

OKLAHOMA EX REL. PHILLIPS, GOVERNOR, *v.*
GUY F. ATKINSON CO. ET AL.

APPEAL FROM THE DISTRICT COURT OF THE UNITED STATES
FOR THE EASTERN DISTRICT OF OKLAHOMA.

No. 832. Argued May 6, 7, 1941.—Decided June 2, 1941.

1. The Denison Dam and Reservoir Project on the Red River in Oklahoma and Texas, authorized by the Act of June 28, 1938, is a valid exercise of the commerce power by Congress. P. 516.

This is a multi-purpose project—part of a comprehensive scheme for controlling floods in the Mississippi River through reservoir control of its tributaries, of which the Red River is one of the more important. It aims also to protect and improve navigation of the Red River itself on its navigable stretches (which lie below the State of Oklahoma) by averting damaging floods and by regulating stream-flow; and it provides means for creating hydro-electric power, the disposition of which will offset some of the costs of the flood-control and of the stream-flow regulation.

2. The fact that portions of a navigable stream are no longer used for commerce does not dilute the power of Congress over them. P. 523.
3. Congress may control non-navigable parts of a river in order to preserve and promote commerce on the navigable parts. P. 523.
4. The power of Congress, under the Commerce Clause, to protect a navigable river from floods extends to the control of waters of its tributaries. P. 525.
5. The exercise of the granted power to regulate interstate commerce may be aided by appropriate and needful control of activities and agencies which, though intrastate, affect that commerce. P. 526.
6. It is for Congress alone to decide whether a particular project, by itself or as part of a more comprehensive scheme, will have such a beneficial effect on the arteries of interstate commerce as to warrant it. P. 527.

It is not for the Court to determine whether the resulting benefits to commerce will outweigh the costs of the project. Nor may the Court inquire into the considerations or objectives which moved members of Congress to vote for the project.

7. Inclusion of the water-power feature in the Denison project, thereby increasing the height of the dam and the area of land to be

- taken for the reservoir, did not exceed the authority of Congress. The project is basically one of flood-control including river-flow, and those functions are interrelated with the power function. P. 529.
8. Whether the work of flood-control would be better done by a dam of one design or another, was for Congress to determine. P. 533.
 9. As respects the authority of Congress to adopt a plan for flood-control, it is not an objection that it will also serve other ends which may be relatively more important. P. 534.
 10. The Tenth Amendment does not deprive the National Government of authority to resort to all means for the exercise of a granted power which are appropriate and plainly adapted to the permitted end. P. 534.
 11. Construction of the Denison Dam and Reservoir does not interfere with the sovereignty of Oklahoma. P. 534.
 12. The facts that land included in a federal reservoir project is owned by a State, or that its taking may impair the tax revenue of the State, and that the reservoir will obliterate part of the State's boundary, and that the State's own project for water development and conservation will be interfered with—constitute no barrier to condemnation of the land by the United States under its superior power of eminent domain. P. 534.
- 37 F. Supp. 93, affirmed.

APPEAL from a decree dismissing on motion a bill through which the State of Oklahoma sought to enjoin the construction, pursuant to an Act of Congress, of a dam and reservoir, upon the ground that the Act and the project exceeded the power of Congress and were contrary to the sovereign and proprietary rights of the State.

Messrs. C. C. Hatchett and Randell S. Cobb, First Assistant Attorney General of Oklahoma, with whom *Messrs. Mac Q. Williamson*, Attorney General, and *William O. Coe* were on the brief, for appellant.

Assistant Solicitor General Fahy, with whom *Assistant Attorney General Littell* and *Messrs. Warner W. Gardner and Richard H. Demuth* were on the brief, for respondents.

MR. JUSTICE DOUGLAS delivered the opinion of the Court.

This case involves primarily the constitutionality of the Act of June 28, 1938 (52 Stat. 1215) insofar as it authorizes the construction of the Denison Reservoir on Red River in Texas and Oklahoma.¹

¹ The Act provides in part:

"Sec. 4. That the following works of improvement for the benefit of navigation and the control of destructive floodwaters and other purposes are hereby adopted and authorized to be prosecuted under the direction of the Secretary of War and supervision of the Chief of Engineers in accordance with the plans in the respective reports hereinafter designated: *Provided*, That penstocks or other similar facilities adapted to possible future use in the development of hydroelectric power shall be installed in any dam herein authorized when approved by the Secretary of War upon the recommendation of the Chief of Engineers and of the Federal Power Commission.

"The Denison Reservoir on Red River in Texas and Oklahoma for flood control and other purposes as described in House Document Numbered 541, Seventy-fifth Congress, third session, with such modifications thereof as in the discretion of the Secretary of War and the Chief of Engineers may be advisable, is adopted and authorized at an estimated cost of \$54,000,000. . . .

"The Government of the United States acknowledges the right of the States of Oklahoma and Texas to continue to exercise all existing proprietary or other rights of supervision of and jurisdiction over the waters of all tributaries of Red River within their borders above Denison Dam site and above said dam, if and when constructed, in the same manner and to the same extent as is now or may hereafter be provided by the laws of said States, respectively, and all of said laws as they now exist or as same may be hereafter amended or enacted and all rights thereunder, including the rights to impound or authorize the retardation or impounding thereof for flood control above the said Denison Dam and to divert the same for municipal purposes, domestic uses, and for irrigation, power generation, and other beneficial uses, shall be and remain unaffected by or as a result hereof. All such rights

The bill in equity was filed by the State of Oklahoma seeking to enjoin the construction of any dam across Red River within the domain of Oklahoma which would impound the waters of the Red River (or its tributary, Washita River) so as to inundate and destroy any of the lands, highways or bridges belonging to or under the jurisdiction and control of the state, or which would obliterate or interfere with its boundaries. The bill also seeks to restrain the institution or conduct in any court in Oklahoma of proceedings to condemn lands for the purpose of the dam or reservoir.²

The bill alleges that Oklahoma will be injured in the following manner by construction of the project: The greater part of the dam will rest on Oklahoma soil and will form a reservoir inundating about 150,000 acres of land, of which 100,000 acres are located in Oklahoma. Of those acres about 3,800 are owned by the state. The United States will acquire title to the inundated land. The land owned by the state is used for school purposes, for a prison farm, for highways, rights of way, and bridges. The basin to be inundated is inhabited by about 8,000 Oklahoma citizens. Much of the land is rich soil in a high state of

are hereby saved and reserved for and to the said States and the people and the municipalities thereof, and the impounding of any such waters for any and all beneficial uses by said States or under their authority may be as freely done after the passage hereof as the same may now be done."

