outreach and Testing

- Pilot testing of process with sample project
- Input from potential applicants, professional community and other stakeholders
- Presentations to promote the Program
- Workshops to explain the process and provide examples

Next Steps in RPDP Development (cont'd)

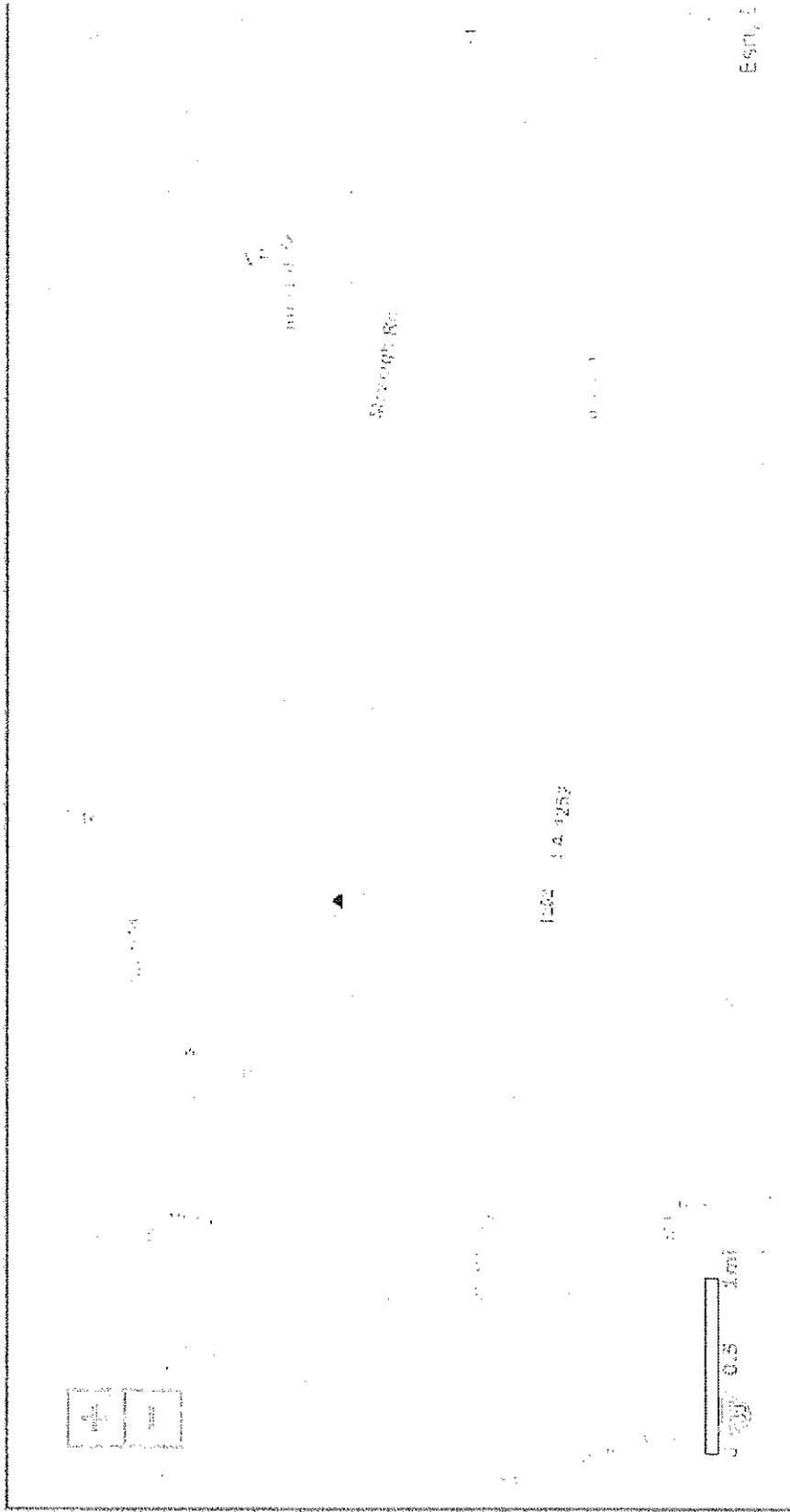
Additional Technical Studies

- Estimate sustainable yields of streams, reservoirs and lakes
- Identify potential reservoir locations based on needs and environmental issues
- Quantify stream flood characteristics
- Develop ground and surface water models



