

December 31, 1930, was set first as the date for completion of the proposed reservoir. The A. P. and L. has contended its completion at that date was not feasible. The Federal Power Commission was said to be considering an application for the license's renewal.

Bull Shoals Tests to Be Resumed

Special to the Gazette. 12-29-40

Mountain Home, Dec. 28.—Drilling will be started again soon on further foundation tests on the Bull Shoals damsite on White river. A few foundation test holes were sunk on this site early in 1940, and showed very satisfactory results. At a hearing before the Flood Control Committee in Washington in April, it was reported that the Bull Shoals project was the largest undeveloped hydroelectric project between the Appalachians and the Rockies. The Flood Control Committee requested a report on Bull Shoals May 11, 1938, and this report recently has been submitted by the United States Engineers.

The Bull Shoals site is about a mile above the historic Bull Shoals mountain, the west bank of the river at the site being in Marion county, and the east bank in Baxter county. There is probably not a better site for a dam in the United States. On the west side of the river, the bank rises to a high bluff. On the east side it crosses a narrow bottom on the Clyde Bryant farm, then rises to a high bluff. It is literally a deep gash in the high Ozarks, through which White river during past ages has eaten its way.

The first site tested for hydroelectric development on White river was the Wild Cat Shoals site, five miles up the river from Cotter. These tests were made first by the Dixie Power Company, and by the White River Power Company. Both held licenses to construct a dam. Foundation tests made by these concerns showed the under structure to be cavernous and not at all suitable for the construction of a high head dam.

Bull Shoals Site Preferred.

After spending several months in investigations, geologists with the United States Engineers located the most desirable site at Bull Shoals, and all tests to date have been found satisfactory. This site is 12 miles up the river from the old Wild Cat Shoals site.

The construction of the Bull Shoals dam would have a beneficial effect in controlling floods on the lower river and, if built as a dual purpose or multiple purpose dam, would develop an enormous amount of power.

The United States Engineer reports on floods on White river show an average damage of \$2,543,000 annually, of which \$790,000 is between Lock and Dam No. 3, above Batesville, and Peach Orchard Bluff, 169 miles above the mouth of the river. The report also said there is also loss of life and the adverse effect of floods on health, general welfare and social security of the inhabitants that cannot be evaluated. Indirect losses probably amount to 25 per cent of the direct losses, the report indicated.

At Newport, in the central part of the basin, 73 floods have occurred in 49 years of record, six of which were major floods.

The report also calls attention to the natural resources of the section: Forest products, coal, manganese, glass sand, natural gas, clay, tripoli, lead and zinc. Much of the power generated at Bull Shoals could be utilized in the development of these resources.

The report shows that the benefits from the construction of the Bull Shoals dam would pay for the dam in less than 40 years. These figures, which are, of course, preliminary estimates, show the cost of this dam to be as follows: Dam and reservoir, \$26,963,000; power house and equipment, \$6,650,000; power transmission facilities, \$4,387,000; interest during construction, \$2,000,000, making a total of \$40,000,000. If the dam is built as a dual dam, the annual power value will be \$1,403,400, and the annual flood benefits, \$1,452,900, a total of \$2,856,300, the report said. Deducting the annual fixed and operation costs, which are placed at \$1,815,100, the net annual benefits would be \$1,041,200, the report said.

Bull Shoals reservoir has a gross capacity of 2,750,000 acre feet, of

which 2,155,000 in the upper 83 feet would be reserved for flood control, and 144,000 in 11 feet of depth would be used for power storage. The total power installation is 120,000 kilowatts and the initial installation 80,000 kilowatts.

UNIFIED FLOOD PROGRAM FOR COUNTY URGED

North Side Levees Create Hazards.

Gazette 12-29-40

Consolidation of three proposed flood control projects for Pulaski county, two of which were authorized by the 1936 Congress, would provide ample economic justification for their early realization, the Pulaski County Planning Board reported in its publication on "Water Resources and Problems of Pulaski County" which will be distributed this week. The projects are:

Two levees in Little Rock, east and west of Main street, for which an allocation of approximately \$100,000 was withdrawn by the United States Army Engineers when the city and landowners failed to provide right-of-way and sign a maintenance agreement.

Levees on the south bank of the Arkansas river, below the mouth of Fourche bayou, paralleling levees which have been built on the north side of the river from Rose City to Gillett. Construction has been authorized by Congress but no money has been allocated.

Flood control of Fourche bayou, which frequently overflows the lowlands south of Little Rock, including a major industrial area and Adams Field, where a \$530,000 national defense improvement program is under way. The United States Engineers reported more than a year ago, following a survey, that the Fourche project was not justified by anticipated economic benefits but the project recently was reopened for reconsideration.

The board will submit copies of the report to Congressman D. D. Terry and the Little Rock District United States Engineers with the recommendation that the three projects be consolidated into a single county-wide flood control proposal. The report contends the projects are concerned with related problems and that no one of them can be carried out successfully.

L. A. Henry, engineer-director of the state Planning Board, was tendered a vote of appreciation by the board for his assistance in compiling the report, in the absence of Virgil L. Buckley, the board's engineer, who has been ill several weeks. The work of Mrs. Pearl L. Blackman, draftsman, also was commended.

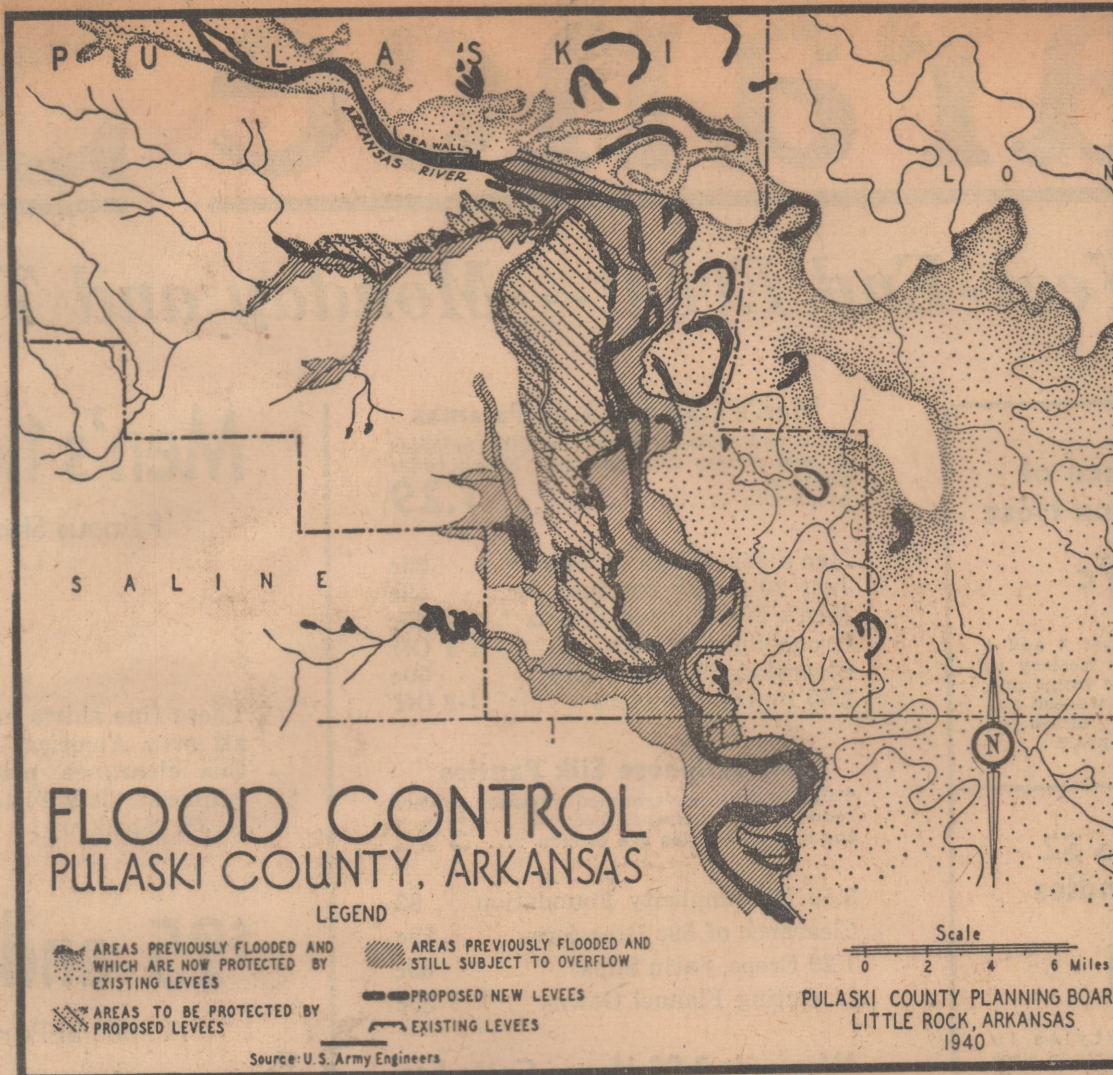
North Side Levees Increase Flood Hazards.

Seawall and levee construction on the north bank of the river has assured protection against floods reaching a height on the Little Rock gauge three feet greater than was reached in the 1927 flood when the waters rose to the 33-foot mark. Twenty-five feet is flood stage and 27 feet major flood stage. Little Rock and the county area south of the river have no more protection than at the time of the 1927 flood, the report points out, and the bulwarks now existing on the opposite side of the river would result in an even greater volume of flood waters pouring over the land south of the river.

Because annual carrying charges would exceed prospective benefits, United States Army Engineers did not recommend the Fourche bayou reclamation project. Landowners of the area built their own levees to a height of 27 feet at an estimated cost of \$150,000. Levees of that height are sufficient to hold back waters of four of every five floods.

The army engineers recognize the unsatisfactory conditions in Fourche bottoms, the report said, and acknowledge that many intangible benefits would result from construction of the project. Flood waters would damage Adams Field

COUNTY FLOOD CONTROL PROGRAM



Locations of proposed levees on the Arkansas river and Fourche bayou, which the Pulaski county Planning Board has recommended to be considered as a single project are shown on the above map. Little Rock's location is just south of the river approximately under the letter "s" in "sea wall." The accompanying legend indicates areas previously flooded, areas which would be protected by proposed levees, the extent of proposed levees and existing levees. Dark, curved black figures on the map are bodies of water. The map was taken from the county Planning Board's report on "Water Resources and Problems," which will be distributed this week.

and would cause an interruption of traffic on roads to the airport and others in the area considered of potential military value.

Co-operative Agency Could Promote Program.

Referring to the delay in securing right-of-way and meeting other federal requirements for construction of the south bank river levees, the Planning Board pointed out the need for co-operation of city, county and state governments.

"In order to effect the needed protection," the report said, "it is recommended that an agency be created with the power of eminent domain and reasonable tax-levying power in order to take advantage of the willingness of the federal government to contribute toward these improvements."

The 65-page water report is the Planning Board's major project for 1940. It includes 25 maps, charts and tables.

River Control Work in State Progresses

Democrat 12-29-40

The comprehensive flood control program for the Arkansas and White river basins by means of reservoirs was gotten under way this year by U. S. Army engineers and is expected to be continued with greater efforts during the coming year. Work now is under way on three reservoir projects and a fourth is expected to start early in the year while preliminary investigations are going forward on a fifth. Authorizations have been granted by Congress for three other projects.

Following construction of several levee projects throughout the Little Rock district, investigations were completed on three projects for construction of dams, designs finished and first construction contracts awarded. A fourth project will be advertised for construction bids next week.

The first of the reservoir projects to be started was the Nimrod dam, being built on Fourche la Pave river in Perry county. The next two were the Blue Mountain dam on Petit Jean in Yell county and the Clearwater dam on Black river near Piedmont, Mo., about 40 miles northwest of Poplar Bluff. The fourth, on which construction is expected to start within several weeks, will be the Norfolk dam on North Fork of White river in Baxter county. Foundation

explorations now are under way for the Water Valley dam on Eleven-point river, west of Pocahontas, in Greene county.

Nimrod Dam Started In April.

Work on the Nimrod dam, designed as a concrete structure to store flood waters on the Fourche la Pave river, was started in April by Russ Mitchell, Inc., and Brown & Root, Inc., Houston, Tex., on their joint bid of \$1,100,689. The dam is scheduled to be finished by May, 1942.

The Nimrod dam will contain penstocks for possible future installation of hydro-electric generating equipment, and when complete will cost about \$4,167,000.

Present work at the Blue Mountain and Clearwater projects is construction of outlet works, the principal construction of the dams to be done under separate contracts. Both outlet works will consist of tunnels through the river banks and the dams are to be of earth construction.

The Blue Mountain outlet works is being constructed by the John Kern Construction Company, Omaha, Neb., on its bid of \$686,877, and is expected to be finished in September. The entire Blue Mountain job will cost about \$5,900,000.

One \$27,000,000 Project. The United Construction Company, Winona, Minn., has the contract for construction of the Clearwater outlet works, its bid being \$1,154,798. The project is due for completion in November. Total cost of the Clearwater project will be about \$12,000,000.

This year's work will see beginning of the huge Norfolk dam, said to be the largest construction project ever undertaken in the state. Bids will be received soon and opened February 20. Actual construction is expected to get under way immediately after the bid and contract are approved. About three and one-half years will be required for completion of the dam.

The Norfolk project for flood control only will cost approximately \$11,327,000 but if power generating equipment is added immediately, as recommended by many officials, the additional size of the dam, the powerhouse and generating equipment will raise the cost to an estimated \$27,000,000.

Preliminary Work at Norfolk.

Preliminary projects for the Norfolk dam now under way are construction of a railroad and highway from the town of Norfolk to the dam site, about five miles, and construction of several dwellings at Mountain Home for occupancy of government personnel during the lengthy construction period.

The railroad construction is being done by the R. J. Reid Contracting Company, Birmingham, Ala., at a cost of \$122,610, while the highway

construction is by S. E. Evans Construction Company, Ft. Smith, at a cost of \$60,396. The dwellings at Mountain Home are being built by R. A. Hughes, Fayetteville, on a bid of \$74,682.

In addition to the extension of the flood control works, bids are to be opened January 29 for 10 pumps for the North Little Rock flood control project. The pumps will be installed along the levee and sea wall.

Norfolk Dam Construction To Start Soon

Democrat 12-29-40

Construction on Norfolk dam, to be erected on North Fork river in the southern part of Baxter county, is expected to begin within four months, it was indicated yesterday when the Little Rock district engineer announced bids for the project would be received and opened February 20. Plans and specifications will be available in about a week.

The dam will be built about five miles from the confluence of the North Fork and White rivers and probably is the largest construction project ever undertaken in the state of Arkansas. It will take about 3 1-2 years for completion.

The first of a series of dams authorized for construction in the White river watershed, Norfolk is expected to be the forerunner of several in a chain of power development that is hoped will result in an Arkansas and White River Valley Authority, sought by public and private interest as a means of industrial advancement for the state.

Present plans for the dam include a structure in which can be placed hydroelectric generating equipment, if authorized by Congress. The hydroelectric facilities have been recommended by the Federal Power Commission and the chief of engineers and a report has been sent to the War Department in connection with public recommendations that the hydroelectric generating equipment be installed immediately. May Cost \$27,000,000.

Construction of the dam for flood control purposes only is expected to cost about \$11,000,000, but if the hydroelectric facilities are added, the increased height and size of the dam with the extra equipment is expected to raise the cost to an estimated \$27,000,000.

The plans on which bids will be asked include a concrete, gravity type structure 2,624 feet long and 220 feet above the stream bed. It will be approximately 200 feet wide at the base of the spillway section. The structure will have a spill-

way with a net crest length of 480 feet about 182 feet above the bed of the stream, 11 flood control conduits and four 18-foot penstocks for future power installation. The spillway will be controlled by steel gates of the radial type when electric generating equipment is added. The penstocks will permit the installation of power units having a capacity of 30,000 kilowatts each, the potential installed capacity being 120,000 kilowatts.

To Create Huge Lake.

The proposed flood control project will provide for storage of 1,251,000 acre-feet of water, which will form a lake of approximately 22,000 acres. The lake would extend 38 miles north of the dam and have a shoreline of about miles.

A permanent conservation pool of 31,000 acre-feet, covering about 1,680 acres, would be formed by the flood control project.

If power facilities are added, the total storage capacity would be 1,983,000 acre-feet, which would form a lake of 30,700 acres, extending about 41 miles north and having 510 miles shore line. The flood control storage in the ultimate development for flood control and power would be 732,000 acre-feet.

The North Fork river rises in Texas county, Missouri, and flows generally south to its confluence with the White river. It is approximately 115 miles long and drains approximately 1,825 square miles, of which 1,806 square miles are above the dam site.

Rainfall and stream flow records of the river indicate it as an important flood-contributing tributary of the White river and a potentially valuable source of hydroelectric power. The average annual run-off from the watershed above the dam site over an 18-year period is about 1,348,000 acre-feet, equivalent to an average rate of flow at the site of 1,850 cubic feet per second. The flow has ranged from 300 to 120,000 cubic feet per second.

Private Permit Sought.

Power possibilities of the river are noted in the extensive investigations made by private interests and application by the White River Power Company for a license for a power development. The permit for the private development expired when the state investigation was centered on a site in the vicinity of Wildcat Shoals on White river.

Construction work on the dam will involve an estimated 850,000 cubic yards of excavation, 102,000 linear feet of core drilling, 1,500,000

Open Bids On Norfolk Dam February 20

Gazette 12-29-40

Invitations for bids for construction of Norfolk dam on the North Fork of White river, 10 miles from Mountain Home will be mailed to prospective bidders and other interested persons January 6, Lt. Col. Stanley L. Scott, engineer for the Little Rock District, U. S. Engineers, announced yesterday. The bids will be opened February 20.

The dam will be a concrete gravity type structure. An overflow structure will be located near the left abutment. There will be eleven conduits through the base of the spillway section. The dam will be about 2,600 feet long and the top will be about 220 feet above the bed of the river.

The dam is to be built five miles northeast of Norfolk in Baxter county and about five miles above the confluence of the North Fork and White rivers. The reservoir will extend into Ozark county, Missouri, and Fulton county, Arkansas.

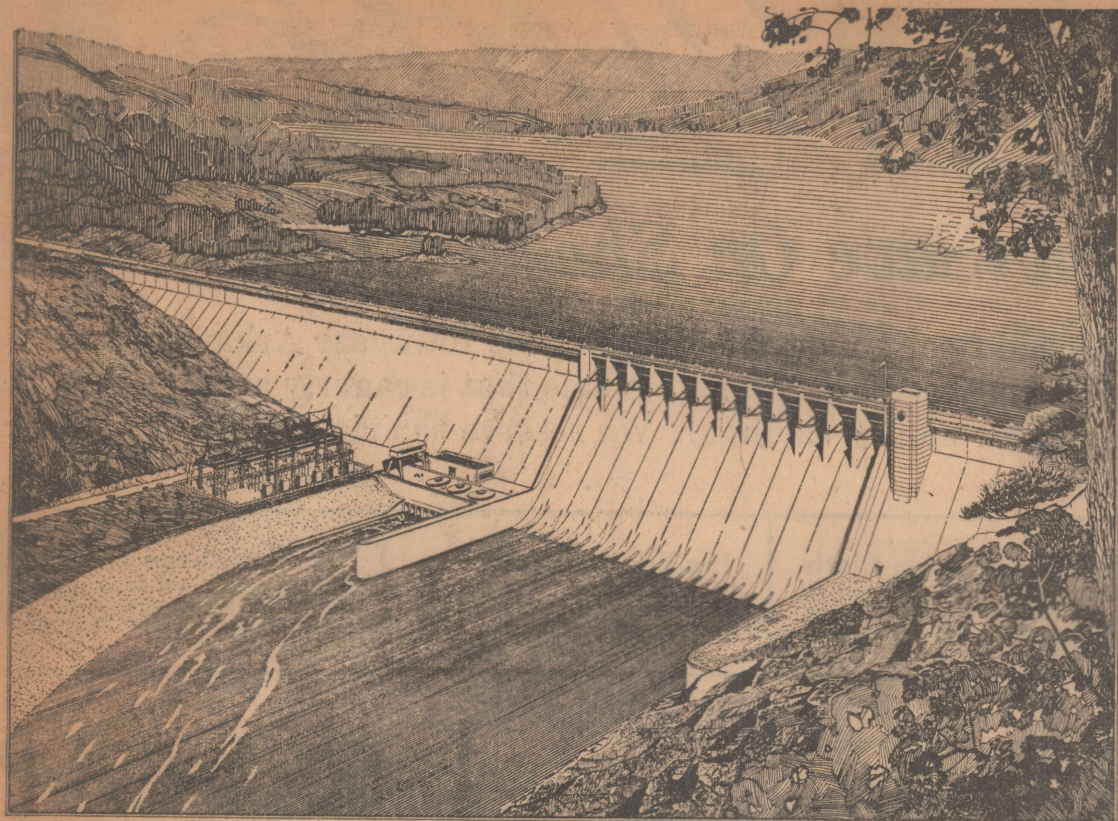
Hydroelectric Power Facilities Considered.

The Norfolk dam and reservoir will be one unit of a comprehensive reservoir system on the White river and tributaries for flood control in the White and Mississippi river valleys. The initial construction will include some basic facilities for the future generation of hydroelectric power.

Colonel Scott said additional authorization from Congress would be required before complete facilities for the generation of electric power could be installed.

The river over which the dam will be constructed is about 115 miles long and drains about 1,825 miles of which 1,806 miles are above the dam site, the colonel said. Channels of nearly all the tributaries of the Norfolk have steep banks and are lined with timber. The bed of the main

HOW BIG DAM WILL LOOK



This is the way the proposed Norfork dam will look when completed. It will be a concrete gravity type structure, more than 2,000 feet long at the top. It will require about 1,200 days to build. It will be constructed across the North Fork of White river in Baxter county near Mountain Home.

stream is relatively permanent. The bed is composed of rock and gravel and has many shoals.

North Fork Site Rated Most Effective.

The North Fork has been recognized for many years as an important flood-contributing tributary of the White river and a potentially valuable source of hydroelectric power, Colonel Scott said. The district engineer at Memphis, Tenn., included the Norfork reservoir in a group of eight reservoirs selected as being the most effective of 13 investigated in a report issued in 1930.

Power potentialities of the river were being investigated at the time. Site of the dam was selected after surface and subsurface investigations of the four narrowest sections of the gorge of the lower river channel. Detailed construction plans and specifications have been completed.

The dam is being designed so that generating facilities can be installed in the initial construction or as a second stage of construction after the dam is completed. The present congressional authorization provides for the construction for flood control and other purposes, and requires that penstocks and other similar facilities for future power development be installed when approved by the secretary of war upon the recommendation of the chief of engineers of the Federal Power Commission.

Storage Area Provides Power, Flood Control.

The reservoir will have a total storage capacity of 1,251,000 acre-feet, at spillway crest level. This will include a permanent power conservation pool, of 31,000 acre-feet. The capacity for flood control above the power conservation pool will be about 1,220,000 acre-feet.

The flood control storage space will be utilized only in times of flood. The stored water will be released as quickly as possible without overflowing the river banks below the dam.

Construction of a government village, offices for government supervisors and a railroad from Mountain Home to the dam site is under way. The dam will be completed in 1,200 days after the contract is awarded, unless extensions are permitted.

Specifications and other information can be obtained at the office of any United States district engineer.

Little Rock and Flood Control Projects.

The situation brought to public attention by a flood control report of the Pulaski County Planning Board is substantially this:

The lowlands to the east and south of the city have no more protection now than at the time of the great 1927 flood.

The seawalls and levees that have been built on the North Side would increase flood heights on the Little Rock side, where there are large in-

dustrial areas and the Adams Field airport.

Failure to provide a right-of-way cost Little Rock a \$100,000 allocation for levee protection for the lowland areas. A levee project for the south bank of the Arkansas below the (upper) mouth of Fourche bayou has been authorized by Congress but no funds for its construction have been allocated. It is these two projects, and a previously rejected plan for flood control on Fourche bayou itself, that the Planning Board recommends for consolidation into a single comprehensive program.

Fourche bayou flood and back waters have frequently overflowed large areas south of the city. The original proposal for their control was disapproved by the United States Engineers on the ground that anticipated economic benefits would not justify the expense. Since then, however, the government has undertaken a \$500,000 national defense improvement at Adams Field, and military considerations might now outweigh economic factors with respect to protecting this airport and its approach roads from Fourche flood waters. Meanwhile the state Flood Control Commission has recommended an altered plan, using the lower mouth of Fourche as an outlet, to do away with construction and operating costs for flood gates and a pumping station, and by direction of Congress the army engineers are making a new study of the bayou problem.

So there the matter stands for the present, with protection more needed than ever before, and no more protection available than there was when the 1927 flood invaded the outskirts of the city.

Flood Control Hearing to Be Held at Parkin Thursday.

Gazette 1-4-41
Parkin, Ark., Jan. 3 (AP).—Lt. Col. James D. Andrews Jr., acting chief of Memphis United States Engineers District, will preside over a public hearing here Thursday on possible modifications of the flood control plan for the St. Francis river.

Four-State Flood Control Meet Friday

Democrat 1-5-41
Conservation and Power Also to Be Hot Springs Topics.

Hot Springs—A dream of a Southwestern compact of volunteer citizens of Arkansas, Louisiana, Texas and Oklahoma, for promoting the orderly development of water re-

sources of the Southwest for flood control and incidental benefits, and for extending the Soil Conservation Service and Forest Conservation work, is expected to come true here January 10 and 11 when a four-state convention will be held at the Arlington hotel.

The meeting was first suggested by John W. Fouts, general manager of the Trinity Improvement Association of Dallas and Fort Worth. He pointed out that such a four-state organization would bear more weight in Congress than individual states and organizations working alone.

W. C. McClure of Camden, secretary of the Ouachita Valley Association, pointed out that it was generally recognized as a regrettable fact that the Southwest, generally, and the Ouachita valley, in particular, seem to be "trailing behind" other sections in the development of water resources. The Southwest Valley Association, the Ouachita Valley Association and the Red River Association all plan to send large delegations.

Expects 500 Delegates.

McClure predicted an attendance of 500 delegates.

The Arkansas Flood Control Commission will hold a business session at the Arlington Thursday, Jan. 9, with R. E. Overman, Little Rock, presiding.

Former Congressman John L. McClelland will preside as chairman of the four-states conference.

Ex-Gov. Pat M. Neff, Waco, Tex., president of Baylor University and head of the recently organized Texas Watershed Association, will be the principal speaker from Texas, with C. S. Clark, Austin, chairman of the state Board of Water Engineers, also on the program.

Conrad Glover, Sheridan, will speak for the Ouachita Valley Association, on "The Voice of Arkansas." Also scheduled to talk is Adolph Felsenthal, Camden. Gov. Carl E. Bailey and Gov.-elect Homer Adkins have been invited. The River Terminals Corporation is expected to be represented by John J. Dee Houston and J. H. Alphin, El Dorado.

Others on the program include Wade O. Marton, chairman of the Louisiana Flood Control and Water Conservation Commission; J. H. McDonald, Muskogee, Okla., prominent in activities of the Arkansas Valley Association, and Henry W. Stanley, secretary of the Hot Springs Chamber of Commerce.

Flood control soil and water conservation problems of Arkansas will take up most of the first day's program, with delegates reporting in good conditions in their district.

Auto Trip Saturday.

A motorcade to the site of the proposed Blakeley dam on the Ouachita river, northwest of Hot Springs, will be headed Saturday morning by Col. C. S. Lynch, executive vice president of the Arkansas Power and Light Company. This is a delayed project expected to receive much attention at the meeting.

The banquet will be held Thursday night. Vaudeville talent will entertain and a number of artists from Camden will appear.

McClure declared that invitations have been extended to the eight senators and 44 congressmen from the four states. He said representatives of the U. S. Engineers Corps of Little Rock, Tulsa, Vicksburg, Houston and New Orleans, the Farm Bureau, National Grange and other groups would be present.

Dam on the Northfork

Construction of Large Dam and Lake for Combined Flood Control and Potential Power Development Is Major Project in Baxter County.

By Tom Shiras

Gazette 1-5-41

Old timers in the Northfork river valley, in Arkansas and Missouri, have stopped scratching their heads and arguing about whether the Northfork dam will be built. Heavy power equipment now tearing at the rocks and dirt, leveling off road beds for a railroad and a heavy-duty highway from the town of Norfolk to the damsite have convinced them that the dam is no longer a dream to argue about. They know now that within the next few years one of the 11 largest concrete dams in the world will stretch from one great bluff to another across this beautiful mountain stream, creating one of the largest clear water mountain lakes in North America. The dam will hold back an immense amount of flood water from the lower White river area, and if a power plant is installed it is expected to produce enough power in coming years to pay for the project.

The Northfork river is particularly adapted to both flood control and power development. It is fed by gigantic springs that break out from beneath high hills in Ozark county, Missouri, and it flows a larger volume of water during dry weather than the White, above the junction of the two rivers. The main stem rises in the town of Mountain View, Mo. Bryant's Fork, its largest tributary, rises near Cedar Gap, Mo., emptying into the main stem near Tecumseh, in Ozark county, Missouri.

It comes racing down out of Missouri into Arkansas, with a greater fall per mile than any other Ozark mountain stream. Leaping water, breaking into white caps on the shoals. High bluffs that rise like sentinels above the deep pools in the sharp bends. A rough, rocky bottom, on which small-mouth black bass live, feed and play in the limpid water. A river now full of music and lure to the bait and fly casters, many of whom have classed it as the best black bass stream in North America.

The character of the river has not changed since the Bluff Dwellers or Rock Shelter people inhabited the shallow caves along its course during the end of the Ice Age. It is the same singing, cascading stream that furnished them their fish caught with bone fish-hooks. It is the same river on which the Osage Indians used to camp, hunt and fish over a century ago. Reading Henry Rowe Schoolcraft's description of the Northfork, written after he had walked from the source to the mouth, in November, 1818, one can see no change since that time.

The United States Engineers were not the first to discover the value of the Northfork river as a potential power source. For years a large part of the flour and meal that went into bread during pioneer days in Ozark county, Missouri, Baxter county, Arkansas, and adjoining counties was ground by water power mills located on this river. Several sawmills also were located along its course and these furnished the early pioneers with lumber.

A. Hodgson, an early pioneer who came from Kansas, and settled on Dry creek, in Ozark county, Missouri, probably was the most active in the development of early day water power on the Northfork. Two of the mills he constructed years ago are still in operation. One of these is located at Hodgson Spring, about 10 miles from Gainesville, Mo., on Bryant Fork. This spring has a flow of 22,000 gallons per minute, and flows a small river. The mill is of the turbine type and is equipped with two turbines, one of 65 horsepower, the other 25 horsepower. Even now, in competition with more modern mills, it produces a large amount of flour

annually. It is owned by the C. T. Aid estate.

The other mill is located at Dawt, Mo., about five miles from Gainesville, and now is owned by Charles Thompson. There is a dam about 300 feet wide across the river at this point that sends the water cascading through a narrow mill race to two turbines, each 45 horsepower. Flour and meal are produced at this mill, and Mr. Thompson also operates a store on the property. Dawt, Mo., will be the head of the huge lake created by the Northfork dam, but it is believed that the backwater will not come up far enough to flood the dam and mill.

These two mills are of a very substantial type and will stand as monuments to Mr. Hodgson, who died several years ago after an active and fruitful life. Another mill that he built was washed away by a flash flood. This one was located at Rainbow Springs, near Dora, Mo.

Baxter county, Arkansas also had its pioneer water power enthusiasts who operated mills on the Northfork river, below the Missouri line. Matt Calhoun is credited with building the first dam and installing the first water power plant in Baxter county, at Henderson. Older citizens of the county recall that this plant was built in the 60's and equipped with both a grist mill and a sawmill.

Jess Wolf and Joe Crunkelton built a dam across the river near the present Northfork damsite late in the seventies, and operated a grist mill there for a number of years. The abutments of this dam are still standing. Mr. Crunkelton later came to Mountain Home and installed a flour mill.

The first useful water power survey of the water power possibilities of the Northfork river, was made in 1909 and 1910 by W. N. Gladson, head of the Electrical Engineering Department in the University of Arkansas. It was sponsored by the Arkansas Geological Survey in conjunction with the United States Geological Survey. This survey covered not only a section of the Northfork river, but the White and Buffalo rivers also. The writer accompanied Mr. Gladson on many of his trips over the basin, and he recalls that there was a great deal of local interest in the project. It was this survey that gave the people of the upper White river watershed a true picture of the power resources of the territory and the important part they would some time play in the future development of the section.

The reason for this survey, as outlined by A. H. Purdue, then state geologist, was as follows: "The rapid consumption of such coal and other stored fuel deposits as are within easy reach of our commercial centers is a matter of great concern to those who contemplate future conditions. After these deposits shall become exhausted, where shall posterity turn for heat, light and other power? The only known available energy that can in any appreciable manner take the place of stored fuels is water power. It follows that the amount of such power within the bounds of any state becomes a matter of public concern."

Mr. Gladson's survey of the Northfork showed that an average of 29,161 horsepower could be developed by suitably located dams, based on the flow recorded at Smith's Ferry, Baxter county.

The three big springs that furnish a large part of the water to the Northfork river are among the largest and most beautiful in the Ozark mountains. The water, while clear, carries a pale blue tint, that reminds one somewhat of flowing, blue sky. They are the Rainbow, or Double Springs, the Hodgson Spring and Blue Spring, all in Ozark county, Missouri. Driving out

of Gainesville, Mo., over well maintained gravel highways, to these beautiful waters, is one of the most interesting scenic drives in the Missouri Ozarks. The country is broken, the Ozark Knobs are numerous and much higher than in other sections, and if one makes the trip in October or early in November, the entire landscape, which is wooded, is a blaze of autumn color.

Rainbow, or Double Spring, is the largest of the three. It is located about five miles from the little village of Dora, on a 1,400-acre tract of wilderness, owned by B. O. Mahaffey of St. Louis. It is strictly private property.