In October, 1939, the State of Oklahoma filed with this Court a motion for leave to file a bill of complaint seeking an injunction against the then Secretary of War from proceeding with the construction of this project. The motion for leave to file was denied by an equally divided court. *Oklahoma v. Woodring*, 309 U. S. 623.

² Appellees are Guy F. Atkinson Co., alleged to be constructing the dam under a contract with the War Department; and Cleon A. Summers and Curtis P. Harris, who as attorneys for the government are alleged to have instituted numerous condemnation suits for the purposes of the proposed reservoir.

cultivation. Much of it has large potential oil reserves. On some of it there are large producing oil wells and on other parts there are drilling operations and exploration for oil and gas. At least 15,000 acres will be highly productive oil lands and at least 50,000 acres are underlaid with oil and gas. There are thirty-nine school districts and townships in the four counties in which the affected area is located. Those governmental units are largely supported by *ad valorem* taxes. The taking of the 100,000 acres will decrease the taxable property in each of the counties and take virtually all of the taxable property in many of the townships and school districts. Each of these governmental units has a large bonded indebtedness payable from an annual levy of taxes. Inundation of the land will deprive those units of much of the tax revenue, so that many will be practically destroyed and the remainder seriously hampered. Since the state derives much of its revenue from a gross production tax on oil and gas, it will suffer great losses in tax revenues from the inundation of the oil and gas lands. The "annual wealth production" to the citizens of Oklahoma from the lands in the reservoir basin is about \$1,500,000. Aside from such losses and losses from oil revenues and personal property taxation, the net taxable loss to the counties, townships and school districts will be about \$40,000 annually.

It is also alleged that the construction of the dam will be a "direct invasion and destruction" of the sovereign and proprietary rights of Oklahoma in that: the boundary of Oklahoma will be obliterated for approximately 40 miles (see *Oklahoma v. Texas*, 260 U. S. 606); there will be a "forcible reduction of the area of plaintiff as one of the United States"; lands owned by it will be taken; its highways and bridges will be destroyed causing an interruption in communication between various parts of the state; the waters to be impounded belong to Oklahoma but will be taken from it without payment of just compensation;

those waters will be diverted from Oklahoma and will be run through turbines located in Texas for the generation of power for sale principally in Texas; the removal of citizens from the 100,000 acres of land will create a "serious social and economic problem," the burden of which will fall on Oklahoma for which no compensation is afforded.

The bill incorporates H. Doc. No. 541, 75th Cong., 3d Sess. (hereinafter called the Report), which contains the War Department's survey and recommendations on the Denison Reservoir and which served as the broad definition of the project which was authorized by the Act of June 28, 1938. The bill alleges that under the statutory scheme flood control and power purposes are "inextricably and inseverably involved." It alleges that, as described in the Report, the first 110 feet of the dam are to be used "solely and exclusively for the development of water-power," while 40 feet "superimposed" on the power reservoir are to be used "solely and exclusively" for flood control. That is to say, from elevation 510 feet (sea level) to 590 feet there is to be a dead storage pool for water-power head, from 595 feet to 620 feet there is to be a water power reservoir, and from 620 feet to 660 feet there is to be a flood-control reservoir. It is alleged that those purposes are "functionally separate and neither is the incidental or necessary result of the other"; that the same part of the reservoir will not and cannot be used for both flood control and waterpower purposes; and that the power portion of the dam is created at the expense of its utilization for flood control. The bill further alleges that as a result of the modification of the statutory plan set forth in the Report the dam is being constructed so as to provide dead storage for water head from 510 feet to 567 feet, a power pool reservoir from 587 feet to 617 feet, and a flood-control reservoir from 617 feet to 640 feet. It is alleged that by reason of that modification the reservoir

will inundate 3,080,000 acre feet for power and 2,745,000 acre feet for flood control, as contrasted to 3,400,000 acre feet for power and 5,900,000 acre feet for flood control under the original plan;³ and that, as a result, the statutory

³ In this connection it is alleged that under the statutory scheme 75% of the height of the dam is for power and 25% for flood control, and 37% of the acre feet inundated is for water storage for power and 63% for flood control, while under the modified plan 82% of the height of the dam is for power and 18% for flood control, and 53% of the acre feet inundated is for water storage for power and 47% for flood control.

The original plan or statutory scheme as set forth in the Report (H. Doc. No. 541, 75th Cong., 3d Sess., p. 45) was described therein as follows:

"The project plan as designed for the combined flood control and power-development scheme with top of dam at elevation 695 is based upon the following allocation of reservoir capacity, the volumes being given in round figures.

"(a) Dead storage.—Stream bed elevation 505 to lower power pool elevation 595, 1,400,000 acre feet.

"(b) Power pool storage.—Elevation 595 to elevation 620, 2,000,000 acre-feet.

"(c) Flood pool storage.—Elevation 620 to crest of spillway, elevation 660, 5,900,000 acre feet.

"(d) Detention flood storage.—Storage above the spillway crest, elevation 660, to the maximum reservoir surface reached by the impounded floodwaters, which in the case of the project flood would be 6,400,000 acre-feet for elevation 687."

Under § 4 of the Act of June 28, 1938, the Secretary of War and the Chief of Engineers were authorized to modify the project as it was described in the Report. A modification has been made. Definite Project for Denison Dam & Reservoir, Red River, Corps of Engineers, U. S. Army (not printed). Those changes were reported to a committee of Congress. Hearings, S. Subcom. on Appropriations, H. R. 6260, 76th Cong., 1st Sess., pp. 25-26, 201. Under the Definite Project (pp. 10-14) the following allocation of reservoir capacity has been made:

(a) *Dead Storage.* Stream bed elevation 505 to lower power pool elevation 587, 1,020,000 acre feet.

scheme has been changed from one preponderantly for flood control to one preponderantly for water power. It is also alleged that no part of the Red River in Oklahoma is navigable.