RPDP documents are available at:

http://www.dotd.la.gov/intermodal/dams/rpdp_reports.aspx



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U.S. Department of the Interior | U.S. Geological Survey

Title: NWIS Site Inventory for USA: Site Map

URL: <http://waterdata.usgs.gov/nwis/nwismap/>



RED RIVER VALLEY ASSOCIATION

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

April 23, 2013

TO: Red River Compact Commissioners
FM: Richard Brontoli, Executive Director, redriverva@hotmail.com

RE: Red River Valley Association Report to the Red River Compact, April 23, 2013

1. Earmarks: The no earmark policy, in the House and Senate, continues to be an issue. The Administration decides which projects and the funding level they receive. Congress needs to take back their responsibility for the appropriation process. They also need to redefine the earmark definition, since civil works projects have been through an authorization, vetted process. Enclosure 1 is our position paper on earmarks.
2. Appropriations: The Administration has never supported Red River projects, therefore we will not receive any Study (GI) or Construction (CG) funds and our O&M projects will be reduced (Enclosure 2). All construction projects have ceased. Some O&M projects will be negatively impacted.
3. Navigation O&M: 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 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.
4. IMTS Reduced Lock Service Mandate: The Corps has also introduced a new lock schedule mandate. Locking hours will be determined by the number of annual commercial lockages per year. Enclosure 3 is the criteria used to determine hours of operation and enclosure 4 shows Red River lockages. Even though this is a mandate the Corps held three public meetings in Alexandria, Natchitoches and Shreveport-Bossier City. The J. Bennett Johnston Waterway is the only waterway where the lock & dams are contractor operated. A new contract will be implemented in February 2014 with the reduced lock service. Initially locks 1 and 2 will operate at level 1 and locks 3, 4 & 5 will operate at level 2. Enclosure 5 is the RRVA public meeting comments.
5. Navigation into Arkansas Feasibility Study: The Arkansas Red River Commission provided \$1 million to the Corps in contributed funds, which the Corps has accepted. The intent is to identify all the potential tonnage, conduct a rate analysis and identify all the benefits. This will provide a decision point if the feasibility study should continue to conclusion or be terminated. The information should be available by the end of 2014 to make this decision.
6. Chloride Control Project; Renewable Energy Project: A private company, GEM, has approached the Tulsa District and Red River Authority of Texas to locate solar ponds at Truscott Brine Reservoir. This renewable source of energy project would use all the water that would be pumped to Truscott when all three sites are completed. A great benefit to this private endeavor is that they will use all the water provide, which means the Truscott Reservoir dam, which has integrity issues, would not have to be modified. It would also provide a greater justification to construct the Chloride Control Project in Oklahoma and basically eliminate the need for a brine reservoir in Oklahoma. The total project cost would be reduced by tens of millions of dollars, greatly improving the benefit to cost ratio.
Currently GEM requires a customer for the power generated to obtain their financing, since it will be totally financed commercially, with no federal funds. They are trying to get the US Air Force (Sheppard AFB) to sign a long term contract, but have run into resistance at high levels within the USAF command.
** RRVA & GEM met with our Congressional delegation 11 March and they have provided great assistance.
Enclosure 6 is information provided our congressional delegation on this project.

Enclosure 1

Red River Valley Association
P.O. Box 709
Shreveport, LA 71162
(318) 221-5233

February 4, 2013

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. There is a major difference between an unauthorized earmark 'parachuted' into a bill and authorized earmarks.

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. Appropriation 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. The Budget Committee sets the funding levels and the Appropriation Committee allocates and prioritizes funding. It is not earmarks that 'busts' the budget, it is the lack of discipline to stay within the budget.
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