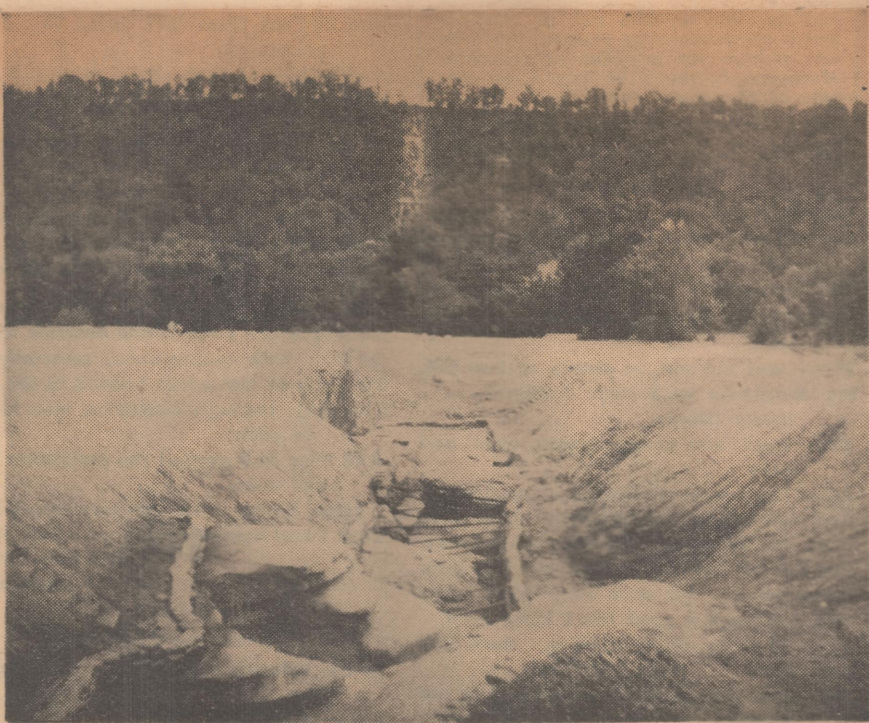
The main spring comes out from under a high mountain, and flows two ways into the Northfork river. Standing there and watching this sky-blue water flowing two ways into the river from the same source, one can hardly understand it. This spring has a daily flow of 123,000,000 gallons every 24 hours, and it is the biggest guarantee that the Northfork river will never go dry. A river that seems to be fully as large as the Northfork river itself flows from the main stream. The clear, blue water is full of watercress and other water vegetation. Gazing into its depths in the open places, one sees rainbow trout feeding and playing on the clean gravel bottom.

The other spring rises in a gravel bar in the middle of the Northfork river, a short distance above the first one. Strange to say, it too, flows two ways—one stream into the main stem of the river, the other into a chute that flows around a tow head, or island formation originating in a sandbar.

Blue Spring is located three miles up the Northfork river from Rainbow or Double spring, and it flows a tremendous amount of water, no figures are obtainable on the exact flow.

Hodgson Spring, on which we commented previously in connection with Hodgson mill, comes out of a wide crevice at the foot of a mountain about 200 yards from Bryant's Fork, into which it flows. Because of the tremendous flow of water, no mill dam is necessary, the spring itself being the mill race. On its way to Bryant's Fork, it cascades over a beautiful low head dam. It is a favorite site for picnics and brush arbor meetings for neighborhood folks.

The combined flow of these three springs, which is approximately 250,000,000 gallons a day, could hardly come from the Northfork watershed. The area as far back as Springfield, Mo., is badly broken underground, and the general opinion is that all or most of the underground water that collects in this area converges and discharges in these three big springs in Ozark county. There are numerous large springs on the lower river that help maintain the flow, but none as large as these three.



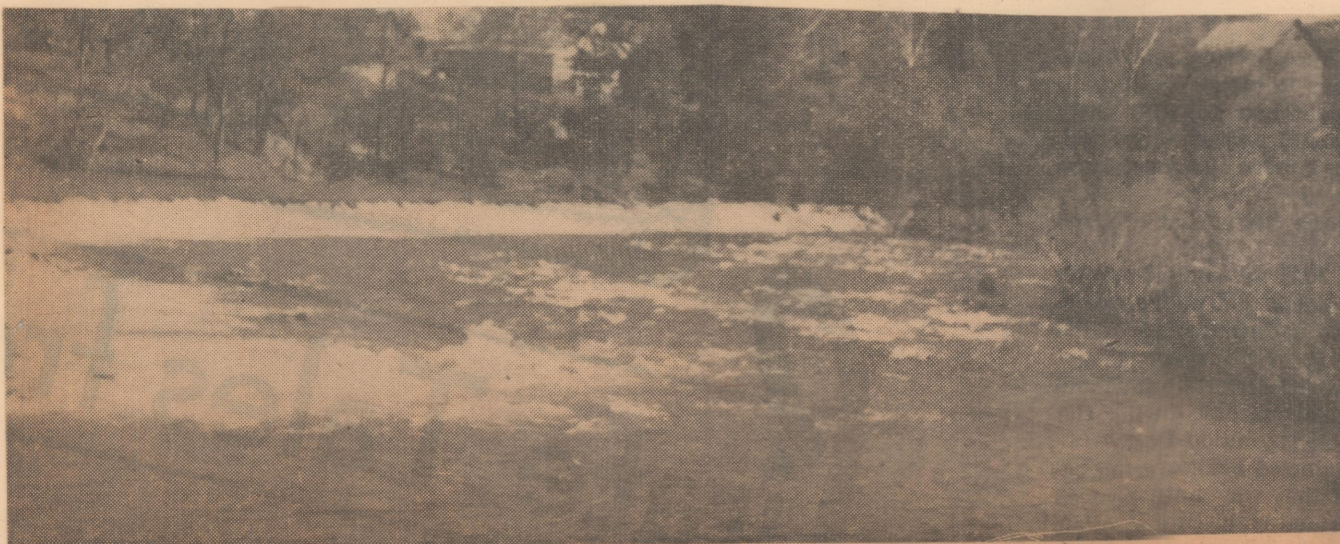
A trench at the Northfork dam site, dug to test the top formation of the dam foundation. It is 100 feet wide and 30 to 40 feet deep.



Core drilling in the middle of the Northfork river to test the dam foundation area is shown above.



At the left are Col. Stanley L. Scott (left), in charge of the Little Rock office, United States Engineers, and Maj. Gen. Julian Schley, chief of the U. S. Engineers, on an inspection trip at the Northfork dam site.



Mill dam at the Charles Thompson mill on the Northfork river, Dawt, Mo.

Specifications Prepared for Norfolk Dam

Democrat 1-7-41

Specifications for the Norfolk Dam, on which bids have been invited by the Little Rock District engineer office, were issued today and are contained in one of the largest binders yet issued for a flood control project in the district. The bids will be opened at 2:30 p. m. February 20 in the Hotel Marion ballroom.

The project calls for a concrete dam on Nork Fork of the White river, about five miles above their confluence, for flood control purposes with plans for later addition of power generating facilities.

As planned for flood control purposes, the dam will cost about \$16,000,000, but if power facilities are added the cost will be about \$27,000,000.

The specifications include 87 items on which the total bid will be based.

Camden Flood Control Meeting Delegates Appointed.

Special to the Gazette. 1-8-41

Camden, Jan. 7.—Delegates to represent Camden and Ouachita county at the four states conference on flood control and soil and water conservation at Hot Springs Thursday and Friday were named today. Many business men and farmers from this county also are expected to attend. John L. McClellan of Camden will be general chairman.

Camden entertainers will be on the banquet program Friday night. Lamar Williamson of Monticello will be toastmaster. Fred Bradford of Camden, chairman of the Board of Directors of the Ouachita Valley Association, and W. C. McClure will be on the program Friday night.

SHARP SLASH IN FLOOD CONTROL FUNDS ADVISED

North Little Rock Project Active.

Gazette 1-9-41

Washington, Jan. 8 (P).—President Roosevelt called for a slow-down in flood control expenditures in his budget message today. He submitted estimates for 1942 sharply below appropriations for the current fiscal year. Any projects not definitely in the defense category and not requiring immediate action, he said, should be deferred.

The president recommended an appropriation of \$22,000,000 for work on the lower Mississippi river and its tributaries, a reduction of \$8,000,000 under current year expenditures. He suggested that the general flood control expenditure be reduced to \$70,000,000.

No attempt is made in the budget to itemize the expenditures to be made under the proposed appropriations for general and Mississippi flood control. This will be done when army engineers tell the House Appropriations Committee how the money would be used.

It was said the flood control project at North Little Rock, Ark. "shall be constructed in accordance with plans now in the office of the chief of engineers here," and that funds would be made available for clearing Louisiana streams of snags and debris.

Rivers and Harbors Total Reduced to \$20,000,000.

Looking to the employment slump that might follow the defense program, President Roosevelt proposed a cut of \$12,392,270 in next year's appropriation for rivers and harbors.

For new work on rivers and harbors, he budgeted \$20,000,000. The current year's appropriation, including \$4,747,000 of an emergency fund set up by the Seventy-sixth Congress, is \$29,047,000. The new budget contains \$43,100,000 for maintenance of existing waterways. This is a reduction of \$3,345,270. Although there was no break-

down, it was presumed that a substantial part of the \$20,000,000 would be required for projects already started. A fight to boost the budget item was expected in the House and Senate.

Fund to Complete Airport Program Asked.

The president asked \$33,500,000 for completing a 250-airport program. The previous Congress authorized \$40,000,000. The Civil Aeronautics Administration, with the approval of the secretaries of war, navy and commerce, allocated the \$40,000,000 for approximately 200 projects.

The \$33,500,000 asked today could be used for further improvements on airports for which funds already have been allocated or on additional projects to bring the total to 250.

While they have obtained much data, officials said no list of projects would be prepared until Congress has made the appropriation. This delay is necessary because the CAA and the WPA conduct airport work and it will be necessary to determine which projects should be financed by each agency. All projects on the CAA program for the construction, improvement and repair of airports must be in the interest of national defense.

Federal Aid Road Total Of \$131,000,000 Recommended.

Congress was asked to appropriate \$131,000,000 for federal aid highways. The amount was \$10,000,000 under that appropriated during the present fiscal year. This was due to a reduction of \$15,000,000 for elimination of grade crossings and an increase of \$5,000,000 to restore sums expended on highways damaged or destroyed by floods or other disasters.

The budget asked \$105,000,000 for aiding states to construct and maintain federal aid roads; \$15,000,000 for secondary or feeder roads, \$10,000,000 for elimination of grade crossings and \$1,000,000 for roads through federal lands.

The 1941 appropriation for federal aid roads totaled \$99,990,000; for secondary or feeder roads \$15,000,000, grade crossing elimination \$25,000,000 and roads through federal lands \$1,000,000.

Hot Springs National Park Would Get Increase.

Expenditures of \$5,181,380 for work in national parks were recommended. The amount was \$217,100 more than that appropriated for the current fiscal year. Among amounts recommended for the next year and for the current year were: Hot Springs National Park, Ark., \$77,890 and \$73,670.

Budget Allows Money For 500 Additional F. B. I. Agents.

The budget calls for an increase of 500 in the "G-Man" staff, which already equals the 1,500 peak reached during the World war.

The budget recommends \$16,450,000 for the Federal Bureau of Investigation, compared with estimated expenditures of \$13,990,000 during the current year. Of the total, \$8,750,000 would be earmarked for defense purposes, an increase of \$2,403,200, and \$7,500,000 would be for regular and emergency needs, an increase of \$278,000.

Estimated Defense Cost Rises to \$28,480,000,000.

The president said \$10,811,314,600 would be needed for the second year of the "gigantic program" for "total defense." This boosted to \$28,480,000,000 the estimated cost of the rearmament effort on which the nation started in June, 1940. Other additional requests already are in prospect.

The budget message recommendations contrasted with a request for \$2,248,126,509 for defense submitted a year ago. By the year's end, the initial request had skyrocketed to \$17,692,227,930 in appropriations, authority to contract and long range commitments for such purposes as a two-ocean navy.

Depending on the turn of events, some defense officials expect the comparable total to be even larger at the close of this calendar year.

Of the proposed defense appropriations, the president recommended \$6,963,532,867 for the army; \$3,547,405,080 for the navy; asked \$225,000,000 for his emergency defense fund; \$33,500,000 for the selective service system; \$17,850,000 for the Defense Commission, and \$8,750,000 for defense functions of the Federal Bureau of Investigation.

The president told the legislators more than \$2,000,000,000 additional would be sought for the most immediate needs.

Authoritative sources forecast the immediate needs would require

closer to \$4,000,000,000, which would be requested within the next week or 10 days. It would include \$1-000,000,000 for a year's operation of four projected plants to assemble 3,600 bombing planes annually from parts prefabricated in automobile factories; \$400,000,000 for new munitions plants and about \$1,600,000,000 to round out equipment for a field force of 2,000,000 men.

A great part of the \$10,811,000,000 for the army and navy will be devoted to providing the productive facilities for arms and equipment for a much greater land force—possibly 4,000,000 men.

Although legislators asserted only the broadest details of the arms program, in relation to the British needs had been worked out, they said the army's program had not been greatly changed. They said the goal still was a productive capacity of 35,000 airplanes annually, about 6,000 tanks and the most modern weapons for a yearly total of about 1,400,000 men.

Naval sources explained no additional fighting ships or airplanes were contemplated in the navy's \$2,547,405,080 share of the total.

Engineers Coring at

Bull Shoals Site

Democrat 1-9-41
Mountain Home—U. S. Engineers are setting up core drill equipment at the Bull Shoals dam site on White River.

A few test holes were dug here in the early part of 1940. These tests proved to be satisfactory. At a hearing before the Flood Control committee in Washington last April it was brought out that the Bull Shoals project was the largest undeveloped hydro-electric project between the Appalachian and Rocky mountains.

The site is about ten miles northwest of Mountain Home. The river is the boundary line at this point between Baxter and Marion counties. The location is an ideal site for a dam it is said, and is about 12 miles up the river from the old Wildcat site. It is here that many thousands of dollars have been spent in past years in an effort to start construction of a power dam.

The figures in a recent report are said to reveal that the dam, built both as a power and flood control project, would pay for itself in 40 years. Figures, which are preliminary, indicate the following costs: Dam and reservoir, \$26,936,000; powerhouse and equipment, \$6,500,000; power and transmission facilities, \$4,387,000; interest during construction, \$2,000,000, making a total of \$40,000,000.

If the dam should be built as a dual purpose dam, the annual power value would be \$1,403,000 and the annual flood benefits, \$1,452,900, a total of \$2,855,900. Deducting the annual fixed operation costs, placed at \$1,815,000, the net annual benefits are figured at \$1,041,200.

Every effort is being made in this and other sections to get this dam built. It would be one of the largest power projects in the middle west.

Flood Control Meet

Will Begin Friday

Democrat 1-9-41
Hot Springs (AP)—Flood control and conservation leaders from four states will convene here Friday for a two-day meeting expected to draw large delegations from the area.

A pre-conference session of the Arkansas Flood Control Commission will be held tonight.

W. C. McClure, Camden, secretary of the Arkansas commission, said the four-states meeting was called for the organization of a compact of volunteer citizens of Texas, Louisiana, Oklahoma and Arkansas for promoting development of water resources and soil and forest conservation in the Southwest.

Gazette 1-10-41

To Flood Conference.
Arkansas Flood Control Commission members who went to Hot Springs yesterday to attend the four state flood control conference starting today were Chairman R. E. Overman, Little Rock; M. W. Green, Prescott; and John P. Morrow, Batesville. C. S. Christian, commission engineer, accompanied them.

Blakely Dam Resolution Adopted

Special to the Gazette, 1-11-41

Hot Springs, Jan. 10.—Residents of the Ouachita river valley, at an open meeting under auspices of the Arkansas state Flood Control Commission, here today adopted a resolution urging the federal Power Commission not to renew or ex-

tend the license of the Arkansas Power and Light Company to build Blakely dam on the Ouachita river 20 miles northwest of Hot Springs.

Debate over the resolution and an address by Reece Caudle, Russellville, highlighted the first day of the four-state convention of water and soil conservationists. Presented by J. Fred Jones of Norman, the resolution called for the revocation of the license. Lamar Williamson of Monticello, member of the state commission, said that the license had expired, but the federal Power Commission had allowed more than a year to pass without taking any action regarding the company's request.

A proposed amendment to the resolution, requesting the A. P. and L. to set a date when work would start, was defeated.

Among those who spoke in favor of the amendment was Adolph Felsenthal, Camden, one of the early advocates of hydro-electric dams on the Ouachita.

Secretary W. C. McClure of the state commission, replying to a statement made by Mr. Jones that electric rates under the TVA were lower than those of the A. P. and L., asserted that overall rates of the A. P. and L. averaged less than two cents a kilowatt hour.

R. E. Overman, chairman of the state commission, presided.

Arkansas Projects Reviewed.
Maj. T. F. Kern, United States engineer for the Little Rock district, reviewed flood control projects in the state, whose cost will total \$102,800,000. Not all this sum has been appropriated, but there are under construction the Nimrod dam, Yell county, a \$4,000,000 project; Blue Mountain dam, Petit Jean, \$5,000,000, and the Clearwater and Norfolk projects, representing a combined cost of \$25,000,000.

Arkansas Declared Handicapped.
C. E. Palmer, publisher, asserted in an address that Arkansas is primarily an agriculture state. Eliminating the damage suit racket and establishing a workmen's compensation law, he said, were steps to attract industries, but high freight rates and the wage and hour law continue to retard progress.

Soil Conservation Advocated.
Speaking on "Lost, A Congressman," Mr. Caudle, who heads conservation directors in the state, said that while steps had been taken to correct the danger of one fewer congressman representing Arkansas, "none of the suggestions made go to the root of the evil."

He said no nation could survive after its "agriculture areas cease to prosper, and a study of the farm lands of our state, especially the upland area, indicate that one of the big problems confronting the people of Arkansas and the nation is soil erosion control."

He said that "all one has to do to understand why Arkansas may lose a congressman is to go through the thousands of acres of uplands and note the eroded condition of the soil."

Mr. Caudle indicated a request will be made of the next legislature for a substantial appropriation for soil erosion control. He said Arkansas is "one of the leading states in erosion control work, but no appropriation has been made to carry on this work."

Oklahoma, Texas and Louisiana, the three other states called to the conference, have not been derelict. Mr. Caudle said. Oklahoma appropriates annually \$40,000; Texas, \$46,000, and Louisiana, \$25,000.

Erosion Losses Described.
Louis P. Merrill, regional conservator. Soil Conservation Service, Fort Worth, Tex., said that in the four states represented, "Erosion has ruined for further profitable crop production more than 26,500,000 acres, an area equivalent to 150,000 average size farms." He said cost of soil erosion in the United States amounts to about \$840,000,000 annually. Erosion damage to highway and railways alone annually, he said.

Other Features of Meeting.
John L. McClellan of Camden, former congressman, presided after noon. Henry W. Stanley, secretary-manager of the Hot Springs Chamber of Commerce, welcomed the delegates, and the Rev. Conrad Glover, Sheridan, responded.

A banquet was held tonight with Lamar Williamson toastmaster. Officers will be named tomorrow.

"Federal Authority" and States And River Development.
Gazette 1-10-41

The bill introduced by Senators Miller and Caraway and Congressman Ellis to create an Arkansas Valley Authority on the model of the TVA was opposed by Senator Johnson of Colorado, who relayed a protest from the Water Conservation Board of his state. That body's chairman predicted that if the AVA legis-

lation is enacted Colorado will be "dominated by federal authority" in the present and future development of the water resources of the Arkansas river. He declared further that such legislation represents an attempt to wipe out state lines and subject the entire basin to "a creature of federal enactment."

However, the people of the Tennessee valley seem glad to be dominated by federal authority in the present and future development of the water resources of the Tennessee river—and tributary streams. They don't seem to be rising up against subjecting the Tennessee basin to a creature of federal enactment. They seem mainly concerned to keep this great federal creature undertaking new jobs in extension of the TVA program.

When the Colorado Water Board spokesman says the proposed AVA is an attempt to wipe out state lines it may in all seriousness be said that state lines are writ in water when water control is undertaken.

States' rights mean more than mere constitutional theories. They are vital and substantial and the Gazette believes it is necessary, in a country so great in area and population as the United States, with its widely differing regions and their widely differing interests, that the states have both the power and the will to manage state affairs. The states have yielded more and more powers and duties in return for benefits from the federal Treasury. And a great federal river valley program is not all benefit. One problem confronting Tennessee, a problem before the legislature that has just convened, is replacing the big tax revenue that the state and many counties have lost as a result of the TVA's taking over private property. But the people of any region that may be proposed for development like that carried on in the Tennessee valley are going to be ready to take the many benefits—power, navigation, flood and erosion control and inducement for new industries—and let the states' rights go.

Flood Control Organization In the Making

Committee Headed By Overman Named At Four-State Meet

Democrat 1-12-41
Hot Springs—A permanent organization, composed of citizens of Arkansas, Texas, Louisiana and Oklahoma, formed for the purpose of promoting the development of water resources, soil and forest conservation and other allied matters in the Southwest, was in the making today.

Actual machinery to set the organization into motion was completed here Saturday at the Arlington Hotel, when a four-states meeting named a temporary committee to perfect the formation of the compact.

The committee, composed of two members from each state, follows: V. C. Marshall, Temple, Tex.; C. S. Clark, Austin, Tex.; R. E. Overman, Little Rock, Ark.; chairman; John P. Morrow, Batesville; J. T. Lee jr., Baton Rouge, La.; W. H. Hodges jr., Elm Grove, La.; N. R. Graham, Tulsa, Okla.; Mike Martin, Muskogee, Okla.

Ten representatives from each state will be selected by the two committees of that state to form a 40-member board. This board will be called into session by Chairman Overman at some later date for the purpose of selecting officers of the compact, naming the organization, and deciding upon methods of financing the four-state organization's activities.

Aims of the body were set up in a resolution adopted by the conference as follows:

"That every river watershed of Arkansas, Louisiana, Oklahoma and Texas be authorized by Congress for survey by the Departments of Agriculture and of War to determine the feasibility of, and economic justification for, comprehensive co-ordinated programs of water, soil and forest conservation; navigation,

flood control, and reclamation; conservation of, and provisions for, wild life; alleviation of stream pollution; harbor deposition; storage and other control of water for agricultural, municipal and industrial purposes, and allied recreational facilities.

"That all such projects, whatever they may be, following their approval and recommendation by proper federal agencies, be included in any appropriate legislation that may be enacted by Congress."

The resolution further stated that "every indication is that, following the current national defense emergency, the federal government will shift the present enormous national endeavor to the conservation of national resources to avoid an otherwise certain slack period."

An effort by delegates to educate the people of their states to the need for flood and soil erosion control was urged by Jesse Wright, Corpus Christi, Tex., a member of the executive committee of the Texas Watersheds Association.

"The main question is how to reach a larger segment of the people of the area," he declared. "It's the question of reaching the man who doesn't know about it. Unless we can get more people to see and understand this problem, we are heading for a lower standard of living."

Felsenthal Points Out Error In Flood Control Report.

Special to the Gazette, 1-13-41
Camden, Jan. 12.—Adolph Felsenthal of Camden, who attended the flood control meeting at Hot Spring Saturday, said that the Gazette's account was in error in some particulars. The resolution offered by Fred Jones, urging that the permit, formerly held by the Arkansas Power and Light Company, for the Blakely dam and reservoir, not be renewed or extended. An amendment was offered to allow further time to the power company. The amendment was defeated and the resolution adopted by a large majority.

The Gazette reported that Mr. Felsenthal favored the amendment. On the contrary, said he supported the resolution and opposed the amendment. He always has been an advocate of its construction and control by the United States government, and believes that under the leadership of Governor-elect Adkins and the state Flood Commission, supported by the people of the Ouachita river valley, "prompt construction of this most important project will follow."

The agency would take over reservoirs already under way in the four basins and three dams which would be authorized under the legislation, Bull Shoals in Arkansas, Table Rock in Missouri, both on the White river, and the Narrows reservoir on the Little Missouri in Arkansas.

Flood Control Work Ahead Of Schedule

Democrat 1-19-41
Construction on the Nimrod dam,

being built on Fourche la Pave River in Perry County, is 45 per cent complete and is two or three per cent ahead of schedule. Maj. T. F. Kern, Little Rock district engineer, said yesterday. He said all projects in the district, except one, were on schedule. Nimrod dam is scheduled for completion early next fall.

The Blue Mountain outlet works is slightly behind schedule because of weather delays and changes in plan, which will delay its completion. It is about 20 per cent finished.

Major Kern said the Clearwater outlet works are about 30 per cent complete and is proceeding about on schedule.

The railroad and access road from Norfolk to the dam site on North Fork of White River are about 50 per cent complete and the government village, being built at Mountain Home, is about 85 per cent finished. All three projects are expected to be completed before the general contractor for the dam begins work. Bids for construction of the dam will be opened February 20.

Capt. E. G. Herb, who arrived here this week from Eugene, Ore., and Capt. J. R. Crume jr., district executive officer, will begin a two-day inspection trip today of the Nimrod and Blue Mountain projects. It will be the first inspection trip by Captain Herb since being assigned to the district.

AVA NECESSARY IN SOUTHWEST, ELLIS ASSERTS

Urges Passage Of Legislation.

Gazette 1-25-41

Washington, Jan. 24 (AP).—The waters of the Arkansas, Red, White and St. Francis river basins "are bleeding unto death the very heart of the great Southwest," Representative Ellis (Dem., Ark.) told the House today. He urged passage of legislation setting up an Arkansas Valley Authority for multiple-purpose control of the four basins.

The general welfare of nearly 9,000,000 persons in sections of Arkansas, Oklahoma, Louisiana, Missouri, Kansas, Texas, Colorado and New Mexico, he declared, call for passage of measures before both Houses to set up a "TVA" for this territory.

Control and development of the four rivers "constitute an emergency not only within the federal jurisdiction but also within the federal responsibility," he said. He asserted operation of federal projects completed there and the national defense demanded expediency in setting up a controlling authority.

Ellis said army engineers estimated the annual flood damage of the four rivers at \$9,377,000. The Federal Power Commission has reported a serious shortage of power in the area.

Agency Would Take Over 37 Reservoirs.

The legislation would create a three-member board to administer a program of production and distribution of power, flood control, navigation, drainage, reforestation, irrigation and soil control.

The agency would take over reservoirs already under way in the four basins and three dams which would be authorized under the legislation, Bull Shoals in Arkansas, Table Rock in Missouri, both on the White river, and the Narrows reservoir on the Little Missouri in Arkansas.

In all, Ellis said, the authority would take over 37 reservoirs either under construction, authorized or recommended. Together they would provide 17,555,800 acre feet of flood storage.

Says Power Cheaper Than That Of TVA Should Be Possible.

"Some kind of an authority for this region is inevitable," Ellis declared. "Even though it may be necessary to defer any extensive construction until the passing of the present emergency, except for those projects vital to the national defense, the authorization itself is necessary now, and every day that passes is too late. President Roosevelt has on several occasions lately on his own motion expressed keen interest in creation of this authority."

Among projects which would fall to the supervision of the authority would be the \$42,290,000 Denison reservoir on the Red river in Texas and Oklahoma, the proposed \$42,000,000 Bulls Shoals and the proposed \$37,000,000 Table Rock, the \$15,451,900 Conchas reservoir on the South Canadian river in New Mexico and the proposed \$22,750,000 Pensacola reservoir on the Grand river in Oklahoma.

The valleys of the four rivers proposed for harnessing in a unified project, Ellis said, "offer to the nation soil richer than the Nile, a vital per cent of the nation's oil, gas and coal, all of the world's supply of helium, 95 per cent of our aluminum production," and scores of minerals.

Ellis said the advantages in the Arkansas Valley area should "enable us to produce even cheaper power than the TVA."

Opposition To AVA Bill Organized

Gazette 1-26-41

Washington, Jan. 25 (AP).—Western representatives who voted today for a committee to study the Supreme Court's decision in the Appalachian power case may also ask a study of a bill proposing an Arkansas Valley Authority modeled after the TVA.

Clifford H. Stone, Colorado Water Conservation Board director, discussed the bill to create the authority, recently introduced by Representative Ellis (Dem., Ark.), and distributed copies on an inaugural address by Gov. Ralph Carr of Colorado opposing the proposal. Representative Robinson (Dem., Utah), chairman of the Western group and the committee, said he would appoint other committee members next week.

The Ellis proposal would establish an authority to take over administration of dams and reservoirs of the White, St. Francis, Arkansas and Red rivers and their tributaries in eight states.

Investigation of Blakely Dam 'Deadlock' Planned.

Gazette 1-30-41

Following a conference with Governor Adkins February 6, three Arkansas Flood Control Commission members will go to Washington to investigate the Blakely dam "deadlock," commission announced yesterday.

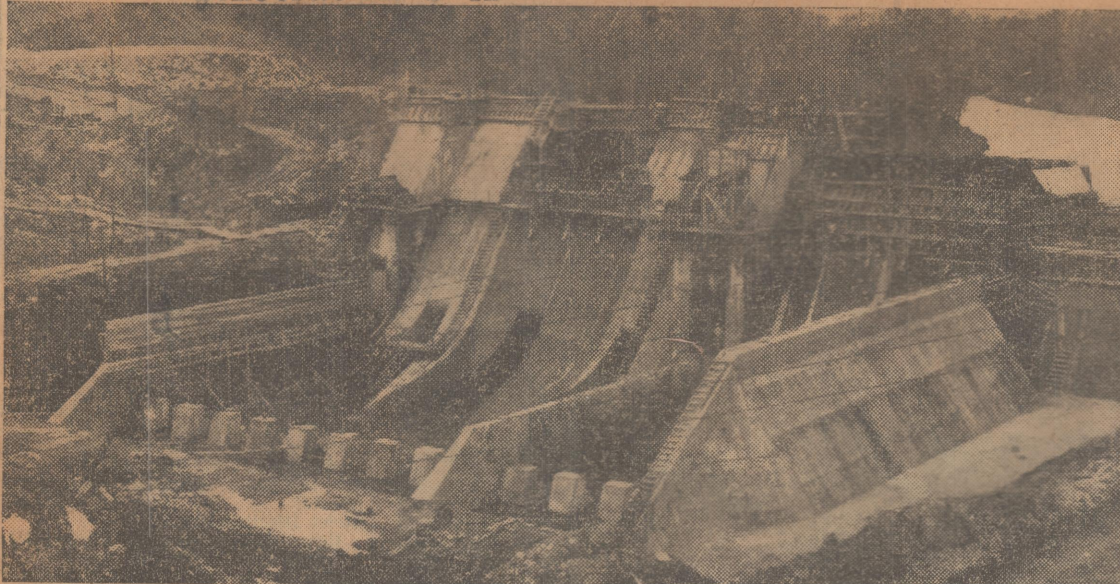
The state Senate has passed a resolution by Senator R. K. Mason of Camden requesting the federal government to construct a multiple purpose power dam and reservoir at Blakely mountain on the Ouachita river north of Hot Springs. It concurs with a Montgomery County Lions Club resolution for the government to revoke the Arkansas Power and Light Company's permit to build the dam, so that it could be included in Congressman Clyde T. Ellis' plans for an Arkansas Valley Authority.

The Federal Power Commission has permitted the power company to extend a completion date from December 31, 1939, indefinitely.

Seek "Modest" Budget.
Chairman R. E. Overman of Little Rock said the commission will present a "modest" appropriation request to the legislature's Joint Budget Committee. The budget and the commission's proposed 1941-42 program will be discussed with Governor Adkins.

Nimrod Dam Construction Ahead of Schedule

Democrat 2-2-41



Nimrod Dam, being built on Fourche la Pave in Perry County, is expected to be completed five months ahead of schedule if the present rate of construction is maintained. Maj. T. F. Kern, Little Rock district engineer, said yesterday.

The government contract calls for completion by March 1, 1942, but the contractor has estimated the project will be finished by October 1. It is about half completed now.

The progress of construction is noted in the accompanying picture, showing a portion of the stilling basin and spillway surface on the downstream side of the structure. In the lower

part of the structure are openings for the controlled outlets through the dam, near the lower part of the spillway surface.

Breaks Force of Water.

In the foreground is a portion of the stilling basin which will serve to break the force of the water after it comes through or over the structure and before it flows on into the natural bed of the river. A row of baffles, nine feet high, is located at the lower edge of the stilling basin and at the right edge is the outer training wall.

The training walls are designed to keep the water from spreading out of the bed of the stream and causing possible ero-

sion until it is past the structure. Smaller walls are constructed in the stilling basin itself.

Immediately beyond the left training wall is the cofferdam which holds back water in the stream now. As soon as the first section of the dam is built high enough, the cofferdam will be closed, to permit work to be carried on behind it. Water in the stream then will flow through the outlets in the dam.

New Procedure Used.

A new procedure was used in construction of the forms for the concrete, according to H. V. Pittman, principal engineering assistant to Major Kern, in adoption of a special type of celotex for the interior surfaces of the forms. The resulting forms were smoother and the use of celotex now has been placed in the specifications for the Norfolk Dam.

The new surfacing material was used on the spillway and the sides of the training walls into which the water will come in contact.

fit without working harm on anyone.

"I know what this is all about," Carr said. "I am suggesting intelligent development with protection for the irrigation states."

Two Governors Agree to Go To Opposition Meeting.

Denver, Col., Feb. 3 (AP).—Governor Carr said today Govs. Dwight Griswold of Nebraska and John E. Miles of New Mexico had notified him they would attend a meeting in Denver Friday to discuss the proposed Arkansas Valley Authority.

AVA PROPOSAL SAID 'LOGICAL' BY PRESIDENT

Project Now Being Discussed.

Gazette 2-5-41

Washington, Feb. 4 (AP).—President Roosevelt said today that establishment of central authorities over the Columbia and Arkansas river sheds, to operate along lines of the Tennessee Valley Authority, is under consideration on Capitol Hill.

The idea, the president told a press conference, is an old one that first developed about 1934 and recently had been revived. He said he knew of no plans to place the Booneville project in the Pacific Northwest under the War Department. Reporters had told him there were rumors on the coast that the department might take it over.