The bill alleges that the Act under which appellees are proceeding is unconstitutional in that it violates the Tenth Amendment, that it is not within the powers of Congress conferred by Art. I, § 8 of the Federal Constitution, and that since appellees are acting under a void and unconstitutional statute they should be enjoined. By an amendment to its bill, the State of Oklahoma also challenges the constitutionality of § 4 of the Act of October 17, 1940, c. 895, 54 Stat. 1198.⁴ The amended bill alleges that the project "does not in any way protect or improve the navigable portions of the lower reaches of Red river or of the Mississippi river either by enriching the lower water flow . . . as the incidental result of the operation of said flood control and hydroelectric power project, except in the intangible, indirect, inconsequential and unsubstantial way" set forth in the Report; and that such inconsequential and intangible benefits to navigation as may result will flow from the flood control, not the power feature, of the project.

(b) *Power pool storage.* Elevation 587 to elevation 617, 2,060,000 acre feet.

(c) *Flood pool storage.* Elevation 617 to spillway crest, elevation 640, 2,745,000 acre feet.

(d) *Detention flood storage.* Elevation spillway crest, 640, to crest of dam, 670. Appellees on the basis of Definite Project, Appendix A, Plate A-23, place the acre feet at approximately 3,300,000 for elevation 662—the condition which, it is asserted, will exist in case of the maximum probable flood.

⁴That section provides: "The project for the Denison Reservoir on Red River in Texas and Oklahoma, authorized by the Flood Control Act approved June 28, 1938, is hereby declared to be for the purpose of improving navigation, regulating the flow of the Red River, controlling floods, and for other beneficial uses."

By motions to dismiss, the appellees asserted, *inter alia*, that the Acts of Congress so challenged were constitutional and valid. The case was heard by a three-judge court (Act of August 24, 1937, c. 754, § 3, 50 Stat. 751, 28 U. S. C. § 380a) which sustained the Act authorizing the project. 37 F. Supp. 93. From a judgment dismissing the complaint and denying the injunction, a direct appeal was taken to this Court.

We are of the view that the Denison Dam and Reservoir project is a valid exercise of the commerce power by Congress.

This project is a part of a rather recent chapter in the long history of flood control on the Mississippi River.⁵ The Federal Government had concerned itself with the problems of navigation and flood control on that river long before⁶ the establishment of the Mississippi River Commission (21 Stat. 37) in 1879. Earlier efforts towards a more comprehensive flood-control program on a national scale⁷ were accelerated by the disastrous Mis-

⁵ For a summary of various flood-control projects on the lower Mississippi, see Report of the Mississippi Valley Committee of the Public Works Administration (1934), pp. 207 *et seq.*; Elliott, *The Improvement of the Lower Mississippi River for Flood Control & Navigation* (1932), pp. 1-21; Frank, *The Development of the Federal Program of Flood Control on the Mississippi River* (1930); Beman, *Flood Control* (1928).

And see H. Doc. No. 541, 75th Cong., 3d Sess., p. 3; Fly, *The Role of the Federal Government in the Conservation and Utilization of Water Resources*, 86 U. Pa. L. Rev. 274; Kerwin, *Federal Water-Power Legislation* (1926).

For bibliography, see H. Com. Doc. No. 4, 70th Cong., 1st Sess.

⁶ See Elliott, *op. cit.*, pp. 1-21; S. Ex. Doc. No. 20, 32d Cong., 1st Sess.; S. Ex. Doc. No. 8, 40th Cong., 1st Sess.; H. Ex. Doc. No. 127, 43 Cong., 2d Sess. For the history and work of the Mississippi River Commission, see H. Rep. No. 1072, 70th Cong., 1st Sess., pp. 334-354.

⁷ See, for example, the so-called First Flood Control Act of March 1, 1917, c. 144, 39 Stat. 948.

Mississippi flood in 1927. The agitation and concern over that disaster⁸ led to the enactment of the Flood Control Act of May 15, 1928 (45 Stat. 534), § 10 of which provided that the Secretary of War should submit to Congress "at the earliest practicable date projects for flood control on all tributary streams of the Mississippi River system subject to destructive floods which projects shall include: The Red River and tributaries . . ." That section of the Act also required a report on the effect on flood control of the lower Mississippi to be attained through the use of a reservoir system, the "benefits that will accrue to navigation and agriculture" from the prevention of siltage and erosion, the "prospective income from the disposal of reservoired waters," and "inquiry as to the return flow of waters placed in the soils from reservoirs, and as to their stabilizing effect on stream flow as a means of preventing erosion, siltage, and improving navigation." Pursuant to that authorization and direction, a report (H. Doc. No. 378, 74th Cong., 2d Sess.) was submitted on December 2, 1935, dealing at great length with the problems of the Red River and its tributaries, and their relationship with the Mississippi.

On June 22, 1936, there was enacted⁹ the Flood Control Act of 1936 (49 Stat. 1570). Sec. 1 of that Act set

⁸ H. Rep. No. 1072, 70th Cong., 1st Sess.; H. Doc. No. 90, 70th Cong., 1st Sess.; Hearings, H. Comm. on Flood Control, 70th Cong., 1st Sess., on The Mississippi River and its Tributaries; Hearings, S. Comm. on Commerce, 70th Cong., 1st Sess., on Flood Control of the Mississippi River.

And see Hoover, The Improvement of our Mid-West Waterways, 135 Annals, No. 224, p. 15.

⁹ See Hearings, S. Subcom. on Commerce, 74th Cong., 2d Sess., on S. 3531; Hearings, H. Comm. on Flood Control, 74th Cong., 2d Sess., on S. 3531; Hearings, S. Comm. on Commerce, Ex. Sess. 74th Cong., 2d Sess., on H. R. 8455; S. Rep. No. 1963, 74th Cong., 2d Sess.; H. Rep. No. 2918, 74th Cong., 2d Sess.; H. Rep. No. 2583, 74th Cong., 2d Sess.; S. Rep. No. 1662, 74th Cong., 2d Sess.

forth a broad Congressional policy, stating, *inter alia*, that "the Federal Government should improve or participate in the improvement of navigable waters or their tributaries, including watersheds thereof, for flood-control purposes if the benefits to whomsoever they may accrue are in excess of the estimated costs, and if the lives and social security of people are otherwise adversely affected" and that "destructive floods upon the rivers of the United States, upsetting orderly processes and causing loss of life and property, including the erosion of lands, and impairing and obstructing navigation, highways, railroads, and other channels of commerce between the States, constitute a menace to national welfare." That Act authorized the construction of various flood-control projects. By § 7 of that Act the Secretary of War was authorized and directed to continue the investigation of other projects, including the Denison Reservoir, where "opportunities appear to exist for useful flood-control operations with economical development of hydroelectric power whenever sufficient markets to absorb such power become available."