Enclosure 2

RED RIVER VALLEY ASSOCIATION FY 2014 APPROPRIATIONS (\$000) CIVIL WORKS				
<u>I. Studies (GI)</u>	FY 13 Approp	RRVA FY 14 Request	Pres FY 14 Budget	Local Sponsor Requirements
1. Navigation into SW Arkansas: Feasibility	-0-	302	-0-	(ARRC)
2. Red River Waterway, LA – 12' Channel, Recon	-0-	100	-0-	(RRWC)
3. Bossier Parish, LA	-0-	270	-0-	(Bossier Levee)
4. Cross Lake, LA Water Supply Supplement	-0-	-0-	-0-	(Shreveport)
5. SE Oklahoma Water Resource Study: Feasibility	-0-	500	-0-	(OWRB)
6. Washita River Basin, OK	-0-	500	-0-	(OWRB)
7. SW Arkansas Ecosystem Restoration: Recon Study	-0-	47	-0-	(ANRC / AR Game & Fish)
8. Cypress Valley Watershed, TX	-0-	175	-0-	(NETWD)
9. Sulphur River Basin, TX	-0-	1,000	-0-	(Sulphur Authority)
10. Wichita River Basin above Lake Kemp, TX: Recon	-0-	100	-0-	(L)
11. Red River Above Denison Dam, TX & OK: Recon	-0-	100	-0-	(L)
12. Red River Waterway, Index, AR to Denison Dam	-0-	100	-0-	(?)
13. Mountain Fork River Watershed, OK & AR, Recon	-0-	-0-	-0-	(?)
14. Walnut Bayou, Little River, AR	-0-	100	-0-	(ANRC)
15. Little River County/Ogden Levee, AR, Recon	-0-	100	-0-	(ANRC)
16. Red River Waterway, Index to Denison, Bendway	-0-	-0-	-0-	(?)
<u>II. Construction General (CG)</u>				
1. Red River Waterway: J. B. Johnston Waterway, LA	2,000 Mitigation Only	22,000	-0-	(RRWC)
2. Chloride Control Project, TX & OK Texas - 7,500 / Oklahoma - 800	-0-	8,500 7,200- TX 1,300- OK	-0-	N/A
3. Red River Below Denison Dam; AR & LA a. Bowie County Levee, TX	-0-	18,000 -0-	-0-	(Levee Districts)
4. Red River Emergency Bank Protection	-0-	20,000	-0-	(Levee Districts)
5. McKinney Bayou, AR, PED	-0-	-0-	-0-	(?)
<u>III. Continuing Authority Program (CAP)</u>				
1. Big Cypress Valley Watershed, TX: Section 1135	-0-	-0-	-0-	(Jefferson)
2. Palo Duro Creek, Canyon, TX: Section 205	-0-	100	-0-	(Canyon, TX)
3. Millwood, Grassy Lake, AR: Section 1135	-0-	100	-0-	(ANRC)
4. Miller County Levee, AR, Sec 1135	-0-	-0-	-0-	(Miller Levee)
5. OK Comprehensive Water Plan, Sec 22	-0-	500	-0-	OWRB

NOTES: Local Sponsor Column – Sponsor indicated in (); (?) indicates No Sponsor identified and need one to continue (L) indicates Sponsor not required now but need one for feasibility; N/A – No Sponsor required.

RED RIVER VALLEY ASSOCIATION

CIVIL WORKS PROJECTS

OPERATIONS AND MAINTENANCE (O&M)

FY2014 (\$000)

Project	President FY13	President FY14
DeQueen Lake, AR	1,870	1,902
Dierks Lake, AR	1,567	1,586
Gillham Lake, AR	1,463	1,735
Millwood Lake, AR	2,680	2,706
Bayou Bodcau Reservoir, LA	1,041	1,204
Bayou Pierre, LA	24	23
Caddo Lake, LA	216	207
Wallace Lake, LA	232	222
J. Bennett Johnston Waterway, LA Basic Annual O&M Backlog Maintenance	8,434	8,795
Old River, LA (MR&T)	8,050	8,118
Broken Bow Lake, OK	2,425	5,704
Hugo Lake, OK	1,716	2,866
Pine Creek Lake, OK	1,053	1,279
Sardis Lake, OK	3,801	1,412
Waurika Lake, OK	1,616	1,340
Chloride Control, Area VIII, TX	1,529	1,591
Denison Dam & Lake Texoma, TX Basic Annual O&M Backlog Maintenance	7,137	11,227
Estelline Springs, TX	42	43
Lake Kemp, TX - Total Need Basic Annual O&M Reallocation Study	241	285
Pat Mayse Lake, TX	1,148	1,004
Jim Chapman Lake, TX	1,736	1,758
Lake of the Pines, TX	3,529	3,400
Wright Patman Dam & Lake, TX	3,513	4,511

