4/03 &
9-29-05

INFORMATION REGARDING NAVIGABILITY OF SELECTED U.S. WATERCOURSES

The Little Missouri River (North Dakota) viewed from the CCC Shelter in the North Unit of Theodore Roosevelt National Park.

Submitted by
Salt River Valley Water Users' Association and
Salt River Project Agricultural Improvement and Power District
to the
Arizona Navigable Stream Adjudication Commission
for purposes of the navigability hearings on the
Lower Salt River
April 2003

SALMON, LEWIS & WELDON, P.L.C.
M. Byron Lewis
John B. Weldon, Jr.
Mark A. McGinnis
2850 East Camelback Road, Suite 200
Phoenix, AZ 85016
Phone: (602) 801-9060
Fax: (602) 801-9070

017

TABLE OF CONTENTS

TABLE OF CONTENTS

Arkansas River—Oklahoma

Reported Decision: Brewer- Elliott Oil & Gas Co. v. United States, 260 U.S. 77 (1922)

Reach at Issue: Stretch near Osage Reservation

Judicial Determination: Non-navigable

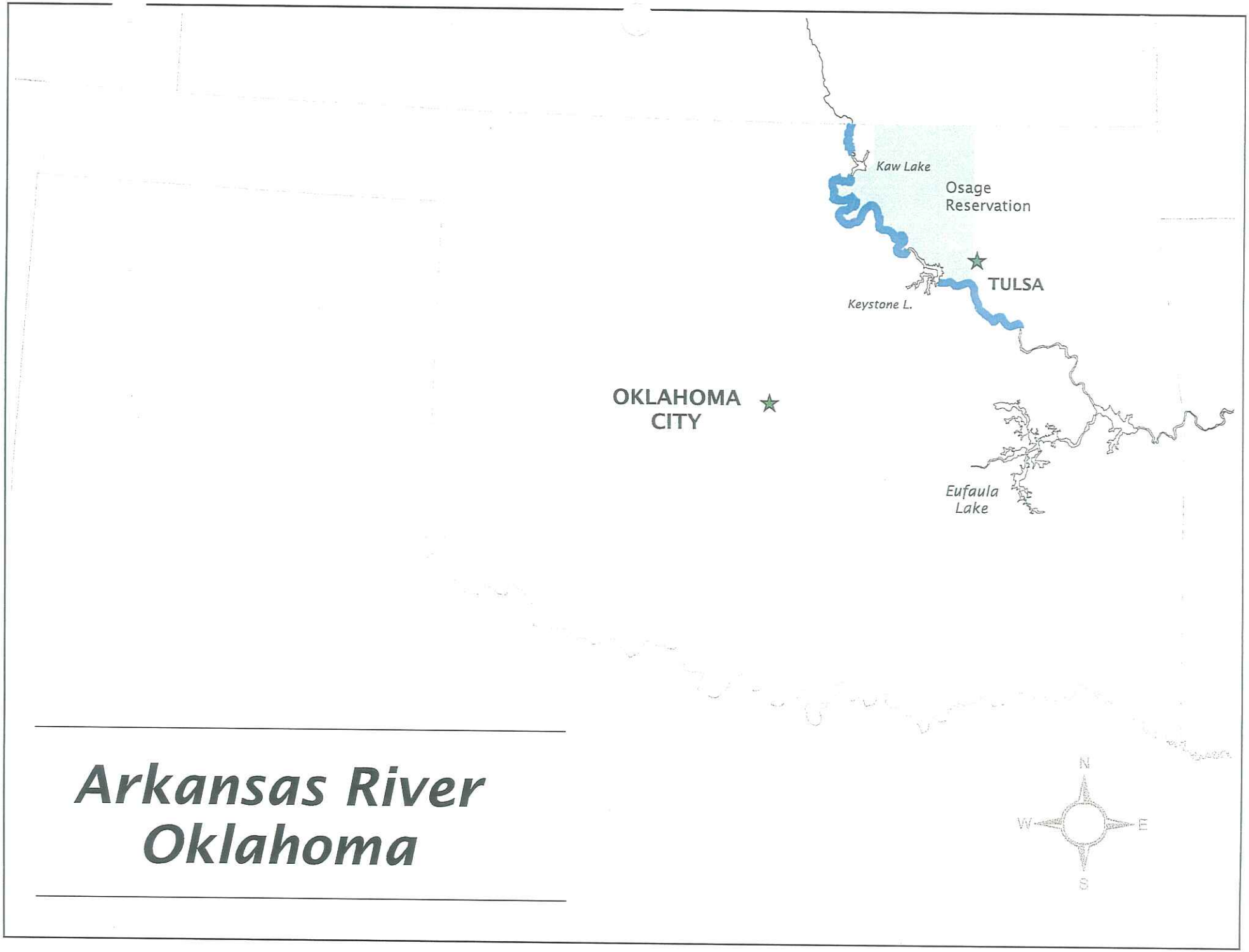
Facts Reported in Decision:

"Voluminous testimony was introduced in the District Court upon the issue of navigability. That court considered it all with evident care and had no difficulty in reaching the conclusion that the Arkansas River along the Osage Reservation was not, and had never been, navigable within the adjudged meaning of that term, and that the head of navigation is and was the mouth of the Grand river, near which was Fort Gibson, and this is a number of miles below the reservation." 260 U.S. at 86.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Tulsa, OK	7,561	1926-1999
Haskell, OK	11,018	1973-1999



Arkansas River
Oklahoma

REPORTED DECISION

Supreme Court of the United States.