Following the disastrous Ohio River flood in January, 1937, the House Committee on Flood Control requested¹⁰ the Chief of Engineers to submit "comprehensive plans for protective works against floods in the Ohio Valley" and plans "to further insure protection in the Mississippi Valley." He submitted a report pursuant to that direction, and recommended the construction of 45 flood-control reservoirs on the tributaries of the Ohio and 24 on other tributaries of the Mississippi, including the Red River.¹¹ As to the proposed Denison Reservoir, he stated that it "would remove the threat of the coincidence of a

¹⁰ The resolution is set forth in Com. Doc. No. 1, H. Comm. on Flood Control, 75th Cong., 1st Sess., p. 1.

¹¹ Com. Doc. No. 1, *op. cit.*, p. 11.

large flood from the Red with a flood in the Mississippi, and would also afford highly desirable protection to the fertile bottom lands in the lower Red River Valley. Besides its flood-control benefits, it has valuable potentiality for power purposes.”¹² And he added: “On the Red River . . . investigations indicate that a flood far exceeding any of record is distinctly possible. The Denison Reservoir would prevent such a flood from reaching disastrous proportions in the valley below it.”¹³

On March 12, 1938, the Acting Secretary of War transmitted to Congress a report from the Chief of Engineers, United States Army, pursuant to the direction contained in § 7 of the Flood Control Act of 1936. That Report, being the one here involved, (H. Doc. No. 541, 75th Cong., 3d Sess.) recommended the construction of a dam near Denison, Texas, for the combined purpose of flood control and development of hydroelectric power. After hearings,¹⁴ Congress passed the Flood Control Act of 1938, here challenged, which authorized,¹⁵ *inter alia*, the Denison project on the basis of the Report and at an estimated cost of \$54,000,000. This was followed by appropriations for the construction work¹⁶ and by the

¹² Com. Doc. No. 1, *op. cit.*, pp. 7-8.

¹³ Com. Doc. No. 1, *op. cit.*, p. 8. The Chief of Engineers, United States Army, on February 12, 1935, had submitted a special report to the House Committee on Flood Control, entitled Flood-Control Works in the Alluvial Valley of the Mississippi River, Com. Doc. No. 1, 74th Cong., 1st Sess. And see the Message by President Roosevelt to Congress June 3, 1937, 81 Cong. Rec., pt. 5, 75th Cong., 1st Sess., p. 5280.

¹⁴ Hearings, House Comm. on Flood Control on H. R. 10618, 75th Cong., 3d Sess., pp. 605-686.

¹⁵ Sec. 4 of that Act is set forth in part in note 1, *supra*.

¹⁶ Act of June 28, 1939, c. 246, 53 Stat. 856; Act of June 24, 1940, c. 415, 54 Stat. 505. See H. Rep. No. 604, 76th Cong., 1st Sess., p. 4; Hearings, S. Subcom. on Appropriations on H. R. 6260, 76th Cong., 1st Sess., p. 13.

Act of October 17, 1940, also challenged by appellant, declaring the Denison Reservoir to be "for the purpose of improving navigation, regulating the flow of the Red River, controlling floods, and for other beneficial uses."¹⁷ Thus, while the Report spoke of the dam as a "dual purpose" project, Congress did not so limit it but authorized it for multiple purposes.

From this history it is plain that this project, which is part of a comprehensive flood-control plan, is designed to control the watershed of one of the principal tributaries of the Mississippi in alleviation of floods in the lower Red River and Mississippi valleys. The Red River, sixth in length among rivers in the United States, has one of the largest watersheds in the country, draining an area about 50 per cent larger than New England—an area of 91,430 square miles, of which 38,291 square miles are above the dam site.¹⁸ It rises near the east edge of New Mexico, flows easterly about 850 miles across the Texas Panhandle and between the States of Oklahoma and Texas to Fulton, Arkansas. From there it flows south and southeast some 460 miles and enters the Mississippi at Red River Landing. The site of the Denison dam is 228 miles up the river from Fulton. The contribution which the Red River makes to disastrous floods in its basin and in the lower Mississippi has long been recognized. Huge crop damage, the loss of buildings, bridges and livestock, pollution of fertile fields, the erosion of rich farm lands, bank cavings, interruption of navigation, injury of port facilities, the creation of sand bars in the channels, interruption or stoppage of interstate transportation by rail, truck and motorcar, disease, pestilence and death, relief of the homeless and destitute—all these are now familiar costs of the floods on the Missis-

¹⁷ See note 4, *supra*.

¹⁸ Report, p. 17.

ssippi.¹⁹ And the history of the Red River valley shows that it has long been plagued by such disasters and burdened by their costs.²⁰

Floods pay no respect to state lines.²¹ Their effective control in the Mississippi valley has become increasingly a subject of national concern,²² in recognition of the fact

¹⁹ As respects the January, 1937 Ohio River flood, the Chief of Engineers reported in April, 1937: "The river rose to a height of 80 feet above low water at Cincinnati, being nearly 9 feet above any flood heretofore of record. The resulting damage was enormous. Practically every community along the entire river suffered heavy loss. Water, electricity, and gas services were discontinued in many cities. More than 500,000 persons were driven from their homes and suffered great discomfort and distress. Highway and railway communications were severed and business and industrial activities were completely disrupted for several weeks. Relief agencies were taxed to the utmost to provide for the flood refugees. Although the direct damages have not yet been fully ascertained, they may conservatively be estimated at more than \$400,000,000. The War Department expended more than \$5,000,000 in relief work and in providing supplies and materials for the flood areas, and approximately \$5,000,000 for emergency work to protect existing structures. The Works Progress Administration provided labor and services. The relief activities of the American Red Cross aggregated more than \$7,500,000. The expenditures of the Federal Government and of the Red Cross for rehabilitation will add greatly to the expenditures already made." Com. Doc. No. 1, H. Comm. on Flood Control, 75th Cong., 1st Sess., p. 3. And see H. Doc. No. 90, 70th Cong., 1st Sess., p. 2; H. Rep. No. 1072, 70th Cong., 1st Sess.; H. Doc. No. 455, 76th Cong., 1st Sess.; H. Doc. No. 91, 76th Cong., 1st Sess.; H. Rep. No. 616, 64th Cong., 1st Sess.; Thomas, *Hungry Waters* (1937).