Mr. Roosevelt indicated that the rumors probably grew with some confusion out of the old expectation that if TVA turned out well other river valleys might be similarly developed.

But the kind of development he was talking about, he said, was a development not by the War Department but by agencies of the TVA type, which he said would provide economic and social development for the benefit of the people as a whole.

Arkansas Watershed Logical for Project.

The president said it was thought that the Arkansas watershed was a proper and logical one for development, since the river ran from the middle of Colorado to the Mississippi, and presented 10 or a dozen separate problems. Some places, he said, are drought and flood areas, and along the river all kinds of crops are raised from cotton to cattle.

Then when the development of the Columbia Basin was undertaken, including the watershed that extends to Puget Sound, Mr. Roosevelt said the idea of developing the entire watershed arose there.

At present, he asserted, the matter of creating authorities for the development of both the Arkansas and Columbia watersheds is being discussed at the capital.

Flood Board Will Discuss AVA With Adkins.

The Arkansas Valley Authority is one of the topics which the state Flood Control Commission expects to discuss with Governor Adkins at a conference scheduled for tomorrow. The governor, who was in Washington early this week, said President Roosevelt has shown much interest in the proposal.

Lone Rock Dam Plans Approved

Gazette 2-7-41

Plans of the Little Rock District, United States Engineers, for construction of Lone Rock dam on the Buffalo river, were approved yesterday by two engineering consultants after they had inspected Lone Rock and Water Valley dam sites Tuesday and Wednesday.

The consultants, W. H. McAlpin of the Office of the Chief Engineer, Washington, D. C. and J. B. Justin, member of a private engineering firm at Philadelphia, recommended additional study of the Water Valley site on E'even Point river.

The two conferred with Maj. T. F. Kern, district engineer, and Capt. J. R. Crume Jr., engineering officer who accompanied them on the inspection trip, at Major Kern's office yesterday afternoon.

The two proposed dams are part of a flood control program in the district approved by Congress in 1938 and for which \$25,000,000 was appropriated. Although this sum will be exhausted in construction of Norfolk and Clearwater dams, Major Kern said, the engineers will proceed with plans for other dams.

Office Opens Bids On 1,200,000 Barrels of Cement.

Bids were opened at the office yesterday for 1,200,000 barrels of Portland cement to be used in construction of Norfolk dam on the North Fork river. Eight firms sent in bids to supply part or all of the cement.

Bids follow: Monarch Cement Co. of Humboldt, Kan., \$2.32 per barrel, f. o. b. Norfolk; Arkansas Portland Cement Co., Little Rock, \$1.568 per barrel, f. o. b. Okay Junction; Trinity Portland Cement Co., Dallas, \$2.32 per barrel, f. o. b. shipping point; Universal Atlas Cement Co., Chicago, \$1.6432 per barrel, f. o. b. shipping point; Consolidated Cement Corporation, Fredonia, Kan., \$2.32 per barrel for 200,000 barrels, f. o. b. Norfolk; Marquette Cement Manufacturing Co., Chicago, \$2.05 per barrel for 150,000 barrels, f. o. b. Norfolk; Alpha Portland Cement Co., St. Louis, \$2.53 per barrel for 600,000 barrels, f. o. b. Norfolk, and Lone Star Cement Corporation, Kansas City, \$2.32 per barrel for 1,000,000 barrels, f. o. b. Norfolk.

Land Section of Office To Be Moved Tomorrow.

The Land Section of the office will be moved tomorrow from the Union Life building to the quarters occupied until recently by the Southwestern Division of the Engineers. About 40 employees of the Land Office will make the move.

Ellis Answers Criticism of AVA Proposal Charges Delegates To Denver Meeting Favored Power Trust

Democrat 2-9-41

By TREMAIN ROBINSON. (Democrat Washington Bureau) Washington — Attacking Friday night's 17-state meeting called by Gov. Ralph Carr in Denver, which voted opposition to the Arkansas Valley Authority plan, Rep. Clyde T. Ellis charged yesterday that "the delegates in their enthusiasm to do the bidding of the power companies ran away with the meeting and condemned any effort on the part of the federal government to bring cheaper power to the people of the West."

In a statement in the Congressional Record, Ellis, who is the author of the AVA legislation, pointed out that the Denver conference of Western states went on record as opposing the creation of power yardsticks anywhere west of the Mississippi and the AVA in particular. He commented also on the alternative proposals approved by the conference.

The first, he noted, is to coordinate activities of federal agencies engaged in developing water resources and commented that this is "exactly" what the AVA legislation would do, except that it also includes future development of the rivers.

U. S. Aid Recalled.

Questioning their objections to AVA, Ellis said:

"Surely they don't still base their objection yet on any question of state's rights, for since the passage of the reclamation act in 1902, the West, including Colorado, has been the beneficiary of several billion dollars in federal expenditures for multi-purpose dams for interstate stream control. Surely they are not opposed to the federal government helping out in their irrigation problems because the government is doing it now and proposes to bring them even greater assistance."

Power Trust Raid.

"The truth of it is," Ellis declared, "that the Denver meeting fathered by Governor Carr is the first power trust raid in what Governor Carr himself last week called 'a bloodless civil war.' If Governor Carr would declare a civil war on the high power rates of his own state instead of declaring it on an effort to develop his own state and the West, he would make himself immortal in the pages of Colorado history."

"We have tremendous hydroelectric power possibilities in the tributaries of the lower Arkansas and the other rivers in the AVA region," Ellis continued. "We need to tie this in with a cheap power source in Colorado and this would come from the vast coal deposits of that state."

"If the power trust will just leave us alone, we will develop the water resources of the West and the power companies will get their share of the benefits," he declared.

Colorado Governor Predicts AVA Defeat.

Denver (UP).—Gov. Ralph L. Carr said yesterday that delegates to the 17-state conference in Denver on the Arkansas Valley Authority proposal had laid the groundwork for "defeat of all plans to create power yardsticks similar to the TVA in this western country."

The governor made his statement as he prepared to leave for Washington, D. C.

The two major purposes of the trip, he said, are to continue the West's opposition to AVA and to secure if possible four or five million dollars to construct proposed defense highways in Colorado this year.

The governor will report to 30 Western congressmen details of the 17-state meeting in Denver which voted unqualified opposition to the AVA plan and "any and all other similar proposals." He called the "state's rights war council" at suggestion of the congressmen.

The governor also will seek a conference with the Secretary of Agriculture on an order reducing Colorado's sugar beet acreage by 23 per cent and will ask for federal funds for a flood control project on the Fountain River near Pueblo.

Ickes Wants Control Of The AVA

Special to the Gazette. 2-9-41

Washington, Feb. 8.—The Miller-

Ellis bill, creating an Arkansas Valley Authority, is headed for a rough voyage.

The fight looms over whether the authority shall be created as a separate governmental unit along lines of the Tennessee Valley Authority is being operated, or shall be designated as a division of the Department of the Interior. Secretary Harold Ickes believes that to include in AVA territory portions designated nearly 40 years ago by Congress as "reclamation areas" without giving his department direction over the agency would be an invasion of the department's prerogatives.

Even though President Roosevelt has told congressional leaders and Governor Adkins of Arkansas that he favors creation of the authority as a separate governmental unit, Mr. Ickes has let it be known that he will not surrender the so-called "reclamation territory" to development by another agency without a fight, or unless President Roosevelt calls him off in unmistakable terms.

Representative Clyde Ellis, who introduced the bill in the House, believes that the authority could obtain best results in the proposed development of hydro-electric power and other resources of the Mid-Southwest which it would serve by operating on the same basis as TVA. He says that TVA has demonstrated the wisdom of such a plan. Mr. Ellis has the support of President Roosevelt, and of Senator George W. Norris of Nebraska and Representative John E. Rankin of Mississippi, co-authors of the TVA program, in his plans to create AVA as a separate agency.

Ickes Indignant That He Was Not Consulted.

Under the reclamation laws enacted in 1902, the Bureau of Reclamation was created as a division of the Department of the Interior. The bureau was assigned to reclamation activity in territories and states "west of the 100th meridian." States included in the proposed AVA program are New Mexico, Colorado, Kansas, Oklahoma, Texas, Missouri, Louisiana and Arkansas. Only Louisiana and Arkansas and Missouri are not included in territory over which the Interior Department has reclamation supervision.

Secretary Ickes first saw a copy of the AVA bill when Representative Ellis circulated it among members of the cabinet after it had been drafted in the offices of TVA.

Indignant that he had not been consulted, he went to the president with a request that the legislation be amended to place the authority under his department.

Obviously Mr. Roosevelt advised Mr. Ickes that since the AVA program contemplated development in fields far greater than that described by Congress as reclamation, he could not approve the secretary's suggestion. The president has similarly advised Senator Norris, Representative Rankin, members of the Arkansas delegation when they called upon him recently and Governor Adkins. He also indicated his position to newspapermen at his press conference when he hinted that the proposed AVA is part of a New Deal to develop the natural resources of the nation and provide hydro-electric power, soil conservation, reforestation, flood control, navigation, drainage, irrigation, other forms of agricultural and industrial improvement and greater recreation facilities throughout the nation.

Committee Opposed To AVA Plan

Special to the Gazette. 2-11-41

Pine Bluff, Feb. 10.—The Committee on National Resources Production of the United States Chamber of Commerce has gone on record as opposing the proposed Arkansas Valley Authority and similar proposed region authorities, the Pine Bluff Chamber of Commerce was notified today.

The committee report received by the Chamber of Commerce here, will be submitted to the national organization at its next annual meeting.

The committee said: "Aside from other consideration of national policy, it would be unwise at this time, when the country is faced with the necessity of heavy outlays for national defense, to divert capital, manpower, engineering talent, construction and manufacturing equipment, to proj-

Elimination Of Floodways Proposed

Gazette 2-5-41

Washington, Feb. 3 (AP).—Legislation which he said would "sound the death knell" of the Boeuf and Eudora floodways "and any other diversion channel between the mouths of the Arkansas and Red rivers" was proposed today by Senator Overton (Dem., La.).

"My bill," Overton said, "provides for the readjustment, building up and strengthening of all the main line Mississippi river levees above the Arkansas and below the Arkansas down to approximately the mouth of the Red river. It specifically provides for a net grade in levee construction from the Arkansas down to near the mouth of the Red river of sufficient height as to give safe protection against what is known as the 'project' or super flood."

Arkansas Support Claimed. Louisiana and Arkansas flood control legislation relating to the lower Mississippi valley is disadvantageous to them and in favor of the territory on the opposite side of the Mississippi.

Overton, president of the Mississippi Valley Flood Control Association, said his legislation would save millions in the cost of the program, and prevent "the dedication to floodway purposes of approximately two million acres of land in Southeast Arkansas and Eastern Louisiana."

Senator Miller (Dem., Ark.), an advocate of modifying the existing plan along the lines of Overton's bill, predicted it would have the support of the Arkansas delegation.

Would Authorize Revisions.

Overton declared the chief of army engineers would be authorized to give, from time to time, "such additional protection equally and impartially to the Yazoo and Red river backwater areas as he deems expedient."

State Commission Engineer Says Floodway Not Needed.

The favorable effect of Mississippi river cut-offs on the river stages "has been such that we cannot see the necessity of building the Eudora floodway," Engineer C. S. Christian of the Arkansas Flood Control Commission said yesterday. In view of information now on hand, "we think Senator Overton (Dem., La.) is right" in introducing a bill to abolish the proposed floodway, Mr. Christian said.

The cut-offs would have lowered the 1927 flood stage at Arkansas City by 11 feet, he said. There are 13 cut-offs between the mouth of the Arkansas river and the mouth of the Red.

Ellis Defends AVA From Carr's Attack

Gazette 2-5-41

Washington, Feb. 3 (AP).—Representative Ellis (Dem., Ark.) told the House today Governor Carr of Colorado opposed an Arkansas Valley Authority because of a "pseudo fear that it would disturb the water rights of his great state."

Ellis said he had been advised Governor Carr "has taken it upon himself to declare a state of civil war and has asked the governors of 16 Western states to join him in what he unfortunately calls a 'bloodless civil war' against the proposed Arkansas Valley Authority."

"It is evident from what he says Governor Carr is either misinformed as to the broad purposes of the Arkansas Valley Authority and the good that would come of it to the people of Colorado, or he has become the mouth-piece of the power trust."

The legislation would set up an authority similar to the Tennessee Valley Authority with responsibility for controlling waters of the Arkansas, White, St. Francis and Red river basins.

Says People for Proposal.

"If the people of Colorado have all the water they want for irrigation, if they do not desire to cooperate in a control of the floods, if they want to continue to pay exorbitant power rates, if they do not want to make more effective existing efforts toward water and wind control, if they wanted no further industrialization of Colorado, and if they don't want to in this manner aid the national defense, then Governor Carr's statements would be consistent with their views. But I know this is not the case, Ellis said.

"The people of Colorado, in 1938 used approximately 582,000,000 kilowatt hours of electricity for which they paid approximately \$18,000,000. Under the TVA rates they would have paid less than \$9,500,000. The AVA can bring them rates as cheap as the TVA."

"Governor Carr's difficulty seems to be that he is thinking in terms of days of the Civil war, while his people are thinking in terms of 1941."

Governor Carr commented, "I am not suggesting civil war nor am I living in Civil war times." In an attack on the AVA before the legislature, he said such proposals brought Western states "to the verge of a bloodless revolution."

The governor said Representative Ellis "should know that in calling this conference I did not want simply to oppose the bill, but to find an alternative plan that will make it possible for people to bene-

acts undertaken ostensibly for national defense that cannot afford effective means of meeting present national defense requirements."

"As for the rights of states on the interstate rivers or streams, there is no recognition of the great and just principle supposed to govern the legal relations between the states where they are on the same stream—namely, that each state has a right, for the benefits of its people, to a fair or equitable share of the waters of the common interstate supply, that share to be diverted among the water users of the particular state in accordance with whatever water law the state maintains. The evident strategy of those who incline toward federal control of the field of our natural resources is to subdue the various basins of the country one by one, and thereby all states."

Nimrod Dam May Be Completed in October.

Gazette 2-13-41
Date for completion of Nimrod dam on the Fourche La Fave river has been tentatively advanced from March 1, 1942, to October of the year, Maj. T. F. Kern, district engineer for the Little Rock District, United States Engineers, said yesterday. Night work is speeding up construction.

The dam, constructed by Russ Mitchell, Inc., and Brown & Root, Inc., joint contractors, is approximately 50 per cent complete. A total of 50,000 cubic yards of concrete has been poured and 500,000 pounds of reinforcing steel have been placed.

The dam will be used for flood control and for future installation of power turbines. Construction was started in May, 1940.

Bids Due On Norfolk Dam Thursday

Gazette 2-16-41

Bids from contractors over the entire nation on construction of the 2,624-foot long Norfolk dam on the North Fork river in Baxter county will be opened by the Little Rock District Office, United States Engineers, Thursday afternoon.

The dam, which will cost approximately \$10,000,000, will be a 220-foot high structure which will store 1,251,000 acre-feet of water for flood control purposes. The dam will also have four 18-foot penstocks for possible future power development.

Maj. T. F. Kern, district engineer, and Maj. John R. Crume Jr., en-

gineering officer, returned yesterday from an inspection of the dam site. Major Kern said a railroad spur from the Missouri Pacific Lines tracks and a road from state Highway 5 to the dam site, now under construction, would be ready for use by the time construction on the dam started. He said a government village at Mountain Home would be completed this week.

Plans for the dam call for an estimated 850,000 cubic yards of excavation, 102,000 linear feet of core drilling and 1,500,000 cubic yards of concrete. Bids for 1,200,000 barrels of cement have been opened.

50-Mile Shoreline.

The dam, which will be five miles northeast of Norfolk, will create a lake with a surface area of 1,680 acres and a shoreline of 50 miles. It will require three years to complete and the workers during that time will live in the government village.

The dam is one of six in the White river basin for flood control purposes authorized by Congress in June, 1938. The penstocks will be installed in the dam but installation of power generating machinery will require additional congressional authorization.

Arkansas Firms Interested.

Nine Arkansas firms were among more than 120 over the country which asked for specifications on the dam. The Arkansas firms were: Crane Co., Little Rock; S. E. Evans Construction Co., Fort Smith; Mobley Construction Company, Morrilton; John Kerns Construction Co., Waveland; Oscar Kochitzky, Little Rock; General Electric Supply Corporation, Little Rock; Truscon Steel Company, Little Rock; Standard Brake Shoe & Foundry Co., Pine Bluff, and Nevil C. Withrow Co., Little Rock.

Among large firms throughout the nation requests for specifications were received from Mittrey Bros. Construction Co., Los Angeles; Morrison-Knudsen Co., Inc., Boise, Id.; Brown & Root, Inc., Marshall Ford Dam, Tex., joint contractors for Nimrod dam, now under construction; United Construction Co., Winona, Minn., contractors for Clearwater dam in Missouri; Utah Construction Co., San Francisco, and Dravo Corporation, Pittsburgh, Pa.

Norfolk Dam Bids to Be Opened Here

Democrat 2-16-41
Bids for the construction of Norfolk Dam, to be built on the North Fork of White River in the south-

ern part of Baxter County, will be opened at 2:30 p. m. Thursday in the ballroom of the Hotel Marion by Maj. T. F. Kern, Little Rock district engineer. The bids were advertised six weeks ago.

The dam, designed for flood control purposes but with penstocks for future installation of power generating equipment, will be a concrete gravity-type structure, 220 feet high and 2,624 feet long.

It will form a reservoir with storage capacity of 1,151,000 acre feet, of which 1,220,000 acre feet will be for flood control and 31,000 for conservation.

The permanent conservation pool will form a lake of 1,680 acres with a 50-mile shoreline.

The dam and reservoir will be the first to be constructed by army engineers in the comprehensive flood control system for the White River. It is expected to be complete late in the fall of 1944.

Work now is under way on a highway and railroad from Norfolk to the dam site, about five miles, both of which are expected to be completed by the end of next month. A group of 18 dwellings for 24 families has been built on the outskirts of Mountain Home for use of government personnel assigned to the project. The dwellings will be ready for occupancy in a week.

Bids were received by the district engineer February 6 on 1,200,000 barrels of cement for use in the dam. The bids have been referred to the office of the chief of engineers for approval.

The principal items of 87 listed in the specifications for the dam include 550,000 cubic yards of common excavation, 290,000 cubic yards of rock excavation, 102,000 linear feet of core drilling, 1,470,000 cubic yards of cement, approximately 1,800 tons of reinforcing steel and 2,700 tons of miscellaneous metal.

NORRELL SEEKS HOUSE BACKING FOR FLOOD BILL

Would Raise Main Levees.

Gazette 2-17-41
Washington, Feb. 16 (AP). — The people of Arkansas, to use the words of Representative W. F. Norrell, are anxious to remove the threat of legislation which would

make their state a "dumping ground" for flood waters of other states.

The Monticello congressman reviewed problems of the lower Mississippi river valley in a statement in the Congressional Record in which he urged colleagues of other states to support his bill (H. R. No. 3,064) to abandon proposed floodways and raise levee heights in Arkansas and Louisiana. Senator Overton (Dem., La.) has introduced a companion bill (S. B. No. 705) in the Senate.

Under the flood control act of 1928, Norrell told the House, Congress approved a program of diverting from the main channels of the Mississippi river flood water in excess of the carrying capacity of the Mississippi levee system. An important diversion authorized was the Boeuf floodway in the middle section of the river, lying immediately south of the mouth of the Arkansas river, and flowing through southeast Arkansas into Louisiana.

Either Boeuf or Eudora Floodways Could Be Built.

As the act now stands, either the Boeuf or the Eudora floodway could be built, the Eudora having subsequently been authorized as a substitute for the Boeuf.

The Eudora would begin in southeastern Arkansas below the Arkansas river and run 10 miles wide and 10 miles long, embracing 850,000 acres of land in southeastern Arkansas and eastern Louisiana, and empty its water into one and a quarter million acres in the Red river backwater area. Either floodway, Norrell contended, would be equally objectionable.

"Although the Eudora was authorized in 1936," he said, "no work at all has been done toward beginning its construction."

In addition to proposed floodways, legislation on the statute books also authorizes that a fuse-plug section of levee in the vicinity of Cypress creek in Arkansas be kept three feet lower than the main line levee grade.

Southeast Arkansas Wants Equal Protection.

It would appear, Norrell asserted, that Congress intended to be sure southeast Arkansas and Louisiana "would constitute a dumping ground for the surplus waters from the other states in the union and to that end not only authorized the fuse-plug and a spillway but prohibited our levees on the Arkansas side from being constructed into a standard levee of grade and section, equal to the levees of the neighbors to the north, south and east of the river."

Norrell said that "undoubtedly" the old plan has been abandoned "in the minds of the flood control authorities, but it has not been abandoned by Congress, because the law actually remains upon the statutes and is today technically in operation."

He said the people of his district, especially those in Desha and Chicot counties, "feel they have suffered the consequences of this very detrimental and unfair act long enough."

"They do not want another fuse-plug levee or another spillway," he said, "but they do want equal levee protection."

Norrell cited a resolution of the Flood Control Commission of Arkansas urging conversion of the fuse-plug levee in southeast Arkansas "into a standard levee of the 1940 grade and section and giving to all the property owners in the presently existing Boeuf floodway protection equal to that enjoyed by their neighbors."

The commission protested construction of the proposed so-called back protection levee and said any effort to construct such a reservoir in southeast Arkansas would "meet with bitter opposition" and will "prove as futile as were the efforts of the army engineers to secure flowage rights in the Eudora floodway in Louisiana."

Would Make Main Levees of Equal Height.

The Overton-Norrell bill would authorize engineers, pending completion of a final plan for flood control in the lower Mississippi valley, to revise main Mississippi river levees on both the east and west banks to provide equal freeboards. All plans for either the Boeuf or Eudora floodway would be forever abandoned as would the plan for the back-protection levee proposed for construction from the head of the Eudora floodway north to the Arkansas river.

Norrell said the bill did not au-

thorize any additional appropriations for the lower valley, but would "save millions of dollars" in cost of the program and "prevent the dedication to floodway purposes of approximately 2,000,000 acres of land in southeastern Arkansas and eastern Louisiana."

Norrell said Gen. Max C. Tyler, president of the Mississippi River Commission, has stated that the substitution of levee enlargement for the floodway plan would afford "equally as good protection."

"The 13 cut-offs and other channel rectifications in the Mississippi river between the Arkansas and the Red have so reduced in recent years the flood level between the Arkansas and the Red rivers that no diversion channel between these two rivers is now necessary," Norrell declared. "The cost of levee enlargement will be considerably less than the \$103,000,000 allotted for the construction of the Eudora floodway."

"It is the purpose of the bill to free this \$103,000,000 so that as much thereof as will be necessary will be used for the new plan of heightening the grades and strengthening the sections of the mainline levees."

"After this work is done, there will be a sufficient sum left over out of the \$103,000,000 to give additional protection to the Yazoo and Red river backwater areas," conservation, Arkansas farmers have taken a big step in halting soil erosion and increasing fertility and productivity of their land, he said.

Daniels estimated that more than 50,000,000 pounds of superphosphate and 25,000 tons of limestone would be used as conservation materials in Arkansas this year.

In 1940, he said, 12,133 tons of limestone, 23,622,935 pounds of superphosphate, 2,414,891 pounds of vetch seed and 75,000 pounds of Austrian winter peas were used.

These materials were furnished through the AAA as grants of aid to the farmers at no cash outlay with the value being deducted from their soil-building allowances, Daniels explained.

Greer's Ferry Project Plans Are Outlined

Democrat 2-19-41

Conclusions were reached yesterday afternoon by Major T. F. Kern, Little Rock District Engineer, following a hearing on the Greer's Ferry project on Little Red River, that flood control and power is desired from the proposed dam and reservoir but that irrigation facilities are not desired, due to the probable cost.

Major Kern conducted the hearing in the ballroom of the Hotel Marion with an enthusiastic crowd present from Heber Springs and other points in the Little Red River watershed. Statements by Congressmen Wilbur D. Mills and Clyde T. Ellis and residents of Heber Springs were read and inserted in the record.

Residents of the Grand Prairie area indicated in statements yesterday afternoon that the cost of water from the project would be greater than at present and expressed "no interest" in a proposal to organize an irrigation district to distribute the water if it were made available.

The proposed Greer's Ferry Dam would be 3 1-2 miles northeast of Heber Springs. Information was sought yesterday to determine whether there is a desire for immediate installation of power generating facilities in the dam, which has been authorized for flood control.

"From the testimony presented here today it appears that the local people are interested in the early construction of the Greer's Ferry Reservoir for flood control as approved by the Flood Control Act of 1938, and that they also desire the generation of hydro-electric power at the dam at the earliest possible time. Owing to the high cost of obtaining water from the Greer's Ferry project, the rice farmers do not appear to be interested in irrigation water therefrom and they are doubtful that any local organization would stand the cost of the transportation facilities," Major Kern said at the close of the hearing.

The conclusions reached by Major Kern and read to the group were concurred in practically unanimously.

The irrigation proposal would entail construction of a canal or irrigation channel for 87 miles from the Greer's Ferry Dam to the vicinity of Stuttgart and a distribution system from there.

V. L. Tindall, Stuttgart, said he believed the irrigation feature was not "economically feasible" as present pumping costs in the Grand Prairie were less than the cost indicated in the preliminary studies. He said he

believed the landowners would not be willing to organize a district for irrigation.

H. V. Stroh, Stuttgart; John M. Hooks, Hazen; Kenneth Gilbert Stuttgart; P. O. Peterson and P. O. Peterson Jr., Carlisle, and R. B. Curtis, Stuttgart, concurred generally in the belief there would be no interest in the irrigation project.

T. J. Fricke, Stuttgart, representative of the Federal Land Bank, inserted in the record a comparative statement of costs of pumping and said he believed "there would be opposition" to formation of an irrigation district.

Frank L. Weaver, Washington, engineer for the Federal Power Commission, said the commission was studying the power possibilities of the project, and E. E. Karns, Washington, Rural Electrification Administration engineer, said the REA hoped for "lower power costs" to serve more persons along its lines.

Rep. Rowland Lindsey, Searcy, chairman of a committee from the Arkansas House of Representatives, said the multiple-purpose project was "heartily approved and endorsed."

To Open Bids Today On Norfolk Dam

Gazette 2-20-41

Bids will be opened at 2:30 this afternoon at the Hotel Marion on construction of Norfolk dam on the North Fork river in Baxter county by Maj. T. F. Kern, Little Rock district engineer of the United States Engineers. The dam will be 2,624 feet long, 220 feet high and will form a lake with a 50-mile shoreline, capable of storing 1,251,000 acre-feet of water.

Clearwater Dam Inspected.

Major Kern returned last night from an inspection of the Clearwater dam on the Black river in southeastern Missouri. The intake structure at the upper end of the dam's diversion tunnel is nearly complete, he said.

Work Being Rushed.

Work will begin the middle of July on the main structure of Blue Mountain dam on the Petit Jean river near Danville, Major Kern said. The dam will be a rolled fill earth embankment 2,700 feet long and 115 feet high, capable of storing 258,000 acre-feet of water.

An outlet tunnel 20 feet in diameter and more than 1,000 feet long is being drilled through solid rock and is expected to be completed in July. The John Kerns Construction Company, contractors, employs 120 men at the dam and the engineers have 27 men there for inspection.

Norfolk Dam Bids Studied By Engineers

Democrat 2-20-41

Bids were opened this afternoon in the ballroom of the Hotel Marion by Maj. T. F. Kern, Little Rock district engineer, for construction of the \$10,000,000 Norfolk Dam on North Fork of White River in Baxter County. The dam is to be about four miles from the confluence of the two streams.

The dam will be for flood control and will have penstocks for future installation of power generating equipment.

Authority for immediate installation of the power equipment must be given by Congress.

The structure will be of concrete and will be 220 feet high and 2,624 feet long. It will have an uncontrolled spillway in which crest gates can be installed if the power equipment is added. The total storage capacity of the dam will be 1,251,000 acre feet.

Night Crews Rush Work on Nimrod Dam

Democrat 2-16-41



Night operation at the Nimrod Dam now under construction on the Fourche La Fave river in Perry County, by Russ Mitchell, Inc., and Brown and Root, Inc., joint contractors for the Army Engineers, is speeding up completion of this huge structure to the extent that the completion date has been tentatively advanced from March 1, 1942 to October of this year. A full 24-hour work day was started three months ago in order to facilitate the pouring of concrete. Maj. T. F. Kern, Corps of Engineers, Little Rock District Engineer who inspected the project recently after being named to succeed Lt. Col. Stanley L. Scott,

said the dam is about 50 per cent complete; 50,000 cubic yards of concrete and one-half million pounds of reinforcing steel having been placed.

The dam will extend from a high bank on the north side of the river, shown in the accompanying picture which depicts the night construction work. The huge forms for concrete for the various stages of the work are shown throughout the structure while forms for training walls are located in the foreground.

Openings for the conduits are shown at the base of the dam at the left. They will be under the spillway over which excess water

will flow during times of flood. The training walls are placed at the sides of the spillway and stilling basin to prevent erosion of the river banks before the water resumes its way in the channel.

The construction of this dam was authorized by Congress by the Flood Control Act of 1936. Construction was started in May, 1940. It is being erected as a dual-purpose dam for flood control and for future installation of power. Soon this structure will be one more added to many already constructed under the supervision of the Army Engineers and will start performing its mission.

RIVER'S FLOW DIVERTED

Gazette 2-20-41



Above is shown the downstream end of an outlet tunnel under construction by the Little Rock District, United States Engineers, at Blue Mountain dam in Yell county. During construction of the dam waters of Petit Jean river will flow through the tunnel, and after the dam is completed the tunnel will be used in releasing impounded waters from the reservoir. When the reservoir is full the outlet works will be capable of discharging 7,938,000,000 gallons of water per day.

U.S. Engineer Calls Hearing On Big Project

Democrat 2-20-41

Maj. T. F. Kern, Little Rock District U. S. engineer, today announced a hearing would be conducted at 10 a. m. February 28 in the Cotter High School gymnasium on the proposed Lone Rock Dam and reservoir on Buffalo River in accordance with various congressional authorizations to obtain information on any objections to plans for the project. The notice of public hearing said information also was sought of desires of local interests for any improvements along the Buffalo River, including hydroelectric power development.

The Lone Rock reservoir is one of six authorized by the Flood Control Act of 1938 which approved a general comprehensive reservoir plan for flood control and other purposes in the White River basin. Although the reservoir has been approved for flood control purposes, additional funds must be authorized by Congress before it can be constructed.

Power Project Proposed. The Flood Control Act also authorizes the installation of penstocks for future power generating equipment in any authorized dam when approved by the Secretary of War upon recommendation of the Chief of Engineers and the Federal Power Commission. No authority has been given, however, for the installation of power generating equipment in any of the dams in the approved reservoir plan in the White River basin.

Preliminary plans for the Lone Rock project have been made for it to be constructed as a flood control project only or as a structure for generating hydroelectric power.

The Lone Rock site is 3.6 miles above the confluence of the Buffalo River with the White River in Marion County. Preliminary plans provide for a concrete gravity dam 2,176 feet wide with a maximum height of 237 feet.

Would Form Large Reservoir. It would form a reservoir with storage capacity of 687,000 acre-feet of which 657,000 acre-feet would be for flood control and 30,000 acre-feet would be for conservation purposes. The reservoir would be in Marion, Searcy and Baxter Counties.

For the addition of penstocks for future power generating equipment, it is proposed to add gates to the spillway crest which would increase the storage capacity to 965,000 acre-feet, but for best operation for power purposes a large upstream reservoir would be constructed. The preliminary plans indicate the most practicable method would be addition of an upstream reservoir so as to avoid relocation of the Missouri and Arkansas Railroad and flooding the Gilbert community. The upstream dam would be located near Mill Creek.

Senator Says Industry Would Be Attracted by A.V.A.

Gazette 2-23-41

Trinidad, Col., Feb. 22 (AP).—Adequate electric power at reasonable rates would draw industry to the Arkansas Valley and increase and stabilize employment in the area, Senator Johnson (Dem., Col.) declared in an address urging valley residents to support a proposed Arkansas Valley Authority.

"Economic operation of existing facilities and adequate development of steam power resources in this area," he asserted, "can provide the needed power at the desired rates."

The senator said it was "strategically important" that plants for manufacturing war materials be located in the Arkansas Valley "because raw materials are locally available, products may be readily shipped to other parts of the country, and most of the area is distant from the coast."

Arkansas, Kansas, New Mexico, Oklahoma and Colorado would be responsive, Johnson said, to large-scale power development projected by the A.V.A.

Johnson undertook a speaking campaign after Governor Carr, Republican, attacked the proposal as a threat to Western irrigation water rights.

Hearing On Lone Rock Dam Friday

Special to the Gazette. 2-23-41

Cotter, Feb. 22.—Cotter is preparing for one of the largest crowds it ever has entertained at the Lone Rock dam hearing here Friday, February 28. The meeting will be held in the new high school gymnasium. At least 1,000 persons are expected to attend from all sections of the Buffalo river valley.

May Be Dual Dam.

There is as much interest in the construction of the Buffalo river dam as there is in those on the Northfork and the White rivers. One of the principal questions which will be discussed Friday will be whether the dam will be a flood control dam only, or a dual dam, combining both flood control and power development.

Buffalo river is one of the longest and is the fastest river in the Arkansas Ozarks, with the exception of the White river. It rises near the little village of Boston, on the crest of the Boston mountains in Madison county, and twists and curves among the high hills through Newton, Searcy, Marion and Baxter counties. Many large spring-fed

creeks flow into it. A large part of the watershed is in the thinly settled mountain sections of the northern part of the state. From its source to its mouth, however, it meanders through the richest part of the north Arkansas zinc and lead field, from which thousands of tons of zinc ore were mined and shipped during the World war.

Several Sites Considered.

The Lone Rock damsite proper is located 1,000 feet above the mouth of Buffalo river, where it empties into the White river. The exact location of the dam has not yet been determined. The United States engineers have been working on the project intermittently for nearly two years. Several other sites have been tested. The last one was just above the bridge across the river on federal Highway 65 between Marshall and St. Joe.