Table 1: Definition of Levels of Service

Level #	Title	Description	Guideline for Range of Lock Operation Data
1	Full Service 24/7/365	24 hours per day, 7 days a week, 365 days a year	More than 1000 commercial lockages per year
2	Reduced Service - Two Shifts Per Day	16-20 hours per day, 7 days a week, 365 days a year (basically two shifts of either 8 or 10 hrs)	Between 500 to 1000 commercial lockages per year.
3	Limited Service - Single Shift	8-12 hours per day, 7 days a week, 365 days a year	100 to 500 commercial lockages per year or greater than 1000 recreational lockages per year
4	Scheduled Service - Set times per day	Lockages (including recreation craft) at set times per day. For example 8 a.m. and 4 pm.	Limited commercial (less than 100 per year) and/or substantial recreational traffic, with a more consistent daytime pattern of lockage
5	Weekends & Holidays	Lockages on weekends and holidays only	Little to no commercial lockages with significant recreational lockages (500 or more per year).
6	Service by Appointment	Commercial lockages by appointment	Limited commercial traffic with no consistent pattern of lockage.



JBJWW Levels of Service Based Strictly on Commercial and Recreational Lockage Data for Fiscal Years 2009, 2010, and 2011

Level of Service 1

JBJWW Time Period	Boggs Commercial	Boggs Recreation	Overton Commercial	Overton Recreation
FY 09	919	593	834	810
FY 10	1127	456	1102	953
FY 11	976	667	940	516
3 YR Average	1007	572	959	726

Level of Service 3

JBJWW Time Period	Lock 3 Commercial	Lock 3 Recreation	Long Commercial	Long Recreation	Waggoner Commercial	Waggoner Recreation
FY 09	277	417	157	1288	131	2544
FY 10	575	1279	400	1197	233	2389
FY 11	352	963	295	1438	326	2640
3 YR Average	401	886	284	1308	230	2524



BUILDING STRONG®

Enclosure 5

Red River Valley Association
P.O. Box 709
Shreveport, LA 71162
(318) 221-5233, redriverva@hotmail.com

April 12, 2013

Col. Jeffrey Eckstein
Commander
4155 Clay St.
Vicksburg, MS 39183

RE: Comments for Reduced Lock Service Mandate on the J. Bennett Johnston Waterway

Dear Col. Eckstein:

The Red River Valley Association is submitting comments pertaining to the referenced Corps of Engineer (COE) action pertaining to the J. Bennett Johnston Waterway locks and dams. This Association does not agree with the proposed mandate and any reduction in lock service is unacceptable.

1. National Economic Benefits: This project was justified on national transportation savings. The COE has not considered water compelled rates and disregards that a navigable waterway is the only competition for rail. Many companies in the Red River Valley benefit from lower transportation rates, even though they may not move cargo on the waterway. Industry uses the waterway as leverage when negotiating rates with the railroads. As you reduce navigation reliability the railroads will have no competition and will increase their rates. This mandate conflicts with the national benefit to reduce transportation costs.
2. Economic Development: It is important to understand that the J. Bennett Johnston Waterway was completed in 1995 and is a young Waterway for economic development. This is not a long time for the public ports to fully develop their potential. This mandate, to reduce lock service hours, will put a great burden on the ability of the ports to attract industries that depend on waterborne transportation. The reliability of the waterway comes into question, not only to recruit new industry but for existing users. This mandate can create a downward spiral of waterway users and a negative impact to the nation.
3. Congressionally Authorized Project: This Waterway project was authorized by Congress to operate 24 hours, 7 days a week, 365 days a year, with a 9' deep, 200' wide channel. We believe the COE has the obligation and responsibility, by law, to operate and maintain this navigation project as authorized by law, Harbor and Rivers Act of 1968, (Pub. L. No 90-834, 82 Stat. 731).
4. Benefit/Cost Analysis: It has been stated that one purpose for this mandate is cost savings. Has an economic analysis been done to determine if there is a cost savings? We have not been provided one. All Corps projects/programs require a CBR over 1.0 for justification, has one been done for this mandate?
5. Water Control: There is a need to monitor pool levels on a constant basis. We understand that the L&Ds will not be left unattended for more than 2 hours to insure pool elevations remain stable. It has also been stated that funding requests of \$1 million per dam have been made to make the dam gates operated remotely. Has this expense been calculated in any CBR analysis for this mandate? Once this is accomplished lock operations could be permanently closed to all commercial and recreational traffic.
6. Cost Savings: It has been stated that any O&M cost savings would be moved from the Operations to the Maintenance of the lock & dams at each project. Is there a guarantee that all cost savings will remain with the J. Bennett Johnston Waterway project and that the annual O&M funding level will not be reduced by any savings? There is a lack of trust in the Administration and we fear the savings would be reduced from the annual allocation, therefore losing both Operations and Maintenance funding.