²⁰ See H. Doc. No. 378, 74th Cong., 2d Sess., pp. 372 *et seq.*; Report, pp. 29, 70-71, 84-87, 88, 94.

²¹ The flood protection afforded by Denison Reservoir will accrue to four states: two-fifths to Louisiana, and one-fifth each to Oklahoma, Texas, and Arkansas. Report, p. 11. And see Report of the Mississippi Valley Committee of the Public Works Administration (1934).

²² National Resources Board, Report 1934, pp. 26-30, 325-329; National Resources Committee, *Drainage Basin Problems and Programs*

that single states are impotent to cope with them effectively. The methods of dealing with them have elicited a contrariety of views.²³

The idea of reservoir control on the tributaries of the Mississippi is not new. The Ellet report²⁴ to the War Department in 1852 urged the making of surveys for the installation of reservoirs on the Red River and other tributaries which would serve the "double purpose" of "keeping back the floods" and relieving "summer navigation from obstruction, by allowing the surplus so retained, to pass down in the season of low water."²⁵ The emergence in recent years of comprehensive plans for reservoirs in the Mississippi river basin²⁶ marks the development of an integrated system designed not only to alleviate, ultimately, flood conditions on the Mississippi itself, but also to avoid or reduce local flood disasters. A part of the local benefits of flood control is frequently

(1936), pp. 73-77; H. Doc. No. 306, Ohio River, 74th Cong., 1st Sess.; S. Rep. No. 891, 64th Cong., 2d Sess.

On forest and flood relationships in the Mississippi river watershed, see H. Doc. No. 573, 70th Cong., 2d Sess., pp. 57 *et seq.* S. Doc. No. 12, 73d Cong., 1st Sess., pp. 299 *et seq.*; pp. 1509 *et seq.*

²³ H. Rep. No. 1072, 70th Cong., 1st Sess., pp. 5-16. And see *United States v. Sponenbarger*, 308 U. S. 256; H. Doc. No. 90, 70th Cong., 1st Sess.; S. Doc. No. 1094, 62d Cong., 3d Sess.; S. Rep. No. 1662, 74th Cong., 2d Sess.; H. Rep. No. 2583, 74th Cong., 2d Sess.

²⁴ S. Ex. Doc. No. 20, 32d Cong., 1st Sess., pp. 13, 99, *et seq.* And see the review of the ideas for reservoirs contained in Final Report, National Waterways Commission, S. Doc. No. 469, 62d Cong., 2d Sess., App. II; National Waterways Comm., Doc. No. 14, Jan. 1910; H. Doc. No. 1289, 62d Cong., 3d Sess.

²⁵ S. Ex. Doc. No. 20, 32d Cong., 1st Sess., p. 102.

²⁶ See H. Doc. No. 259, 74th Cong., 1st Sess.; Nat. Res. Com., Drainage Basin Problems and Programs (1938); H. Doc. No. 798, 71st Cong., 3d Sess., Vol. 2; H. Rep. No. 1072, 70th Cong., 1st Sess., pp. 101-109; H. Doc. No. 395, 73d Cong., 2d Sess., Pt. 5; H. Rep. No. 1100, 70th Cong., 1st Sess., p. 14; H. Rep. No. 1120, 75th Cong., 1st Sess.

protection of navigation in the tributary itself. That is present here to a degree. It is true that "no part of the [Red] river within Oklahoma is navigable." *Oklahoma v. Texas*, 258 U. S. 574, 591. Though appellant alleged that the stream is not now a navigable river of the United States, it has heretofore been authoritatively determined that in years past "the usual head of navigation" was Lanesport, Arkansas, near the Oklahoma boundary. *Id.*, p. 589. At the present time, commerce on the Red River is limited to the section below Alexandria, Louisiana, 122 miles above its mouth.²⁷ The fact that portions of a river are no longer used for commerce does not dilute the power of Congress over them. *Economy Light & Power Co. v. United States*, 256 U. S. 113, 123; *United States v. Appalachian Power Co.*, 311 U. S. 377, 409-410. And it is clear that Congress may exercise its control over the non-navigable stretches of a river in order to preserve or promote commerce on the navigable portions. *United States v. Rio Grande Dam & Irrigation Co.*, 174 U. S. 690, 703, 706, 708; *United States v. Utah*, 283 U. S. 64, 90. It is obvious that, at least incidentally, Congress has done precisely that in this case. Congress was not unmindful of the effect of this project on the navigable capacity of the river. In authorizing it, Congress exercised all the power it possessed to control navigable waters. The Acts in question contain a declaration that one of their purposes is to improve navigation. And the Report clearly shows that the Denison Reservoir will have at least an incidental effect in protecting or improving the navigability of portions of the Red River. The District Engineer reported that "Inasmuch as any new navigation system for the Red River would require flow regulation to furnish a dependable navigable improvement, the Denison

²⁷ Report, pp. 2-3; and see p. 65.

Reservoir would be of considerable benefit.”²⁸ In his view, it would decrease bank caving and silt carriage, substitute “moderately high stages of long durations for high-flood stages of short duration,” “furnish more dependable navigable stages especially in the upper portions of the navigation pools,”²⁹ and have a “favorable effect on open-channel navigation by reducing flood stages and increasing low-water flows.”³⁰ The Division Engineer expressed the view that a “dependable low-water flow of 2,200 to 3,000 cubic feet per second which would result from construction and operation of the power project at Denison would be of distinct benefit to the small commerce now developed upon those reaches of the lower Red River which are included in approved navigation projects, and might have a material bearing upon future studies of the Red River with a view to its further improvement. In the present state of knowledge upon this point, it is necessary to classify these benefits among the intangibles. But there is no doubt that a dependable low water supply would simplify, perhaps materially, such future development of the river as may be undertaken.”³¹ Thus the effect on the river is tangible, though the value may be uncertain³² since it de-

²⁸ Report, p. 67. And see p. 72.

