SOUTHEAST OKLAHOMA
WATER RESOURCES UTILIZATION STUDY
SECTION 905(b) (WRDA 86) Analysis

1. STUDY PURPOSE

The purpose of this study is to determine if there is a Federal interest in providing ecosystem restoration improvements in the Kiamichi River Basin in Southeast Oklahoma. If a Federal interest is determined, a feasibility report will be forwarded to Congress with a recommendation for authorization. This reconnaissance phase of the study found that there is a Federal interest in continuing the study into the feasibility phase. This Section 905(b) (WRDA 86) Analysis documents the basis for this finding and establishes the scope of the feasibility phase. As the document that establishes the scope of the feasibility study, the Section 905(b) (WRDA 86) Analysis is the basis of the Scope of Work chapter of the Project Management Plan.

2. STUDY AUTHORITY

a. This Section 905(b) (WRDA 86) Analysis is an initial response to the Energy and Water Development Appropriations Act, 2000 (Public Law 106-60). The appropriations language in the House Committee on Appropriations Report 106-253, dated July 23,1999, reads in part:

> The Committee has provided funding for a reconnaissance study of flooding and related water resource issues in Southeast Oklahoma, Oklahoma.

b. The reconnaissance phase of the study began in January 2000 using $100,000 appropriated in Fiscal Year 2000 in response to the study authority.

3. LOCATION OF PROJECT/CONGRESSIONAL DISTRICTS

a. The study area consists of 29 counties in Southeast Oklahoma, primarily focusing on the Kiamichi River Basin (see Attachment 1). The Kiamichi River is a tributary of the Red River and flows south-southwesterly through southern Oklahoma to its confluence with the Red River near Hugo, Oklahoma. The basin contains a drainage area of 1,830 square miles, is 130 miles long, and is 30 miles wide at its widest point. The Kiamichi River Basin topography is primarily composed of ancient mountains with deep, narrow valleys and swift flowing streams. Elevations range from 2,400 feet near Muse to about 440 feet in the lower reaches near Hugo Lake. Two Corps of Engineers reservoirs are located in the Kiamichi River Basin - Sardis Lake near Clayton in the upper basin and Hugo Lake near Hugo in the lower basin.

b. The non-Federal sponsor for the feasibility phase of the study is the Oklahoma Water Resources Board (OWRB).

c. The study area lies within the jurisdiction of Senators James Inhofe and Don Nickles and Representatives Wes Watkins (3rd District), Tom Coburn (2nd District), and J.C. Watts (4th District).

4. PRIOR STUDIES, REPORTS, AND EXISTING WATER PROJECTS

This study necessitated reviewing the following reports:

(1) Central Oklahoma Project, Feasibility Report for Water Resources Development, March 1978, Corps of Engineers. This report presented a variety of alternatives for water supply for central and southwest Oklahoma using water resources from Southeast Oklahoma.

(2) Red River Basin, AR, TX, LA, and OK Interagency Comprehensive Technical Report, Volume 3, March 1989, Soil Conservation Service, Bureau of Reclamation, and Corps of Engineers. This report studied the water resource problems, needs, and opportunities within the Red River Basin.

(3) Kiamichi River Basin Water Resources Development Plan, February 2000, Oklahoma Water Resources Board. This report addressed ways to facilitate development of the Kiamichi River Basin's water supplies and identified potential benefits for citizens of Oklahoma using those resources.

5. PLAN FORMULATION

During a study, the six planning steps set forth in the Water Resource Council's Principles and Guidelines are repeated to focus the planning effort and eventually to select and recommend a plan for authorization. The six planning steps are: 1) specify problems and opportunities, 2) inventory and forecast conditions, 3) formulate alternative plans, 4) evaluate effects of alternative plans, 5) compare alternative plans, and 6) select recommended plan. The phases of the planning process typically differ in the emphasis placed on each step. In the iterations conducted during the reconnaissance phase, the step of specifying problems and opportunities is emphasized, although the other steps are not ignored, since the initial screening of preliminary plans that results from the other steps is critical to the scoping of the follow-on feasibility phase studies. The following subparagraphs present the results of the reconnaissance phase. This information will be refined in future iterations of the planning steps during the feasibility phase.

a. Identified problems. The only problems identified in the 29-county area of Southeast Oklahoma with the potential of both Federal interest and a local sponsor are in the Kiamichi River Basin.

