

## **W. D. MAYO HYDROELECTRIC PROJECT**

The W. D. Mayo Hydroelectric Project has been generously funded by the U.S. Department of Interior-Energy and Minerals Development Program as follows:

**Phase I - DOI-EMDP 2009 - \$130,000** – The Feasibility Study was concluded with a final report and business plan prepared by the Benham Companies and North Star Energy Services with recommendations to continue through development.

**Phase II – DOI-EMDP – 2010 - \$150,000** - continuation of the feasibility and pre-development. Completed.

**Phase III - DOI-EMDP 2011 - \$1,667,100** - begins October 1, 2010. Funding by U.S. Department of Interior, Division of Energy and Minerals Department, Energy and Minerals Development Program (EMDP) will provide for development in areas of:

- Continuing technical aspects of the project
- Topographic Survey (Mapping)
- Geotechnical Engineering
- Finalize Project Conceptual Document
- Continuation Turbine Generator Accessories – Specifications and Procurement
- Continuation of the Powerhouse & Equipment – Specifications and Procurement
- Complete General Arrangement Drawings
- Transmission/Interconnect selection and associated R-O-W, SWPA vs. OG&E
- Determination of source of Potable Water & Temp. Power (R-O-W)
- Development of RFP – Power & Renewable Energy Credits - Marketing
- Response to qualified entities of RFP for Power & Renewable Energy Credits – Marketing
- Project Construction and Project Financing coordination – Development of Options
- Business Plan Revision to reflect changes in project costs, tax/investment credits and interest rates
- State and Federal Agency Coordination affected parties of the project
- USACE Operating and Site Access Agreement refinement/revision to reflect specifics
- USACE Review and Approval of Project Activities

**Phase IV DOI-EMDP 2012 - \$550,000** allowed funds for: U.S. Army Corps of Engineers (USACE), Detailed Powerhouse Model Study, and Movable Bed Model (Sedimentation Model) Study.

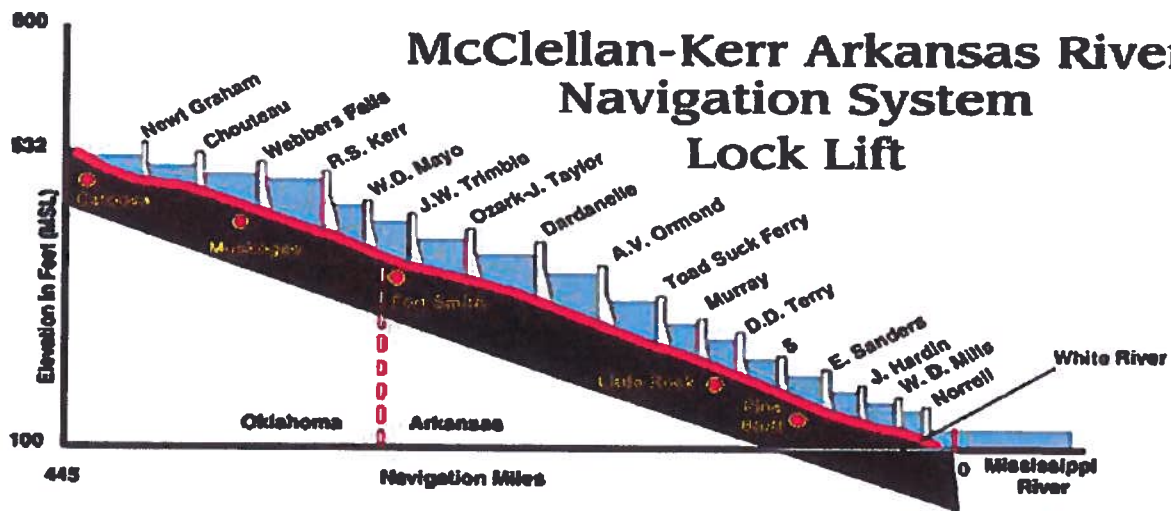
**Phase V** will continue with the pre-construction/development of the project. A budget will be submitted for the following tasks: Modeling completion, USACE 408/404/10 Permits; Environmental reviews, Engineering Consultants, Marketing Consultants and Project Management, power purchase agreements (PPAs), transmission/interconnect, and travel.