²⁹ *Id.*, p. 67.

³⁰ *Id.*, p. 68.

³¹ Report, pp. 79-80. The initial project for improvement of navigation on the Red River was authorized in 1828. Federal expenditures to June 30, 1936, exceeded \$4,000,000. *Id.*, p. 3.

³² As to the intangible benefits from flood control see H. Doc. No. 455, 76th Cong., 1st Sess., entitled Value of Flood Height Reduction from Tennessee Valley Authority Reservoirs to the Alluvial Valley of the Lower Mississippi River; H. Doc. No. 91, 76th Cong., 1st Sess., pp. 22 *et seq.*, entitled The Chattanooga Flood Control Problem; Cooke, On the Relations of Engineering Science to Flood Control, 84 Science (Supp.) 40.

pends in part on future action of Congress. But that is not our concern.

We would, however, be less than frank if we failed to recognize this project as part of a comprehensive flood-control program for the Mississippi itself. But there is no constitutional reason why Congress or the courts should be blind to the engineering prospects of protecting the nation's arteries of commerce through control of the watersheds. There is no constitutional reason why Congress cannot, under the commerce power, treat the watersheds as a key to flood control on navigable streams and their tributaries. Nor is there a constitutional necessity for viewing each reservoir project in isolation from a comprehensive plan covering the entire basin of a particular river. We need no survey to know that the Mississippi is a navigable river. We need no survey to know that the tributaries are generous contributors to the floods of the Mississippi. And it is common knowledge that Mississippi floods have paralyzed commerce³³ in the affected areas and have impaired navigation itself. We have recently recognized that "Flood protection, watershed development, recovery of the cost of improvements through utilization of power are . . . parts of commerce control." *United States v. Appalachian Power Co.*, *supra*, p. 426. And we now add that the power of flood control extends to the tributaries of navigable streams. For, just as control over the non-navigable parts of a river may be essential or desirable in the interests of the navigable portions,

³³ As respects benefits from flood height reduction to railroads and highways, see H. Doc. No. 455, 76th Cong., 1st Sess., pp. 21-27; Report, App. H. (not printed) §§ 8-10, 16; H. Doc. No. 378, 74th Cong., 2d Sess., pp. 35-36, 264-265, 372-373; H. Rep. No. 1072, 70th Cong., 1st Sess., pp. 224-228, 246-248; Hearings, S. Comm. on Commerce, Ex. Sess., 74th Cong., 2d Sess., on H. R. 8455, pp. 71-72, 307. For a full account of flood damage to railroads see: Bull., Amer. Ry. Eng. Assn. (1928) Vol. 29, No. 303, pt. 2.

so may the key to flood control on a navigable stream be found in whole or in part in flood control on its tributaries. As repeatedly recognized by this Court from *M'Culloch v. Maryland*, 4 Wheat. 316, to *United States v. Darby*, 312 U. S. 100, the exercise of the granted power of Congress to regulate interstate commerce may be aided by appropriate and needful control of activities and agencies which, though intrastate, affect that commerce.

It is, of course, true that the extent to which this project will alleviate flood conditions in the lower Mississippi is somewhat conjectural. The District Engineer estimated that the Denison project would cause a reduction of 35,000 cubic feet per second in the lower Mississippi in case the May, 1908, flood were repeated; 8,000 cubic feet per second, in case of the May, 1935, flood; and 100,000 cubic feet per second, in case of the estimated maximum probable flood.³⁴ But the Division Engineer pointed out that "the magnitude of the effect would depend upon the size and origin of the concurrent flood in Red River, and upon the basis of reservoir operation."³⁵ In his view, a reduction in flow of 35,000 cubic feet per second in case of such a flood as 1908 "if long enough sustained, would imply a reduction in stage averaging 1.3 feet between Alexandria and Moncla, and a reduction of 0.15 foot in the flow lines of the Atchafalaya Basin and the main river below Old River, provided they were at peak stage. At lower stages the effect would be greater, but less necessary."³⁶ This matter was again reviewed in the Definite Project and the following observations were made:³⁷ "Floods in the Missis-

³⁴ Report, p. 74. Cf. H. Doc. No. 798, 71st Cong., 3d Sess., Vol. 2, Annex 18, pp. 1496-1498.

³⁵ Report, p. 86.

³⁶ *Id.*, p. 86.

³⁷ Definite Project, App. D., p. 7. As respects the relation of the Mississippi River as a commerce carrier to flood control, see H. Rep. No. 1072, 70th Cong., 1st Sess., p. 359.

Mississippi River usually occur in the spring as a result of flood flows out of the Ohio River. The coincidence of flood flows out of the Red River with the Mississippi River spring floods is rare. However, the early summer floods out of the Missouri River occasionally coincide in the Mississippi River with the summer floods out of the Red River. The control provided by the proposed Denison Dam and Reservoir on the Red River summer floods has been estimated to produce a reduction of approximately 0.6 foot at the mouth of Old River on the Mississippi. This reduction, while not substantial with respect to Mississippi flood stages, is important when flood crests seriously tax the Mississippi levee system."

Such matters raise not constitutional issues but questions of policy. They relate to the wisdom, need, and effectiveness of a particular project. They are therefore questions for the Congress, not the courts. For us to inquire whether this reservoir will effect a substantial reduction in the lower Mississippi floods would be to exercise a legislative judgment based on a complexity of engineering data. It is for Congress alone to decide whether a particular project, by itself or as part of a more comprehensive scheme, will have such a beneficial effect on the arteries of interstate commerce as to warrant it. That determination is legislative in character. Cf. *United States v. Appalachian Power Co.*, *supra*, p. 424. The nature of the judgment involved is reemphasized if this project is viewed not in isolation but as part of a comprehensive, integrated reservoir system in the Mississippi River basin. A War Department survey in 1935 reveals promising engineering prospects in a system of 157 reservoirs³⁸ throughout the tributaries of the Mississippi. To say that no one of those projects could be constitutionally authorized because its separate effect on floods in

³⁸ H. Doc. No. 259, 74th Cong., 1st Sess.

the Mississippi would be too conjectural would be to deny the actual or potential aggregate benefits of the integrated system as a whole. That reveals the necessity, from the constitutional viewpoint, of leaving to Congress the decision as to what watersheds should be controlled (and what methods should be employed) in order to protect the various arteries of interstate commerce from the disasters of floods.