Low Bid Of \$10,778,726 On Big Dam

Gazette 2-21-41

The Utah Construction Company of Ogden, Ut., and the Morrison-Knudsen Company of Boise, Ida., were apparent low bidders on construction of Norfolk dam on the North Fork river in Baxter county, Maj. T. F. Kern, Little Rock district engineer of the United States Engineers, announced after opening of bids yesterday at the Hotel Marion. Their joint bid was \$10,778,726.

The second apparent low bid was by the United Construction Company of Winona, Minn., the La Crosse Dredging Corporation and the Porter DeWitte Construction Company as joint bidders. Their bid was \$11,081,665.32. W. E. Callahan Construction Company of Dallas and the Gunther & Shirley Company of Los Angeles bid \$11,726,624, for the apparent third low.

Other bids: Brown & Root, Inc., of Houston and McKenzie Construction Company of San Antonio, \$12,708,972; Dravo Corporation of Pittsburgh, Pa., \$12,719,844, and S. A. Healey Company of White Plains, N. Y., \$12,140,486.

The engineers' estimate of construction cost was \$9,413,157.92, but it was explained this figure did not take into account any profit for the contractor. Construction work is expected to begin in about two months or within 30 days after notice is given to proceed. Work must be finished in 1,200 days.

The proposed dam will be 10 miles southeast of Mountain Home near the convergence of the North Fork with the White river. It will be 220 feet high and 2,624 feet long

and will create a lake with a shoreline of 50 miles. It will include penstocks for possible future power generation.

Flood Control Commission To Meet Friday.

Gazette 2-25-41

A meeting of the state Flood Control Commission will be held at Cotter at 10 a. m. Friday, R. E. Overman, commission chairman, announced yesterday. The meeting will coincide with a hearing to be conducted by Maj. T. F. Kern, Little Rock District United States engineer, concerning the proposed Lone Rock dam on Buffalo river.

John I. Moore, chairman of the Senate Flood Control Committee, said he will attend the meeting. Other members of the General Assembly, whose districts are affected by the dam, also are expected to attend. Mr. Overman said Missouri will be represented by a delegation headed by John T. Woodruff of Springfield and Rex Allman of Forsythe, who have requested the commission to meet with them following the hearing.

Lone Rock dam is one of six projects in the White river watershed provided in the Flood Control Act of 1938. Expenditure of \$25,000,000 was authorized by Congress at that time, and the cost of the Norfolk and Clearwater dams will approximate that figure.

Dual Dams On Buffalo River Endorsed

Special to the Gazette. 3-1-41

Cotter, Feb. 28.—A resolution asking that proposed dams on Buffalo river be dual purpose—(flood control and power)—was endorsed by 300 to 400 delegates from the White and Buffalo river basin at a hearing held by United States engineers here today. The resolution, offered by Judge Earl Berry of Marion county, recommended that power facilities be installed when the dams are constructed.

Maj. T. F. Kern explained that the Lone Rock project was one of six in the White river basin authorized by the Flood Control Act of 1938, which set aside \$25,000,000 for initial construction and surveys. He explained that two plans for the Buffalo were being considered, one for a high head dam at the Lone Rock site, 3.6 miles above the mouth of the river, and the other for two dams, one at the Lone Rock side and the other at the mouth of Mill creek, just above the bridge on Highway 65. Delegates endorsed both plans.

R. M. Routhven, Mountain Home, former Baxter county judge, was chairman. Donald Blackmon, superintendent of Cotter schools, welcomed delegates, and the Rev. E. Floyd Conyers, Methodist pastor, gave the invocation. The Cotter band played, and women members of the Methodist church served a luncheon.

Major Kern said that the \$25,000,000 originally set aside is being used in the construction of the North Fork dam, the contract for which will be awarded soon; the Clear Water project on Black river, and other surveys throughout the basin. He said additional appropriations by Congress would be needed for the Lone Rock project.

Ellis and Mills Endorse Dams. Judge Berry read a letter from Congressman Clyde T. Ellis, who endorsed the dams, from flood control, power development, industrial development and recreation angles. He told of the undeveloped mineral resources of the Buffalo river section and of the part that cheap power would play in their development.

Ernie Wright, attorney of Mountain Home, read a paper by Congressman Wilbur D. Mills, who endorsed dual dams. He stressed the benefit his district would receive from flood control, and the importance of cheap power in the development of industry.

R. E. Overman of Little Rock, chairman of the state Flood Control Commission, reviewed flood control legislation since 1935. He asserted that a radical change in policies had taken place.

Formerly the idea was to build levees on the main stems, he said. Today the plan still takes these levees into consideration but includes dams on the upper reaches of the streams to hold river floods. He gave credit to the United States engineers for including dams in their program.

Warns Against Flooding Mines. Charles S. Christian, chief en-

gineer of the state Flood Control Commission, endorsed the two-dam plan for Buffalo and the idea of dual dams. He advised that the Lone Rock dam not be built so high that it would flood valuable mines in the Rush Creek district of Marion county. He also endorsed construction of Bull Shoals and Table Rock dams on the White river.

H. W. Blaylock, member of the state Utilities Commission, discussed the dams from an industrial point.

"While we have plenty of labor and an enormous amount of raw material, we register only thirty-eighth among the states in manufactured products," he said. "This forces our ambitious young people to go to other states to seek good positions. Cheaper power rates and a more conciliatory attitude toward industry by our legislators would remedy this condition."

Asks Zinc Field Protection.

J. Henry Hand of Yellville, manager of the Mine Owners League, endorsed the Buffalo river dams as duals, but objected to the Lone Rock dam being built to a height which would flood the Rush Creek camp in Marion county, in which the largest zinc mines in the state are located.

All members of the delegation from the Springfield (Mo.) Chamber of Commerce spoke. Dr. Meadors, president of the organization, endorsed construction of the Buffalo river dams as dual dams, asserting that more and cheaper power meant more industry for the Ozark section, and the future of the area lay in its industrialization.

Louie Repps, secretary of the organization, reviewed the development of the Piedmont section, which started with the development of water power and said that the Ozark section was much the same as the Piedmont section.

John Woodruff reported that south Missouri, like north Arkansas, is interested in the development of power in the White river basin because more and cheaper power meant more and larger industries.

A. P. & L. Asks Return for Survey.

The Arkansas Power and Light Company was represented by Kenneth Johnson, H. P. Lindsey and L. J. Cooper. Mr. Johnson said that his company did not oppose construction of the dams and was interested in more and cheaper power. He said that any development should be made for the most good to the most people.

He asserted that the White River Power Company spent about \$1,000,000 in investigating the Wildcat Shoals site on White river when it held the license, and he believed it should be repaid in power or in cash. He cited figures he said proved that the Arkansas Power and Light Company was not short on power, and would furnish 5,000 horsepower for construction of the North Fork dam.

Clarence Vance of Buffalo, F. J. Smith and H. D. Morton of Mountain Home, Ed Mays of Leslie and Berry Floyd, Luther Cavaness and Sam Berry of Yellville, Robert Woods of Calico Rock and Dene Coleman of Batesville, also spoke.

Members of the Flood Control Commission attending were John Morrow, Mr. Christian, Layton Coffman and Mr. Overman.

Congressman Ellis Telegraphs Defense of TVA.

Gazette 3-1-41

Washington, Feb. 28 (AP).—Congressman Ellis (Dem., Ark.) telegraphed Maj. T. F. Kern, district United States engineer attending the Lone Rock dam hearing at Cotter, Ark., today, challenging what he said was an implication in an Arkansas Power and Light Company statement that the company had "delivered more than 35,000 kilowatts of electric power" to the Aluminum Company of America plant in Tennessee last week. The Aluminum Company obtains its electric power from the Tennessee Valley Authority.

Ellis contends that Arkansas needs a series of public hydroelectric power projects to supply its own electricity needs.

He said that the Arkansas Power and Light Company will not produce sufficient power by next fall to supply electricity needs within the company's territory as estimated by the Federal Power Commission.

"The true situation is," Ellis' telegram read, "that in expanding its plant to a 24-hour basis, the Aluminum Company at Alcoa, Tenn., suddenly needed 150,000 kilowatts additional power."

"TVA's cheap power market had been so completely exhausted that it could supply only 80,000 kilowatts. TVA is under contract to furnish Arkansas Power and Light Company with a huge amount of

power on an exchange basis. What TVA actually has done was to reduce the amount of power it has been delivering to A. P. & L. until the amount which the TVA is now delivering to A. P. & L. in excess of what A. P. & L. is delivering to TVA is about zero."

Although the difference in one or the other may vary from week to week, the telegram continued. The TVA has called on the Commonwealth and Southern and the Carolina Power and Light Company "to help supply the additional power at Alcoa."

Southeast Arkansas Plans Fight on Mississippi's Flood Control Attitude

Camden—W. C. McClure of Camden, secretary of the State Flood Control Commission, said yesterday that, following a meeting held recently in Greenville, Miss., attended by landowners and members of the Mississippi levee district and at which the Overton-Norell bill was vigorously opposed. A mass meeting will be held in McGehee, Ark., sometime after March 15, for the purpose of endorsing this measure.

He said notice also would be served that the people in the affected areas of Arkansas and Louisiana, not only accept the challenge issued at the Greenville meeting but are now determined to foster this measure more vigorously than ever.

Commenting further McClure said: "It is unfortunate that the Greenville meeting took the action it did in opposition to Senate Bill 705 by Senator Overton and its companion bill, H. R. 3064 by Congressman Norell of Arkansas. In the view of any impartial judge the effort of Overton and Norell is one of utter fairness to landowners along the west bank of the Mississippi river, and regarded as in no sense giving the people of Arkansas and Louisiana any advantage."

Condemns Fuse Plug.

"On the contrary this measure seeks to correct an injustice inflicted for years by the 'fuse plug levee' in Southeast Arkansas, where the grade and section of a strip of levee is left lower and weaker than on the Mississippi side in order that when floods come this levee will blow out with tragic loss and danger to Arkansas and Louisiana. This 'fuse plug' arrangement is a protective project for property owners on the other side of the river only."

The Overton-Norell measure furthermore attempts to kill forever the engineering monstrosity known as the Eudora floodway, for which \$103,000,000 has been appropriated by Congress—a proposal for flood diversion, opposed not only by the people of Arkansas and Louisiana, but by every student of the subject.

"The Eudora floodway is admittedly a contradiction to the proven advantages of headwater control, and a recognized enemy of the reservoir-on-tributary program of flood prevention and water conservation."

It is expected the McGehee meeting will be largely attended. The Flood Control Commission of Arkansas is expected to pass a resolution in advance of the meeting. The resolution has already been prepared by Lamar Williamson of Monticello, member of the commission, McClure said.

OVA Backers Hope For Adkins' Nod

Fate of Ouachita River Development Depends on Governor.

Democrat 3-2-41

The fate of Sen. Clyde Byrd's proposal to create a \$20,000,000 Ouachita Valley Authority, a conservation and power project embracing 17 counties, appeared this week-end to be dependent upon the stated approval or disapproval of Gov. Homer M. Adkins.

Cognizant of the 10 remaining working days of the current legislative session, and of the bulk of pending legislation, proponents of the measure yesterday frankly admitted that the governor's nod of approval alone could propel the measure through the two houses.

Adkins Non-Committal.

Governor Adkins thus far has been non-committal upon the bill. The results of a public hearing on the bill conducted at 7 p. m. tomorrow at the Hotel Marion by the Committee on Conservation of Natural Resources will give the governor the first opportunity to commit himself, Senator Byrd said yesterday.

At his morning press conference yesterday, Governor Adkins told newsmen that he had suggested to Senator Byrd that facilities and data of the Flood Control Commission, the Oil and Gas Commission, and the Department of Public Utilities be used in investigating the feasibility

ity of the measure.

Senator Byrd said that in addition to testimony from the three state agencies, W. A. Delaney Jr., Ada, Okla., one of the owners of the Louisiana-Nevada Gas Co., would offer technical information concerning the practicality of utilizing waste gas from the south Arkansas oil fields as fuel in a proposed steam-generated power plant.

Would Build Blakely.

The authority would be empowered to build the long-planned Blakely Mountain dam, to construct a steam-electric power plant in the oil fields, and to take over by legal action properties of private utilities within the OVA area. Conscription of plans and engineering data of the Arkansas Power & Light Co., originally given authority to construct the Blakely Dam, would be authorized by the bill.

The possibility of an official of the Federal Power Commission testifying at tomorrow night's hearing was also indicated yesterday after Senator Byrd had communicated with Washington. Chairman Leland Olds said that he would announce tomorrow whether or not he was sending a member of the commission's staff.

Manganese Fight Figures.

A delegation from Batesville also has been invited to testify concerning a manganese plant that city lost to Helena because of Batesville's inability to obtain cheap electric power. Governor Adkins, referring to the invitation of the Batesville group, said that in his opinion port facilities at Helena were an additional factor in the location of the manganese plant there. He also mentioned that Congressman Gathings had been instrumental in securing the plant for Helena.

Senator Byrd said that he will seek to prove the need for cheaper and more abundant electric power in Arkansas by exhibiting tomorrow night figures to show that neighboring states in January received on an average \$5,000,000 more for national defense industries than did Arkansas. He also referred to a statement made in Washington Friday by Congressman Clyde T. Ellis that the Tennessee Valley Authority was unable to supply the power needs within its immediate area, and as a result has reduced the amount of power it contracted to supply the Arkansas Power and Light Company.

Congressman Ellis said that the Arkansas Power & Light Company had forecast it would have 288,000 kilowatts available this fall, whereas the amount the Federal Power Commission estimates will be needed is 307,000 kilowatts.

AVA Could Take Over.

Ever since Senator Byrd introduced his bill, there has been much speculation as to whether the proposal conflicts in any way with Congressman Ellis' proposed Arkansas Valley Authority. While Senator Byrd has maintained the proposal did not, there has been no definite indication from Congressman Ellis.

It was learned yesterday that Senator Byrd will submit an amendment to the bill early this week which would empower the Arkansas Valley Authority to take over operation of the OVA, should it decide the two projects conflicted. The amendment, it is understood, is the result of communications between Senator Byrd and Congressman Ellis.

When first introduced the measure proposed the development in only nine counties. An amendment submitted Thursday added eight more counties. The 17 counties to be included within the proposed authority now are:

Saline, Hot Spring, Clark, Dallas, Calhoun, Bradley, Ashley, Pike, Columbia, Garland, Hempstead, Lafayette, Miller, Montgomery, Nevada, Ouachita and Union.

To finance the acquisitions of utility properties, pipelines, land, and the construction of dams and power plants, the bill authorizes a bond issuance of \$20,000,000. Electric rates would be computed on the basis required to retire the bond issues and provide for maintenance and a sinking fund. While the authority would be tax-exempt, the 17 counties would participate as beneficiaries in sharing three per cent of the gross proceeds from the sale of power and water. This would recompense the counties for their tax loss.

Senator Byrd said yesterday, that in view of national defense industries creating such a potential power demand, the authority could be expanded to include the narrows of the Little Missouri River, the Saline, and Caddo, if it were held necessary.

Arkansas congressional representatives in Washington were wired an invitation yesterday to either attend the hearing tomorrow night or to communicate their attitudes regarding the proposal.

U. S. ENGINEERS FOR INCREASED FLOOD OUTLAYS

Arkansas Projects Listed.

Gazette 3-3-41

Washington, March 2 (AP).—United States Engineers informed Congress today they could profitably expend \$50,000,000 for flood control work in the Lower Mississippi valley during the next fiscal year, \$28,000,000 in excess of the amount fixed in President Roosevelt's budget message to Congress.

This is the portion of the river and its tributaries from the mouth of the Ohio river to the head of passes in Louisiana under which flood control falls to the jurisdiction of the Mississippi River Commission.

The Engineers are ready to undertake flood control and rivers and harbors work in the middle South involving \$24,378,600, provided Congress provides sufficient appropriations.

The engineers estimate this amount could be spent on new work and maintenance under the general flood control and the rivers and harbors program, as distinguished from the \$50,000,000 they estimated could be spent in the alluvial Mississippi valley which is a separate program in itself.

Expenditures on Arkansas Dams Recommended.

The annual report of the Army Engineers, submitted to Congress and the president today, reveals the engineers estimated they could spend \$12,187,100 in Louisiana, Arkansas, Mississippi and Tennessee under the general flood control program, \$6,167,500 on new river and harbor work and \$5,477,000 on river and harbor maintenance.

Large projected expenditures in the four states include:

Flood control: Blue Mountain reservoir in Arkansas, \$2,000,000; Nimrod reservoir in Arkansas, \$600,000; Norfolk reservoir in Arkansas, \$4,500,000; Bayou Bodcaw reservoir, Louisiana, \$1,993,000.

The engineers reported they could spend an additional \$2,555,100 next fiscal year on the so-called Memphis Wolf river and Nonconnah creek project in Tennessee. This program involves construction of levees, flood walls and bank protection in Memphis and Shelby county.

An expenditure of \$4,500,000 on Norfolk dam on the North Fork river in Arkansas next fiscal year would see that project 40 per cent completed by June 30, 1942, the engineers reported.

An expenditure of \$600,000 on the Nimrod reservoir in Perry county, Ark., on the Fourche La Pave river would bring that project to a state of 85 per cent completion.

Proposed expenditure of \$2,000,000 on the Blue Mountain reservoir in Yell county, Ark., on the Petit Jean river would bring that project to 71 per cent completion under the present authorization.

\$300,000 Allotted For Little Rock District.

Unless otherwise noted the following, included in the report, are maintenance proposals only: Red river below Fulton, Ark., \$50,000.

Cypress Bayou and waterway between Jefferson, Tex., and Shreveport, La., \$1,600.

Ouachita and Black rivers, Arkansas and Louisiana, \$312,000.

Examinations, surveys and contingencies, Vicksburg District, \$300,000.

Arkansas river below Pine Bluff, Ark., \$25,000.

White river, below Peach Orchard Bluff, Ark., \$125,000.

St. Francis and L'Anguille rivers and Blackfish Bayou, Ark., \$13,000.

White river, Arkansas, above Peach Orchard Bluff, \$30,000.

Black river, Arkansas and Missouri, \$20,000.

Upper White river, Arkansas, \$50,000.

Examinations, surveys and contingencies, Little Rock District, \$300,000.

The following are included in the flood control program, as distin-

guished from river and harbor: Black Bayou, La., \$289,000.

Wallace lake reservoir, Louisiana, \$192,000.

Blakely Mountain dam, Arkansas, \$23,000.

13-Year Period Of Security for Valley.

The engineers told Congress "satisfactory progress" had been made on the project for the "alluvial valley."

"Noteworthy progress has been made," the report said, "on the Morganza floodway, the Wax lake outlet, the Charenton drainage and navigation canal and related works."

"Urgent main river work has been prosecuted and work on the tributary projects for headwater protection of the St. Francis and Yazoo rivers, including construction of the Wappapello and Sardis reservoirs, and backwater protection of the White river, has been pushed vigorously within the limits of funds available for such work."

"Work accomplished on the adopted project for the alluvial valley of the Mississippi river has demonstrated its effectiveness by affording unbroken protection for a period of 13 years to date."

"Never before has the alluvial valley enjoyed so long a stretch without destructive overflow occurring somewhere along the lower Mississippi river. This record is even more remarkable when it is recalled that during the past 13-year period high waters on the main river here, at many points, reached stages higher than any previously recorded."

The report told of completion of the Sardis, Miss., dam and reservoir on which \$12,489,254.21 had been spent through last June 30. Work was continuing on Arkabutla dam and reservoir, also in Mississippi. The Wappapello dam in Missouri was 60 per cent complete at the end of the last fiscal year, the report disclosed.

The engineers did not refer to the controversy between residents of Arkansas and Louisiana on the one side and those of Mississippi on the other ultimate plans for protection in the lower section of the alluvial valley. Arkansas-Louisiana interests have offered legislation proposing permanent abandonment of the proposed Eudora floodway in favor of equalized levees on both the east and west banks of the Mississippi river.

BILL PROPOSES WATERPLANNING DEVELOPMENTS

Agency Would Be Created.

Gazette 3-4-41

The establishment of a state Water Resources Commission to survey the water resources of the state and plan for their protection and development was called for in S. B. No. 310 introduced in the Senate by Senator Mitchell of Prescott yesterday. The bill incorporates recommendations and suggestions of conservation and flood control experts from Louisiana, Texas, Oklahoma and Arkansas made at a two-day meeting in Hot Springs shortly before the legislature was convened.

The commission would be empowered, among other things, to build and maintain and operate canals, dams, locks, reservoirs and other necessary appurtenances; to divert waters from streams by canals; to build and maintain power dams; to manufacture and distribute water, steam electric, and hydro-electric power; to reclaim and drain swamp lands; to borrow money; and to investigate all undeveloped power sites and irrigation projects in the state.

A seven-man commission with staggered terms would be appointed by the governor and they would receive \$20 per diem compensation while in active work. The commission would appoint a federal representative to co-ordinate the work with that of the federal government, a director, a secretary, and necessary engineers.

Specific authorization would be given the commission to issue \$10,000,000 worth of bonds and any amount of additional bonds would

be permitted on the authorization of an advisory board of the constitutional officers of the state. Income, property and energy developed by the commission would be tax exempt and the state would not be responsible for the debts of the commission.

The bill conforms closely to that of Senator Byrd of El Dorado creating an Ouachita Valley Authority except that it applies to the entire state rather than to counties in south Arkansas.

SENATE GROUP DELAYS REPORT ON OVA PLAN

Recommendations Due Today.

Gazette 3-4-41

A Senate Conservation Committee took under advisement last night Senator Byrd's Ouachita Valley Authority bill after a three-hour public hearing at which the \$20,000,000 project was bitterly condemned by an Arkansas Power and Light Company spokesman as a "socialistic set-up."

The committee announced it would meet at noon today to make its report, after its author said he wanted the group "either to okay it or kill it."

Proponents of the bill stressed its possibilities of developing the "sour gas" resources of the Columbia and Lafayette county oil fields and the water resources of the Ouachita valley. C. Hamilton Moses, lawyer for the Arkansas Power and Light Company and sole spokesman for the opposition, said the measure would "take the heart out of our properties."

The power company's two hydro-electric dams on the Ouachita river and the site of its proposed third dam at Blakely mountain would be within the proposed OVA area.

Byrd supported his measure with telegrams from Senators Caraway and Miller and Congressmen Ellis, Craven, Harris, Mills and Norrell. Witnesses for the bill were Alec Crowell, Oil and Gas Commission director; W. A. Delaney, president of the Louisiana-Nevada Transit Company; Thomas Fitzhugh, chairman of the Utilities Commission, and Dr. H. W. Blalock, a member of the commission. Approximately 400 persons, including directors, officials and many stockholders of the Arkansas Power and Light Company filled the Marion hotel ballroom for the hearing.

Plans for Desulphurization Plant Presented.

Mr. Crowell supplied statistics regarding the huge gas reserves of the McKamie and Big Creek oil fields which, he said, were being used almost solely for bringing oil from the ground and for a repressuring program in Union county. He said sufficient gas was known to be available to operate a 60,000 kilowatt steam electric plant for 100 years.

Mr. Delaney presented details of plans his company has for a \$400,000 plant to remove sulphur and other by-products from the gas. He said such a plant could produce at a cost of \$19 a ton sulphite pulp that sells for \$80 a ton, as well as other saleable acids and materials, leaving the gas to be sold for about 3.5 cents per 1,000 cubic feet.

He said this gas could be used to operate a steam electric plant which he estimated would cost \$6,000,000 or less. Later, Mr. Delaney said his company was not attempting to invade the field of the A. P. & L., but wanted to build the desulphurization plant to extract by-products from the "sour gas."

Mr. Fitzhugh and Mr. Blalock stressed what they said was a power shortage in the state, challenging contentions of the A. P. & L. that it had sufficient power.

A. P. and L. Executive Says Power Sufficient.

"There is no shortage of power in Arkansas," C. S. Lynch, executive vice president of the Arkansas Power & Light Co., told the committee in opposing the bill. "The Arkansas Power & Light

Co.'s business is to keep in touch with and prepare to meet power demands in any part of the state which we serve. Our company has generating capacity to the maximum load ever experienced, and in addition has a firm contract for 40,000 k. w. from TVA which serves to meet system needs as would capacity owned by us."

"Furthermore our company is a part of a system that has carried loads up to 285,000 k. w., and by reason of these relations we are in position to carry loads 25 to 30 per cent above any we have heretofore experienced. We are prepared to provide new capacity and furnish power at reasonable rates as soon as we can be assured that a permanent need exists. Generating capacity to supply large new demands can be provided by our company as quickly as the manufacturing plants can be built to use this additional power."

Use of Sour Gas Creates Difficulties.

"In regard to the sour gas in south Arkansas, the state has a resource deserving thorough study as to its economic development. We have been and are still continuing such a study, particularly as regards use of this gas. Experts in treatment of gas of this sort are not in agreement as to the feasibility of economic treatment and cost, and have reversed themselves after first giving favorable opinion based on preliminary information."

"Gas experts caution against attempt to burn raw sour gas without thorough study as to the possibility of injury to plant and animal life by the burning of this raw sour gas. Neither can the hydrogen sulphide be removed from the gas and wasted to the air without similar danger. Neither our company nor any other user of this gas can afford to adopt any plan for its use that will involve possibilities of extensive damage to crops, to vegetation and to human life."

"Certainly, if this gas must be sweetened before use its cost will be increased by that treatment, and there is also involved a real problem of disposing of tremendous amounts of by-products into which hydrogen sulphide might be converted, without adversely affecting market prices of these products. We are now working to help find the proper answer to this complicated development problem, and to assist in interesting capital in its development."

Substitute AVA Bill Drafted

Gazette 3-10-41

Denver, March 9 (AP).—A substitute Arkansas Valley Authority bill, providing protection for state's rights over irrigation water, has been drafted by a 10-man committee representing 14 Western states. Clifford H. Stone of Colorado, committee chairman, withheld details of the substitute proposal, saying it would be submitted to Gov. Ralph L. Carr Monday for a final check.

Carr, who protested against the federal encroachment into states' water rights which he said would result from enactment of the AVA bill before Congress, called a conference of Western states to mobilize Western opinion on the issue.

Nevada Governor Assails AVA Plan.

Gazette 3-14-41

Carson City, Nev., March 13 (AP).—Gov. E. P. Carville, in a special message to the legislature, denounced proposed federal legislation which he opined would destroy state control over waters of certain rivers and jeopardize decreed water rights of the semi-arid West. He referred to a bill in Congress which he said provides for organization of a federal corporation with extensive powers over the basins of the Arkansas, St. Francis, Red and White rivers.

"While on the face of this legislation there may not appear a great danger so far as our state's water rights are concerned," he said, "I feel it my duty to sound a warning the proposed action constitutes an opening wedge in a great plan to place every river basin of any consequence in the country under federal authority and thus deny the rights of states

in development of their water resources."

Norfolk Dam Contract Goes to Two Firms.

Gazette 3-11-41

The Utah Construction Company of Ogden and the Morrison-Knudsen Company of Boise, Ida., joint low bidders for construction of Norfolk dam, have been awarded contract for its construction, Maj. T. F. Kern, Little Rock district engineer for the United States Engineers, announced yesterday. Their bid was \$10,778,726.

Officials of the firm will confer with Major Kern and other engineers next week after visiting the dam site on the North Fork of the White river in Baxter county. Construction is scheduled to start in May.

Bids Will Be Asked On New Dam Soon.

Gazette 3-21-41

Invitations to bid on construction of Blue Mountain dam on the Petit Jean river southwest of Waveland (Yell county) will be made next Wednesday, Maj. T. F. Kern, Little Rock District engineer, United States Engineers, announced yesterday. Bids will be opened April 30.

The project will consist of a rolled-fill earth dam 2,800 feet long and 115 feet high, concrete spillway and earth dikes. Construction of outlet works is proceeding under a separate contract. The work will require excavation of 1,700,000 cubic yards of dirt and the embankment will consume 1,460,000 cubic yards. Construction must be completed within 700 days after notice is given to proceed.

Blakely Dam Proposed As U. S. Project

Democrat 3-23-41

Power Commission Refuses to Extend A. P. & L. Permit.

By B. N. TIMMONS.

(Democrat Washington Bureau.) Washington—Efforts to get congressional action toward construction of the Blakely Dam on the Ouachita river followed quickly on the heels today of a Federal Power Commission order which, in effect, revokes the license held by the Arkansas Power and Light Company for its construction.

Rep. Oren Harris is preparing legislation for construction of the dam as a government project and expects to introduce a bill for it the first of the week. He has been conferring the Corps of Army Engineers about it because congressional action taken will depend upon how far the engineers have gone with it.

Awaiting Report.

At present, Harris is waiting to hear what the engineers recommend in a report to be made soon on the Ouachita, including Blakely Dam. Heretofore it has been considered as a project to build with a combination of federal funds with A. P. and L. Now that this is apparently out of the picture, it will have to be considered as a wholly government project.

Harris said he will take one of two steps the first of the week. If the engineers send in a report recommending Blakely as a wholly federal job, he will offer legislation to authorize its construction. If the report is not altered to meet this new situation, he will ask the Rivers and Harbors Committee to order the engineers to make a survey of it. The latter course will require much more time, but will be necessary unless the engineers report on the dam as a government project.

Expect Early Action. In either case, Harris and other Arkansas members are hopeful of action during this session of Congress. They expressed confidence that if an authorization bill is introduced, it will get early consideration in committee and possibly be passed this year. If there has to be another survey first, Harris said he is confident that the committee will order it quickly.

The action taken by the Power Commission was to deny the application of A. P. and L. for an amendment of its license to postpone indefinitely the construction of Blakely Dam. The company had made this request some time ago. A hearing was held by the commission, but no action taken until now.

"License requirements with respect to the Blakely development have not been satisfied, actual construction has not been prosecuted in good faith and with due diligence nor has the licensee established when, if ever, it proposes to construct or complete this development," the commission said.

The license for the dam had al-

ready been amended twice by the commission to give the company more time to start construction of the dam.

TELLS OF HUGE POSSIBILITY IN WHITE'S BASIN

Power Opportunity Described.

Gazette 3-25-41

Washington, March 24 (AP).—The White river basin in Arkansas was cited by the Federal Power Commission today as having outstanding power possibilities in connection with flood control work.

The commission, referring to studies of this basin and others to determine feasibility of developing hydro-electric power in connection with flood control, said in its annual report it had found that "in most instances small additional investment at such projects would assure the ready development of their potential power when required by the power market and the conservation of the country's energy resources."

It said its investigations "of five flood-control projects in the White river basin indicate that it will be economically feasible to install initially 386,000 horsepower of capacity at these projects, with an annual output of 1,158,000,000 kilowatt-hours of hydro-electric energy."

"The commission believes that the availability of this power should provide a stimulus to industrial development and utilization of the mineral resources in the area," said the report.

Arkansas also was pointed out as one of the areas where the greatest power need would develop in the defense program. The commission added, however, that the full effects of the defense-load would not be felt in most areas until next year.

White Basin Project Urged By Many Arkansas Organizations.

The FPC's report of "outstanding power possibilities" in connection with the five proposed flood control and navigation projects in the White river basin was gratifying to Arkansans who have been seeking development of the area.

The projects have been endorsed and supported by the state Flood Control Commission in hearings before the FPC, the congressional Rivers and Harbors Committees and before United States Army Engineers.

The projects also are supported by Representative Clyde T. Ellis of Bentonville, author of the proposed Arkansas Valley Authority, and other congressmen and senators. Many state organizations have gone on record as favoring development of the valley by constructing multipurpose dams for flood control, navigation and hydro-electric power production.

Two of the five proposed projects are under construction. They are the Nimrod dam on the North Fork of the White river in Baxter county and the Clearwater dam near Poplar Bluff, Mo., on the Black river, a tributary of the White. Other projects are the Bull Shoals and Table Rock dams on the White river and the Narrows project on the Little Missouri river. All have been surveyed and recommended by the army engineers.

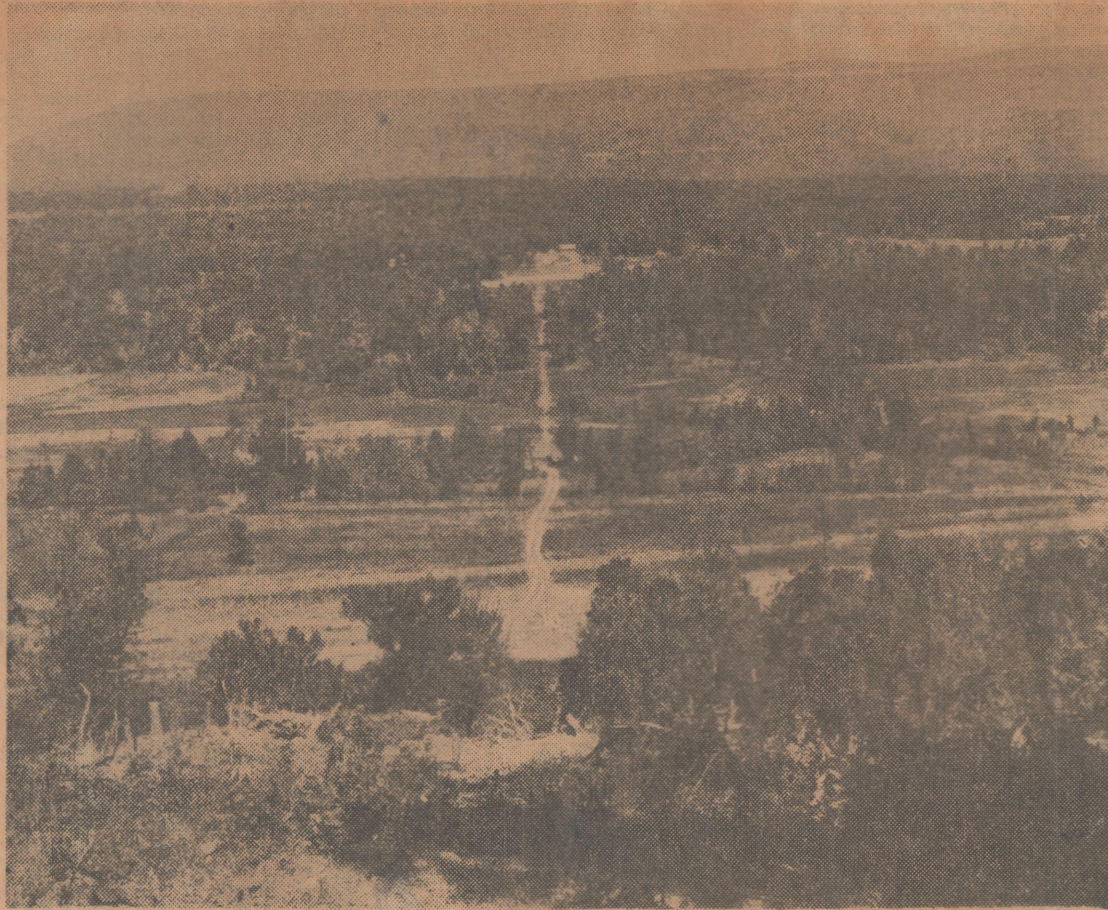
The Norfolk dam will be constructed looking to future installation of power turbines. Conversion of this dam into a hydro-electric as well as a flood control project was endorsed by the War Department and the Federal Power Commission.