7. Project Justification and Success: The COE has a responsibility to show the benefits of their civil works projects. Over the past years the COE has changed the metrics used to determine the funding levels for waterway. This project was authorized based on cost savings for 'trip ton-miles' and over the past years this metric has been changed and no longer reflects the actual benefits of the waterway. The COE should conduct a post project study to determine the 'true' benefits of the waterway, before this mandate is implemented. There is no doubt a current CBR ratio would be greater than 1.0 and should be analyzed.
8. Recreation: Recreation is one of the project purposes, by law. It has also proven to be one of the most important economic engines for our communities. There have been two national Bassmaster Classic tournaments (2009 & 2012) and the FLW National Championship will be held in 2013, each contributing over \$20 million into the regional economy for a three day event. In addition there are regional and local tournaments throughout the year. These tournaments are usually open to anglers over three pools and if the locks are closed during tournament times these major events will not come to the Red River/J. Bennett Johnston Waterway. Can you guarantee that the locks will be operating during major tournaments?
9. Security: There should be serious concern for the security of the lock and dam structures. It will soon become known that these areas are unsecure and ripe for theft, vandalism and sabotage. Has leaving these structures unattended been coordinated through Homeland Security? If you require a guard or reimburse local law enforcement for additional patrols, you have no savings.
10. Safety: There is always the possibility of an accident from break away barges or recreation craft that impact the dam gates. If there is no one on site to react lives may be at risk or the potential to loose pool. Such a catastrophic accident would far exceed any savings realized by this mandate.
11. National Navigation System: The COE, more than anyone, should understand the importance of the Waterway System. This mandate will impact all the tributaries and set a precedent nationwide. This downward spiral of our nation's navigation service will impact the whole navigation system. When you cut off the limbs of a tree – the trunk will die.
12. Multi-purpose Project: This navigation project has numerous benefits in addition to navigation. The full range of benefits includes water supply, agricultural, industrial, recreation, bank stabilization, flood reduction and the eco-system. The reduced operation of the system has a wide range of impacts. All these benefits should be included in a CBR analysis to demonstrate that this mandate is unworthy.

The RRVA understands the national budget needs to be reduced, but it should not be done at the expense of this operational project. At this time Congress has given the COE the ability to appropriate the funds it receives to the projects and at the levels it chooses. Priority should be given to the O&M of completed projects. The COE has the responsibility to operate and maintain this project at the Congressionally authorized service of 24 hours per day, 7 days a week, 365 per year and to project dimensions.

We are opposed to this mandate to reduce lock operations on the J. Bennett Johnston Waterway and do not believe the COE has adequately calculated the many risks and impacts to the region and the nation. It appears that any cost savings are minor compared to these economic impacts.

Thank you for the opportunity to comment on this serious issue and we hope the COE readdresses this mandate and realizes the detriment to our nation's waterway system and economy.

Sincerely;

Richard Brontoli
Executive Director

Enclosure 6

Red River Valley Association
P.O. Box 709
Shreveport, LA 71162

March 11, 2013

TO: US Delegation Members

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

RE: Chloride Control Project (CCP), Salinity Gradient Solar Ponds (SGSP)

The Corps of Engineers, Tulsa District; Red River Authority of Texas (RRA) and Good Earth Mechanics, LLC (GEM) have been working on incorporating Solar Ponds into the CCP. Following is the status of this initiative.