(1) **Existing conditions.** The Kiamichi River Basin is located in Choctaw and Pushmataha Counties, Oklahoma, and has a drainage area of 1,830 square miles. The river originates in southeastern LeFlore County, flows west and southwest across western Pushmataha County, and then turns southeast across Choctaw County to the Red River. The basin is 110

miles long, and the width varies from 5 to 30 miles. The northern two thirds of the basin lies in the Ouachita Mountains physiographic province. This location represents an ecotonal region between the Prairie Parklands to the west and the Southern Floodplain Forest to the east. As such, the faunal assemblages of the Kiamichi Basin are highly diverse with several western species at the eastern most edge of their ranges and many eastern forms near the edge of their western most ranges. Also, several unique or rare aquatic species are found within the basin. Representative taxa historically known to occur within the basin include 24 species of mussels, 85 species of fish, 55 species of amphibians, 158 species of reptiles, 160 species of birds, and 51 species of mammals.

Since the 1970's, many land use changes have been gradually occurring within the watershed that appear to be impacting the habitat and water quality of the Kiamichi River Basin for indigenous species. Non-point source runoff from ranching and chicken production facilities has contributed to nutrient loading in the basin. Increased sediment loading and use of selected herbicides from silviculture practices within the upper watershed may also be impacting the water quality of the river. Construction and operation of reservoirs within the basin have reduced the amount of physical habitat for some species, and operation of the reservoirs may be impacting the natural flood cycles and the thermal regime of the Kiamichi River.

Hugo Lake is located in the lower Kiamichi River Basin. This multipurpose reservoir became operational in 1974. The lake was Federally authorized and constructed, and has available storage for flood control, water supply, and water quality. Construction of the lake altered the ecosystem of the lower Kiamichi River Basin. This area provided habitat for many of the mussel species found in the Kiamichi River Basin.

Sardis Lake is located on Jackfork Creek in the lower Kiamichi River Basin. Jackfork Creek flows into the Kiamichi River northeast of Clayton. Sardis Lake was Federally authorized and constructed, and became operational in 1983. The lake only has storage for flood control and water supply. Operation of Sardis Lake may have altered stream flow on the lower Kiamichi River and also may have affected the thermal regime of the river.

Resource agencies are concerned about impacts associated with the cumulative effects due to land use changes within the basin for some aquatic species in the Kiamichi River Basin. Those species include the Blackspot Shiner, Goldstripe Darter, Crystal Darter, Peppered Shiner, Pallid Shiner, Kiamichi Shiner, Rainbow mussel, Ouachita Creekshell mussel, Scaleshell mussel, Ouachita Kidneyshell mussel, Little Spectacle Case mussel, Southern Hickorynut mussel, Butterfly mussel, Louisiana Fatmucket mussel, Monkeyface mussel, Squawfoot mussel, Three-Horned Wartyback mussel, and the Mississippi Map Turtle.

Also, populations of two federally listed threatened and endangered mussel species in the basin appear to be declining. The Ouachita Rock Pocketbook mussel (*Arkansia wheeleri)* is a Federally-listed endangered species found in the Kiamichi, and the Winged Maple Leaf mussel (*Quadrula fragosa*), also a Federally-listed endangered species, is believed to occur there as well. Both species depend on stream flows with good water quality for survival; however, both are rapidly declining due to impacts associated with the aforementioned land use changes.

Mussels are important indicator species in riverine ecosystems. Mussel beds and the spent shells of mussels in these beds provide habitat for benthic macroinvertebrates. Mussels also serve an important role as filter feeders. Through the feeding process, mussels provide nutrients for benthic macroinvertebrates. Mussels are dependent on appropriate substrate and flow conditions. Modified conditions could result in a loss of significant habitat and food resources for other aquatic fauna, thus disrupting the entire riverine ecosystem.

Four major tributaries of the Kiamichi River are located between the confluence of Jackfork Creek and the Highway 3 bridge southeast of Antlers. These tributaries account for approximately 30% of inflows into Lake Hugo. The tributaries are Pine Creek (John's Valley), Buck Creek, Tenmile Creek, and Cedar Creek. Each tributary provides habitat for a warm water aquatic community. The OWRB considers the Kiamichi River a source of high quality water. The water quality along this segment of the river is generally good, with primarily agricultural runoff providing nutrient load to the river.

The Kiamichi River Basin includes portions of Pittsburg, Latimer, LeFlore, Pushmataha, Atoka, and Choctaw Counties in Southeast Oklahoma. However, implementation of any alternative plan could have impacts in the entire 29-county Southeast Oklahoma area. The estimated 1990 population in the basin was about 25,600. The population of the Kiamichi River Basin resides primarily in rural areas and earns incomes well below incomes earned by populations living in other portions of the state.