"The most important thing is congressional appropriations," said C. S. Christian, engineer for the state Flood Control Commission. "However, the FPC's report should prove important in obtaining funds for immediate development of some of the projects."

The report will be used by Arkansas power advocates to seek approval of the White river basin development.

BLUE MOUNTAIN DAM SITE

Gazette 3-27-41



—Photo by U. S. Army Engineers.

Invitations for bids to construct Blue Mountain dam on the Petit Jean river in Yell county, site of which is shown above, were issued yesterday by Maj. T. F. Kern, Little Rock district engineer for the United States Engineers. The bids will be opened April 30. The dam will furnish protection from floods for 57 miles to the confluence of the Petit Jean and Arkansas rivers. A flood in April, 1927, destroyed thousands of dollars worth of property in the valley. The dam will be a rolled-fill earthen structure 2,800 feet long and 115 feet high. Construction of outlet works, under a separate contract by the John Kerns Construction Company, is now 32 per cent complete. The axis of the proposed dam is along the road which follows the opening shown across the center of the picture. The lake formed by the dam will extend 15 miles up the valley. In the background can be seen Mount Magazine.

Contract For Norfolk Dam Power Signed

Special to the Gazette. 3-28-41

San Francisco, March 27.—Representatives of the Arkansas Power and Light Company signed a contract here today to supply the Morrison-Knudsen Co. and the Utah Construction Co. with 5,000 horsepower of electric energy for use in building the dam on the North fork of White river in Baxter county near Mountain Home. The two companies received the contract recently on their bid of \$10,778,726.

Kenneth C. Johnson of Pine Bluff and Paul Griffith of Little Rock, industrial power engineers for the utility, signed the contract for the company. W. H. Puckett, vice president of Morrison-Knudsen Co., and L. A. Corey, president of Utah Construction Co., signed for the contractors.

Line to Norfolk Completed, Big Substation Planned.

Special to the Gazette. 3-28-41

Pine Bluff, March 27.—Construction of a 110,000-volt transmission line 48 miles long from Batesville to the Norfolk dam site at a cost of nearly \$500,000 has been completed, officials of the Hoosier Engineering Company, the contractor, notified C. S. Lynch, executive vice president of the Arkansas Power and Light Company, today. Although constructed so it can carry as high as 154,000 volts, the line will be operated at only 110,000 volts for the present, Mr. Lynch said.

The Arkansas Power and Light Company will build a \$75,000 substation at the Norfolk damsite to supply power needed to build the dam, and to integrate the company's Ozark division with the remainder of its interconnected system, Mr. Lynch said. The substation will include two large 3,000 kilovolt-ampere transformers. One will reduce the voltage from 110,000 to 33,000 volts for use in the Ozark division, and the other will reduce it to 2,400 volts for use in construction work. It is expected that about a month will be required to complete the substation after work is started. Completion of a railroad spur to the substation site must be awaited because the big transform-

ers cannot be handled except by rail.

Another Line Authorized.

Mr. Lynch said he has authorized work started on a 33,000-volt transmission line from the Norfolk substation to Gassville and Summit to bring the Ozark division into the A. P. and L. system. At present the Ozark division is obtaining power from another company through a connection at Berryville. A substation will be built at Gassville for distribution of power in that vicinity.

"When the Gassville-Summit line is completed, service in the Ozark division will be improved, and a large additional supply of power will be available in that territory," Mr. Lynch said. "This increased power supply will be adequate to meet any demands that may arise. The power company is trying to induce additional industries to utilize the natural resources of that section."

The Ozark division includes Berryville, Cotter, Green Forest, Mountain Home, Yellville, Harrison and several smaller towns. Headquarters are in Harrison, with L. J. Cooper as division manager.

"We have invested nearly \$500,000 in building a line to north Arkansas to integrate our Ozark division, and we can supply this large bloc of power immediately," said Mr. Lynch. "We are glad to know that our rates are so reasonable the contractors want to buy our power rather than use their own generating equipment."

Norfolk Contracts Wait Final Approval.

Gazette 3-29-41

Contract forms for construction of the Norfolk dam in Baxter county have been forwarded for final approval at Washington, Capt. E. G. Herb, executive officer of the United States Engineers, Little Rock District, said yesterday. The forms had been returned to the contractors, the Utah Construction Company and Morrison-Knudsen Company, for minor corrections.

Submitted with the contract were a performance bond of \$5,389,363 and payment bond of \$2,500,000. Notice to proceed on construction will be issued upon final approval of the contract. Contractors are already at work, however, at their own risk.

Engineer Returns.

Maj. T. F. Kern, district engineer, returned last night from inspection of a gravel access road from Highway 5 near Norfolk to the dam site. Major Kern also inspected construction work at Nimrod, Blue Mountain and Clearwater dams.

Hearing On Flood Plan April 17

Gazette 4-4-41

Flood control projects proposed for the Arkansas and White rivers will be considered by the House Flood Control Committee on April 17, Chairman W. M. Whittington (Dem., Miss.) notified Chairman R. E. Overman of the Arkansas Flood Control Commission, yesterday. Testimony regarding Ouachita river projects probably will be heard April 18. Governor Adkins will be requested to authorize the state commission to send representatives to the hearing. Army officers of the Little Rock and Vicksburg (Miss.) district offices, United States Engineers, are expected to testify in behalf of Arkansas jobs favorably reported by the engineers.

Principal Projects.

Major Arkansas projects included in an omnibus bill pending before Congressman Whittington's committee include: Bull Shoals and Table Rock on White river, aggregating a total cost of \$79,000,000. The latter would be in Missouri, near the Arkansas line.

Greer's Ferry, Little Red river, near Heber Springs. Belle Foley dam on Strawberry river.

The Narrows dam on Little Missouri river, near Murfreesboro.

Testimony for Table Rock and Bull Shoals was heard last year. Chairman Whittington has said it will not be necessary to repeat "old" testimony.

Norrell Is Member.

Representative W. F. Norrell of Monticello is a member of the Flood Control Committee, which is seeking authorization for expenditures totaling \$250,000,000. The entire amount would not be appropriated at one time.

Proponents said the work should prevent a "let-down" that otherwise would follow a decline in defense work.

The committee's request for a \$191,000,000 authorization was side-tracked for defense preparations last year.

Work Order Issued On Norfolk Dam.

Gazette 4-6-41

Maj. T. F. Kern, Little Rock district engineer, announced yesterday construction of the Norfolk Dam on North Fork river in Baxter county is underway. A work order has been issued to the Utah Construction Company and Morrison-Knudsen Company, Inc., awarded the contract on a joint bid of \$10,778,726.

The dam will be a concrete gravity type structure with a crest length of 2,624 feet and a maximum height of 220 feet above the stream bed. It will form a reservoir with a storage capacity of 1,251,000 acre feet.

Terms of the contract require construction to begin within 30 days after receipt of the work order and for the structure to be completed within 1,200 days. The contractors have begun work. It is estimated the dam will be completed in the fall of 1944.

The contractors are also building a construction camp, providing quarters for approximately 250 employees.

Proposed Lone Rock Dam To Be Protested.

Special to the Gazette. 4-9-41

Batesville, April 8.—Abandonment of the Lone Rock dam project on the Buffalo river or reduction of the height to 125 feet on the ground that the proposed 237-foot dam would drown out practically all the principal mine developments along the stream 30 miles from its mouth, is urged by the Ozark Mine Owners League, it was reported here today. J. H. Hand of Yellville, manager of the league, has sent a letter of protest to Congress.

"Army engineers have advised that if the dam is to serve flood control, which is the primary purpose of the government, it would not be feasible to reduce the height below the present plan—237 feet—for flood control alone," the letter said. "That would drown out the principal mine developments along Buffalo river except for a few that are high up on the hillsides."

"If power facilities, which are not yet authorized, should be included, flood crest of the reservoir would be raised still 40 feet higher. What use could such power be to local mining industry with most of the district's proven ore deposits 100 feet under water?"

"In view of this threatened loss to mine owners, the destruction of a potential mining industry which would deprive the country of an essential metal (zinc); to say nothing of cruel disruption of communities, it is the considered judgment of many thoughtful people that the government should abandon the project and leave the charming Buffalo river basin, with its recreational attractions, undisturbed."

Maumelle River Project Rejected

Gazette 4-10-41

United States army engineers have rendered an unfavorable report on a project for flood control measures on the Maumelle river in western Pulaski and eastern Perry counties, it was announced by Lt. Col. Stanley L. Scott, Southwestern Division engineer, from his headquarters in Dallas, Tex., yesterday.

A hearing on the project was conducted by Colonel Scott at Robinson school on Highway 10, west of Little Rock, before his headquarters were transferred from Little Rock to Dallas.

Cost Pronounced Excessive.

"The principal grounds upon which the adverse conclusions are based are that field investigations, considered together with engineering and other pertinent studies, show that works for the protection of relatively undeveloped agricultural lands in this valley from headwater floods of the Maumelle river and from backwater floods of the Arkansas river, considered either separately or in conjunction with the storage of water for beneficial uses, cannot be constructed except at a cost that is in excess of the over-all benefits that may reasonably be expected to accrue therefrom."

Interested persons may appeal from the conclusion to the Board of Engineers for Rivers and Harbors at Washington within four

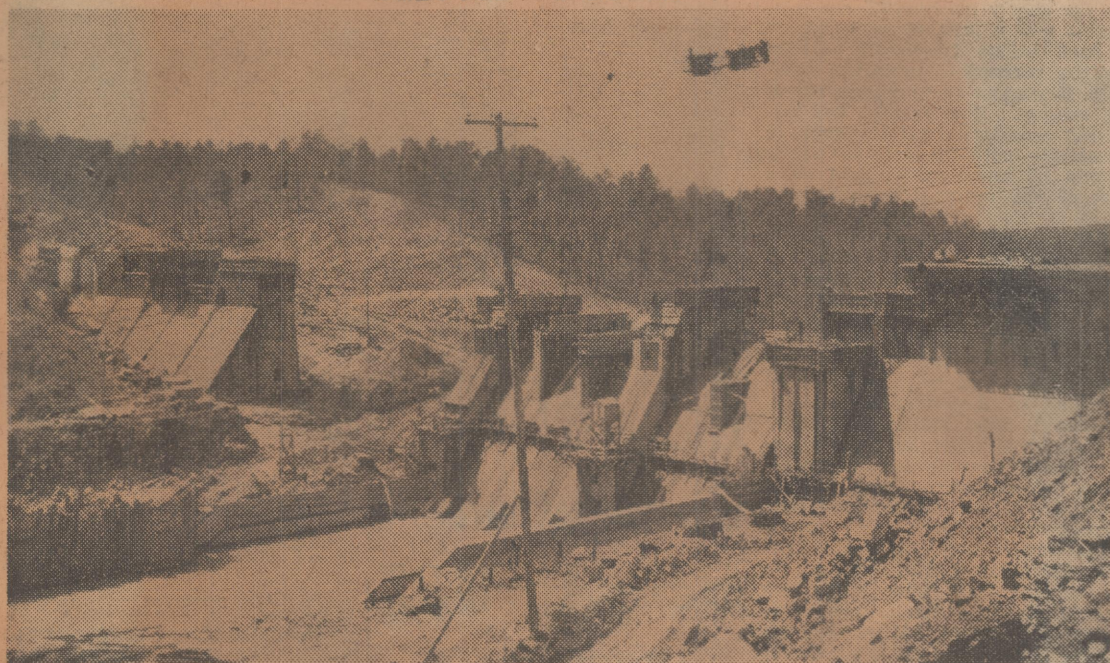
weeks, Colonel Scott said. If material for presentation to the board cannot be gathered in that time an appeal may be made for extension of the time limit, and if oral hearings are desired dates may be arranged by correspondence. He pointed out that the unfavorable action of the War Department in no way affects action of the Department of Agriculture, charged jointly with the department in making the investigation.

Appeal To Be Taken.
Dr. W. A. Lamb, 4001 West Eleventh street, who owns a large acreage in the Maumelle river valley, and who with Dr. Glen M. Holmes, 3805 South Lookout street, led the movement in behalf of the project, expressed disappointment last night on hearing of the engineers' report but said an appeal will be taken soon.

"One of the most beautiful and fertile farm areas of Arkansas has been turned down," he said. "But we don't expect to quit because of this action."

FLOOD CONTROL PROJECTS AT NIMROD AND BLUE MOUNTAIN TO BE SCENIC ATTRACTIONS

Gazette 4-13-41



Work at Nimrod dam consists at present mainly of drilling and cleaning the area on the other side of a coffer dam (shown at left center in the picture), preparatory to laying the foundation for the remaining portions of the dam. Approximately 35,000 cubic yards of concrete remain to be poured. While men worked on the portion of the dam nearest to view, the waters of the river were routed on the opposite side of the coffer dam.

By CLIFTON PAISLEY.

(Staff Correspondent of Gazette.)

Nimrod, April 13.—Today is Easter Day, and you'll want to attend church and show off that new bonnet or tweed. But when a Sunday comes along when you're ready to take the furnace apart to occupy yourself, here is a suggestion: Visit the two-thirds complete Nimrod dam on the Fourche La Pave river in Perry county and the site of Blue Mountain dam on the Petit Jean river near Havana where work is progressing on a diversion tunnel to carry its waters around an immense earthen dam.

This reported visited the dams Thursday as guest of the Little Rock district office of the United States Engineers, authors of the projects. The hosts were John A. Haynes, assistant chief clerk, and O. R. Mitcham, chauffeur.

The trip, totaling less than 250 miles, was routed by Conway and Morrilton; south on state Highway 9 to Perryville; west on Highway 60 to Nimrod; on Highways 7 and 10 to Blue Mountain, and back via Highways 10 and 27 to Russellville and home. Guide service is provided at both sites on Sundays and visitors may inspect the dams in detail.

Nimrod dam, which will be 97 feet high and 986 feet long, will be the largest concrete dam in the state when completed about October 15. Blue Mountain dam, 115 feet high and 2,700 feet long, will be the only one of its kind in the state. Visitors are welcome on week days while construction is under way.

Nimrod Dam Massive Concrete Structure.

Wendell W. Ralphe, resident engineer in charge at Nimrod, said the giant structure, which will form a lake with a surface area of 3,600 acres, has poured 70,000 cubic yards of 105,000 cubic yards of concrete to be used. Sixteen of 26 monoliths (block divisions of the dam) have been completed and seven of nine slide gates to hold or release water have been installed. Work was begun in April, 1940.

The contractors, Russ Mitchell, Inc., and Brown & Root, Inc., employ 292 men, mostly from Yell and Perry counties, on the project, while a force of 47 men is employed by the engineers. K. E. McDougal is superintendent of construction.

Manufacturing their own cement from materials mined a half mile upstream, the contractors have poured as much as 1,000 cubic yards of concrete in one day. The cement is poured from containers of four to eight tons capacity moving on tracks and picked up by a 25-ton cableway.

The cableway, which is the same one used on the Norris and Hiwassee dams of the Tennessee Valley Authority, consists of two towers, one on either bank of the river, with a 1,400-foot length of cable between. Two telephone operators,

one at the head tower and the other at the place where concrete is to be poured, regulate the movement of the mechanism as it picks up the containers, moves them along the cable, and empties them.

Reporter Goes Into The Dam Interior.

Donning protective tin helmets (a precautionary measure required of all those visiting the immediate construction area), we followed Mr. Ralphe as he conducted us down a ramp along the downstream of the dam and into a large interior passageway which will extend its entire length. It houses oil-pressure operated valves controlling the slide gates. They will be operated from a control tower on top of the dam.

Seven of the slide gates, seven and one-half by six feet, will be the largest of the kind in any dam in the country. A shaft running along the ceiling of the tunnel will enable the gates to be raised or lowered by cranes in case of an emergency. A 22-foot road will be constructed along the top of the dam. Construction cost of the dam itself will be \$1,137,875, but it is estimated cost of the entire project, including engineering, purchase of lands and relocations, will total about \$4,000,000.

Although the main purpose of construction was flood control, two penstocks, 15 feet in diameter, are being constructed to provide for possible power development. It is estimated generators installed at the penstocks would provide 10,424,000 kilowatt hours per year of prime electrical energy and 19,600,000 kilowatt hours per year of all kinds. For the present the penstocks will be sealed with concrete.

From eight to 10 families in the area to be covered by the lake must be relocated. It is likely a low pool will be maintained after the dam is completed and through the winter, and the entire area to be immersed will be covered in the spring before foliage begins to grow.

Blue Mountain Dam to Be Earthen Structure.

Blue Mountain dam, being built in the shade of Mount Magazine, the highest elevation in the state, will serve as a flood control project for area devastated by the big flood of 1927. During April of that year run-off in the Petit Jean river basin was nearly equal to the usual yearly runoff.

But it will also add one of the largest lakes in the state. At spillway crest the lake will have a surface area of 11,000 acres and a shoreline of 89 miles. It will extend 15 miles up the valley and have a maximum width of two miles.

The 115-foot high earthen dam, which will be approximately 2,700 feet long, will be 600 feet wide at its base. It will contain nearly 2,000,000 cubic yards of material, all of which will be obtained from the immediate vicinity. Bids on the

structure will be opened here April 30.

Work Has Started on The Diversion Tunnel.

At present work has been done only on a conduit 24 feet in diameter through the right abutment which will conduct water through a 125-foot high ridge into a creek entering the river below the dam. John Kerns Construction Company, which has the contract for the tunnel, employs 142 men at the site.

C. J. Zimmerman, foundations chief for the engineers, who have 33 men at work at the site, conducted us through the tunnel and explained its construction. Begun about six months ago at the side of the ridge away from the river, it now lacks approximately 30 feet of being complete.

Because of the fumes which result from use of gas or gasoline equipment, a compressed air drill is used to bore 10-foot holes into which charges of dynamite are placed. Drilling is accomplished from a large platform running on wide tracks and known as the "jumbo." The debris is removed on to trucks, drawn in and out of the tunnel by cables attached to a steam hoist at the entrance and a pulley at the interior end. If the trucks were allowed to operate on their own power inside the tunnel, the fumes might be fatal to workers. Mr. Zimmerman estimated the tunnel will be completed and ready for a concrete sheathing in a week of 10 days.

After the tunnel is completed a two-foot sheathing of concrete will line the inside. It will be circular-shaped, except at the stream end, where it will be divided into three rectangular conduits.

The intake structure at the stream end of the tunnel will consist of a gate control tower, with one gate at each of the three rectangular conduits. The tower, which will house mechanism controlling the gates, will rise more than 50 feet above the level of the lake. The entire outlet works is expected to be completed by late summer.

'HOLING THROUGH'

Gazette 4-16-41



The photograph shows J. N. Ball, field engineer for the John Kerns Construction Co., emerging from the diversion tunnel for Blue Mountain dam under construction on Petit Jean river in Yell county. It was taken immediately after the "holing through" of the tunnel. Mr. Ball was greeted by C. A. Hammock, resident engineer for the Little Rock Engineer District. He has headquarters at Booneville.

The conduit which is being tunneled through the right abutment will be circular in section, 20 feet in inside diameter, and 1,019 feet long. Flows through the conduit will be regulated by operation of three tractor type service gates, each eight feet wide and 17 feet high. An excavated outlet channel about 3,600 feet long will lead from the stilling basin at the downstream end of the tunnel to meet the main river channel about three-quarters of a mile below the dam. With the reservoir full, the outlet works will be capable of discharging 7,938,000,000 gallons of water per day.

State to Be Represented At Flood Control Hearings.

Gazette 4-18-41

The Arkansas Flood Control Commission will be represented at House Flood Control Committee hearings on the Arkansas, White, St. Francis and Red river basins May 7, and on the lower Mississippi basin May 8.

Gen. Julian L. Schley, chief of army engineers, will testify on the latter date.

Chairman Will M. Whittington (Dem., Miss.) advised the Arkansas commission that committee hearings would start next Monday, after a brief postponement. More than two weeks will elapse before projects in which Arkansas is interested will be considered.

Plans to send several representatives to Washington were started by the commission some time ago.

Engineers Ask Bids On Clearwater Dam.

Gazette 4-18-41

Invitations to enter bids for the second phase of construction of the \$10,000,000 Clearwater dam project on Black river near Piedmont, Mo., will be issued May 1 for opening June 3. Capt. E. C. Herb, executive officer for the Little Rock District, United States Engineers, announced yesterday.

The second phase will call for construction of an earthen dam 4,200 feet long and excavation for spillways. Construction of outlet works for diversion of the stream is under way. The third phase will be construction of concrete spillways.

Advance notices to contractors said bids would be considered for two types of construction. One would be a roll filled dam while the alternate will be hydraulic fill. Top of the dam will be 608 feet above sea level and about 150 feet above the dam's base.

Plans and specifications may be obtained from any office of the engineers.

Captain Herb said that more than 200 workmen are employed in preliminary construction on Norfolk Dam on the North Fork river in Baxter county. The main office building is scheduled to be completed this week. The road from Norfolk to the dam site has been completed.

Flood Control Commission To Prepare Recommendations.

Gazette 4-24-41

Recommendations to the House Flood Control Committee for Arkansas projects will be prepared at a state Flood Control Commission meeting next week, Engineer C. S. Christian said yesterday. Representatives of the commission will appear before the committee in Washington on May 7-8 in behalf

of the proposed:

Bull Shoals dam, White river, near Cotter, and Table Rock dam, White river, in Missouri near the Arkansas line. The Federal Power Commission has recommended that power-generating facilities be constructed at both.

Narrows dam, Little Missouri river, Pike county.

Power facilities at Norfolk dam on the North Fork of White river, Baxter county. Ground is being cleared for the Norfolk flood control project.

Flood Control Projects To Be Outlined

Democrat 4-27-41

A schedule of flood control projects for Arkansas will be worked out at a meeting of the State Flood Control Commission Tuesday, Charles Christian, commission chief engineer, announced yesterday.

The schedule will be presented to the House Flood Control Committee in Washington at hearings scheduled for May 7 and 8.

The commission probably will recommend that the Norfolk dam on the White River, near Norfolk, be equipped with power facilities. The dam is now under construction.

Other probable recommendations include projects for the Bulls Shoals Dam on the White River near Cotter, Table Rock Dam on the White River in Missouri, and the Narrows Dam on the Little Missouri in Pike County.

Backers Have No Desire To Rush Action

Democrat 4-20-41

Prefer Thorough Study of Huge Power Proposal.

By TREMAIN F. ROBINSON. (Democrat Washington Bureau.)

Washington, D. C.—Now that the first legislative rush of the national defense program is over, Congress is due to give serious consideration to the Arkansas Valley Authority bill, creating a corporation to control nearly everything from dust storms to floods on 293,000 square miles of land sprawling over Texas, Louisiana, Arkansas, Oklahoma, Missouri, Kansas, Colorado and New Mexico.

This is the gigantic undertaking of

establishing a TVA in that vast area with not only the power, navigation, flood control and other TVA aspects, but with dust-storm control in addition.

Just when formal, serious discussion of the proposal will start, Congress was not known, but Rep. Clyde T. Ellis (D., Ark.), author of the legislation, said today the plan will be given a hearing, at length, by the House Rivers and Harbors Committee. With the major part of defense legislation out of the way, this will probably start before long, or summer at latest.

Sponsors in No Rush.

Thus far no active steps have been taken to get the legislation before either the Senate or House for passage. Sponsors are in no rush about it, but Ellis declares that—sooner or later—this development is "inevitable." Neither he nor others interested predict it will be passed by this Congress. They look at it as a long-range proposition which, while necessary, may take a while to go through. So they are going through the steps now of getting support for it, explaining it, discussing it and in general letting Congress and country know what it is.

The AVA plan, under a close inspection, is not as frightful as a first glance might indicate or as some of the opponents claim—for as beneficial as its aims are, it has opposition which is vociferous to say the least. Actually there is very little that is new in the whole proposal except for the idea of co-ordinating the work now going on plus the work that has been proposed or authorized by Congress.

What Bill Provides.

Here is the whole AVA proposal in a nutshell: AVA would be a corporation which would co-ordinate and inaugurate new developments for work on flood control, irrigation, erosion control, drainage, navigation, power and recreation. Work on all of this, quite obviously, is going on now and much of it has been going on for years. But to a large extent it has been hit or miss.

What AVA would do is to co-ordinate this work—plan and direct its development—and operate on the spot instead of from Washington. Ellis' idea is that if this is not created and put into operation, the country has seen only the beginning of "the plague of the Grapes of Wrath." Purpose of the plan is to restore the land that is now ruined and prevent more from destruction, to provide irrigation and navigation and navigation and to harness the rivers for more power, of which a shortage now looms in the area. This is to the end of improving living conditions, raise income levels and attract new industries.

This it would do over the area of more than 293,000 square miles covering all of Arkansas and Oklahoma.

a huge section of Texas lying, roughly, north of an imaginary line running west from Ft. Worth and Dallas, that part of Louisiana north of where the Red River enters the Mississippi, Northeastern New Mexico and Southeastern Colorado and the southern parts of Kansas and Missouri.

The set-up is to cover the watersheds of the Arkansas, Red, White and St. Francis rivers and their tributaries. This, roughly, is the area affected by those rivers and hence the area included in the AVA plan. It takes its name from the Arkansas River, Ellis explains, because the Arkansas is the longest of the four. **35 Dams Provided.**

It averages 400 miles in width and runs more than 1,000 miles from the Mississippi westward. It has a population of around nine million people. It is seven times as large as the TVA territory.

Basis of the whole AVA setup is a series of 35 dams on the four rivers and their tributaries for flood control, navigation, power and irrigation. Some are already built and in operation. Others, such as the Denison dam, are under construction. Others are authorized by Congress but awaiting funds. The rest have been recommended by the Corps of Army Engineers and are awaiting authorization by Congress. Every one has the official stamp of approval from one branch or the other of the federal government. The bill itself authorizes only the construction of two new ones—Bull Shoals in Arkansas and Table Rock in Missouri, both on the White River.

Cost \$496,000,000.

Cost of this whole setup, as estimated by the army engineers, is \$496,105,000, including those already completed. Ellis figures the whole thing can be paid for by electricity savings in five years. A "conservative" estimate by the War Department is that four billion kilowatt hours of electricity can be produced annually by reservoirs in the ACA region.

Comparing rates in states of the AVA area with present TVA power rates, Ellis said the people of Texas pay \$31,000,000 more a year than they would under TVA rates, those of Louisiana \$9,500,000, Oklahoma \$11,500,000, Arkansas \$6,000,000, Kansas \$10,500,000, New Mexico \$1,500,000, Colorado \$8,500,000, Missouri \$21,000,000. If these higher charges were brought down to the TVA level, to bring about the saving of this amount of money each year in each state, the whole thing would be paid for in five years, Ellis said.

This saving, however, is just the first thing. Experience shows that where there is cheap power new industry moves in and that which is there expands. Natural resources are developed. The multiple-purpose dams which generate power also provide flood control and make navigation possible. In the AVA setup the reservoirs are also to be used for irrigation in the dry sections of the area and supply water for the rice fields of the southeastern part of the area. The average annual direct flood loss alone in the area is placed at \$9,000,000 by the War Department.

Most of this type of development has been done by the TVA and it would be applied to the AVA region. However, AVA would also have the job of trying to control wind erosion as well as water erosion. How it would go about doing this, aside from the programs already in operation, is not known, except that AVA would co-ordinate all the present activities along that line with its reservoir program. The main thing on this angle is that under AVA the whole thing would not only all be tied in together, but the efforts at saving the land and water would be intensified.

Has F. D. R.'s Blessing.

But so much for the general plan of what AVA will do. What Congress will do about it remains to be seen. It may do nothing this year, but that does not greatly worry proponents of the plan. They think it should be started now but believe that such a plan is inevitable and they are not rushing onto the floor of Congress to face possible defeat. Instead, they are going into it thoroughly and taking steps to get the Congress to do likewise. While the proposition came up before Congress quickly and recently, it appears to be no flash in the pan.

The stature of this of any other proposal placed before the nation for adoption or rejection can be judged to a large extent by the opposition to it and the support for it. There is little doubt but what it has administration support. President Roosevelt, while he did not openly support it, has unofficially given it his blessing and the bill to create AVA was drawn up by Ellis with the help of the TVA experts, after a number of conferences with them and with the president.

The plan is also gaining support from a large section of the general public, from newspapers, from various farm organizations, coal associations and other organizations.

Carr Leads Opposition.

Open opposition to it thus far has come primarily from two sources—Gov. Ralph L. Carr, Colorado, and

from the United States Chamber of Commerce.

The country can expect to hear more about AVA from now on, one way or the other. Efforts are being made now to form an association in the eight states affected to back the AVA plan and various conferences are being held this week and part of next on the plan.

In Washington, the annual convention of the United States Chamber of Commerce is slated to hear more about AVA in a speech by Governor Carr. Also, before long committee hearings on the legislation itself can be expected to start in Congress.

What it will all lead to, only the future can tell.

Preliminary Work On Dam Well Under Way

Mountain Home—There is considerable activity at and around the Norfolk dam site. Removing timber and loose dirt from the bluff that owsers over 200 feet above the bed of the river on the east side is attracting much attention. The bluff is almost perpendicular, and men were suspended with ropes to remove the timber. A large "bulldozer" driven by a high-powered tractor is used.

The railroad and highway have been completed to the site with the exception of sidings and extensions.

Flood Control Projects Endorsed

Gazette 4-30-41

The state Flood Control Commission formally decided yesterday to ask the House Flood Control Committee to recommend:

Authorization for the Bull Shoals and Table Rock flood control projects on White river, and the Narrows project on Little Missouri river.

Additional funds for Greer's Ferry dam on Little Red river, Celburne county; Bell Foley dam, Strawberry river, Lawrence county, and Water Valley dam, Elevenpoint river, Randolph county.

Governor Adkins notified the commission he would support its Washington requests, to be made May 7-8, and its plans for a celebration at Norfolk dam May 22.

To Represent Adkins. Representative R. W. Griffith Jr. of Little Rock, chairman of the House Budget Committee in the 1941 General Assembly, will represent the governor at the Flood Control Committee hearings.

Commission members who probably will attend are Chairman R. E. Overman, Little Rock; M. W. Greeson, Prescott; John P. Morrow, Batesville, and Lamar Williamson, Monticello. Secretary W. C. McClure of Camden and Engineer C. S. Christian of Little Rock will attend. Mr. Christian will leave Saturday night.

An Arkansas delegation will attempt to obtain congressional authorizations for: Proposed Table Rock and Bull Shoals projects on White river and the Narrows project, Little Missouri river; power facilities at Norfolk, White river, and additional work on Blue Mountain, Petit Jean river, and Nimrod, Fourche La Fave river.

Arkansas Flood Control Commission members who will testify are: Chairman R. E. Overman, Little Rock; John P. Morrow, Batesville; Layton Coffman, Harrison; M. W. Greeson, Prescott, and Lamar Williamson, Monticello. Secretary W. C. McClure of Camden and Chief Engineer C. S. Christian of Little Rock also will testify.

Low Bidders On Dam Announced

Gazette 5-1-41

Apparent low bidders on construction of the 2,800-foot long earthen Blue Mountain dam on the Petit Jean river, near Waveland, Yell county, were announced by the Little Rock District Office of the United States Engineers yesterday. The bids were opened at Hotel Marion. They are:

Myers, Myers & Goen of Salem, Ind., \$1,111,879.

Southern Contracting and Engineering Company of Memphis, \$1,221,558.

S. J. Graves & Sons of Minneapolis, \$1,228,899.

There were seven other bidders. The low bids were all under the government estimate of the job, which was \$1,243,171.56. Construction of the 115-foot high dam is expected to require 700 days. Work is proceeding under a separate contract on a diversion tunnel to carry the river's waters around the right abutment. It is expected to be completed by fall.

Hearings On AVA to Be Opened Soon

Gazette 5-2-41

Washington, May 1 (P).—Representative Ellis (Dem., Ark.) said he had been advised by the House Rivers and Harbors Committee that hearings on legislation to create an Arkansas Valley Authority would be started "within a month." Ellis said Chairman Mansfield (Dem., Tex.) assured him of an early hearing this morning.

"I am expecting the Budget Bureau to complete its studies on the proposal and to release the departmental reports for clearance back to the committee within the next two weeks," Ellis said.

The legislation would set up an authority to have charge of flood control and power operations in the Arkansas, St. Francis, White and Red river basins.

Blakely Dam Work Start Date Sought

Gazette 5-4-41

Washington, May 3 (P).—Representative Harris (Dem., Ark.) asked the Federal Power Commission in a letter made public today to fix a date for starting construction in the near future of the Blakely mountain dam in Arkansas by the Arkansas Power and Light Company.

Noting that the company, which has had a license for the site since 1927, had asked an extension until December 31, 1946, Harris asked prompt action on the petition, so "other opportunities of development" could be used if the company did not carry out the development.

The dam should be built, he said for flood protection and additional power. "If the company really intends to go ahead with it," Harris wrote, "it seems further delays should not be permitted."