1. **Concept:** GEM, a private company, wants to install, operate and maintain the SGSP project at no cost to the government. They propose to use Truscott Brine Reservoir for the ponds and require access to the brine water and federal land. These ponds will produce electricity as a renewable power project (see attached SGSP schematic). When fully implemented there will be a use for all the brine water existing in Truscott Reservoir from the completed Area VIII and from the remaining two sites; Areas VII & X (see project map attached).

2. **Status:** a. A 'Table Top' exercise was conducted July 10-11, 2012 with representatives from Corps HQ, Corps SWD, Tulsa District, RRA, RRVA and GEM.

b. There was a consensus that the Corps would deal exclusively with the RRA (CCP local sponsor) who will submit a request to incorporate into the project SGSP to increase reservoir evaporation. RRA will contract with GEM to execute the project.

c. The type of out grant for the federal land will be an easement.

d. The project Master Plan and Water Permit (with TCEQ) will need to be revised.

e. GEM will have to provide the appropriate NEPA documents, in addition to covering the RRA and Corps expenses to process the project application.

f. **Next Action:** GEM must get contract commitments to buy the power before they can secure private investments for Phase 1. GEM and the Corps have been working with the RRA, Army EITF, and the RRVA to contract the power to Sheppard AFB since September 2012. Additionally, the power could be offered to Army installations and/or municipalities (e.g., Wichita Falls). A key issue is that the (private) project financing requires a 25 year contract.

3. **Benefits:**

a. The CCP is a part of the Texas State Water Plan, including the completion of Areas VII & X.

b. There will be **no cost to the federal government** to implement this initiative.

c. GEM will compensate the RRA from the project (e.g., lease fees).

d. To complete the CCP Truscott Dam will have to be refurbished to repair a recently discovered permeability problem. The dam will not have to be refurbished with the SGSP installation, greatly reducing the remaining project cost.

e. The ponds will be in the footprint of Truscott Reservoir (see the attached land use map).

f. Environmental impacts should be minor since the intended use is nearly identical to the current use; the permanent impoundment of salt brine.

g. Phase 1 of the SGSP project will produce 15 megawatts of electricity, using the salt currently impounded in the reservoir for SGSP construction. This is continuous base load power, not intermittent power production, so is more reliable than wind and solar panels.