Most of the aquatic habitat for restoration is in Pushmataha County. According to State estimates, the1999 population of Pushmataha County was 11,500, slightly larger than its 1990 Census count of 10,997. The city of Antlers, the largest city in the county, has an estimated population of 2,500. The population density for the county is 3.0 persons per square kilometer. The per capita income in Pushmataha County was $13,512 as compared to the State per capita income of $21,694. Of the 77 counties in the state, Pushmataha ranks 76th in per capita personal income. The 1995 median household income for the State of Oklahoma was $26,495 while the Pushmataha figure was $18,763. An estimated 31.2% of the county population live in households with incomes below the poverty level as compared to 18.2% of the State's population. Retail trade, construction, manufacturing, and health services are the largest employing industries in the county. The average 1999 unemployment rate in Pushmataha County, 5.2%, is higher than the State of Oklahoma rate of 3.6%.

(1) **Expected future conditions.** The existing land use changes that have occurred since the 1970's are expected to occur into the future. The existing agriculture and silviculture activities will probably continue to increase along with the resultant changes and impacts to water quality.

The existing physical loss of aquatic habitat resulting from construction of existing reservoirs will remain the same. Any physical loss of habitat, alteration of stream flows, or modifications to the thermal regime of the Kiamichi River could severely impact the habitat of the riverine ecosystem in the basin.

The State of Oklahoma projects a population of 28,900 in the year 2020 in the Kiamichi River Basin. The growth is linked to overall economic development in Southeast Oklahoma. Historically, this area has fewer employment and income opportunities than elsewhere in the state. Persistent unemployment and relatively low incomes should continue in the next 20 years. The resultant population growth will be below that expected in other areas of the state.

The relatively depressed economy of the Kiamichi River Basin does not offer any opportunity to divert economic resources to preservation/restoration of the watershed's riverine ecosystem. Without assistance, it is doubtful any local action will be taken.

(2) **Planning objectives and planning constraints.**

(a) **National Objectives.** The national or Federal objective of water and related land resources planning is to contribute to national economic development consistent with protecting the nation's environment, pursuant to national environmental statures, applicable executive orders, and other Federal planning requirements.

?? Contributions to National Economic Development (NED) are increases in the net value of the national output of goods and services expressed in monetary units. Contributions to NED are the direct net benefits that accrue in the planning area and the rest of the nation.

?? The Corps has a second objective for National Ecosystem Restoration (NER) in response to legislation and administration policy. This objective contributes to the nation's ecosystems through ecosystem restoration, with contributions measured by changes in the amounts and values of habitat.

(b) **Public Concerns.** The local sponsor expressed concern about possible impacts to the Kiamichi River's diverse riverine ecosystem and water quality due to activities within the basin. Agriculture and silviculture practices and confined animal operations have affected the Kiamichi River's ecosystem. The OWRB lists the Kiamichi River Basin as highest priority for attention due to the presence of two endangered species that are unique to the Kiamichi River. The U.S. Fish and Wildlife Service have also expressed concern about finding solutions to maintain the riverine ecosystem in the Kiamichi River Basin. Other public interest groups such as The Nature Conservancy have also shown concern for the Kiamichi River's ecosystem.

(c) **Study Planning Objectives.** The national objectives of NED and NER are general statements and are not specific enough for direct use in plan formulation. The water and related land resource problems and opportunities identified in this study are stated as specific planning objectives to provide focus for formulating alternatives. These planning objectives reflect problems and opportunities and represent desired positive changes in without project conditions. The planning objectives are specified as follows:

Preserve and/or restore the riverine ecosystem of the Kiamichi River Basin between the confluence of Jackfork Creek and the Kiamichi River and the upper reaches of Hugo Lake over the 50-year period of analysis.

(d) **Planning Constraints.** Unlike planning objectives that represent desired positive changes, planning constraints represent restrictions that should not be violated. The planning constraints identified in this study are as follows:

(i) Avoid negative impacts to threatened and endangered and other species in the study area,

(ii) Minimize impacts to cultural resources in the study area,

(iii) Minimize negative impacts to turbidity in the Kiamichi River and its tributaries,

(iv) Minimize reduction of dissolved oxygen in the Kiamichi River and its tributaries,

(v) Minimize water losses due to evaporation.

(4) **Problems Warranting Federal Participation.** The riverine ecosystem in the Kiamichi River Basin is degrading as a result of development in the basin. Some indicator species of the diverse riverine ecosystem are already in decline. Loss of these indicator species breaks down the food chain of the ecosystem and will heavily impact the overall condition of the ecosystem throughout the Kiamichi River basin. Flow and thermal regime conditions are key to the survival of the indicator species.

b. **Alternative Plans.** Screening of a variety of measures, some of which were infeasible due to technical, economic, or environmental constraints, resulted in the formulation of alternative plans. Screening consisted of assessing each measure and determining whether to retain it for plan formulation. Following are the descriptions and results of evaluating the measures considered in this study:

(1) **No Action.** The National Environmental Policy Act (NEPA) requires that the Corps consider the option of "No Action" as one of the alternatives. No Action is the condition reasonably expected to prevail over the period of analysis, given current conditions and trends, and assuming the Federal Government takes no action to achieve the planning objectives. This plan, also known as the Without Project Condition, forms the basis from which all other alternative plans are measured.