Nor is it for us to determine whether the resulting benefits to commerce as a result of this particular exercise by Congress of the commerce power outweigh the costs of the undertaking. *Arizona v. California*, 283 U. S. 423, 456-457; *Ashwander v. Tennessee Valley Authority*, 297 U. S. 288, 329-330. Nor may we inquire into the motives of members of Congress who voted for this project, in an endeavor to ascertain whether their concern over the great national loss from soil erosion, the enormous crop damages, the destruction of homes, the loss of life and other like ravages of floods, overshadowed in their minds the desirability of protecting the Mississippi and other arteries of commerce. *Arizona v. California, supra*, p. 455, and cases cited. It is sufficient for us that Congress has exercised its commerce power, though other purposes will also be served. *Id.*, p. 456.

But Oklahoma points out that the Denison Reservoir is a multiple-purpose project,³⁹ combining functionally and physically separate and unrelated purposes. It says that only the top 40 feet of the dam is set apart for flood control and that the lower portions of the dam are designed for the power project and are neither useful nor necessary for flood control. It points out from the Report⁴⁰ that a reservoir for flood control only would have

³⁹ On functional aspects of multiple-purpose dams, see note 45, *infra*.

⁴⁰ P. 42. In this connection, it should be noted that the District Engineer recommended that a dam for flood control only would be

a maximum height of 165 feet, while a reservoir for flood control and power development would require a maximum height of 185 feet. It therefore earnestly contends that the additional 20 feet in height of the dam requires a very much greater acreage of appellant's domain than would a project for flood control only. And it insists that Congress is without authority to authorize a taking of Oklahoma's domain for the construction of the water power feature of the project.

There are several answers to these contentions. We are not concerned here with the question as to the authority of the federal government to establish on a non-navigable stream a power project which has no relation to, or is not a part of, a flood-control project. While this reservoir is a multiple-purpose project, it is basically one for flood control. There is no indication that but for flood control it would have been projected. It originated as part of a comprehensive program for flood control. And the recommendation in the Report that a dual purpose dam be constructed was based "on the assumption that the flood-control project is to be built in any event."⁴¹ See *United States v. Chandler-Dunbar Co.*, 229 U. S. 53, 73. Furthermore, it is plain from the Report that the construction of the project so as to accommodate power will increase or augment some of the flood-control benefits, including river flow, which would accrue were the dam to be erected for flood control only. Thus, the District Engineer stated: "If it were con-

at elevation 675, while the multiple-purpose dam would be at elevation 695. Report, p. 42. The Division Engineer, however, stated that a restudy indicated "that in the case of the flood-control-only project greater economy would result from narrowing the spillway to 1500 feet and raising the crest of the dam to elevation 681 feet." *Id.*, p. 80.

⁴¹ P. 94.

structed solely for flood control it would have beneficial effects in reducing floods, decreasing bank caving and silt carriage, and in substituting moderately high stages of long durations for high-flood stages of short duration. If the Denison Reservoir were constructed for the dual purposes of flood control and power development, these beneficent effects would be augmented by those resulting from the regulated power discharge which would increase low-water flows and furnish more dependable navigable stages especially in the upper portions of the navigation pools.”⁴²

It is true that the power phase of this project in purpose and effect will carry some of the costs of flood control. The Division Engineer estimated that the annual deficit of \$287,000 from flood control would be offset by an annual profit of \$404,310 from power, leaving an annual net profit of \$117,000.⁴³ But the fact that Congress has introduced power development into this project as a paying partner⁴⁴

⁴² Report, p. 67.

⁴³ *Id.*, p. 94.

⁴⁴ As stated in Report of the Mississippi Valley Committee of the Public Works Administration (1934), p. 23:

“Navigation is particularly benefited by reduction of flood crests, and all of the possibilities of water use are improved by increases in flow at extreme low stages. Under certain favorable circumstances it may be possible to release water from flood-control reservoirs to satisfy requirements for hydroelectric power development at the dam, or to regulate the flow down stream to the advantage of a variety of water uses. In such cases equitable distribution of costs among the several purposes served may even sufficiently reduce the costs chargeable to flood protection to warrant the construction of flood-control reservoirs which could not be justified for flood protection alone.”

And see Fly, *The Role of the Federal Government in the Conservation and Utilization of Water Resources*, 86 U. Pa. L. Rev. 274, 286 *et seq.*; Message by President Taft, August 24, 1912, 48 Cong. Rec., pt. 11, 62d Cong., 2d Sess., p. 11796, vetoing a bill authorizing the building of a dam across Coosa River, Alabama, by a private company; S. Doc. No. 246, 64th Cong., 1st Sess.

does not derogate from the authority of Congress to construct the dam for flood control, including river flow. The power project is not unrelated to those purposes.⁴⁵ The allocations of cost⁴⁶ and storage between power and flood control, however significant for some purposes, cannot conceal the flood-control realities of this total project. Cost of the power project, roughly speaking, was determined by the cost of the multiple-purpose dam less the cost of a dam for flood control only.⁴⁷ On that basis the Report points out that the cost of storage for flood control only (5,800,000 acre-feet) is about \$6.60 per acre-foot, while the cost of the 3,500,000 acre-feet in the so-called power pool is around \$2 per acre-foot, exclusive of the cost of the powerhouse and appurtenant construction.⁴⁸ In this connection, the Definite Project states that the "amount of storage which can be economically allocated to the production of power depends on the ability of the power market to absorb the power during the useful life of the project."⁴⁹ But the Division Engineer observed that

⁴⁵ On the relationships between the multiple purposes of water control see Report of the Mississippi Valley Committee of the Public Works Administration (1934), pp. 20-24; Alvord & Burdick, *Relief from Floods* (1918), pp. 28-36; Clemens, *The Reservoir as a Flood-Control Structure* (1935), 100 *Am. Soc. of Civ. Engs.* 879; H. Doc. No. 1792, 64th Cong., 2d Sess., p. 5.

And see *Nat. Res. Com., Water Planning* (1938); *Nat. Res. Com., Energy Resources & National Policy* (1939), p. 306.