## W. D. Mayo Hydroelectric Project

The W. D. Mayo Lock and Dam #14 is operated by the U.S. Army Corps of Engineers (USACE) and is located in Sequoyah County, near Spiro, Oklahoma. As a **typical hydroelectric project, the service life will be 100 years.** Section 1117 of the Water Resources Development Act of 1986 authorized Cherokee Nation to construct a hydroelectric project at W.D. Mayo Lock and Dam #14 (see attached).

- Project size – 30MW
- Expected cost of completion - \$144 million
- Timeline – Design 1 year; Construction 2-3 years; Completion date of 2015.
- USACE is very supportive and will provide federal oversight for the project.
- Obstacle: The project was authorized by Congress in 1986 giving Cherokee Nation exclusive rights. Amendments to HR 1421 are pending in Congress.

The Arkansas River is a sustainable renewable resource operated and controlled by the USACE. The viability of this project has been proven through the operation of Lock and Dam #13 and #15 for the past 40 years. The revenue generated will benefit Cherokee Nation for 100 years and is considered a low-risk endeavor. Hydroelectric generation is presently installed and operating at the following Lock and Dams of the Arkansas River Navigation System: R.S. Kerr – Oklahoma; J.W. Trimble – Arkansas; Ozark J. Taylor – Arkansas; Dardanelle – Arkansas; A. V. Ormond – Arkansas; Murray – Arkansas; and W.D. Mills – Arkansas.