(2) **Non-Structural Measures**.

(a) Provide additional stream flows from Sardis Lake. Releases would allow sustained minimum flows on the Kiamichi River to benefit the ecosystem. This measure affects approximately 56 river miles from the confluence of Jackfork Creek and the Kiamichi River to

the Highway 3 bridge southeast of Antlers. This measure does not provide any benefits to the tributary streams.

(b) Implement a lake level management plan for Sardis Lake that provides seasonal flows similar to those experienced before construction of Sardis. This measure also affects 56 river miles, but does not provide any benefits to the tributary streams.

(3) **Structural Measures**.

(a) Modify the intake structure at Sardis to provide warmer water releases. This measure lessens the effects of Sardis Lake on the thermal regime of the Kiamichi River. Up to 56 river miles from the confluence of Jackfork Creek and the Kiamichi River to the Highway 3 bridge southeast of Antlers are affected, but no benefits are provided to the tributaries.

(b) Construct a re-regulation dam on the Kiamichi River below Sardis Lake to provide sustained minimum stream flows. This measure affects up to 50 river miles, but does not affect any of the tributaries.

(c) Construct a dam on one or more tributaries of the Kiamichi River to provide sustained minimum flows on the Kiamichi River and tributary streams. The tributaries are Pine Creek (in John's Valley), Buck Creek, Tenmile Creek, and Cedar Creek (see Attachment 2). This measure provides sustained minimum stream flows for up to 118 river miles.

(4) **Preliminary Plans.** Preliminary plans are combinations of one or more management measures that survived initial screening. Following are descriptions and results of evaluating the preliminary plans in this study:

(a) **Preliminary Plans Eliminated from Further Consideration.**

Plans consisting of combinations of structural measure (b) with any of the other four measures were not feasible. Construction of a reregulation dam on the Kiamichi River negatively impacts the riverine ecosystem.

(b) **Preliminary Plans for Further Consideration.**

(i) **Non-structural measure (a)** is a potentially feasible alternative. This alternative provides sustained minimum stream flows over 56 river miles of the Kiamichi River.

(ii) **Non-structural measure (b)** is a potentially feasible alternative. This alternative implements a lake level management plan to create more natural, seasonal flows on 56 river miles of the Kiamichi River.

(iii) **Structural measure (a)** is also a potentially feasible alternative. This alternative raises the temperature regime of the Kiamichi River below

the confluence with Jackfork Creek. This alternative affects 56 river miles of the Kiamichi River.

(iv) **Structural measure (c)** is also a potentially feasible alternative. Any of the reservoirs on the four tributaries in the lower Kiamichi River Basin will augment stream flows by creating impoundments of approximately 1,000 to 3,500 acres (or a combination of any of the four). These reservoirs provide minimum sustained stream flows for as little as 26 river miles or as much as 118 river miles of the Kiamichi River and its tributaries.

(v) Combinations of **non-structural measure (a)** and **structural measures (a) and (c)** are possible alternatives. These alternatives provide sustained minimum flows for up to 174 river miles of the Kiamichi River and its tributaries. Water temperature is also affected.

(vi) A combination of **non-structural measure (b)** and **structural measure (a)** is a possible alternative. This alternative creates more natural stream flows and temperatures for up to 56 river miles of the Kiamichi River and its tributaries.

c. **Preliminary evaluation of alternatives.** Expected positive impacts on aquatic habitat in the Kiamichi River are similar for each of the preliminary plans. On a scale of 0 to 1, with 1 representing optimal habitat quality, the current habitat quality is approximately 0.3 - 0.4. The expected future with-project habitat quality with any of these three alternatives is 0.7 - 0.8. Without implementing any of the alternatives, the expected future habitat quality is 0.0 - 0.1.

(1) **Alternative A** provides sustained minimum flows by making releases from Sardis Lake. This alternative affects 56 river miles of the mainstem of the Kiamichi River. No tributaries are affected.

(2) **Alternative B** provides more natural seasonal flows by implementing a lake level management plan at Sardis Lake. This alternative affects 56 river miles of the mainstem of the Kiamichi River. No tributaries are affected.

(3) **Alternative C** increases stream temperature by modifying the intake structure at Sardis Lake. This alternative affects 56 river miles of the mainstem of the Kiamichi River. No tributaries are affected.