⁴⁶ Cf. Hamilton, *Cost as a Standard for Price*, 4 *Law & Cont. Problems* (1937), 321, 325.

⁴⁷ Report, pp. 60, 64.

⁴⁸ Report, p. 82.

⁴⁹ Definite Project, p. 11. The District Engineer stated in the Report, p. 32: "A hydroelectric development alone at the Denison Reservoir site could not absorb all of the reservoir costs and produce power in competition with that from fuel-consuming plants. However, the combination of flood control and power development in the Denison Reservoir presents certain promise of favorable economic feasibility.

"In actual operation of the dual-purpose project this cheap storage would be dedicated to flood control, whereas in the financial set-up it is credited to power."⁵⁰ It is clear from the Report⁵¹ and the Definite Project, that the bottom pool of dead storage is designed to take care of the deposit of silt "which would otherwise reduce the efficiency and economic worth of the flood control storage."⁵² At the same time, it will effectively provide waterpower head. And so far as the power storage is concerned, the Definite Project makes plain that it is functionally related to the broad objectives of flood control. The operation of the reservoir will involve a consideration of its multiple purposes.⁵³ Its operation in periods of drought so as to regularize the flow below the dam;⁵⁴ the reduction in reservoir outflow in case of floods down the valley; the increase of the outflow, in case of impending floods from above the dam, to the maximum "bank full capacity downstream of the dam, so that the maximum amount of flood control storage will be available when the peak of the

Although this reservoir would approach economic justification if constructed exclusively for flood control, the income from power developed in conjunction with flood control would in part absorb this deficiency since the value of the available power would be somewhat in excess of its cost. It is apparent that the relative amounts of annual return, flood benefits, or power revenues, from each of the two functions of a dual-purpose development are quantitatively dependent upon the manner in which storage potentialities of the site are apportioned between these two functions. It is believed, however, that an increased allocation of such storage to flood control at the expense of power would not materially alter the above conclusion except perhaps to show economic deficiencies for both phases of the development."

⁵⁰ Report, p. 82.

⁵¹ *Id.*, pp. 45-46.

⁵² Definite Project, pp. 10-11, App. F., p. 5. And see Hearings, H. Comm. on Flood Control, 75th Cong., 3d Sess., p. 641.

⁵³ Definite Project, p. 26.

⁵⁴ *Id.*, App. F., p. 7; Report, p. 67.

flood reaches the reservoir, thereby reducing the peak outflow of the reservoir to a minimum"⁵⁵—these are ample evidence that the power features and the flood-control features of the dam, including river flow, are not unrelated. They demonstrate that, in operation of the dam, the several functions will be interdependent, and that the conflicts between the respective requirements of flood control and power development are here more apparent than real.⁵⁶ They show that this is nonetheless a flood-control project which will "fully control the maximum flood of record,"⁵⁷ though power, it is hoped, will pay the way. Whether the work of flood-control, including river flow, would be better done by a dam of one design or another is for Congress to determine. And, as we have said, the

⁵⁵ Definite Project, pp. 26, 12.

⁵⁶ It was noted in Nat. Res. Com., Energy Resources & National Policy (1939), p. 276, that:

"The most obvious and most discussed conflict of purpose in use of water resources relates to flood control and power. Since flood control is of great urgency in so many basins, one may appear to demolish all concept of wisdom in production of water power by the pat observation that an empty reservoir will not run turbines and a full reservoir will not catch floods. With respect to a particular reservoir, the observation is in point, but it is not thereby conclusive. That one reservoir might be reserved for flood control and another on the same stream used for power probably stumps no one. Neither should it stump anyone that part of a single reservoir be reserved for flood and part be used for power. Indeed, it would often cost less to provide flood-control space in the same reservoir with power space than to build a separate reservoir. And it should not be forgotten that storage to prevent the ordinarily low flow of dry seasons is itself flood prevention in that better sustained ordinary flow tends to maintain clear channels. If the conflict really were irreconcilable, we should be forced to abolish private water-power plants on every stream system requiring flood control. If private power and public flood control may harmonize, one may believe the same of public power and public flood control."

And see *The Norris Project* (1940), ch. 8.

⁵⁷ Report, p. 88.

fact that ends other than flood control will also be served, or that flood control may be relatively of lesser importance, does not invalidate the exercise of the authority conferred on Congress. *Kaukauna Water Power Co. v. Green Bay & Mississippi Canal Co.*, 142 U. S. 254, 275, 276; see *In re Kollock*, 165 U. S. 526, 536; *Weber v. Freed*, 239 U. S. 325, 329-330; *Arizona v. California*, *supra*, p. 456.

The Tenth Amendment does not deprive "the national government of authority to resort to all means for the exercise of a granted power which are appropriate and plainly adapted to the permitted end." *United States v. Darby*, *supra*, p. 124, and cases cited. Since the construction of this dam and reservoir is a valid exercise by Congress of its commerce power, there is no interference with the sovereignty of the state.⁵⁸ *United States v. Appalachian Power Co.*, *supra*, p. 428. The fact that land is owned by a state is no barrier to its condemnation by the United States. *Wayne County v. United States*, 53 Ct. Cls. 417, *aff'd* 252 U. S. 574. There is no complaint that any property owner will not receive just compensation for the land taken. The possible adverse effect on the tax revenues of Oklahoma as a result of the exercise by the Federal Government of its power of eminent domain is no barrier to the exercise of that power. "Whenever the constitutional powers of the federal government and those of the state come into conflict, the latter must yield." *Florida v. Mellon*, 273 U. S. 12, 17. Nor can a state call a halt to the exercise of the eminent domain power of the federal government because the subsequent flooding of the land taken will obliterate its boundary. And the suggestion that this project interferes with the state's own program for water development and conserva-

⁵⁸ The government concedes that there will be no loss of political jurisdiction over the lands taken except with the consent of the state. Art. 1, § 8, clause 17 of the Constitution.

tion is likewise of no avail. That program must bow before the "superior power" of Congress. *United States v. Rio Grande Dam & Irrigation Co.*, *supra*, p. 703; *New Jersey v. Sargent*, 269 U. S. 328, 337; *Arizona v. California*, 298 U. S. 558, 569; *United States v. Appalachian Power Co.*, *supra*.

Affirmed.