Griffith to Represent Governor At Washington Hearing. Gazette 5-4-41

Representative R. W. Griffith Jr. of Pulaski county, chairman of the 1941 House Budget Committee, will leave by plane this afternoon for Washington, where he will represent Governor Adkins at hearings before the House Flood Control Committee on Wednesday and Thursday.

An Arkansas delegation will attempt to obtain congressional authorizations for: Proposed Table Rock and Bull Shoals projects on White river and the Narrows project, Little Missouri river; power facilities at Norfolk, White river, and additional work on Blue Mountain, Petit Jean river, and Nimrod, Fourche La Fave river.

Arkansas Flood Control Commission members who will testify are: Chairman R. E. Overman, Little Rock; John P. Morrow, Batesville; Layton Coffman, Harrison; M. W. Greeson, Prescott, and Lamar Williamson, Monticello. Secretary W. C. McClure of Camden and Chief Engineer C. S. Christian of Little Rock also will testify.

Celebration At Norfolk Dam May 22

Gazette 5-4-51

A celebration at the site of Norfolk dam on the North Fork of the White river in Baxter county, where 500 men are now employed in work preliminary to building the giant concrete structure, is being planned for Thursday, May 22, R. E. Overman, chairman of the state Flood Control Commission, announced yesterday. More than 5,000 persons are expected to attend from Arkansas, Missouri and other states.

Among those who have accepted invitations to appear on the program are Governor Adkins; Col. Stanley E. Scott, chief engineer for

the Southwest Division of the United States Engineers with headquarters at Dallas, Tex.; Maj. T. F. Kern, Little Rock District engineer for the United States Engineers; Congressman Wilbur D. Mills and Clyde T. Ellis.

A special train will bring a large delegation from the Springfield (Mo.) Chamber of Commerce, headed by John T. Woodruff and accompanied by a band. It is hoped a special train of the Missouri Pacific Lines will carry from 150 to 200 persons from Little Rock and southern Arkansas.

The dam, which will be a concrete gravity type structure 220 feet high and approximately a half-mile long, will be constructed as a flood control project with provision for future power development. It will be the first of six dams planned for the White river system by the United States Engineers.

Residents of Baxter county, headed by Judge R. M. Ruthven, are making elaborate preparations to entertain visitors. In the morning there will be a parade with several bands, sight-seeing and other activities. Speaking will begin at 1:30 p. m. and will be completed in time for the Springfield train to leave the dam site at 4 p. m.

Governor Adkins has been asked to proclaim May 22 "Norfolk Day." The program is being sponsored by the commission and the Upper White River Power Development Association.

500 Men at Work On Foundation Excavation.

Work at the site consists at present of excavation and stripping of "overburden," or material above foundation rock, on the left abutment. H. V. Pittman, chief of the Operations Section of the Little Rock District office, said yesterday. Most of the 500 persons employed are hand labor.

Work on a coffer dam to hold waters of the river back while foundation work in the river bed is carried on, will begin about July 1, he said. Pouring of more than 1,200,000 barrels of concrete which will be used in the structure will begin about the middle of September.

Railroad Spur to Dam Site Completed.

A three-mile railroad spur from the Missouri Pacific Lines tracks near Norfolk to the dam site has been completed by the government and turned over to the contractors for maintenance and the railroad for use. Supplies needed in the dam's construction will be moved over the spur and over an access road from Highway 5.

The contractors, the Utah Construction Company and the Morrison-Knudsen Company, have completed an office building and are at work on blacksmith shops, warehouses, a hospital and other buildings. The Arkansas Power and Light Company has installed a temporary 650 kilowatt unit to supply electricity and are at work on a sub-station which will supply more power for the dam's construction.

Work on the \$10,778,726 structure is scheduled for completion by the fall of 1944.

The contractors, under the direction of the general superintendent, B. Williams, are now preparing a parking area, observation platform for visitors and connecting roads which will probably be ready by June 1.

Ellis Sees Value in AVA After War

Gazette 5-6-41

Washington, May 5 (P).—Representative Ellis (Dem., Ark.) told the House today the proposed Arkansas Valley Authority and similar huge public work "may well mean the difference between saving democracy and losing it in the inevitable economic chaos" he predicted would follow the present war in Europe. Such undertaking, the Arkansas legislator said, would create "hundreds of thousands" of jobs and provide new frontiers for new homes.

He quoted Gov. Ralph L. Carr of Colorado as saying in a speech before the United States Chamber of Commerce the AVA was "comparatively unimportant" and criticized the governor's speech as offering "not one constructive note nor one ray of hope." If the governor's ideas expressed in his speech before the chamber were to be accepted, Ellis

aid, "it would be ridiculous to spend further federal funds in Colorado for flood control and to provide storage for irrigation."

BUILDING LEVEE IN EAST LITTLE ROCK FAVORED

For Protection Of Adams Field.

Gazette 5-8-41

Washington, May 6 (P).—Proposed improvements for Arkansas occupied attention of the House Flood Control Committee at its session here today.

One of the projects urged was improvement of levees and building of some new ones on the south side of the Arkansas river between Little Rock and Pine Bluff.

This would include a levee in the East End of Little Rock to protect the huge investment at Adams Field, Little Rock airport. It was testified that the airport has gone under water during high stages of the Arkansas river in the past.

C. S. Christian of Little Rock, engineer for the Arkansas Flood Control Commission, urged the building of a levee in East Little Rock and that levees generally be strengthened on the south side of the river all the way to Pine Bluff. Also he suggested closing the lower branch of Fourche bayou, which empties into the Arkansas river about 12 miles below Little Rock, while leaving open the upper branch which empties into the river near the city.

A new levee in the vicinity of the Pine Bluff city limits also was proposed.

Maj. Miles Reber of the Engineers Corps said that local interests had built the levees on the south side of the river and that they are inadequate for flood conditions. A new levee has been built on the north side of the river from North Little Rock to Gillette.

"There is no question as to the economic advisability of this project," said Major Reber.

Cost of the project is estimated at \$722,000.

Dam on Little Missouri River Urged.

M. W. Greeson of the Arkansas Flood Control Commission, advocated flood control on the Little Missouri river in Arkansas, a \$5,430,000 hydro-electric project Pike county, Arkansas, and \$120,000, channel improvements river and tributaries.

This project has been recommended by army engineers.

Other Arkansas Levee Projects Urged.

Representatives Mills (Dem., Ark.) and Gathings (Dem., Ark.) appeared before the committee on behalf of a project for levees between Augusta, Clarendon and DeWalls Bluff, Ark., at an estimated cost of \$2,847,500.

Charles Gordon, Pine Bluff banker, urged levee improvements in the Tucker Lake Levee District.

Proposals For Red And Ouachita Rivers Approved.

Brig. Gen. M. C. Tyler, president of the Mississippi River Commission, gave the committee a list of flood control and power undertakings on the Red and Ouachita rivers in Louisiana, Arkansas, Texas and Oklahoma and their tributaries which have been given preliminary approval by army engineers.

The improvements were recommended by a special committee of War Department engineers headed by General Tyler which made the surveys at the request of Congress. They still are before the Board of Army Engineers and have not been submitted to Congress.

Among the recommendations were: Authorization of channel improvement of Walnut Bayou in Little River county, Arkansas, for flood control provided local interests assume maintenance responsibility.

A comprehensive flood control plan in the Sulphur river basin.

Channel improvement of Bayou Bodeau, Red Chute and Loggy bayou for flood control.

Extension of the existing floodway to include drainage work and channel improvement on McKinney bayou in Miller county, Arkansas, provided local interests assume responsibility for maintenance.

Levees and other improvements on the Red river in these areas: Manice bayou, Long Prairie-North Bossier, upper Caddo for diversion of Kelly bayou, East Point, La., Aloha-Rigolette, Grant and Rapides parishes, Louisiana, including drainage works, improvement of Bayou Rigolette channel and separation of Bayous Darrow and Rigolette channels, Rocky bayou-Pineville in Rapides parish, and Rapides bayou area, Louisiana.

A levee for protection of Jonesville, La., and vicinity instead of the presently-authorized project.

Channel improvements at Bayou Bartholomew and channel improvements and a new outlet channel on Deep bayou if local interests assume maintenance.

General Tyler said the engineers had recommended unfavorably on a navigation plan from the mouth of the Red river to Shreveport, La., due partially to the present cost of the improvements. A similar report was made on navigation of the Ouachita river.

John E. Murray, president of the Bossier Levee Board, Shreveport, told the committee he favored the report and S. E. Huey, acting chief engineer of Louisiana, and Homer Harris of Alexandria, La., said they were satisfied.

Ellis Urges Program For White River Valley.

As spokesman for 46 Arkansas citizens, Representative Ellis (Dem., Ark.) urged a comprehensive flood control hydro-electric program in the White river valley. He told the committee that Arkansas residents of the valley wanted:

Power facilities at Norfolk dam, Norfolk river, Arkansas, at an estimated cost of \$13,000,000.

Authorization of Bull Shoals and Table Rock hydro-electric projects on the White river in Arkansas and Missouri at a total cost of \$72,500,000. He asked \$2,000,000 for preliminary work in the next two years.

Lone Rock flood control reservoir, Buffalo river, Arkansas, leaving location to army engineers.

Authorization for power as well as flood control at Greer's ferry project near Heber Springs.

Major Reber testified the projects were favorably recommended by the War Department. Reservoirs recommended on White river tributaries included Walter Valley, Bell Foley, Greer's Ferry and Lone Rock.

Missouri Congressman Raises Objection.

Representative Cochran (Dem., Mo.) told the committee he opposed spending \$72,500,000 on hydro-electric projects on the White river if the power is not needed.

Ellis declared he believed "the wild life group in Missouri prevailed on Cochran to make the statement," but he didn't think the group "a wild life group at all."

Representative Short (Rep., Mo.) in whose district most of the Table Rock project would be located, urged the construction. He said he had some opposition telegrams from Joplin and Springfield.

Malvern Residents Favor Blakely Dam.

Gazette 5-8-41
Mayor Kelo Kight and other Malvern residents want the proposed Blakely mountain dam project to proceed, in the interest of flood control in the Ouachita river valley, they informed the state Utilities Commission yesterday.

Chairman Ben E. Carter said the commission is interested in having the project completed, but has not determined a method of procedure.

The Federal Power Commission has notified the Arkansas Power and Light Company that it has terminated the company's license to construct the dam, effective June 1.

An application to be heard here next Monday includes an A. P. and L. request for permission to complete the Blakely project in 1946-47. The FPC order has made the request useless, it was said.

County Judge Jack Kight and County Clerk Horace Fisher of Hot Spring county were in the Malvern delegation.

Understanding Reached.
Mr. Carter said that the commission and A. P. and L. officials reached an "amicable" understanding at a conference on a commission order issued Tuesday, requiring the company to turn over all records in a general investigation

of its operations.

The order designated E. B. Thomas, senior accountant of the Utilities Department, to examine records with the assistance of department and FPC staff members. It said accountants engaged in the investigation, resumed at Pine Bluff several weeks ago, claimed that access to records had been denied them.

Mr. Carter said a difference of opinion regarding procedure caused the difficulty.

FOUR PLANS FOR FLOOD CONTROL WORKS OFFERED

Two Would Cut Out Eudora Floodway.

Gazette 5-9-41

Washington, May 8 (P).—Submission to the House Flood Control Committee today of four alternative plans for the flood control program in the lower Mississippi Valley, in lieu of the Eudora floodway diversion, added fuel to the controversy between Arkansas and Louisiana interests on one side and Mississippians on the other.

Gen. Max C. Tyler, president of the Mississippi River Commission, outlined the plans. He underwent a barrage of questions from Representatives Allen (Dem., La.) and Norrell (Dem., Ark.) who insisted any adopted project should provide levees on the west side of the Mississippi river as high as those on the eastern side.

The hearings will be resumed tomorrow with the hearing of witnesses from the three states.

Two Plans Would Modify Floodway Diversion Project.

The existing program for the area between the mouth of the Arkansas and the Red river calls for construction of the Eudora floodway in Arkansas and Louisiana, together with a northern fuse-plug levee extension between the Arkansas and Vauluse, Ark. Under this plan General Tyler said, the cost of protection would be \$66,672,000 for the floodway and extension plus \$17,928,000 to complete work on main line levees.

The alternate plans also called for completion of work on the main river in the section between the Arkansas and the Red. Two of the plans would eliminate the floodway diversion entirely, the other two would modify this plan.

General Tyler explained that existing authorizations call for construction of the Eudora floodway, substituted for a previously authorized Boeuf floodway in the plans for protection of the area between the Arkansas and the Red rivers.

Since this plan was adopted, he said, there has been such an increase in the channel capacity of the Mississippi river due to cut-offs and other control developments that alternative plans to construct the floodway can be considered.

"Had the same conditions existed in 1938, it is quite possible more consideration would be given complete confinement of the floods," he said.

Arkansas and Louisiana interests have complained present plans would submerge 2,050,000 acres in the Red river backwater area and only 923,000 in the Yazoo backwater area on the east side of the Mississippi river.

Provisions of Four Proposed Plans Explained.

Under one plan, to cost \$53,565,000, the proposed floodway would be narrowed to half the width originally contemplated, and eliminate the Eudora extension. It would necessitate considerable levee work.

Plan No. 2 would reduce the west bank floodway by omitting its southern portion and the setback levee of the existing project would be built from Yancopin to the Arkansas-Louisiana line to a grade equivalent to that of the opposite east bank levee. The fuse plug could be extended southward to the state line by degrading to 1914 grade all of the 1928 grade levee between that point and Vauluse.

This would cost \$44,102,000.

A third project, approved by Arkansas and Louisiana interests, would eliminate both the Eudora floodway and its northern extension and set up levees of equal grade on both east and west banks of the Mississippi river, all levees to be set one foot above the computed crest flow line of a recorded flood. Cost of raising the levees, mostly the Arkansas-Louisiana side, would be \$27,513,000.

A fourth plan, opposed by Louisiana and Arkansas on the ground it tended to maintain the superiority of the levees on the east, or Mississippi side, would consist in readjusting levees on both sides to give the west bank levees a net grade three feet above the flow line of a confined 1927 size flood and the east bank levees to a grade six feet above the same flow line. This would cost \$17,379,000 for the additional readjustments.

Raising Levees on Both Sides Offered as Compromise.

Agreeing with Representative Allen that plan No. 3, providing levees of equal height on both sides of the Mississippi river, would be acceptable to engineers, General Tyler said it would be opposed by Mississippi interests principally because it would raise the project flood stage at Vicksburg, Miss., two and a half feet higher than would the floodway plan and inundate an additional 247,000 acres in the Yazoo basin backwater area.

The Mississippi side now has a three-foot superiority in levee grades and equal heights would expose both sides equally to inundation by a record flood. Mississippi interests contend they are entitled to the superiority by virtue of the higher and older development of east bank lands and because the topography of this part of the valley would force any surplus waters released through east bank levee breaks to re-enter the Mississippi at Vicksburg.

In view of the unlikelihood of acceptance of this plan, the final suggestion of raising levees on both sides, but allowing the east bank the higher levees, was offered.

"The adoption of such an interim plan would require the west bank to defer for the time being, final and complete protection against the hypothetical project flood in order to eliminate the floodway," Tyler told questioners.

"It would require the east bank interests to concede some added flooding of the lower end of the Yazoo basin by backwater in the event a flood in excess of that of 1929, the greatest of record, ever did occur." Such a prospect he said, was remote.

The "compromise," he indicated, might ultimately prove adequate, when reservoirs and channel improvements under construction and contemplated, come into play.

For the present, he said, the protection afforded by a standard of three feet freeboard above the maximum flood of record proposed for the west bank would end a period of uncertainty.

WEST SIDE OF RIVER VS. EAST IN DIKE HEARING

Mississippi Flood Plans Disputed.

Gazette 5-10-41

Washington, May 9.—Louisiana and Arkansas witnesses from the west side of the Mississippi river and Mississippi witnesses from the east side renewed today their annual flood control controversy before the House Flood Control Committee. The question was whether to complete the flood control program for the middle section of the lower Mississippi valley through use of the proposed Eudora floodway in Arkansas and Louisiana or by one of four plans suggested by Gen. Max C. Tyler, president of the Mississippi River Commission.

Since two of the substitute plans involved either a narrow floodway or a northern extension of the proposed Eudora, both of which the

Louisiana and Arkansas people said were unacceptable, attention shifted to the two substitute plans eliminating the necessity for a floodway diversion. Opposing witnesses, however, could not agree on either of these plans.

Christian Advocates Levees Of Equal Height.

Former United States Senator Joseph E. Ransdell of Lake Providence, La., C. S. Christian, Little Rock, chief engineer of the Arkansas Flood Control Commission; J. R. Adams of the Louisiana Engineering Commission and Sam J. Wilson, Montrose, Ark., plantation owner, advocated levees of equal section and height on both sides of the Mississippi in the area from the Arkansas to the Red river.

This plan was opposed by J. S. Allen, chief engineer of the Mississippi Board of Levee Commissioners and Walter Sillers, Rose-dale, Miss., attorney, who contended if the Eudora floodways was not acceptable they would not oppose one plan suggested by General Tyler providing for a readjustment of levee grades on both sides of the river, but leaving the Mississippi side with a three-foot advantage.

Under this plan, Allen said, both sides of the river would be protected against a flood of the size of the record 1927 crisis and Mississippi would be protected against a hypothetical future super-flood.

Under this plan, Arkansas and Louisiana interests argued, a future super-flood would top the western levees and inundate many hundreds of thousands of acres of land. They insisted the levee heights should be the same on both sides.

Under the equal heights plan, Sillers and Allen said, 250,000 additional acres of Mississippi cultivated land would be subjected to Yazoo river backwater inundation.

"We think we are entitled to the advantage of higher levees by reason of the topography of our side of the river and because we maintained such a superiority at our own expense before the engineers took over the flood control program," Sillers said. Allen said any break that would allow the entrance of flood waters on the Mississippi side would send these same waters back into the Mississippi river at Vicksburg and likely lead to a break on the other side of the river below.

"I we knew the equal levee plan would afford absolute safety to both sides," Sillers said, "we might be more interested."

Say Mississippians Not Entitled to Advantage.

Representative Allen (Dem., La.) said Arkansas and Louisiana interests would never be satisfied "until we are given equal protection." He and Representative Norrell (Dem., Ark.) said they did not agree with the theory of Mississippians they were entitled to an added margin of levee safety.

"General Tyler testified the plan for equal levee heights was practical," Representative Allen told Engineer Allen. "You people of Mississippi seem to endorse only plans that would put the water in Arkansas and Louisiana. Just because you started building levees first is no reason you must always have a superiority."

Representative Allen said if the levees were readjusted under the plan acceptable to Mississippi, the Mississippi side levees would be three feet higher, and the west side levees would go out in a record flood.

Saying no spillway has been suggested for the Mississippi side because it wasn't feasible, Engineer Allen said, "we are just careful students of geography."

"You mean you were careful to get on that side of the river to be born," Representative Allen retorted.

NEW ARKANSAS FLOOD CONTROL JOBS FORESEEN

Hearings Favorable To State.

Gazette 5-11-41

Most of Arkansas's congressmen believe that a \$250,000,000 omnibus

flood control bill to be introduced in the House will include sufficient allocations for continuing present projects and starting "some" new jobs in the state, Chairman R. E. Overman of the state Flood Control Commission said yesterday.

Mr. Overman and other commission members and representatives attended House Flood Control Committee hearings in Washington last week.

The commission requested authorization for raising, strengthening and improving levees on the south side of the Arkansas river between Little Rock and Pine Bluff.

Maj. Gen. Julian Schley, chief of army engineers, has concurred in the division and district engineers' favorable reports on the proposal.

Projects for Fourche Island, Tucker Lake and Woodson levee projects have an estimated first cost of \$641,000, subject to the provision that all land easements and rights-of-way be furnished by local interests without cost.

The omnibus bill would include the Little Rock-Pine Bluff improvements, many of which would be the filling of old gaps.

Congressman D. D. Terry of Little Rock urged the committee to recommend the authorization. Congressman W. F. Norrell of Monticello, in whose district the lower end of the levee territory is located, is a member of the Flood Control Committee.

Mr. Overman said the construction from Little Rock south probably would renew interest in a proposed levee for the east end of Little Rock. Right-of-way was pledged at a mass meeting following the 1935 flood, but property owners' enthusiasm had cooled by 1937.

United States Engineers are restudying a proposed Fourche Bayou levee project, once unfavorably recommended, to protect Adams Field, municipal airport. (The Fourche Bayou and Fourche Island proposals are separate.)

The Washington hearings were "very satisfactory," from an Arkansas viewpoint, Mr. Overman said.

Authorizations Asked For Four Projects.

The commission requested authorizations for:

An increased "ceiling" on the appropriation for the White river and its tributaries. Clearwater (Black river in Missouri) and Norfolk dam work contracted to date have used an original \$25,000,000. The commission wants an additional \$13,500,000 to complete Norfolk, including the installation of power facilities. Two million dollars for starting exploration work on the \$42,000,000 Bull Shoals proposal and \$37,000,000 Table Rock (Missouri) proposal, White river. One and one-half years would be required in making plans.

A \$6,800,000 power and flood control project at the Narrows, Little Missouri river, Pike county, including channel improvement of the river and Ozan and Terre Noire creeks.

The proposed \$7,159,000 Greers Ferry dam on Little Red river, Heber Springs, Cleburne county.

Review Asked on Operations Of Grand River Dam.

Congressman Fadlo Cravens of Fort Smith requested a review of a report on operations of the Grand river dam flood pool, Pensacola, Okla., in connection with Arkansas efforts to transfer the control of such operations from the state of Oklahoma to the United States Engineers. Grand river furnished one-fourth of the Arkansas river's inflow in the 1927 flood.

Congressman Terry, Congressman Clyde T. Ellis of Bentonville and probably Congressman Wilbur D. Mills of Searcy will attend the Norfolk dam celebration on May 22. Congressman Dewey Short (Rep., Mo.) plans to attend. Governor Adkins will be present. Senator Hattie W. Caraway will attend if Washington duties do not detain her, Mr. Overman said.

Urges Immediate Construction Of Blakely Dam.

Gazette 5-11-41

To the Editor of the Gazette:

It is the business of the national government to build, own and control Blakely Mountain Dam and reservoir, solely in behalf of the people without aid, participation or partnership of any capitalist or corporation. Refusal of the Federal Power Commission to grant a permit to the Arkansas Power and Light Company to construct this dam under such joint ownership, is fortunate for Arkansas. Too many citizens have considered this project one to be used mostly for electric power service and

almost as a natural right of the corporation, overlooking the fact that electricity was only a by-product of a government project of protective value to the Ouachita Valley in Arkansas and Louisiana, for flood protection and increased navigation.

Building of this dam has been urged for 25 years, but the World war, the depression and ownership of an unused permit for 15 years by the corporation has prevented its construction. Now that the corporation is out of the picture, it leave the course open for the people to demand its prompt construction by the government. Its need was shown long before any similar projects were asked for the White and Arkansas rivers, and no valid reason can be given that this vital project for South Arkansas should longer be delayed. It is far more than a south Arkansas project. As far back as 1910 the United States engineers office at Vicksburg, urged construction of this dam to a possible height of 300 feet, creating a lake 35 or 45 miles long and in places more than five miles wide. It would forever prevent floods in the Ouachita river, it would extend navigation above Camden to within 30 miles of Hot Springs and 60 miles of Little Rock; it would reduce the cost of hydroelectric power to its lowest minimum.

Such a structure and such a lake would give Arkansas its most notable tourist attraction because of its nearness to Hot Springs. Its unusual height and the great size and depth of this lake, with its hunting, fishing and boating, with its possibilities of newer forms of fish and game life, could hardly be met elsewhere. Nor need the Arkansas Power and Light Corporation lose heart, for there is still open the leaseage of the great water power that the government will create. With the great expanse of water behind this dam as a reserve, the problem of evaporation probably would be removed from cares of the corporation, and give economy of service not now available. This should prove of competitive advantage to the corporation which now serves almost every county in the state.

We should join under leadership of the governor and his commissions and urge upon Congress the prompt construction of the Blakely dam and reservoir to its highest possible height and strength.

Adolph Felsenthal.

Camden, Ark.

Urge Early Completion Of Blakely Dam

Gazette 5-14-41

Washington, May 12 (P).—Major Miles Reeber told the House Flood Control Committee today preliminary reports of army engineers justified flood control work on 15 tributaries of the Tombigbee river in Mississippi. He estimated the cost of \$1,780,000 plus annual maintenance of \$197,000. Annual benefits, he said, were figured at \$308,400.

The committee adopted a resolution asking the engineers to review reports on a proposed dam in Blakely mountain on the Ouachita river, Arkansas. Representatives Norrell and Harris (Dem., Ark.) urged immediate completion of the Blakely dam. They said Arkansas Power and Light Company's license to construct the dam in co-operation with the government would expire soon under a Federal Power Commission ruling.

Norrell, a member of the committee, said he and Harris wanted the dam completed "whether it is built by the power company or the government, and we are opposed to any further delay."

The power company has spent considerable money on the project, which ultimately would cost \$6,669,000. Harris told the committee there had been no progress on the construction in so long that the people of Arkansas were demanding it be expedited.

Big Party To Attend Dam Celebration

Gazette 5-22-41

A large delegation from the Little Rock District office, U. S. Engineers, will attend the Norfolk dam celebration in Baxter county today, Capt. E. G. Herb, executive officer, said yesterday. The group will be headed by Maj. T. F. Kern,

district engineer; Maj. J. R. Crume Jr., engineering officer, and Captain Herb. Part of the group will make the trip by automobile and about 20 will ride the Missouri Pacific Lines special train.

Major Kern will meet Lt. Col. Stanley L. Scott, Southwestern Division engineer, at Clearwater where Colonel Scott will begin an inspection of flood control projects in the Little Rock district. Following the inspection at Clearwater, Colonel Scott and Major Kern will go to Norfolk for the celebration, and then to Nimrod and Blue Mountain.

The special train, sponsored by the Chamber of Commerce, will leave the Missouri Pacific station at 8:15 a. m. and arrive at the dam site at 12:15 p. m. The return trip will begin at 4 p. m., the tour returning to Little Rock at 8:30.

NORFORK'S DAM SEEN AS START OF A NEW ERA

Speakers at Celebration Rejoice.

Special to the Gazette. 5-23-41

Norfolk, May 22.—A new day for Arkansas industrially and unprecedented protection from flood water were predicted by speakers as 12,000 persons gathered at the Norfolk dam site today to celebrate the beginning of construction of the \$16,000,000 project.

Visitors began pouring into the area early this morning from many sections of Arkansas and Missouri. Four bands were in the parade which marched down the mountain to the speakers platform at 1 p. m.

The first delegation to arrive was from West Plains, Mo., in 60 cars. It included a band and two Missouri State Patrolmen. The two special trains, one from Little Rock, the other from Springfield, Mo., came dashing up the narrow Northfork valley at 1 p. m. Both were late and were crowded to the guard rails. It was estimated that they had 1,000 passengers.

The United States Engineers, Utah Construction Company, and Morris-Knudson, Inc., the contractors, were hosts. All work was suspended for the day, and guides were furnished to give the visitors a clear idea of the enormous project. Most of the visitors spent the morning inspecting the job. Many visited the observation tower on the high bluffs overlooking the site.

First Blast Gouges Deep Into Mountain.

At 3 p. m. a huge charge was fired in the high bluff on the east side of the river, which will be the east abutment for the dam. It was the first major blast in rock excavation in the project. The charge contained 600 pounds of dynamite. Twelve thousand faces were turned toward the bluff, and watched hundreds of tons of rock pitch forward into the narrow valley between the bluff and the river. Sound of the explosion echoed and re-echoed for miles through the surrounding mountains.

The Arkansas State police and Sheriff Powell of Baxter county and his deputies, patrolled the area closely but no arrests were made.

Ex-Judge Ruthven Gives Address of Welcome.

Because the trains were late, the program started late. About 2 p. m. Bradley Foster, school superintendent of Baxter county, opened the meeting and the Rev. Mr. Barger of Mountain Home offered prayer. R. M. Ruthven, former county judge, gave the address of welcome.

"I hope that some day the lower valley will enjoy the benefit of flood control from this day and the upper valley will enjoy the power," he said. "This dam program in the upper basin is a problem for all of us."

The opening song, "America," was led by Mrs. L. A. Jackson of Little Rock, assisted by Mrs. Nat Dyer of Mountain Home. Four bands and 12,000 voices sent this national anthem echoing through the hills.

Only the Beginning, Says Major Kern.

Maj. T. F. Kern, Little Rock district engineer for the United States Army Engineers, stressed importance of the entire program in the White river basin. "The Norfolk dam is only the beginning of the development of this great valley," he said. "The chief of engineers has recommended construction of Bull Shoals and Table Rock on the White river at an estimated cost of \$79,000,000.

"At the Norfolk site, a single dam for the primary purposes of flood control and the production of power is the most economical method of providing flood control and power. This site is suitable for dual-purpose development."

Congressmen Terry And Ellis Speak Briefly.

Congressman David D. Terry of Little Rock spoke briefly.

"Construction of Norfolk dam is the beginning of a new day in Arkansas," he said. "It will bring the state into a new era. What we are starting today will place us in a position which Arkansas richly deserves. There is no need for jealousy between the utilities and the government. We need every ounce of electric energy that we can produce. Out of the hills will flow energy that will bring us into our own, and raise Arkansas and Missouri up into two great commonwealths."

Congressman Clyde T. Ellis extended greetings from Congressmen Sam Rayburn, Will Whittington and others in Washington interested in the dam program in the White river basin.

He read letters from President Roosevelt saying that the Norfolk dam should be constructed to a power height, which is being done. "Every year we can expect a flood and out of each three years, a major flood," said Mr. Ellis. "The annual flood loss in the valley is \$2,000,000, and this alone over a stretch of years would pay for the dams."

'Must Take the Offensive,' Says Governor's Message.

In a telegram read by J. J. Harrison of Little Rock, Governor Adkins said that Arkansas must "take the offensive" in industrialization by obtaining power at proper rates from every available resource.

His policy statement was telegraphed here from Washington, where he said he had gone without advance announcement "on an important matter."

Mr. Adkins reported that he had been getting "first-hand information" for the past few years on the Tennessee Valley Authority and "the marvelous progress of industrialization in the Tennessee valley."

"We must secure power and proper rates through utilization of our water power, sour gas, coal, and steam plants," said the message. "We must use every resource at our command, including the Arkansas Valley Authority, the development on the White and Ouachita rivers, also the facilities of the public utilities to get the desired results."

"Every facility of the state government will co-operate to this end."

Colonel Scott Praises Spirit of Co-operation.

Col. Stanley L. Scott, division engineer, gave a comprehensive picture of the Norfolk and other dam projects in the White river basin. He told of the beauty of the Northfork river, and the love of sportsmen for the river.

"But sometimes it loses its self-restraint like a spoiled child and causes death and destruction," he asserted. He complimented those present on the co-operation they had given to the project. "It is the first step in many steps to come, and each step will take the state a little closer to its place in the sun." He said he "rejoiced" that army engineers had unfolded the great potentialities of the White river basin.

"The people of the United States today have never felt more dependent on our military forces than they do now, and they will not fail them," he said. "One reason why army engineers are in charge of these dam constructions is because of the splendid war training for them. He said that the contractors on the Norfolk dam have a national reputation for efficient performance."

Representatives Of Various Sections Speak.

John Woodruff of the Springfield (Mo.) Chamber of Commerce, commended the co-operation on the dam projects in the upper White river basin, started by John E. Miller, then congressman, in 1934. "We have made headway even in foul weather," he said. "The Norfolk dam is the beginning of many new enterprises for Arkansas and Missouri, because electrical energy reaches out into many lines of industry."

Charles Wood of the West Plains Chamber of Commerce stressed importance of fighting for the other dam projects in the White river valley. "Arkansas got the Norfolk dam. Missouri is not jealous but we will not be satisfied unless we secure power from this dam and other proposed dams. Power dams will not only give us necessary power, but beautiful lakes for recreations as well."

Fred M. Pickens of Newport spoke for Newport, Batesville and the lower valley.

Dr. Jarvis, secretary of the Harrison Chamber of Commerce, spoke for the Harrison delegation.

Virgil Willis, Harrison attorney, also made a short talk.

B. Williams, manager of the Norfolk project for the Utah Construction Company, and Morrison-Knudsen Inc., said, "I have seen a lot of dams and dam sites, and the Norfolk dam site is one of the best I have ever seen."

P. L. Wallis, vice president of Utah Construction Company, and W. H. Puckett, vice president of Morrison-Knudsen Inc., made short talks.

A Dream Come True, Says Judge Miller.

Judge Miller made the final talk. "I am glad to be here and am glad to have had a part in this program," he said. "It took a great many days of hard work to get this started and the Norfolk dam, which is now a reality, was a dream for a great many years. Arkansas is not yet a great state, but will be if we as citizens utilize and conserve our resources."

Work Order Issued On New Dam

Gazette 5-25-41

Notice to proceed with construction of the earthen embankment and spillway for Blue Mountain dam on the Petit Jean river in Yell county was issued yesterday by Maj. T. F. Kern, Little Rock District Engineer of the United States Engineers. Myers, Myers & Goen of Salem, Ind., the contractors, bid \$1,111,879 for the job.

They must begin work in 30 days and must complete the dam by the summer of 1943. The dam, being built as part of comprehensive flood control plan for the Arkansas valley, will form a lake of 11,000 acres 15 miles long when full. A permanent pool nine miles long and covering 2,900 acres will be maintained.

The spillway will be built in the left bank of the river and will be 150 feet wide. Construction under a separate contract is proceeding on a tunnel to the right of the dam through which flow of the river will be controlled. The tunnel is expected to be completed about October 1.

Consulting Engineer Discusses New Dam.

William Gerig, expert hydraulic and dredging work engineer of Arkadelphia, conferred with engineers at the Little Rock District office here last week on proposed plans for construction of Clearwater dam on the Black river near Piedmont, Mo. Bids have been asked for construction of the dam by rolled-fill and hydraulic-fill methods. They will be opened in Little Rock June 3.