(4) **Alternative D** provides additional flows in the lower Kiamichi River Basin by constructing a small dam on one or more of four tributaries of the Kiamichi River. This alternative affects anywhere from 26 river miles to 118 river miles the Kiamichi River and its tributaries, depending on the reservoir(s) chosen for construction. Estimated construction costs for the proposed dams are:

Location	River Miles Affected	Cost
John's Valley	64.8	$52,600,000
Buck Creek	43.5	$55,900,000
Tenmile Creek	31.6	$70,100,000
Cedar Creek	26.4	$29,100,000

(5) **Alternative E** combines **Alternatives A and C**. This alternative provides minimum sustained flows on the Kiamichi River. Water temperature is increased to more closely meet the requirements of the riverine ecosystem.

(6) **Alternative F** combines **Alternatives A and D**. This alternative provides minimum sustained flows by releases from Sardis and one to four additional dams on tributaries in the lower Kiamichi River Basin.

(7) **Alternative G** combines **Alternatives B and C**. This alternative provides seasonal flows and increased water temperature.

6. FEDERAL INTEREST

Based on preliminary screening of these alternatives, at least one alternative is potentially feasible for ecosystem restoration in an economically justified, environmentally acceptable manner in the feasibility phase. Ecosystem restoration is an output with a high budget priority. Therefore, there is a Federal interest in conducting the feasibility study.

Seven alternatives developed as a part of this reconnaissance study potentially provide NER benefits to the riverine ecosystem of the Kiamichi River. The alternatives affect as little as 26 river miles or as much as 174 river miles of the Kiamichi River and its tributaries. By altering stream flow conditions for minimum sustained flows, seasonal flows, thermal regime, or combinations of all three, the Kiamichi River ecosystem could be returned to a more natural state.

7. PRELIMINARY FINANCIAL ANALYSIS

The Oklahoma Water Resources Board, the non-Federal sponsor, provides 50% of the cost of the feasibility phase. Attachment 3 is a letter of intent from the local sponsor stating their willingness and ability to pursue the feasibility study and share in its cost and their understanding of the cost sharing required for potential project construction.

SUMMARY OF FEASIBILITY STUDY ASSUMPTIONS AND EXCEPTIONS

a. Detailed topographic mapping is necessary for real estate studies and hydrologic analysis and design. If additional data in digital format is necessary, aerial photography and mapping will be obtained.

b. A geographical information system (GIS) will be used to present study data in a geo-spatial referenced format.

c. The real estate estimate for Lands, Easements, Rights-of-way, Relocations, and Disposal Areas (LERRD's) will be based on a gross appraisal. A detailed Real Estate Design Memo will be part of the plans and specifications effort.

d. Due to the large areas potentially affected by the project, an EIS will be required.

e. The cost estimate for report preparation assumes that only the main report (with environmental impact statement) will be reproduced on paper. The technical appendices will be reproduced as a CD-ROM.

8. FEASIBILITY PHASE MILESTONES

Milestone	Description	Duration (mo)	Cumulative (mo)
F1	Initiate Study	0	0
F2	Public Workshop/Scoping Meeting	2	2
F3	Feasibility Scoping Meeting	9	11
F4	In Progress Review	12	23
F5	Alternative Formulation Briefing	30	53
F6	Draft Feasibility Report	4	57
F7	Final Public Meeting	1	58
F8	Feasibility Review Conference (if needed)	1	59
F9	Final Report to Division	4	63
F10	DE's Public Notice	1	64
F11	Chief's Report	6	70

10. FEASIBILITY PHASE COST ESTIMATE

	Feasibility Phase Task	Total ($)	Federal ($)	Local ($)	
				Cash	In-Kind
1	Public Involvement	20,000	10,000	10,000	
2	Environmental Studies	1,125,500	562,750	562,750	
3	Economic Studies	45,000	22,500	22,500	
4	Project Management	75,000	37,500	37,500	
5	Plan Formulation	100,000	50,000	50,000	
6	Engineering/Design	2,691,000	1,345,500	1,345,500	
7	Real Estate	75,000	37,500	37,500	
8	Independent Technical Review	30,000	15,000	15,000	
9	Report Preparation (including GIS)	50,000	25,000	25,000	
10	Washington Level Review Contingency	50,000	25,000	25,000	
11	Study Contingency	470,200	235,100	235,100	
	Total Cost	**4,731,700**	**2,365,850**	**2,365,850**	

11. RECOMMENDATIONS

The study recommendation is that the Tulsa District proceed with a cost-shared feasibility study to examine proposed solutions to address ecosystem restoration of aquatic habitat in the Kiamichi River Basin. The Oklahoma Water Resources Board is the local cost-sharing sponsor. A preliminary time and cost estimate to conduct the feasibility study is $4,731,700 over 70 months. Refined time and cost estimates are part of the Project Management Plan submitted at the completion of the reconnaissance phase.