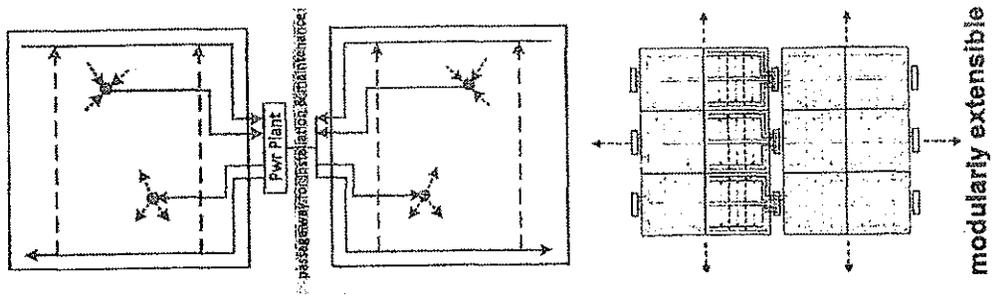
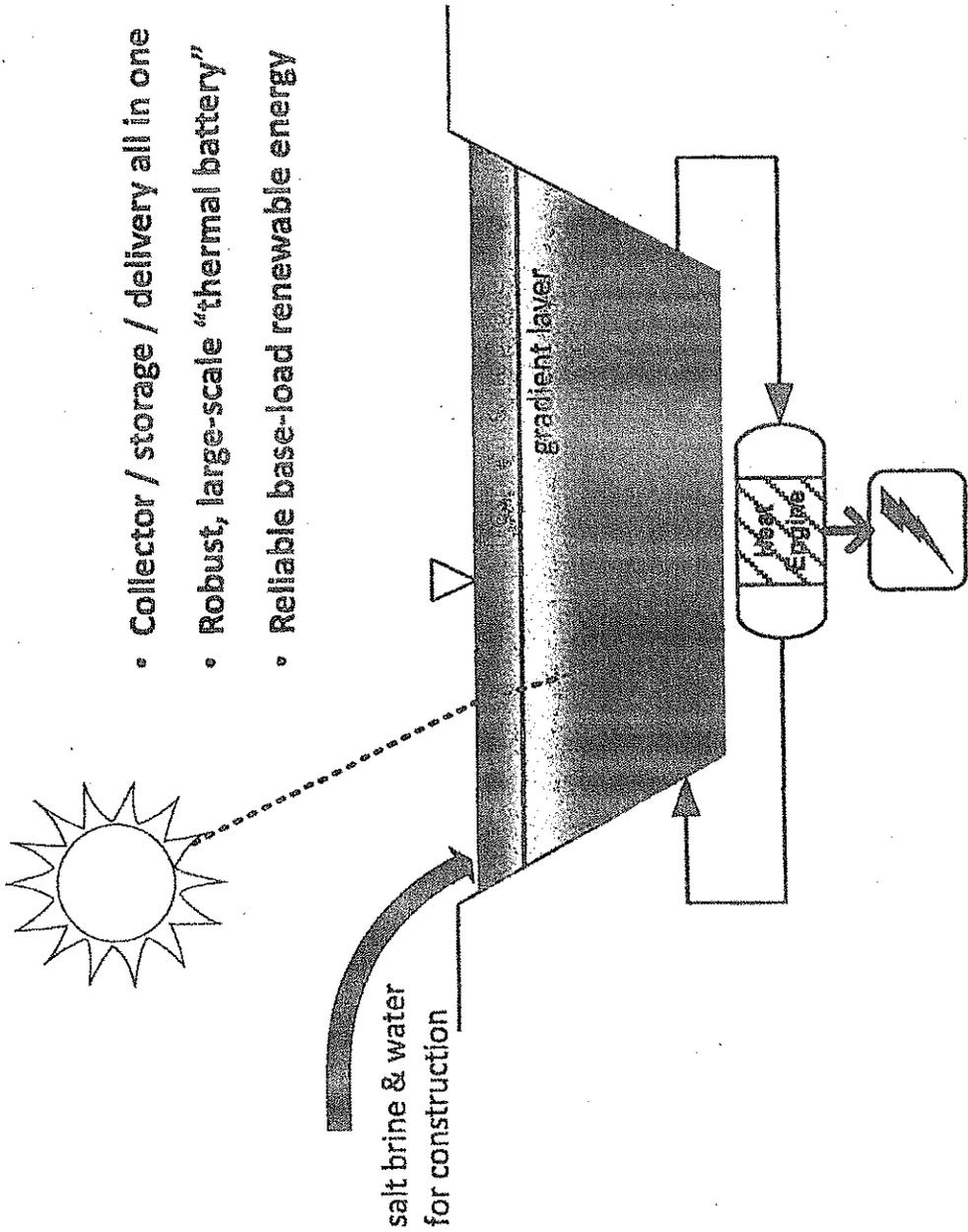
h. In later phases the Truscott site can support up to 50 megawatts of SGSP systems; however, Phase 1 stands on its own economically while mitigating the limitations due to the dam's diminished freeboard.

i. There is the potential that this initiative may someday contribute to the CCP federal O&M.

j. GEM would create new jobs of 1 permanent employee per megawatt on site in addition to construction and add approximately \$5M capital investment per megawatt in the region.

k. The SGSP CCP with RRA would synergize with a similar GEM proposal on the Brazos River.

Our Technology: Salinity Gradient Solar Ponds (SGSP)



RED RIVER COMPACT

**ARKANSAS - LOUISIANA - OKLAHOMA -
TEXAS**

MAY 12, 1978

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SIGNATURES

RED RIVER COMPACT

ARKANSAS-LOUISIANA-OKLAHOMA-TEXAS, 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:

<u>Stream</u>	<u>Site</u>	<u>Ac-ft</u>	<u>Location</u>	
			<u>Latitude</u>	<u>Longitude</u>
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:

<u>Stream</u>	<u>Site</u>	<u>Ac-ft</u>	<u>Location</u>	
			<u>Latitude</u>	<u>Longitude</u>
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
Bois d'Arc Creek	New Bonham Reservoir	130,600	33° 42.9'N	95° 58.2'W
Coffee Mill Creek	Coffee Mill 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 1	24,500	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
Mud Creek	KVW Ranch 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:

<u>Stream</u>	<u>Site</u>	<u>Ac-ft</u>	<u>Location</u>	
			<u>Latitude</u>	<u>Longitude</u>
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:

<u>Stream</u>	<u>Site</u>	<u>Ac-ft</u>	<u>Location</u>	
			<u>Latitude</u>	<u>Longitude</u>
McKinney Bayou Trib.	Bringle Lake	3,052	33° 30.6'N	94° 06.2'W
Barkman Creek	Barkman 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:

<u>Stream</u>	<u>Site</u>	<u>Ac-ft</u>	<u>Location</u>	
			<u>Latitude</u>	<u>Longitude</u>
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
- iv. 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.