Mr. Gerig retired two years ago as head engineer in the Office of the Chief of Engineers in Washington, D. C., was a division engineer between 1905 and 1908 on construction of Gatun dam in the Panama Canal Zone. He has supervised much construction of levees along the Mississippi river.

Test Laboratories Moved to Projects.

Most of the equipment of the concrete laboratory in the district office has been moved to the site of Norfolk dam. Part of the soils testing laboratory has been moved

to the Blue Mountain dam site near Booneville and will be operated there shortly. Another part of the soils laboratory will be moved to the Clearwater dam site next month.

Nimrod Engineer Will Be Transferred.

Wendell W. Ralphe, resident engineer at Nimrod dam, now nearly 75 per cent complete, will be transferred to Norfolk dam about June 8, it was announced. William Pappeheimer, assistant resident engineer, will succeed Mr. Ralphe.

Work Likely to Be Continued on Dams.

Flood control appropriations of the War Department for the 1942 fiscal year beginning July 1 are expected to make possible to complete or continue construction on the Nimrod, Blue Mountain and Norfolk dams in Arkansas, Capt. E. G. Herb, executive officer of the Little Rock District, United States Engineers, announced yesterday. The appropriations announced yesterday are: Nimrod reservoir, Perry county, \$540,000; Blue Mountain reservoir, Yell county, \$1,800,000, and Norfolk reservoir, Baxter county, \$2,700,000.

The Nimrod dam is expected to be completed by November 1. Work was started in March, 1940. Construction on the Blue Mountain diversion tunnel is expected to be completed by October 15. Work was started in July, 1940. The contract for earth embankment and spillway was awarded this month to Myers, Myers & Goen of Salem, Ind., for \$1,111,879. Construction on Norfolk dam began this month; the project to be completed in 1,200 days. Contract for approximately \$10,000,000 for construction have been awarded to Morris-Knudsen Company of Boise, Id., and the Utah Construction Company of Ogden, Ut.

Operations at Norfolk dam have been resumed following the celebration last week marking the start of construction, Captain Herb said. Approximately 500 men are working on the project, contractors reporting more than 425 persons employed in addition to the government personnel of 60. Work is proceeding in three shifts a day.

Principal section of the work at present is the preparation of the foundation for the huge concrete structure and completion of the contractors' camp. Foundation work includes stripping top soil and loose rock to reach solid rock on one bank of the stream. More than 110,000 cubic yards of earth have been moved. The construction camp, which is rapidly being completed, is composed of dormitories, duplex dwellings, recreation hall, mess hall, hospital, machine shops, blacksmith shop, electrical shop, warehouses, water and electrical systems and several office buildings.

Installation of four bowling alleys is under way in the recreation hall. The hospital has six beds and is equipped with X-ray and operating equipment. A doctor and two nurses are on duty at all hours. Prospective workers must submit to physical examinations.

FLOOD CONTROL PLANS MAY BE KNOWN TODAY

Eudora Project Believed Out.

Gazette 5-29-41

Washington, May 28 (P).—The House Flood Control Committee had virtually completed work today on an omnibus flood control bill understood to abandon plans for a Eudora floodway in Arkansas and Louisiana.

Members of the committee declined to discuss today's executive session, but indicated the committee might report out its bill tomorrow authorizing flood control projects in all sections of the country.

The existing plan for protection in the lower Mississippi valley south of the Arkansas river includes a project for the Eudora floodway. Arkansas and Louisiana interests urg-

ed elimination of the floodway and strengthening and heightening of levees on both the Mississippi and the Louisiana-Arkansas banks of the Mississippi river.

The plan reported tentatively approved by the committee would provide for higher levees on both sides, but would give the Mississippi side a two-foot advantage in height over the western side of the river.

\$172,412,065 Available To Army Engineers.

Army engineers have \$172,412,065 to spend on navigation, flood control and power plants during the 1942 fiscal year beginning next July 1.

The amount, included in the War Department civil functions appropriations bill signed recently by President Roosevelt, was \$7,069,600 above budget recommendations but \$39,559,245 less than was made available to the engineers for the current fiscal year.

Of the total in the bill, \$104,143,425 will go for flood control and power works, and \$68,268,640 for rivers and harbors. Maj. Miles Reeber of the construction section of the Engineer Corps said the appropriations would enable the engineers to continue work on scores of authorized jobs and start a few new ones of a national defense character.

Flood control works in the 1942 program and the amounts to be spent during the year include:

Mississippi river (general) \$22,000,000; Wallace Lake reservoir, Louisiana, \$59,000; Denison reservoir Texas and Oklahoma, \$9,000,000; Blue Mountain reservoir, Arkansas, \$1,800,000; Nimrod reservoir, Arkansas, \$540,000; Norfolk reservoir, Arkansas, \$2,700,000; Newport, Ky., \$500,000; Louisville, Ky., \$800,000; Wolf Creek reservoir, Kentucky, \$2,500,000; Nashville district surveys, \$36,000.

Maintenance of completed works, \$400,000; miscellaneous, including surveys by Department of Agriculture and salaries, \$4,359,642.

Rivers and harbors jobs in the program and the amounts to be spent include:

Pearl river, Mississippi and Louisiana, \$1,897,000; Caloosahatchee river and Lake Okeechobee drainage areas, Florida, Southwest Pass and South Pass, Mississippi, Louisiana, \$490,000; Sabine-Neches Waterway, Texas, \$1,066,500; Louisiana-Texas intercoastal waterway from the Mississippi river at or near New Orleans, La., to Corpus Christi, Tex., \$1,000,000.

Mississippi river between the Ohio and Missouri rivers, \$700,000; Mississippi river between the Missouri river and Minneapolis, Minn., \$4,200,000; Illinois waterway, Illinois, \$350,000; Missouri river, mouth to Kansas City, Mo., \$1,500,000.

Miscellaneous, including maintenance, surveys, erosion and engineering, \$43,100,000.

FLOOD CONTROL PROJECTS BILL BEFORE HOUSE

Proposes Spending \$260,000,000.

Gazette 5-30-41

(By the Associated Press.) Washington, May 29.—A bill (H. R. 491.) authorizing \$260,000,000 of flood control projects in all sections of the country was introduced today by Chairman Whittington (Dem., Miss.) of the House Flood Control Committee.

The measure embraces substantially all projects included in a bill offered by the Flood Control Committee last year, but which was not passed because of President Roosevelt's insistence that national defense projects be given preference.

This year's measure, Whittington said, "is in line with the president's recommendation that necessary public works must be planned and authorized to provide for the stabilization of employment following the existing emergency."

The bill carries no appropriations. It is merely authority for army engineers to undertake construction of projects after Congress appropriates money for them.

Projects for Every District In Arkansas Included.

Projects for every district in Arkansas were included in flood control authorization bill.

The largest project would authorize a \$42,000,000 flood control and power dam at Bull Shoals on White river capable of producing 190,000 kilowatts of firm power.

This project, advocated by Representative Ellis, topped another for his district, a \$11,000,000 additional authorization for Norfolk dam on North Fork of White river in Baxter county to equip this dam for producing 120,000 kilowatts of electricity. Project previously was authorized for flood control only at an estimated \$16,500,000 cost.

Authority was asked for a proposed \$34,000,000 Table Rock dam in Missouri on the White river, above Bull Shoals, with 160,000 kilowatts capacity.

The committee passed up proposed Lone Rock and Mills Creek dams on Buffalo river and Greers Ferry dam on Little Red in Cleburne and Van Buren counties because engineers' recommendations have not been made.

The overall authorization for the White river basin was increased from \$25,000,000 to \$49,000,000.

Representatives Harris and Cravens had included a \$3,000,000 authorization for starting work on Narrows dam on Little Missouri river below Murfreesboro. The project, estimated to cost \$6,669,000, would include channel clearance of the main river and other improvement on Terre Noire and Ozark creeks.

The committee included \$50,000 authorization for levee around Calion.

A \$2,847,500 authorization was included, at the request of Representative Mills, for a flood protection levee on the east side of White between Augusta and Clarendon and levee and flood wall works at De Valls Bluff.

Little Rock-Pine Bluff Levee Authorized.

Another \$641,000 authorization, sponsored by Representatives Terry and Norrell, would provide a levee on the south bank of the Arkansas between Little Rock and Pine Bluff.

A \$284,000 authorization was approved for levee work in Crawford county levee district. Representative Gathings obtained revision of plans for protection in St. Francis levee district to include a long drainage district below Oak Donnick. Revision would involve a cost of about \$900,000, nearly \$1,000,000 less than original plans.

Bayou Fourche project in the vicinity of Little Rock was not included in the bill, since army engineers recently refused to endorse it. Part of the project was described as not economically feasible, Representative Norrell said, while lack of local co-operation was said by engineers to have delayed approval of another part.

\$19,000,000 Proposed For Lower Mississippi River.

Without describing projects in detail, the bill's recommendations included the following expenditures in various river basins:

Mobile river — Prattville, Ala., \$350,000; Allatoona reservoir on Etowah river, Ga., \$3,000,000; Tombigbee river channel work, \$150,000. Lower Mississippi river, \$19,000,000; Red river opposite Alexandria for protection of Pineville, La., \$159,000; Red river along bayous Darrow and Rigolette, La., \$914,500. Arkansas river basin—\$29,000,000.

comprehensive plan including reservoirs in Grand river basin, Okla., and Ia., and in the Verdigris river basin, Kan.; \$800,000 on Salt Fork on Arkansas river; \$513,000 in vicinity of Tulsa and West Tulsa, Okla. Tennessee river basin—\$13,500,000 local works at Chattanooga and Rossville.

Proposed Eudora Floodway Abandoned Under Agreement

A 12-year-old controversy between interests of the east and west sides of the Mississippi river over flood protection for the lower valley was settled amicably in an agreement abandoning the proposed Eudora floodway in Arkansas and Louisiana.

The agreement was made by Whittington and Senator Overton (Dem., La.) chairman of the Senate Commerce Committee on Flood Control. Overton's action was approved by Representative Allen (Dem., La.) and Norrell (Dem., Ark.), with whom he had worked for abandonment of any floodway diversion plans.

The agreement was incorporated in the flood control authorization bill.

Under terms of the agreement for the lower valley, the Boeuf floodway and the Eudora, which was substituted for it, together with a northern extension of the Eudora and the back protection levee, are abandoned.

"Some \$103,000,000 already earmarked for a west side diversion is released to finance the modified project," Senator Overton said, "including a \$22,000,000 levee grade revision from Cairo to the mouth of the Arkansas."

The bill embraces the Mississippi River Commission's Plan No. 4 for the middle section of the river from the Arkansas to the Red. This is the section over which the controversy has raged between residents of Louisiana and Arkansas on the west side of the river and residents of Mississippi on the east side.

"It is agreed that the east side shall have a three-foot freeboard above the project flood south from the Bolivar-Coahoma county line, as against a one-foot freeboard above the project flood on the west side," Senator Overton said.

Arkansas and Louisiana interests long have advocated increased levee protection as against floodway diversions which they claim threatens valuable farm land in their states.

"Both the backwater areas of the Yazoo and Red rivers will be given the maximum protection that can be devised by the chief of engineers without jeopardizing the safety and integrity of the main Mississippi river levees," Senator Overton said.

St. Francis River Plan In Arkansas Affected.

In view of modification of the Mississippi valley flood control plan, the existing plan for control of the St. Francis river in Arkansas would be changed to permit substitution of a ditch in Cross county for the suspended portion of the original project below Oak Donnick, a report released yesterday by the Mississippi Valley Flood Control Association said.

The ditch would begin in vicinity of the Oak Donnick outlet to the St. Francis Bay floodway and terminate in St. Francis Bay about two miles north of the riverfront. The report stated the project would include construction of a highway bridge over state Highway 42, and the project would be provided if all local interests give assurances satisfactory to the Secretary of War that:

Lands, easements and rights-of-way necessary for construction would be provided without cost to the United States.

The United States be held free from damages caused by construction.

Works be maintained after completion in accordance with regulations prescribed by the Secretary of War.

FLOOD CONTROL ACCORD AFTER LONG ARGUMENT

Four Men Reach Compromise.

Gazette 6-1-41

Washington, May 31 (P).—Four men, all of them fighters, got together around a conference table this week and reconciled differences that ended 12 years of spirited controversy over how the flood control plan for the lower Mississippi valley should be completed.

When they finally agreed upon a compromise, Chairman Will Whittington, (Dem., Miss.) of the House Flood Control Committee, sat down and wrote out a bill upon which all could center their efforts to have adopted.

It was a great occasion for Whittington, author of all omnibus flood control authorization bills since the Roosevelt administration came into office, for the compromise enabled him to draft legislation he feels will solve forever the major flood problems of the lower valley.

It was a great day for the three men on the other side of the table, Senator John Overton of Loui-

siana, chairman of the Senate Commerce Subcommittee on Flood Control; Representative W. F. Norrell of Arkansas and Representative Leonard Allen of Louisiana, for the compromise removed forever the threat of floodways that would allow the inundation of thousands of acres of their land.

Senator Theo G. Bilbo of Mississippi joined in many of the conferences and helped work out a basis for a solution.

The compromise plan for the lower valley was made a part of the general flood control bill Whittington offered in the House Thursday.

Proposed Plans Turned Down Because of Objections.

Back of the agreement lies a story.

When army engineers first undertook the problem of drafting a plan to protect the territory along the big Mississippi south of the Arkansas, commonly called the "middle section," it was considered a floodway was necessary to divert water from the river at flood time. Levees high enough to retain the water were not considered feasible.

First the Boeuf floodway in Louisiana was proposed. Interests in that area protested. Then came a decision to substitute the Eudora floodway in Arkansas with a provision to pay landowners for the use of the property when it was flooded.

More protests came. Arkansas and Louisiana interests claimed many thousands of acres were subject to the threat of inundation. Overton and Norrell introduced companion bills designed to abandon forever the idea of constructing a floodway and authorizing levees on the Arkansas-Louisiana side of the Mississippi be built up to a par with those on the Mississippi side.

A few weeks ago army engineers came before the House committee with several suggestions for completing the protection program, two of them making possible the abandonment of floodways. Cut-offs, they said, had so increased the acceleration of the movement of flood crests downstream that higher levees were now feasible.

One of the substitutes provided the levees on each side be of equal height, the other the Mississippi side have a three-foot superiority because of a superiority that side had maintained through its own efforts in the days before the government undertook the flood control program.

The Arkansas and Louisiana people insisted on equal heights, the Mississippi insisting on a superiority.

The agreement ending the deadlock provides the Mississippi side shall have a three-foot freeboard above the project flood, against a one-foot freeboard above the project flood on the west side, a difference of two, instead of three feet.

Under this plan, Whittington said, "both the backwater areas of the Yazoo, on the Mississippi side, and the Red, on the other, will be given the maximum protection that can be devised by the chief of engineers without jeopardizing the safety and integrity of the main Mississippi river levees."

Whittington in Tribute To Congressman Norrell.

Whittington paid high tribute to Norrell, a second term congressman, for his part in the negotiations.

"He's a splendid gentleman, and I enjoyed working with him," the chairman said. "The same is true of Senator Overton and Mr. Allen. I think we worked out this matter harmoniously."

Norrell said he understood engineers would be able to start work at once if Congress approves the flood authorization bill.

"While the project would simply be authorized under the bill," Norrell said, "some \$103,000,000 has been earmarked for a floodway diversion and engineers have at least a part of this money set aside to finance the modified project. The project will include expenditure of \$22,000,000 for levee grade revision from Cairo to the mouth of the Arkansas."

"The big thing to us is the abandonment of plans for a floodway through some of the best land in Arkansas. Property values in that area should increase and the people will breathe easier from now on."

Gazette -6-13-41 Geologist Plans Tour.

Prof. L. C. Glenn of the Vanderbilt University Geology Department arrived from Nashville, Tenn., yesterday for a week's consultation with personnel of the Little

Rock District United States Engineers, Engineering Section. He will visit dams under construction at Nimrod, Blue Mountain, Clearwater and Norfolk.

Flood Control Unit Members

Are Appointed Democrat -6-15-41

C. S. Christian, engineer for the State Flood Control Commission, is slated to be named engineer-director at a meeting of the commission Monday, it was reported yesterday, following appointment by Governor Adkins of two new members of the flood board.

The new appointees are: Dwight H. Blackwood, Osceola, representing the Sixth Congressional District, and succeeding Lamar Williamson, Monticello, who resigned.

Appointments of three other members, R. E. Overman, Little Rock; M. W. Greeson, Prescott, and Layton Coffman Harrison, by former Governor Bailey, were not confirmed by the Senate, and they are subject to replacement if Governor Adkins so desires. The chief executive said yesterday he had not decided whether he would make other changes on the commission.

Meeting Called for Monday.

At the meeting of the commission tomorrow the question of naming a director probably will be finally settled. The Flood Control Commission appropriation for the year beginning July 1, provides for a director at a salary of \$4,000, but Governor Adkins has said he wanted the post left vacant in order to save that money.

Commissioner Overman has been a candidate for the position as director. At least one member has proposed discharge of Mr. Christian and use of the amount appropriated for his salary in employing several smaller-salaried engineers.

The appointment of Mr. Blackwood as a member of the commission apparently is a move favorable to Mr. Christian. The flood control engineer formerly was chief engineer for the State Highway Department when Mr. Blackwood was the last elective highway commissioner.

The reported plan to appoint Mr. Christian, who now draws a salary of \$3,600, as engineer-director of the commission, would be in line with the governor's desire to save one of the salaries set up in the appropriation for the department. Whether the salary for the combined post would remain at \$3,600 or be increased to \$4,000, was uncertain.

Title To Nimrod Dam Site Cleared

Gazette 5-25-41

A United States patent on 80 acres of land near the present site of Nimrod Dam, which was requested from the government under the 1850 "swamp land" act by former Gov. Elias N. Conway in 1859, was received by the state Land Office yesterday.

The property is officially described in the patent signed by President Roosevelt as the west half of the northwest quarter of Section 34 of Logan county. The land already has been deeded to the government as part of the Nimrod Dam reservoir. But the formal patent was obtained by Land Commissioner Otis Page to co-operate with United States Army Engineers in providing an absolutely clear title.

When Governor Conway requested patents to all swamp land in that area, the government clerk who filled out the necessary forms duplicated the description of the east half of the northwest quarter of Section 34 and failed to issue a patent on the west half. The oversight was discovered by Mr. Page when running down titles to the land.

"Few persons realize there is so much swamp land in that hilly district," Mr. Page said. "A recent survey disclosed there are more than 50,000 acres listed under that classification in the Nimrod and Blue Mountain Dam areas."

The 1850 federal "swamp land" act classified such lands as any 40 acres which embraced more than 20 acres of overflow or swamp land.

Clearwater Dam to Give Flood Relief

Special to the Gazette. 6-11-41

Piedmont, Mo., July 10.—Flood protection to the upper Black river valley will be given by Clearwater dam and reservoir, under construction six miles southwest of here, as well as flood relief to the lower White and Mississippi rivers, Lt. Col. T. F. Kern, Little Rock district engineer, said at a businessmen's meeting here tonight. The dam is being constructed under direction of the Little Rock Engineer District.

Work is under way on the outlet tunnel, and work will start soon on the earth embankment. The dam is scheduled to be completed in the fall of 1943. It will contain more than 5,000,000 cubic yards of material and will be approximately 150 feet high.

Clearwater dam was one of the first selected by the chief of engineers for construction in the comprehensive plan for flood control in the White river basin and its tributaries, following adoption by Congress of the 1938 flood control act, Colonel Kern said.

"The reservoir is being constructed primarily for flood control," he said. "It will provide flood protection to the upper Black river, and in combination with the other authorized and recommended reservoirs in the White river basin will give flood relief to the lower White and Mississippi rivers."

Colonel Kern predicted interest in a permanent pool to be formed by the dam and expressed belief that "operation of the reservoir for flood control will not seriously detract from its recreational attraction."

Land subject to flooding, permanently or temporarily, by operation of the reservoir, will be bought by the government and all trees in the permanent pool will be cut and removed before completion of the project.

State's Building Dam Opposed By Governor.

Gazette 7-1-41

Governor Adkins turned thumbs down yesterday on a proposal that the state complete the Blakely Mountain Dam and hydro-electric project, originally contemplated by the Arkansas Power and Light Company on the Ouachita river near Hot Springs.

The proposed dam is primarily a flood control project, the governor said, "and should be completed by the federal government."

"I would be glad to see the government build the dam as a flood control and power project," he said. "But this is not the type of business for the state to undertake now."

State sponsorship was suggested editorially by the Hot Springs New Era, which proposed the state issue revenue bonds for that purpose. Governor Adkins explained a vote by the people would be required to issue bonds.

"Anyway, I would hesitate to ask the people to vote on such a project while a federal agency is preparing to build plants in the south Arkansas 'sour gas' fields to produce about 200,000 kilowatts of new capacity," he said.

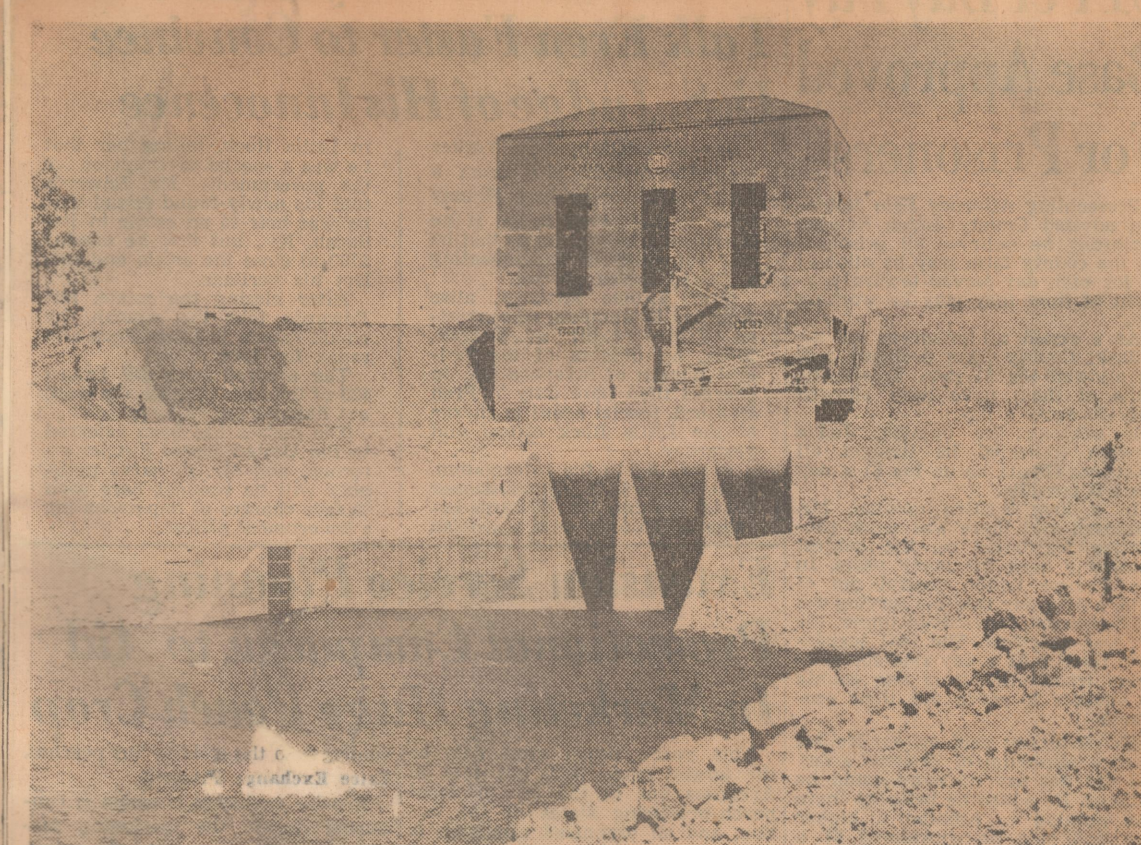
Engineers Feel New Dam On St. Francis Virtually Ends Northeast Arkansas Floods

By NORMA HENDERICKSON. Popular Bluff, Mo.—A beautification and development program, over a period of two years, will, in the opinion of United States Army engineers, make Wappapello Lake, 16 miles from here, one of the beauty places of the Middle West.

The 2,600-foot long dam has been completed insofar as the contractors are concerned, but the engineers now have launched the beautification plan which calls for planting of hundreds of shrubs, several large trees and grass-seeding of the expanse of earth which has been thrown up to harness the turbulent St. Francis River.

With completion of this project which cost \$6,500,000, engineers declare floods on the St. Francis River in Southeast Missouri and Northeast Arkansas are a thing of the past.

Puts a Check Rein on the St. Francis



PART OF WAPPAPELLO DAM.

Man has put a check rein on the St. Francis river, which, it was estimated, caused a loss of \$40,000,000 during the floods of 1927 and 1928, mostly in Arkansas. Here are shown a part of the Wappapello dam on the upper reaches of the St. Francis, in Missouri, the control tower, and the concrete tunnel and gates beneath the tower through which the river now flows. The power generating unit is located at the left through the grill near the water's edge. The picture is a little deceiving. Human figures, if they can be made out, will give an idea of the size of the structure. The tower is as tall as a four-story building.

They declare the flood tunnel through the dam provides for outflow of 10,000 cubic feet per second, and even when the floodgates, mechanically operated, are open, not enough water can get through the tunnel to cause the river to spread out over its banks as it moves through a serpentine channel southward toward Helena, Ark.

The St. Francis River flood control program is the brain child of three original advocates, former Congressman Will Driver of Osceola, Ark., Langdon Jones of Kennett, Mo., and the late William N. Barron of Poplar Bluff.

"We went to Washington, advocating flood impounding dams," recalls Jones, "when the officials laughed at us and nearly threw us out of their offices. The plan was then very unpopular. However, engineers made a full and complete study of such a plan and declared it would prove successful."

Through more than ten years of effort the dream of regulating flow of the St. Francis for protection of property southward has been realized, Jones said.

"The St. Francis River caused damage estimated at \$40,000,000 in 1927 and 1928. Much of that damage was in Northeast Arkansas where the levees were swept out and the water spread over miles and miles of fertile farm land in cultivation, destroying the crops and much other property," he continued. "Now that Wappapello Dam is finished, there will be no more floods like those we had to face in those days."

Compliments Driver.

Jones accredited much of the success of the present flood control program to former Congressman Driver.

"Will Driver has worked tirelessly with us. It has been a fight by two states to bring about control of the river—and we have won," he declared.

Jones and others co-operating paid a high compliment to the United States Army engineers for their work. The job was started under direction of Gen. Daniel C. Noce, at that time head of the Memphis, Tenn., district. He has since been transferred to the regular Army and is succeeded by Lt. Col. James Andrews jr.

The Wappapello Dam is built of rolled earth and concrete. Crest of the dam at elevation is 420 feet, with a freeboard of six feet for wind set-up and waves.

The reservoir area spillway crest elevation is a mile or more wide and will include some 40 miles of the St. Francis River. The conservation pool, or lake, covers 6,000 acres and has a shoreline of about 150 miles. Storage capacity at crest level is 625,000 acre-feet, in cluding the conservation pool. The reservoir, when the dam is in full service, will have an area of 23,000 acres.

The concrete control tower stands approximately four stories in height from the river level. The river now passes through a concrete tunnel approximately 21 feet square. Three gates, 10 by 20 feet, are operated mechanically with electrical power generated at the dam.

May Become Resort.

A dwelling for the caretaker, and facilities for the public will be completed in due time. Meanwhile, government engineers are working out plans for leasing of land which

is owned by the government adjacent to the lake. Leases will be issued, according to present plans, for various forms of development, including clubhouses, boathouses, landings and the like.

Fishing will be prohibited in the lake until 1943, engineers declaring experts have found that it will be necessary to extend the time in order that fish which originally were in the river may become accustomed to the lake. Thousands of game fish will be placed in the lake in the meantime.

Construction of Wappapello dam has brought about the necessity of moving five towns, the town of Greenville, county seat of Wayne County, being the largest. Greenville extended its city limits one mile north and is now rebuilding the town at the new location above possible crest of the lake.

Highways Moved.

Numerous changes in highways have been necessary through this development project. Highway 67 is being raised to new high mark above the river level in a program necessitating expenditure of approximately one-half million dollars. One section of the St. Louis-San Francisco railroad branch from Puxico to Williamsville was junked due to the fact that rebuilding along higher areas would have been too expensive. A natural gas pipeline was rerouted at expense of approximately \$200,000.

Orville Zimmerman, Congressman from the Tenth Missouri District, listed a number of men who have been instrumental in bringing about construction of the flood control program. Some of them are: James Alexander and Joseph R. Bertig, Paragould, Ark.; James M. Futrell, former governor of Arkansas; Paul M. Pfeiffer, Piggott, Ark.; H. N. Pharr, West Memphis, Ark.; James R. Rhyme, Corning, Ark.; Brig. Gen. Louis M. Means, Camp Robinson, Ark.; Sen. Hattie Caraway of Arkansas.

"Arkansas is more interested in flood control on the St. Francis than Missouri," Congressman Zimmerman said, "for the reason it involves much more property."

Flood control on the Black river, which converges with the White at Newport, Ark., will be a reality within a few years. Government engineers already have awarded contract for completion of a flood control dam at Clearwater, 40 miles north of Poplar Bluff, Mo. It will be similar, in many respects, to the Wappapello dam, but actual cost of the dam itself will be approximately three times that of the Wappapello job.

This project is supervised by district engineers at Little Rock.

Seek Flood Control Dam on Saline River.

Gazette 7-30-41

Approval of a proposed flood control dam on the Saline river near Benton, as one of three objectives during August and September, will be sought by the state Flood Control Commission, it was decided at a meeting at the capitol yesterday.

Commission Chairman R. E. Overman said Governor Adkins will be asked for authority to employ three junior engineers to interview

farm families in the Saline valley to determine flood losses in the past 10 years. Approximately 200,000 acres of rich bottom lands are subject to overflow, he said. Economic justification will be sought for the dam.

The Aluminum Company of America, which will operate a large aluminum plant in the Benton-Bauxite area, is interested in impounding large quantities of water for use by the plant, he said.

Other objectives of the commission will be obtaining presidential approval for a proposed Narrows reservoir on the Little Missouri river north of Murfreesboro and a federal grant for dredging sluggish streams in southeast Arkansas.

Mr. Overman announced North Louisiana residents would be invited to meet with residents of southeast Arkansas in Lake Village, late next month or early in September, to discuss a proposed project for the clearing of the streams, such as Bayou Bartholomew, Boueff river and Bayou Mason.

No personnel matters were discussed.

Flood Control Work Changes Proposed

Gazette 8-3-41

Washington, Aug. 7 (P).—Army engineers recommended today changes in the flood control work on the St. Francis river in Arkansas to meet the wishes of local interests.

The chief of army engineers, in accordance with the desires of local interests, had suspended work on the portion of the program below Oak Donnick, Ark., which called for a levee floodway.

Local interests now desire that a ditch be substituted for the levee floodway. An engineers report sent to Congress today recommended the substitution of such a ditch, and noted that the change in plans would involve no added expense.

Blue Mountain Dam Contract Is Cancelled

Democrat 8-15-41

John Kerns Construction Company, Omaha, Neb., today was notified that its contract for construction of the outlet and diversion tunnels at the Blue Mountain Dam in Yell County had been terminated. Termination of their right to proceed was announced today by Lt. Col. T. F. Kern, Little Rock district engineer.

"The right to proceed under the

terms of the contract was terminated for failure to prosecute the work so as to insure its completion within the times specified," Col. Kern said.

The construction work was started by the contractor in June 1940, and was about 53 per cent complete on August 1, this year.

Conference Here Tomorrow.

The Hartford Accident and Indemnity Company, Hartford, Conn., surety for the contractors, has been notified of the action by the district engineer, with the result that a representative of the surety will hold a conference here Saturday morning with the engineers to determine if the surety will take over the contract or it will be completed by the government.

Inspectors of the Little Rock district began an inventory of the equipment, materials and plant at the site, immediately after the termination message was dispatched to the contractors. Except for completing necessary parts of the work, such as curing concrete poured in the last day or two, and receiving materials and equipment being delivered at the site, no work will be done pending the conference Saturday. Work is expected to be resumed in the near future.

Blue Mountain Dam will be a unit in the comprehensive plan for flood control on the Arkansas river and its tributaries. The dam is located about 15 miles southeast of Booneville.

Extensions Granted.

The contract for construction of the outlet works and diversion tunnel was awarded the Kerns Company June 10, 1940, and a notice to proceed with work was issued June 19, with the completion scheduled for July 26, 1941. Several extensions of time have been given the contractors, Colonel Kern said, the present completion date being early in the fall. The bid price for the contract was \$686,877.10.

The diversion tunnel will be through the south bank of the stream. It will be 20 feet in diameter and approximately 1,020 feet long.

Dam Contract Set.

A contract was awarded May 12, 1941 to Myers, Myers and Goen, Salem, Ind., for construction of the earth dam and spillway, on a bid of \$1,111,879. The dam will be about 2,800 feet long, 115 feet high and is scheduled for completion July 1, 1943. The reservoir will have a storage capacity of 258,000 acre feet, of which 233,000 will be for flood control and 25,000 acre feet will be for a permanent pool, having a surface of 2,900 acres.

Operation of the reservoir is intended to provide flood protection to farm lands for the 57 miles down stream to the conjunction of the Petit Jean and Arkansas rivers, and assist in flood control on the Arkansas.

A section of the John Kerns Company contract with the government reads: "If the contractor refuses or fails to prosecute the work, or any separable part thereof, with such diligence as will insure its completion within the time specified in Article One, or any extension thereof, or fails to complete said work within said time, the government may, by written notice to the contractors terminate his right to proceed with the work or such part of the work as to which there has been delay."

Flood Control Bill Signed By President

Measure Authorizes Projects Without Any Appropriations.

Washington (AP)—President Roosevelt signed today a bill authorizing a \$275,000,000 flood control program and made it clear that all projects would be held up which are not important to national defense.

The measure merely authorizes construction of scores of projects without appropriating funds for them.