12. POTENTIAL ISSUES AFFECTING INITIATION OF FEASIBILITY PHASE

Continuation of this study into the cost-shared feasibility phase is contingent upon an executed FCSA. Failure to achieve an executed FCSA within 18 months of the beginning of the reconnaissance phase may result in termination of the study. There are no apparent issues at this time that impact implementation of the feasibility phase.

13. VIEWS OF OTHER RESOURCE AGENCIES

Only limited and informal coordination with other resource agencies occurred due to the time constraints of the reconnaissance phase. Coordination with the U.S. Fish and Wildlife Service regarding preliminary plans that result in constructing dams on the tributaries of the Kiamichi River was positive.

14. PROJECT AREA MAP

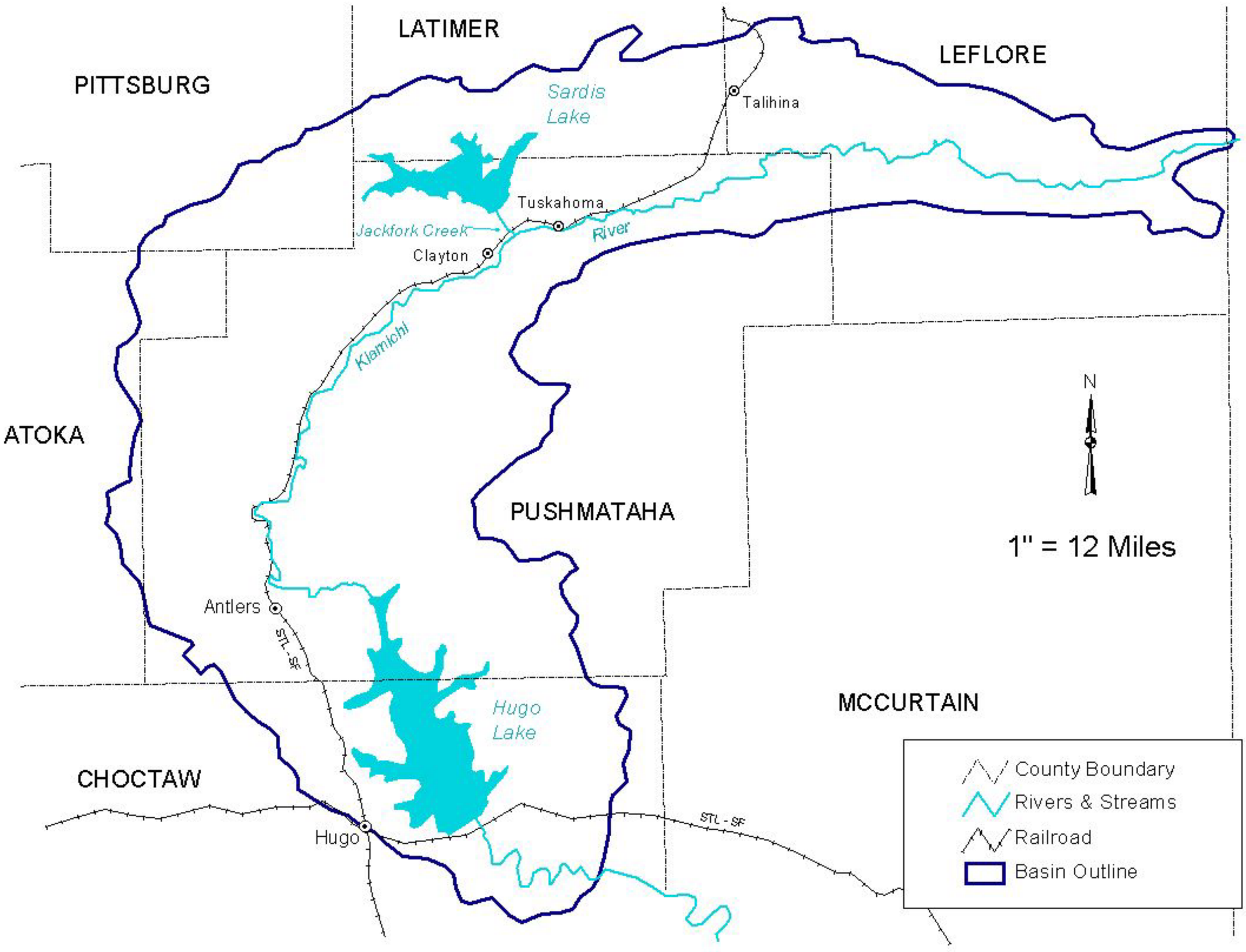
Attachment 1 is a map of the study area. Attachment 2 shows the proposed project locations.