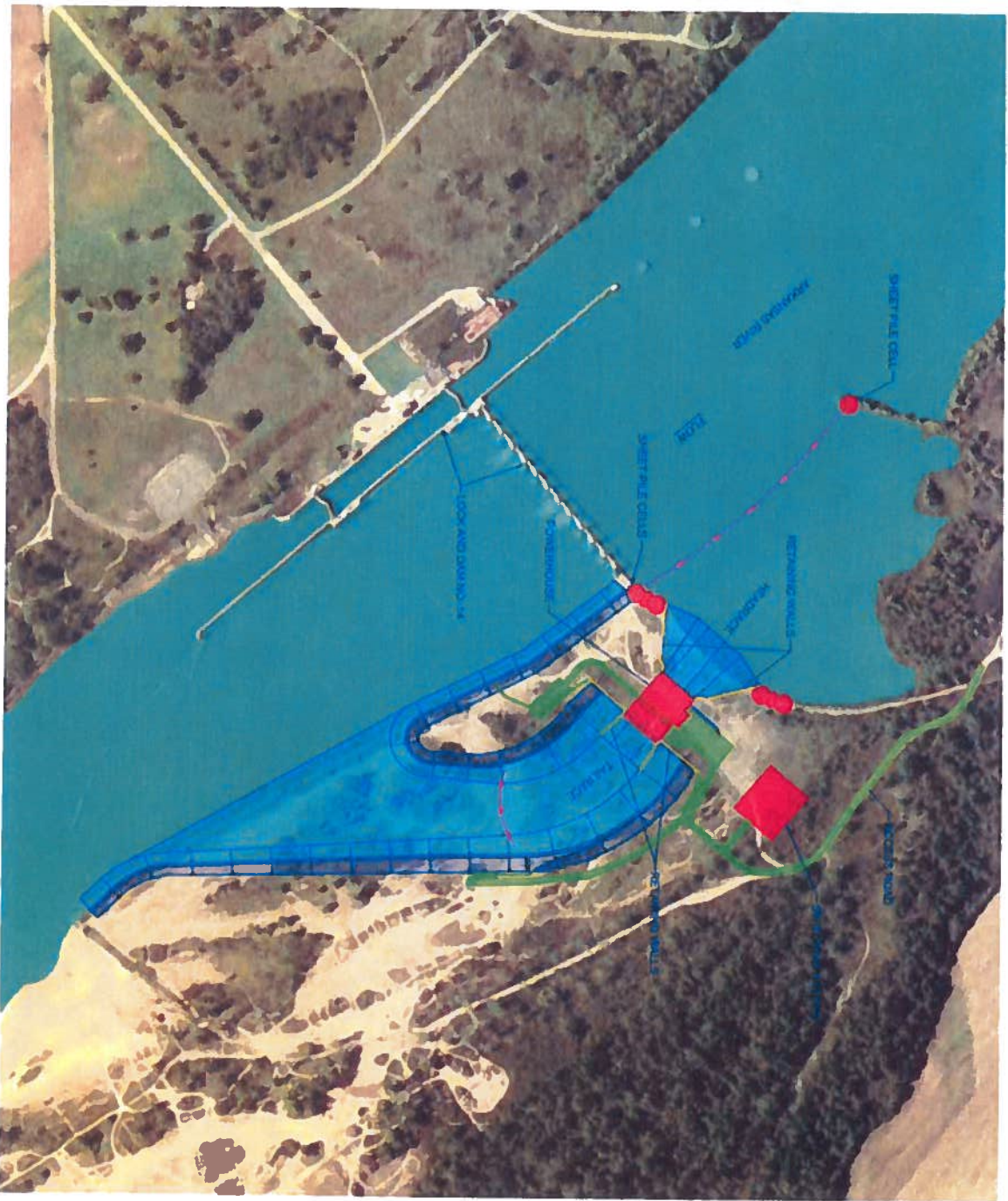
**Short-Term Benefits:**

- Construction will provide 150-200 direct jobs in a low-income area: construction of power plant, road construction, power line construction, concrete batch plant operation, security, fence and barrier construction.
- Indirect employment in Sequoyah County: food sales, transportation and logistics expenditures, housing requirements and other sales of commodities.
- Local economic benefit from construction is \$532 million.

**Long-Range Benefits:**

- Power Purchase/consumption by Cherokee Nation or sales to wholesale/retail entity.
  - Offset electric load of Cherokee Nation and entities as a hedge against future power inflation costs.
  - Sales to wholesale/retail entity(s) would provide long-term income to Cherokee Nation.
  - A combination of a. and b. above may be possible through negotiation.
- Provide permanent employment of 5-10 highly-trained workers and continuous tax revenue and income to the local area.
- Gross annual income is expected to exceed \$10-\$12 million that will escalate over time.
- The project has an actual life of nearly 100 years with no major renovation until after the 46<sup>th</sup> year of operation (turbine overhaul) and is considered low-risk.
- Allows Cherokee Nation to be a “green energy” provider (useful for marketing).
- Creates a source of energy that is environmentally sound, uses no fuel except water-flow to generate energy, and is a perpetual source of non-polluting energy during the next century.

As funding permits, the Project Development Team of Cherokee Nation Businesses, L.L.C. will continue development of the project with the assistance of experienced consultants. SAIC (formerly Benham) and North Star Energy Services (engineering and marketing firms) have been engaged on this project for the past 16 years. Benham built the J.W. Trimble Lock and Dam at Ft. Smith which is a model design for the W.D. Mayo project.



NOTE: PRELIMINARY LAYOUT  
 INFORMATION SHOWN IS CONCEPTUAL BASED ON ACTUAL LAYOUT OF THE COMPLETED DOWNSTREAM PLANT AT LOCK AND DAM NO. 9. THE PLANT LAYOUT DEPICTED IS ANTICIPATED TO BE NEARLY IDENTICAL. THE SITE CONFIGURATION WILL REQUIRE FURTHER REFINEMENT SUBSEQUENT TO DETERMINATION OF POWER SALES AGREEMENTS AND ASSOCIATED TRANSMISSION INTERCONNECT SELECTION AND HYDROLOGIC MODELING TO MITIGATE POTENTIAL EFFECTS ON NAVIGATION. THE GENERAL ARRANGEMENT AND SITE LAYOUT IS REPRESENTATIVE OF PRIMARY CONSTRUCTION ANTICIPATED.

W. D. MAYO HYDROPOWER PROJECT

**AERIAL SITE PLAN**

**CHEROKEE NATION**

**BEHNSAM**  
 THE BEHNSAM GROUP, LLC  
 11115 Woodbridge, Suite 400  
 Charlotte, NC 28255

112TH CONGRESS  
1ST SESSION

# H. R. 1421

To amend the Water Resources Development Act of 1986 to clarify the role of the Cherokee Nation of Oklahoma with regard to the maintenance of the W.D. Mayo Lock and Dam in Oklahoma.

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## IN THE HOUSE OF REPRESENTATIVES

APRIL 7, 2011

Mr. BOREN (for himself and Mr. COLE) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Natural Resources, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To amend the Water Resources Development Act of 1986 to clarify the role of the Cherokee Nation of Oklahoma with regard to the maintenance of the W.D. Mayo Lock and Dam in Oklahoma.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

1 **SECTION 1. RIGHTS AND RESPONSIBILITIES OF THE CHER-**  
2 **OKEE NATION OF OKLAHOMA REGARDING**  
3 **THE W.D. MAYO LOCK AND DAM IN OKLA-**  
4 **HOMA.**

5 Section 1117 of the Water Resources Development  
6 Act of 1986 (Public Law 99-662, 100 Stat. 4236) is  
7 amended to read as follows:

8 **"SEC. 1117. W.D. MAYO LOCK AND DAM.**

9 **"(a) IN GENERAL.**—Notwithstanding any other pro-  
10 vision of law, the Cherokee Nation of Oklahoma may—

11 **"(1)** design and construct one or more hydro-  
12 electric generating facilities at the W.D. Mayo Lock  
13 and Dam on the Arkansas River in Oklahoma, sub-  
14 ject to the requirements specified in subsection (b)  
15 and in accordance with the conditions specified in  
16 this section; and

17 **"(2)** market the electricity generated from any  
18 such facility.