"In approving this bill," Mr. Roosevelt said in a statement, "I wish to make it clear that during the present emergency I do not intend to submit estimates of appropriation or approve allocations of funds for any project which does not have important value in the national defense."

Creates Backlog Project.

White House officials said that the president's action in signing the legislation was part of his declared policy of creating a backlog of projects which may be undertaken after the current emergency ends. They could be used at that time to take up employment slack caused by the lessening of the pace of defense production.

The text of the president's statement follows:

The flood control bill (HR4911) authorizes the construction of new

flood control projects, but it does not make any appropriations for that purpose. The projects are to be undertaken "as speedily as may be consistent with the budgetary requirements," from whatever funds may be appropriated.

In approving this bill, I wish to make it clear that during the present emergency I do not intend to submit estimates of appropriation or approve allocations of funds for any project which does not have important value in the national defense.

Bill Authorizes Arkansas Projects.

Projects authorized by the flood control bill included:

Lower Mississippi River—Channel improvements, levees and reservoir work, including Yazoo Basin, Bouef Floodway and Eudora Floodway north to Arkansas River, \$11,982,000. Red-Ouachita River Basin—Local works at Calion, Ark., \$50,000; Narrows reservoir on Little Missouri River, Ark., \$3,000,000.

White River Basin—Expansion of present comprehensive plan of flood control, \$24,000,000; local works between Augusta and Clarendon, Ark. and at DeValls Bluff, Ark., \$2,847,000.

Arkansas River Basin—Local works between Little Rock and Pine Bluff, Ark., \$641,000; local works in Crawford County Levee District, Ark., \$284,000.

AUTHORIZATION FOR VARIETY OF RIVER PROJECTS

Several Arkansas Works Included.

Gazette 8-20-41

Washington, Aug. 19 (AP)—President Roosevelt signed today a bill authorizing a \$275,000,000 flood control program and made it clear that all projects would be held up which are not important to national defense.

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White House officials said the president's action in signing the legislation was part of his declared policy of creating a backlog of projects which may be undertaken after the current emergency ends. They could be used at that time to take up employment slack caused by the lessening of the pace of defense production.

Arkansans Pleased By Authorizations.

Needs of smaller streams and basins, such as Saline river and Bayou Meto, can receive the Arkansas Flood Control Commission's undivided attention whenever projects for larger streams, as authorized in the omnibus bill signed by President Roosevelt, are under way, Chairman R. E. Overman said yesterday.

Commission members and other Arkansas residents interested in flood control were gratified by the president's action, Mr. Overman said. They realize that an authorization does not necessarily mean an appropriation, "but it's a step that always must be made, and we're glad to get it," he said. The commission, agreeing with the president, favors priority for flood control projects connected with national defense. This probably means that the "local works" authorized in the omnibus bill have little chance for early progress, Mr. Overman said.

Many Projects Of Interest In State.

The chairman said authorizations include:

Arkansas river basin—An additional \$29,000,000, bringing total to \$50,000,000, including cost of proposed Oklahoma projects.

Norfolk dam in Baxter county—Additional \$13,500,000.

White river comprehensive plan—Additional \$24,000,000, including work on Bull Shoals and Table Rock dams, the latter a few

miles north of the Arkansas border, in Missouri.

Little Missouri river—The Narrows reservoir near Murfreesboro, \$3,000,000.

Other authorizations include: Lower Mississippi river—Channel improvements, levees and reservoir work, including Yazoo basin, Bouef floodway and Eudora floodway north to Arkansas river, \$11,982,000.

Red-Ouachita river basin—Local works, Calion, \$50,000.

White river basin—Local works between Augusta and Clarendon, and at DeValls Bluff, \$2,847,000.

Arkansas river basin—Local works between Little Rock and Pine Bluff, \$641,000; local works in Crawford County Levee District, \$284,000.

WORK ON NORFOLK DAM SLOWED DOWN BY DEFENSE PRIORITY

Special to the Gazette, 9-7-41

Mountain Home, Sept. 6.—Construction of the Norfolk dam is being slowed down because steel, electric cable and repair parts for equipment now in use are hard to get, due to defense priorities.

It was expected that the gigantic crushing and gravel and sand washing plants would be completed by August 15, but while practically complete, they still lack a few parts. These parts are in transit, but the delay has cost the contractors two weeks in getting them in operation.

Bernard Williams, project manager said that if there were no further delays, workmen will begin pouring concrete about September 25. The immense foundation trench has been excavated to within one to three feet of solid rock. The last foot of excavation in rock will have to be done with bore and wedge methods. Blasting cannot be used in this last excavation operation, as it would crack the underlying ledge, and the face of the foundation must be intact.

The bluff which forms the east abutment of the dam has been cleaned off and blasting for the footings will be started soon. All excavation operations are up to schedule.

Huge Refrigerator Built.

Preparations for a 209-ton capacity plant for refrigeration of water to be used in cooling the water in the dam has been started. The water will be circulated through a network of one-inch metal tubing embedded in the dam to absorb the heat liberated from the concrete due to the hydration of cement. The control of this heat is necessary in mass concrete placement to minimize the amount of volume change of the concrete and occurrence of related cracking.

A concrete school for the representatives of the Engineer District in the Southwestern Division, and employees of The Utah Construction Company and Morrison-Knudsen, contractors building the dam, was held Wednesday, Thursday and yesterday. Capt. E. C. Herb, area engineer at the Norfolk dam, was in charge. R. S. Phillips, Chicago, field representative of the Portland Cement Association, gave lectures and practical demonstrations in concrete work. H. V. Pittman, chief of the Operations Division, Little Rock Engineer District, and Roy F. House, head of the concrete laboratory at the Norfolk dam also spoke.

Safety Record Set.

There probably have been fewer accidents on the Norfolk dam project than on any other of its size in the United States. While there have been many minor accidents, causing cuts and bruises, there have been no major accidents. Louie Kerr, head of the Safety Division, reported: "We have lost one finger since the work started." Several safety meetings have been held, and one safety school, at which men were taught how to prevent injuries. This is augmented by a weekly safety sheet, which goes to each employee.

Gravel and sand hauling started last week. The material is being dug from an immense gravel bar at Herron, on the north bank of White river. A spur has been built from the main line of the White River Division to the bar, and three trains crews are hauling big gravel trains from the bar to a big stock pile at the washing and cleaning plant at the dam. The Amyx Bros. Construction Co. has the contract for digging and loading the material

at the bar.

617 Men at Work.

Peak employment at the dam during the last 10 days has been running around 617 men. Bernard Williams said that when concrete work is started the last of the month, employment will be increased 20 per cent. Most of the new men employed will be carpenters, who will work on wooden forms for concrete.

The latest addition to the buildings is a guest house, designed and furnished by Frances H. James, purchasing agent. It contains nine rooms and will be used by visiting engineers, business representatives, and others, who find it necessary to spend a day or two on the project.

White River Projects Held Of Interest

Gazette 9-18-41

Development of potential hydro-electric power from the White river is of national interest. Lt. Col. T. F. Kern, Little Rock district engineer, told the weekly luncheon meeting of the Little Rock Lions Club at Hotel Marion yesterday.

"The chief of engineers has recommended the construction of flood control dams in the Arkansas and White river basins and the production of power at Norfolk, Bull Shoals and Table Rock because they are economically justifiable," Colonel Kern said. "Although the Little Rock district now has under construction two reservoirs and the North Little Rock pumping plant in the Arkansas river basin, the potential hydro-electric power from the White river makes the development of the White river of greater national interest at this time."

The 1938 flood control act, authorizing initiation of construction of flood control reservoirs in the White river basin, provided that provisions should be made for future production of power. Construction of power facilities at Norfolk and improvement of Bull Shoals and Table Rock for flood control and power are authorized by the 1941 flood control act.

"We have found," Colonel Kern said, "that, where the site is adaptable to a multiple-purpose improvement, a flood control and power development is most desirable. For example, the dual-purpose Norfolk development will cost considerably less than the total cost of a flood control project and a power project at that site."

Colonel Kern outlined specifications for the Norfolk dam, started last spring as a flood control dam. Under provisions of the 1941 act, it will be completed as a dual purpose dam within three years.

Officials To Survey Levees

Special to the Gazette, 9-18-41

McGehee, Sept. 17.—Congressman W. F. Norrell of Monticello, accompanied by Col. S. B. Sturgis, United States district engineer of Vicksburg, Miss., and C. S. Christian, engineer for the Arkansas state Flood Control Commission, will leave here tomorrow to inspect Mississippi river levees. They will go through Lincoln, Jefferson and Chicot counties. Also in the party will be Congressman Norrell's private secretary, Representative Ernest Maner, and Walter M. Ebel, Hot Springs newspaper man.

\$31,000,000 Appropriated for Work.

The survey will be the first step in carrying out provisions of a flood control measure enacted by Congress and signed by President Roosevelt, which appropriated \$31,000,000. The levee will be built one foot higher than any recorded flood stage and will eliminate the fuse plug provision of the so-called "Jadwin plan."

Mr. Christian said the levee will give "the limit in future flood protection" to more than 1,500,000 acres, constituting the richest alluvial lands in Jefferson, Lincoln, Ashley, Desha and Chicot counties.

Mississippi River Straightened.

Engineers have taken many kinks out of the Mississippi river since the last time it went on a rampage. Between a point about 30 miles above Arkansas City, where the Arkansas empties, and the Angola landing in Louisiana, a

distance of 370 miles, the Mississippi river has been shortened 136.28 miles. This straightening also has aided in flood control and is said to have lowered by 12 feet the high-water mark at Arkansas City.

Following the inspection of the levee, Congressman Norrell and Mr. Maner will return to Washington.

Materials For Bull Shoals Job Surveyed

Special to the Gazette, 9-28-41

Mountain Home, Sept. 27.—The survey of aggregate that can be used in the construction of the Bull Shoals on White river was started by the United States engineers this week. The survey will include all gravel bars, limestones, sand and other material that could go into construction.

A reservoir map of the Bull Shoals project has been completed by the engineers.

Core drilling on the Bull Shoals foundation will be started soon. Some foundation drilling has been done and was favorable. The new work will be let under contract and will get under way as soon as bids are advertised and let.

The Bull Shoals project, along with Table Rock on White river, just above the state line in Taney county, Missouri, were authorized as multiple purpose dams by Congress.

The Bull Shoals dam site is located on the White river, 15 miles above Cotter, on the boundary line of Baxter and Marion counties. Bull Shoals takes its name from Bull Shoals mountain, which rises majestically from the river in Marion county. It is shaped like the back of a bull, and is one of the highest mountains in this section.

Perfect Dam Site.

The Bull Shoals site is a perfect dam site. It is a deep gash, with a mountain rising from the river on the Marion county side, and a small narrow bottom on the Clyde Bryant farm on the Baxter county side. Immediately back of the bottom is a high bluff which makes a perfect abutment.

The Bull Shoals dam will be one of the largest concrete dams in the United States. It will be of concrete gravity construction, 2,235 feet long with a maximum height above the stream bed of 223 feet, with controlled sluices and spillway. The complete structure will contain approximately 1,700,000 cubic yards of concrete. The spillway has been designed to accommodate a flood, with sluices in a closed position, greatly in excess of the maximum record. The plan provides for the installation of power generating units with a capacity of 190,000 kilowatts.

Work Ahead of Schedule.

Work on the Norfolk dam is moving fast and is eight days ahead of schedule. Twenty thousand cubic yards of earth and rock were moved by the contractors the past week. The total excavation to date amounts to 544,000 cubic yards.

The contractors aggregate plant, which will be used in processing sand and gravel and crushing stone, practically is completed, and started operation this week. The concrete mixing plant also was completed this week. The huge cableways, largest ever used in dam construction in the United States, will be completed the middle of next week, when the pouring of concrete is scheduled to start.

Joel D. Justin, consulting engineer, Philadelphia, Pa.; H. V. Pittman, chief of operations division, United States engineer office, Little Rock, and G. R. Schneider, head of design section, United States engineers office, Little Rock, inspected the Norfolk project this week with Capt. E. G. Herb, area engineer.

Nimrod Dam Construction Complete

Gazette 10-1-41

Construction of Nimrod dam on Fourche La Fave river in Perry county, a unit in the comprehensive plan for flood control on the Arkansas river and its tributaries, has been completed except for construction of the roadway hand rails and installation of a lighting system, the Little Rock District, United States Engineers, announced yesterday. The project is expected to be completed about four months

ahead of schedule.

Maj. J. R. Crume Jr., executive officer, said yesterday reports indicate the work is about 95 per cent complete. The last concrete in the roadway and bridge across the spillway section of the dam was poured Saturday. Cleaning of the site and construction of an operator's residence are included in work yet to be done. A separate contract will be made for construction of the residence.

The dam is 97 feet high and nearly 1,000 feet long. The reservoir formed by the dam will have a storage capacity of 335,000 acre-feet of water when complete. Thirty thousand acre-feet of the reservoir will form a conservation pool, extending 15 miles above the dam. For about six miles, the pool will be a mile wide.

Bids for the contract were opened February 27, 1940, and work was started less than a month later.

Clearwater Dam Excavation Under Way.

Excavation for the cut-off trench in the foundation of Clearwater dam, now under construction on Black river near Piedmont, Mo., was started this week, Maj. J. R. Crume Jr., executive officer, United States Engineers, Little Rock District, announced yesterday.

The cut-off trench will be excavated to solid rock across the entire valley along axis of the dam. The space will be filled with impervious material similar to the impervious center of the dam proper and will tend to prevent seepage of water through the dam. Rapid progress is being made on the outlet works and diversion tunnel of the project. They are expected to be in readiness when diversion of the stream flow is made next spring.

Far-Away Flood Control Projects Launched by Federal Authorities To Protect Lowlands in Arkansas

Democrat 10-8-41

Scattered widely over Colorado, New Mexico, Kansas and Arkansas, a total of 19 dams have been authorized by Congress as part of the flood control program for the vast area known as the Arkansas River Valley.

Located, with one exception, on tributaries of the Arkansas, the system of reservoirs, which probably will cost more than \$100,000,000, is designed to regulate the flow of water so as to prevent serious floods in the lower Arkansas River Valley in Oklahoma and Arkansas.

The original Arkansas Valley program as prepared by U. S. Engineers in 1938 contemplated 13 reservoirs. More recent acts of Congress, however, have revised the original plan to add seven new dams and eliminate one of the original projects.

The fact that 19 dams have been authorized, though, does not mean the completion is anywhere near completion. Years may elapse between the time the dam is authorized and the time money is appropriated and construction actually starts.

Long-Time Program.

Only six of the 19 are now completed or under construction. They include the Caddoa on the Arkansas River in Colorado; Great Salt Plains on the Salt Fork of the Arkansas in Oklahoma; Conchas on the South Canadian river in New Mexico; Ft. Supply on Wolfe Creek in Oklahoma; Nimrod on the Fourche la Fave in Arkansas; and Pensacola on Grand River in Oklahoma.

Although electric power will be a by-product of some of the dams, all are listed as flood control projects. The two in Colorado and New Mexico, however, actually are probably irrigation jobs, according to C. S. Christian, engineer for the Arkansas Flood Control Commission.

"Only 20 per cent of the water that falls in Colorado ever gets down here now," he said. "The rest is taken off for irrigation. I guess they are going to take some more." In that connection, the New Mexico dam is beyond the western limit of the area in which rainfall affects the Arkansas river, he pointed out.

Two Arkansas Projects.

Only two of the 19 dams are located in Arkansas. One is Nimrod, now virtually complete, and the other Blue Mountain Dam on the Petit Jean river. Funds for its construction have

been appropriated.

The majority of the dams, 11 will be located in Oklahoma, with the remaining four in Kansas.

In addition to Great Salt Plains, Ft. Supply and Pensacola, the Oklahoma Dams authorized are, Mannford on the Cimarron River; Tenkiller Ferry, Illinois River; Optima and Canton, North Canadian River; Wister, Poteau River; Huley, Caney River (tributary of the Verdigris); Markham and Ft. Gibson, Grand River.

The four Kansas dams are Toronto, Fall River, Neodesha and Elk City, all on the Verdigris River.

Equipment for generating electric power has been authorized in the Pensacola, Markham Ferry and Ft. Gibson Dams in Oklahoma and Nimrod in Arkansas. Power probably will be authorized for other dams at a later date.

Record Cable Being Used On Norfolk Dam

Special to the Gazette. 10-12-41

Mountain Home, Oct. 11.—The first 1,500,000 cubic yards of concrete required in construction of Norfolk dam was poured yesterday afternoon, when the largest cable way ever used in dam construction was completed and placed in use.

The cable way, spanning 2,836 feet between the towers, will support weights up to 20 tons. The cable weighs 18.5 pounds per linear foot.

Concrete required for the dam, if it all were shipped at one time, would require the use of 80 50-car freight trains having a total length of 35 miles. Employment when concrete operations reach the peak is expected to be about 1,000 men. Total cost of the project, including the installation of power generating facilities, is expected to be about \$27,550,000.

Construction of the dam was started in April by the Utah Construction Company and Morrison-Knudsen Company, Inc. The dam is expected to contain 1,500,000 cubic yards of concrete when completed. It will be a multi-purpose dam for flood control, power and recreational facilities. No congressional authority has been given for an appropriation of power generating facilities.

Resources Planning Board To Meet October 24.

Plans for continuing water studies of the Arkansas river basin between Little Rock and Tulsa, Okla., and the White river basin above Newport will be made by the National Resources Planning Board's Southwest Mississippi Basin "A" Committee at the Albert Pike hotel at 9:30 a. m., October 24.

The area includes the Ozark and Ouachita mountains, important territory for land use studies.

Arkansians on the committee are by Georgs C. Branner, state geologist; C. S. Christian, engineer for the state Flood Control Commission, and L. A. Henry, engineer-director of the state Planning Board.

Blakeley Dam Hearing November 27

Gazette 10-16-41

St. Louis, Oct. 15 (P).—The Arkansas Power and Light Company's appeal from an order by the Federal Power Commission terminating a license for construction of the Blakeley dam on the Ouachita river will be heard November 27 by the United States Circuit Court.

The company, which expended \$1,600,000 on land acquisition, engineering and preliminary construction costs, had sought an extension of the completion date for the project. After hearings in Washington last December, the commission refused the request and revoked the license, effective September 1, 1941.

The order said construction had not been pursued "in good faith and with due diligence." final

plans had not been submitted and the company had failed to establish when it proposed to proceed with and complete the work.

Order Declared Illegal.

In its appeal, the company contended the order was "unreasonable, capricious, arbitrary and contrary to law."

The petition said operations on the project were suspended in February, 1937, because the commission and the Army Corps of Engineers had "failed to take any action whatsoever, favorable or otherwise, on plans and specifications."

The company denied asking an indefinite postponement of the completion date but said it had sought an extension until such time as the commission might direct, "considering all economic factors."

The company proposed expanding the plans to provide for a multi-purpose flood control and power dam "to serve the broad public interest of the Ouachita valley."

It also asked authority to build a steam generating plant in the "sour gas" field of southwestern Arkansas to supply high load factor power for national defense industries, the plant to be constructed ahead of the Blakeley dam.

The commission, in terminating the Blakeley license, denied the company permission to build the plant.

Nimrod Dam Nears Completion

Gazette 10-16-41

Construction of Nimrod dam on the Fourche la Pave river in Perry county is scheduled for completion by December 1, officials of the United States Engineers Office said yesterday.

Only minor work remains such as placing roofs on two operating towers, placing the roadway parapet walls, installing electric wiring, back-filling and sodding, and grading the road to the dam.

The lake which the dam will form will not be filled until spring. Men, animals and machines are at work clearing an area for the permanent conservation pool which will extend 15 miles upstream into Yell county. The clearing is scheduled to be completed by Christmas.

Two Penstocks Installed. Designed for flood control along the 60 miles of the Fourche La Pave river to its junction with the Arkansas, the dam contains two 15-foot penstocks and other facilities which may be used for power generation should Congress authorize installation of generators. Possible power installation would amount to 14,000 kilowatts capacity.

A gantry crane has been installed on the bridge across the dam and will be used for handling bulkhead and tractor gates, cleaning trash racks and removing debris.

Two conduits with Howell-Bunger type valves, which operate on the principle of the garden hose nozzle, will control the stream flow through the dam, and seven giant gates, operated by oil power-driven pistons, will be opened when heavy flood waters are to be let out. The dam will store 335,000 acre-feet of water forming a lake of 18,300 acres.

Giant Cableway Sold.

A giant cableway, which was brought here after use on the Norris and Hiwassee dams of the Tennessee Valley Authority system, has been sold to S. A. Healy Construction Company and will be used on the engineers' Wolf Creek dam in Kentucky, William Pappenheimer, resident engineer, said. The concrete mixing plant will go to the TVA.

Many Carpenters Employed. Although the dam is of concrete at the peak construction period more carpenters were employed than any other skilled group. Carpenters were used mainly to build elaborate arches and other forms into which the concrete was moulded.

In October, 1940, 460 men were employed at the dam with a pay roll of \$12,000 weekly. At present 177 men are employed with a payroll of approximately half that amount. Work has proceeded in eight-hour shifts 24 hours a day.

Blakeley Dam Hearing Likely To Be Held at Camden.

Special to the Gazette. 10-17-41

Camden, Oct. 16.—Maj. W. H. Hastings of the Corps of Army Engineers at the Vicksburg (Miss.) office notified the Chamber of Commerce today that Col. S. G. Sturges,

district engineer, will arrive in Camden Friday, October 24, to confer with officials regarding a hearing on the Blakeley mountain dam project of the Arkansas Power and Light Company. The hearing probably will be held here.

Purpose of the hearing will be to ascertain public sentiment toward the dam. W. C. McClure, Chamber of Commerce secretary, said that the Ouachita Valley Association has filed briefs setting up the importance of flood control as well as power development. A dual purpose dam has been endorsed by the Camden Chamber of Commerce.

Adolph Felsenthal, long an advocate of a dual purpose dam and known as "father of river navigation" of the Ouachita, has urged that the hearing be held here.

AVA ENDORSED OVER PROTEST AT CONVENTION

Broad Development Plan Favored.

Gazette 10-18-41

A resolution which in effect endorsed the proposed Arkansas Valley Authority, but not by name, was adopted over the protest of private utility representatives by the eight-state Southwest Valley Association in convention here yesterday.

Meeting at the Hotel Marion, the organization approved a recommendation that "an authority of some character" be created to harness the Arkansas, White, Red and St. Francis rivers primarily for flood control and then for irrigation and power development.

The resolution, presented by a committee after lengthy debate, was written following an address by Congressman Clyde T. Ellis of Bentonville, sponsor of the pending AVA bill in Congress. Difference of opinion concerning the association's intent as embodied in the recommendation was voiced later by four officials.

J. C. Murray of Little Rock, secretary of the Resolutions Committee, said the AVA was not mentioned because Congressman Ellis announced his bill would be changed "to meet certain objections of Western states."

Victor Barnett of Tulsa, Okla., associate editor of the Tulsa Tribune, who was elected president, said the resolution was a tacit endorsement of the AVA bill in principle, with the provision that United States Army Engineers supervise construction of reservoirs for all purposes and operate flood control facilities after the dams are built.

Secretary W. C. McClure of Camden of the Arkansas Flood Control Commission, who was elected third vice president of the association, said: "This resolution does not mean an endorsement or rejection of public power."

T. M. Markley of Tulsa, lawyer for the Public Service Company of Oklahoma, moved to table the resolution. He charged that Congressman Ellis was "just another congressman who wants to get in the power business." His motion received few votes and was lost.

Ellis Says Federal Power Set-Up Planned.

Congressman Ellis, assailing power rates of private utilities as another reason for creation of the AVA, said the government will announce in Washington "within a matter of hours, or a very few days at the outside," that it has "been forced to develop its own power" for the proposed \$60,000,000 aluminum plant allocated to Arkansas.

"The decision is already made," he said. "It will not be an exclusive Rural Electrification Administration set-up as some had hoped. Instead, it will represent a compromise between REA and the Defense Plant Corporation."

Mr. Ellis said President Roosevelt expressed the hope this week that the AVA be "set up as quickly as possible."

"Day before yesterday, Senator Josh Lee of Oklahoma and I spent 30 minutes with the president," he

said. "I was anxious that the authority be set up as quickly as possible. We are going to revise the bill some and Senator Lee is going to help sponsor it in the Senate."

Opposition of Western Governors Criticized.

Mr. Ellis lashed out several times at Governor Phillips of Oklahoma and Governor Carr of Colorado, both of whom have voiced opposition to the AVA.

"We think it ill behooves the West to step in here and object," Mr. Ellis said, explaining that the project would not interfere with irrigation in Oklahoma and Colorado. "The deep truth is that Governor Carr, a Republican, and Governor Phillips, a Democrat, from whence most of the opposition has come, appear to be owned body and soul by the power trust."

At another point he said: "Public power and cheap power have virtually encircled Arkansas. We can see it across the river in Tennessee and Mississippi and Kentucky. We hope to get a little of it in northwest Arkansas through the KAMO transmission Rural Electrification Administration cooperative, if Governor Phillips ever gets through sabotaging it for the benefit of the power companies."

Private Utility Rates Said to Be Too High.

Then he launched into an attack on rates of the Arkansas Power and Light Company and other utilities operating in the proposed AVA basin. He said the rates are "so abominably high that millions cannot afford it, and so high that commerce and industry, in our highly competitive economy, can never experience normal growth."

He again referred to the "outrageously high salaries of their officials—as in the case of the Arkansas Power and Light Company, the \$36,000 salary of its president, whose duties consist chiefly of lobbying for the company."

Retiring President N. R. Graham of Tulsa commented at the close of the address that "Congressman Ellis' speech was forthright and, in the case of Arkansas, sensational."

Utility Representative Defends Private Firms.

While the Resolutions Committee debated in another room, J. A. Whitlow of Tulsa, vice president of the Public Service Company of Oklahoma, arose to say:

"So many of our people [private utility officials] are afraid to answer back, but damn it to hell I'm not. These attacks on the utilities are usually made from prepared papers by those who get off in some out-of-the-way place, where no one is ready to answer."

"Mr. Ellis charged the utilities hold monopolies. I don't know what he is talking about. The states of Oklahoma and Missouri do not grant exclusive franchises. Arkansas issues indeterminate permits which can be revoked at any time."

Mr. Whitlow, who was associated with the Arkansas Power and Light Company at Pine Bluff five years before going to Tulsa, charged that the association had become a lobby to "get you to submerge flood control in favor of public power."

Contending that the Tennessee Valley Authority would "go out of business in six months if it had to pay the equivalent of taxes," he asked why Congressman Ellis did not compare TVA rates with those of private utilities in St. Louis, Madison, Wis., and Spokane, Wash., "where power can be produced at lower rates than in Tulsa, Springfield, Mo., and Little Rock." Mr. Ellis had cited much higher rates in the latter three cities than those in the TVA-served city of Tupelo, Miss.

Colorado Official Hits Proposed Authorities.

Phoenix, Ari., Oct. 17 (P).—Proposed regional authorities to control water development and conservation of natural resources "strike at the very roots of the economic and social well-being of the people," Clifford H. Stone, director of the Colorado Water Conservation Board, said today.

Speaking before the tenth annual convention of the National Reclamation Association, Stone said advocates of authority legislation failed to recognize that there exists "an expanding and tested program of water development providing irrigation, flood control and cheap power."

Stone demanded that the states maintain their freedom to enter into water compacts among themselves, and that local and state

interests be considered in relation to national interests.

The motivating force behind authority legislation, he said, is cheap power.

He charged that under the cloak of flood control and power production, the proposed federal authorities would be vested with power to control the appropriation, use and distribution of water for all purposes, including irrigation.

Rayburn Opposed To Including Denison Dam

Washington, Oct. 17 (P).—Senator Lee (Dem., Okla.) said today Speaker Rayburn (Dem., Tex.) had expressed opposition to including the Denison dam hydro-electric project in Arkansas Valley Authority legislation at this time.

"He said he wanted to give it thorough study," said the senator.

Lee and Representative Ellis (Dem., Ark.) said after a visit to the White House this week that they would offer new legislation to create an Arkansas Valley Authority along lines of the TVA and bring under the AVA Denison dam which is in the speaker's district and the Oklahoma Grand River dam hydro-electric project.

Lee said the legislation was being prepared but he did not know when he and Ellis would introduce it.

DAM AUTHORITY SAID TO IGNORE ARKANSAS NEED

Needless Flood Loss In State.

Gazette 10-18-41

Failure of the Pensacola Dam on Grand river in Oklahoma to control Arkansas river floods was placed on the steps of the Grand River Dam Authority, an Oklahoma state agency, by a representative of the United States Engineers here yesterday.

Lt. Col. Harry A. Montgomery, Tulsa District engineer, told the Southwest Valleys Association convention at Hotel Marion that if recommendations of army engineers had not been rejected by the dam authority four damaging floods along the Arkansas river since April could have been avoided.

Presenting a statement of what he termed factual data, with "no attempt made to draw conclusions," Colonel Montgomery pointed to the engineer's original proposal to construct three reservoirs along the lower Grand river for flood control and generation of hydro-electric power.

One of these was the present Pensacola Dam. The others were the proposed Markham's Ferry and Fort Gibson dams.

"This approved plan provided for the reservation at all times in the three reservoirs of 1,685,000 acre-feet of storage for the capture of flood flows," Colonel Montgomery said. "Of this total, 960,000 acre-feet would have been reserved for this purpose in Pensacola reservoir alone."

Operating Plan Changed by Authority.

He said the dam authority changed the operating plan for the Pensacola project, increasing the power storage by 420,000 acre-feet, but with a corresponding reduction in the available flood control storage. This change, Colonel Montgomery said, reduced the flood control storage in the dam from 960,000 to 540,000 acre-feet.

The storage space was cut another 295,000 acre-feet, he said, when the dam authority was relieved of the responsibility of acquiring additional lands at a higher elevation.

And so today, as a result of these two modifications of the development recommended by this department, we have the Grand River Dam operating with only 240,000 acre-feet of available flood control storage, or just 25 per cent of the amount proposed at this site, and only 14 per cent of the 1,685,000 acre-feet which this department recommended."

Effect of Recent Floods Described.

Colonel Montgomery described the effect of four recent floods. He said the dam had been closed since March, 1940. The first flood in April, 1941, had a volume of 1,350,000 acre-feet above the dam.

"Although the dam had been closed since March, 1940, inflow since then had not been sufficient to fill the pool, so that it was possible to store about 600,000 acre-feet in the reservoir, mostly in the power pool," he said.

The dam was able to hold the discharge of water below that of the flow into the reservoir "but it had no material effect on flood conditions in the Arkansas river." As a result, a stage of 30.6 feet was reached at Van Buren, which is about nine feet above "bank-full stage."

"The major contributor to Arkansas river floods will not be effectively harnessed until the total flood storage of 1,685,000 acre-feet recommended [by army engineers] is provided," Colonel Montgomery said.

Flood Damage Could Have Been Avoided.

"It is particularly significant that, had this flood capacity of 1,685,000 acre-feet been available for use during the four floods which I have described, the entire flood flow from above the dam could, if downstream conditions required, been stored in the three reservoirs until downstream conditions permitted release without producing overbank stages."

"Under these conditions, no damage would have been done to the valley below the dam site, nor would any flood flows from the Grand river contributed to flood flows in the Arkansas river downstream."

As a result of this address, the association adopted a resolution recommending that the federal government take over the Pensacola dam and construction of Markham's Ferry and Fort Gibson dams be carried out under direction of army engineers.

The resolution criticized the dam authority for not accepting the engineers' recommendations of flood control features of the project.

Reports Made By Other Speakers.

The status of other army engineers' projects was described by Col. Stanley L. Scott, formerly of Little Rock, Southwest Division engineer, and Lt. Col. T. F. Kern, Little Rock District engineer.

J. C. Murray, traffic manager of the Little Rock Chamber of Commerce, recommending development of navigation, obtained adoption of resolutions petitioning army engineers to study the needs of navigation on the Arkansas, White and Ouachita rivers.

Other speakers included R. E. Overman, chairman of the Arkansas Flood Control Commission, and John T. Woodruff of Springfield, Mo., long an advocate of flood control in the White river valley.

Mr. Overman, who was asked by the convention to propose a future program, suggested an educational program be inaugurated to inform residents of the eight-state area of progress in flood control. He recommended a \$50,000 annual budget but warned against affiliation of the association with "state politics."

A resolution calling for nationwide support of the Soil Conservation Service was adopted.

V. Barnett of Tulsa Elected President.

Victor Barnett of Tulsa was elected president of the association to succeed a fellow townsman N. R. Graham. The latter succeeded to the chairmanship of the board. Other new officers:

John P. Morrow, Batesville, first vice president; W. G. Twyman, Poteau, Okla., second vice president; W. C. McClure, Camden, third vice president; F. L. Vaughan, Oklahoma City, fourth vice president; Gene Williams, Helena, fifth vice president; Glade Kirkpatrick, Tulsa, sixth vice president, and Mr. Murray, seventh vice president, and T. L. Geren, Fort Smith, treasurer. Members of the Board of Directors: Arkansas—E. A. Matthews, Pine Bluff; J. F. Sloan, Black Rock; M. W. Greeson, Prescott, and Reese Caudle, Russellville.

Oklahoma—Oscar Anderson, Oliton; Mike Martin, Muskogee; T. Elmer Harbour, Muskogee; F. S. Hurd, Broken Arrow.

Missouri—John T. Woodruff, Springfield; Arch T. Hollenback, West Plains; Rev. J. E. Chase, Branson, and C. C. Keller, Springfield.

Louisiana—George D. Holland, Monroe; Wade O. Martin, St. Martinsville; W. H. Hodges Jr., Elm Grove, and B. C. Powell, Farmington.

Texas—John M. Fouts, Dallas; C. M. Palmer, Texarkana; C. S. Clark, Austin, and V. C. Marshall, Temple.

Kansas—W. J. Small, Neodesha; W. Carter Hall, Coffeyville; George S. Knapp, Toledo.

Colorado—Arnold Bauer, Lamar; M. M. Simpson, McClove, and M. C. Hinderlinder, Denver.

New Mexico—To be appointed.