Date

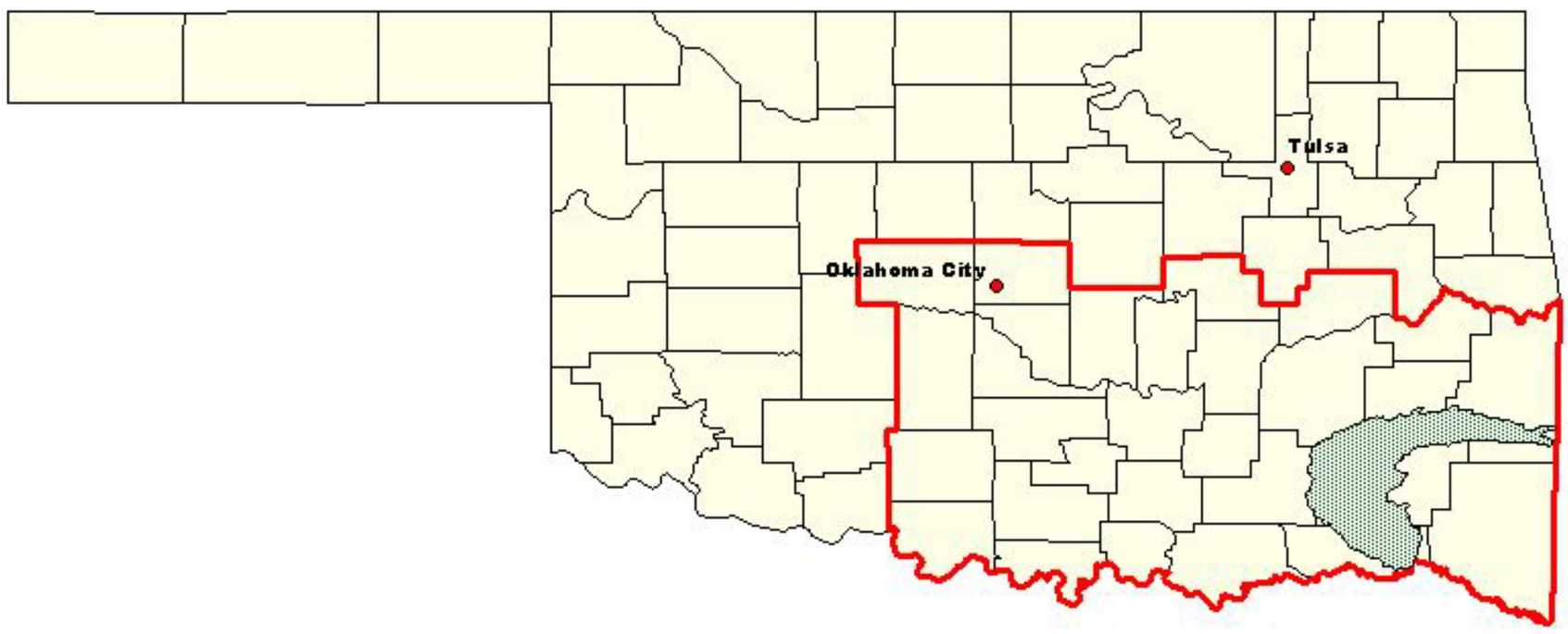
1 Dec 00

LEONARDO V. ELOR
Colonel, U.S. Army
District Engineer

KIAMICHI BASIN

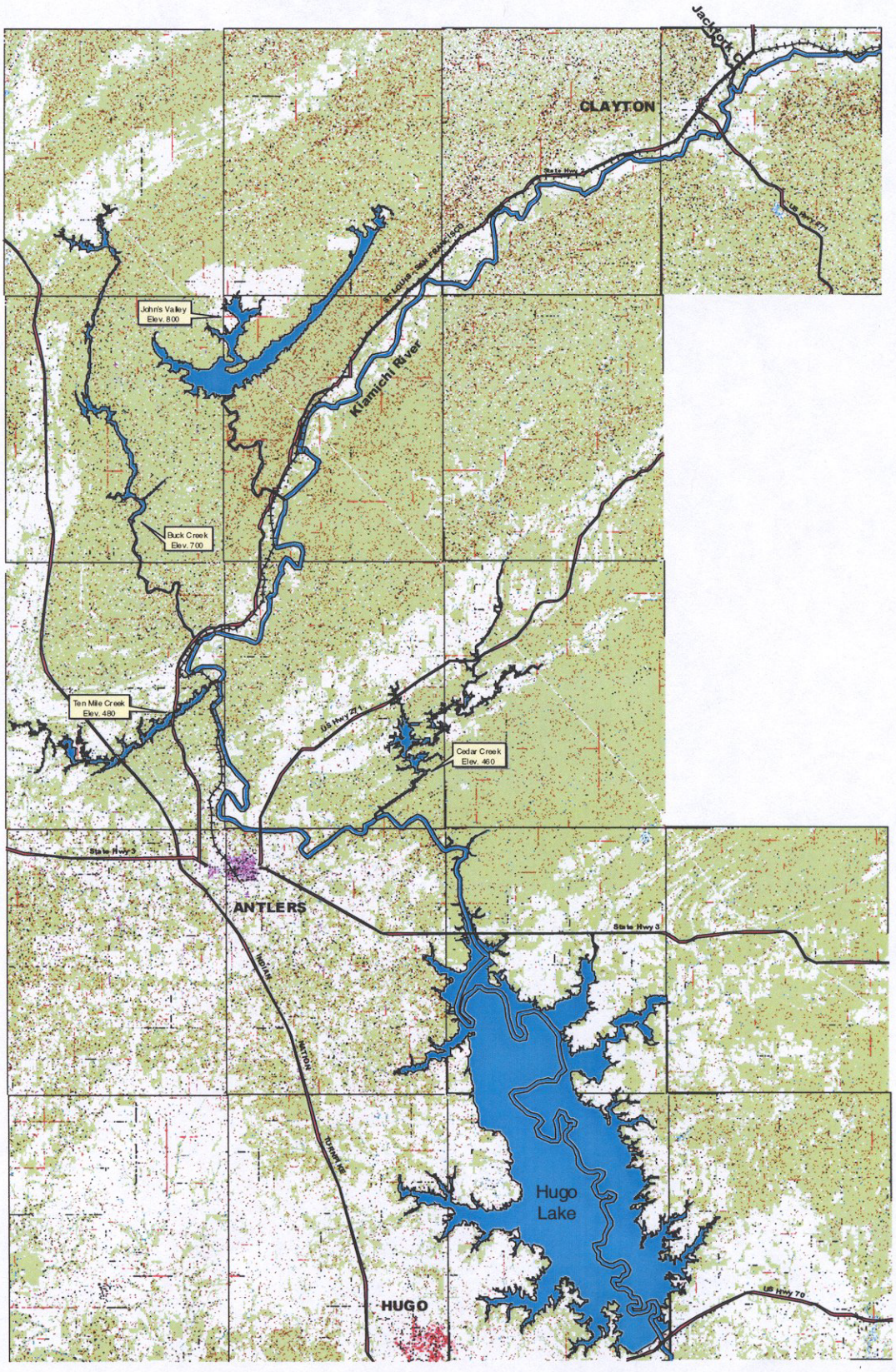


VICINITY MAP



Attachment 1

PROPOSED PROJECT LOCATIONS



Attachment 2

DUANE A. SMITH
EXECUTIVE DIRECTOR

FRANK KEATING
GOVERNOR

STATE OF OKLAHOMA
WATER RESOURCES BOARD

September 6, 2000

Colonel Leonardo V. Flor
District Engineer
U.S. Army Corps of Engineers
1645 South 101st East Avenue
Tulsa, OK 74128-4609

Dear Colonel Flor:

The Oklahoma Water Resources Board (OWRB) is concerned about impacts on threatened and endangered aquatic species in the Kiamichi River Basin in southeast Oklahoma. Use of available water resources in the 29 counties of the southeast Oklahoma region could possibly have some impact on these threatened and endangered species. I understand that the Corps of Engineers can conduct a cost-shared feasibility study on ecosystem restoration of the Kiamichi River Basin under the General Investigations Program.

I understand that the OWRB's cost-sharing responsibility during the feasibility phase would be 50 percent, up to one-half of which can be provided as in-kind services. I also understand that preconstruction engineering and design and construction for ecosystem restoration measures are cost-shared at a maximum of 65 percent Federal and a minimum of 35 percent by the local sponsor. The local sponsor provides all the lands, easements, rights-of-way, relocations and disposal areas needed for the project as part of their share of the project.

OWRB is currently seeking a fully-Federally funded feasibility study through the Energy and Water Development Appropriations Bill, 2001. However, if full Federal funding is not possible, OWRB will be interested in participating in the feasibility study as the cost-sharing local sponsor as stated above.

The purpose of this letter is to express the intent of the OWRB to enter into negotiations for the feasibility phase. The Project Study Plan developed during the negotiations will describe the study activities, proposed schedule and cost of the study. I understand that this letter is not a contractual obligation on the part of either the Corps or the OWRB and either party may discontinue the project development process at any time.

Sincerely,

Duane

Duane A. Smith
Executive Director

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