19 **"(b) PRE-CONSTRUCTION REQUIREMENTS.**—(1) The  
20 Cherokee Nation shall obtain any permit required by Fed-  
21 eral or State law before the date on which construction  
22 begins on any hydroelectric generating facility at the loca-  
23 tion referred to in subsection (a), except that the Cherokee  
24 Nation shall be exempt from any licensing requirements  
25 under the Federal Power Act (16 U.S.C. 791a et seq.)  
26 that may otherwise be required for the construction, oper-

1 ation, or maintenance of hydroelectric generating facili-  
2 ties.

3 “(2) The Cherokee Nation may initiate the design or  
4 construction of any such facility only after the Secretary  
5 reviews and approves the plans and specifications for such  
6 design and construction.

7 “(c) PAYMENT OF DESIGN AND CONSTRUCTION  
8 COSTS.—(1) The Secretary of the Army may accept funds  
9 offered by the Cherokee Nation and use such funds to  
10 carry out the design and construction of any hydroelectric  
11 generating facility.

12 “(2) The Cherokee Nation shall—

13 “(A) bear all costs associated with the design  
14 and construction of any such hydroelectric gener-  
15 ating facility; and

16 “(B) provide any funds necessary for such de-  
17 sign and construction to the Secretary of the Army  
18 prior to the Secretary initiating any activities related  
19 to the design and construction of a hydroelectric  
20 generating facility under this section.

21 “(d) ASSUMPTION OF LIABILITY.—The Cherokee Na-  
22 tion shall—

23 “(1) hold all title to any hydroelectric gener-  
24 ating facility constructed under this section and

1       may, subject to the approval of the Secretary of the  
2       Army, assign such title to a third party;

3           “(2) be solely responsible for—

4               “(A) the operation, maintenance, repair,  
5               replacement, and rehabilitation of any such fa-  
6               cility; and

7               “(B) the marketing of the electricity gen-  
8               erated by any such facility; and

9           “(3) release and indemnify the United States  
10       from any claims, causes of action, or liabilities that  
11       may arise out of any activity undertaken to carry  
12       out this section.

13       “(e) ASSISTANCE AVAILABLE.—Notwithstanding any  
14       other provision of law, the Secretary of the Army may pro-  
15       vide any technical and construction management assist-  
16       ance that is requested by the Cherokee Nation relating  
17       to the design and construction of any hydroelectric gener-  
18       ating facility described in subsection (a).

19       “(f) THIRD PARTY AGREEMENTS.—The Cherokee  
20       Nation may enter into agreements with the Secretary of  
21       the Army or a third party that the Cherokee Nation or  
22       the Secretary determines are necessary to carry out this  
23       section.”.

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DEPARTMENT OF ARMY  
CORPS OF ENGINEERS, TULSA DISTRICT  
1645 SOUTH 101<sup>ST</sup> EAST AVENUE  
TULSA, OKLAHOMA 74128-4809

Programs & Project Management Division **JUN 18 2009**

Swimmer Group, L.L.C.  
1330 East 25<sup>th</sup> Street  
Tulsa, OK 74114

To Whom It May Concern:

The U. S. Army Corps of Engineers (USACE) has a rich History of alliance commencing in 1980 with the Cherokee Nation of Oklahoma furthering hydroelectric development at the W D Mayo Lock and Dam on the McClellan-Kerr Arkansas River Navigation System.

Perhaps the best example of USACE-Cherokee support for such project is demonstrated pursuant SEC. 1117. W.D. MAYO LOCK AND DAM, Public Law 99-662 (HR 6) passed November 17, 1986. The Act provides for:

[.... the conservation and development of water and related resources and the improvement and rehabilitation The Cherokee Nation of Oklahoma is authorized to design and construct hydroelectric generating facilities at the W.D. Mayo Lock and Dam on the Arkansas River in Oklahoma, as described in the report of the Chief of Engineers dated December 23, 1981: ....]