SIGNED AND APPROVED on the 12th day of May 1978 at Denison Dam.

John P. Saxton
John P. Saxton, Commissioner
State of Arkansas

Arthur R. Theis
Arthur R. Theis, Commissioner
State of Louisiana

Orville B. Saunders
Orville B. Saunders, Commissioner
State of Oklahoma

Fred Parkey
Fred Parkey, Commissioner
State of Texas

R. C. Marshall
R. C. MARSHALL, Major General
Representative
United States of America

**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 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:

- (1) Budget Committee;
- (2) Engineering Committee;
- (3) Environmental and Natural Resources Committee;
- (4) 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 1 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 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. * * * *”

(3) 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.

e. **Elm 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 07303400, 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.
- (2) 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.

f. **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:

- (a) 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 2,337-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 1,229 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) The Compact compliance calculations will be made ignoring this channel loss adjustment).

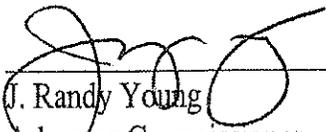
D. Compact Compliance - Compact compliance is achieved as long as the actual delivery exceeds the scheduled delivery.

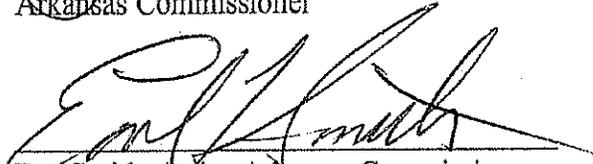
Adopted by unanimous consent of the Commission April 22, 2008 at Marshall, Texas.

RED RIVER COMPACT COMMISSION

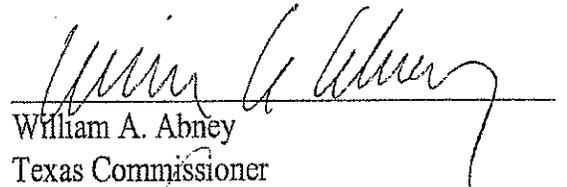

Gordon W. "Jeff" Fasset, Chairman

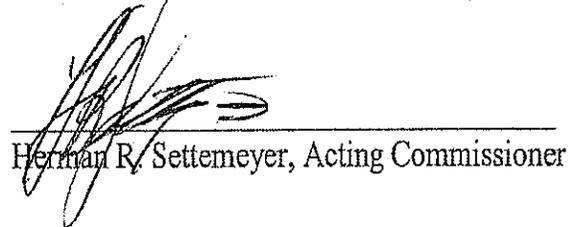
STATE OF ARKANSAS


J. Randy Young
Arkansas Commissioner


Earl Smith, Acting Arkansas Commissioner

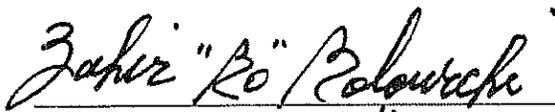
STATE OF TEXAS


William A. Abney
Texas Commissioner

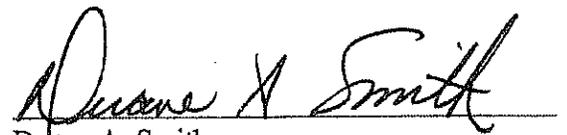

Herman R. Settemeyer, Acting Commissioner

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 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. 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 cfs, 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, OK, Gage flow, minus Kiamichi River near Hugo, OK, 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 Boggy Creek near Unger, OK, Gage flow, minus Kiamichi River near Hugo, OK, flow, minus Sanders Creek near Chicota, TX, 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 dam sites; 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-feed 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 dam sites 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 the Engineering Committee and submitted for Commission consideration.

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 dam sites 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 develop 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; providing 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 should 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 2. b. (3).