USACE looks forward to working with the Cherokee Nation as the Nation continues with its development of the hydroelectric facility.

Sincerely,

John H. Roberts, P.E., PMP  
Deputy District Engineer for  
Project Management

SEC. 1117. W.D. MAYO LOCK AND DAM.

(a) Notwithstanding any other provision of law, the Cherokee Nation of Oklahoma is authorized to design and construct hydroelectric generating facilities at the W.D. Mayo Lock and Dam on the Arkansas River in Oklahoma, as described in the report of the Chief of Engineers dated December 23, 1981: Provided, That, the agreement described in subsection (d) of this section is executed by all parties described in subsection (b) of this section.

(b)(1) Conditioned upon the parties agreeing to mutually acceptable terms and conditions, the Secretary and the Secretary of Energy, acting through the Southwestern Power Administration, may enter into a binding agreement with the Cherokee Nation of Oklahoma under which the Cherokee Nation of Oklahoma agrees --

(A) to design and initiate construction of the generating facilities referred to in subsection (a) of this section within three years after the date of such agreement,

(B) to reimburse the Secretary for his costs in --

(i) approving such design and inspecting such construction, and

(ii) providing any assistance authorized under subsection (c)( 2) of this section, and

(C) to release and indemnify the United States from any claims, causes of action, or liabilities which may arise from such design or construction.

(2) Such agreement shall also specify --

(A) the procedures and requirements for approval and acceptance of such design and construction are set forth,

(B) the rights, responsibilities, and liabilities of each party to the agreement are set forth, and

(3) the amount of the payments under subsection (f) of this section, and the procedures under which such payments are to be made, are set forth.

(c)(1) No Federal funds may be expended for the design or construction of the generating facilities referred to in subsection (a) of this section prior to the date on which such facilities are accepted by the Secretary under subsection (d) of this section.

(2) Notwithstanding any other provision of law, the Secretary is authorized to provide, on a reimbursable basis, any assistance requested by the Cherokee Nation of Oklahoma in connection with the design or construction of the generating facilities referred to in subsection (a) of this section.

(d)(1) Notwithstanding any other provision of law, upon completion of the construction of the generating facilities referred to in subsection (a) of this section, and final approval of such facilities by the Secretary --

(A) the Cherokee Nation of Oklahoma shall transfer title to such facilities to the United States, and

(B) the Secretary shall --

(i) accept the transfer of title to such generating facilities on behalf of the United States, and

(ii) operate and maintain such facilities.

(2) The Secretary is authorized to accept title to such facilities only after certifying that the quality of the construction meets all standards established for similar facilities constructed by the Secretary.

(e) Pursuant to any agreement under subsection (b) of this section, the Southwestern Power Administration shall market the excess power produced by the generating facilities referred to in subsection (a) of this section in accordance with section 5 of the Act of December 22, 1944 (58 Stat. 890; 16 U.S.C. 825s).

(f) Notwithstanding any other provision of law, the Secretary of Energy, acting through the Southwestern Power Administration, is authorized to pay to the Cherokee Nation of Oklahoma, in accordance with the terms of the agreement entered into under subsection (b) of this section, out of the revenues from the sale of power produced by the generating facilities of the interconnected systems of reservoirs operated by the Secretary and marketed by the Southwestern Power Administration --

(1) all reasonable costs incurred by the Cherokee Nation of Oklahoma in the design and construction of the generating facilities referred to in subsection (a) of this section, including the capital investment in such facilities and a reasonable rate of return on such capital investment, and

(2) for a period not to exceed fifty years, a reasonable annual royalty for the design and construction of the generating facilities referred to in subsection (a) of this section.

(g) Notwithstanding any other provision of law, the Secretary of Energy, acting through the Southwestern Power Administration, is authorized --

(1) to construct such transmission facilities as necessary to market the power produced at the generating facilities referred to in subsection (a) of this section with funds contributed by non-Federal sources, and

(2) to repay those funds, including interest and any administrative expenses, directly from the revenues from the sale of power produced by the generating facilities of the interconnected systems of reservoirs operated by the Secretary and marketed by the Southwestern Power Administration.

(h) There are authorized to be appropriated to the Secretary for the fiscal year in which title to the generating facilities is transferred and accepted under subsection (d) of this section,

and for each succeeding fiscal year, such sums as may be necessary to operate and maintain such facilities.