BREWER-ELLIOTT OIL & GAS CO. et al.
v.
UNITED STATES.

No. 52.

Argued Oct. 12 and 13, 1922.
Decided Nov. 13, 1922.

Appeal from the United States Circuit Court of Appeals for the Eighth Circuit.

Suit by the United States against the Brewer-Elliott Oil & Gas Company and others. A decree for the government was affirmed by the Circuit Court of Appeals (270 Fed. 100), and defendants appeal. Affirmed.

West Headnotes

Indians 12
209k12 Most Cited Cases

Under Act June 5, 1872, 17 Stat. 228, granting to the Osage Indians a tract of land described as bounded by the main channel of the Arkansas river, Acts March 3, 1873, 17 Stat. 530, and March 3, 1883, 22 Stat. 603, 624, appropriating money to be paid to the Cherokee Indians for such lands and the conveyance thereof by the Cherokee Indians, the title to the river bed is to be determined by the language of the act of 1872; the meaning of the deed being interpreted in the light of the acts in pursuance of which it was made and especially the act of 1872.

Indians 12
209k12 Most Cited Cases

Act June 5, 1872, 17 Stat. 228, granting a described tract of land to the Osage Indians under which they took possession, was sufficient to vest in them good title to the land described without a subsequent deed to the United States made by the Cherokee Indians.

Navigable Waters 1(3)
270k1(3) Most Cited Cases

A "navigable river" is one used or susceptible of being used in its ordinary condition as a highway for commerce over which trade and travel is, or may be, conducted in the customary modes of trade and travel on water, and the mode by which commerce is conducted thereon, or the difficulties attending navigation, is not conclusive.

Navigable Waters 36(1)
270k36(1) Most Cited Cases

The declared purpose of the Louisiana Purchase Treaty with France that statehood should be ultimately conferred on the inhabitants of the territory purchased did not affect the power of the government to make grants of land below high-water mark of navigable waters in any territory, when necessary to carry out public purposes appropriate to the objects for which the United States held the territory.

Public Lands 114(1)
317k114(1) Most Cited Cases

Where the United States has not in any way provided otherwise, the ordinary incidents attaching to a title traced to a patent under the public land laws may be determined according to local rules, provided such rules do not impair the efficacy of the grant or the use and enjoyment of the property by the grantee.

Waters and Water Courses 89
405k89 Most Cited Cases

As the Arkansas river along the Osage Indian Reservation was not and never had been navigable, Act June 5, 1872, 17 Stat. 228, granting to the Osage Indians a tract of land described as bounded by the main channel of such river, included the bed of the river as far as the main channel.

Waters and Water Courses 89
405k89 Most Cited Cases

When Oklahoma came into the Union, she took sovereignty over public lands in the condition of ownership as they were then, and, if the bed of a nonnavigable stream had then become the property of Indians under a grant from the United States, there was nothing in the admission of Oklahoma into a constitutional equality of power with other states divesting such title.

Waters and Water Courses 89
405k89 Most Cited Cases

Under the constitutional rule of equality of a state

with others upon its admission into the Union, the courts or Legislature of a state cannot, in dealing with the general subject of beds of streams, adopt a retroactive rule for determining navigability which would destroy a title already accrued under federal law and grant or would enlarge what actually passed to the state at the time of her admission.

****61 *79** Messrs. W. A. Ledbetter, S. P. Freeling, H. L. Stuart, and E. E. Blake, all of Oklahoma City, Okl., for appellants.

Mr. Assistant Attorney General Riter, for the United States.

Mr. Chief Justice TAFT delivered the opinion of the Court.

This is an appeal from a decree of the Circuit Court of Appeals of the Eighth Circuit affirming that of the District Court for Western Oklahoma. The bill in equity was filed by the United States for itself and as Trustee for the Osage Tribe of Indians, against the Brewer-Elliott Oil & Gas Company, and five other such companies, lessees, under oil and gas leases granted by the state of Oklahoma, of portions of the bed of the Arkansas river, opposite the Osage Reservation in that state. It averred that the river bed thus leased belonged to the Osages, and not to Oklahoma, and that the leases were void, that the defendants were prospecting for, and drilling for, oil in the leased lots in the river bed and were erecting oil derricks and other structures therein, and prayed for the cancelling of the leases, the enjoining of defendants from further operations under their leases, and a quieting of the title to the premises in the United States as trustee.

The state of Oklahoma intervened by leave of Court and in its answer denied that the Osage Tribe or the United States as its trustee owned the river bed of which these lots were a part, but averred that it was owned by the state in fee. The other defendants adopted the answer of the state.

After a full hearing and voluminous evidence, the District Court found that at the place in question the Arkansas river was, and always had been, a nonnavigable ***80** stream, that by the express grant of the government, made before Oklahoma came into the Union, the Osage Tribe of Indians took title in the river bed to the main channel and still had it. It entered a decree as prayed in the bill. The Curcuit Court of Appeals held that whether the river was navigable or nonnavigable, the United States, as the owner of the territory through which the Arkansas flowed before statehood, had the right to dispose of the river bed, and had done so, to the Osages. It also concurred in the finding of the District Court that the Arkansas at this place was, and always had been, nonnavigable, and that the United States had the right to part with the river bed to the Osage Tribe when it did so. It affirmed the decree.

The Osage Tribe derived title to their reservation from the Act of Congress of June 5, 1872, entitled an act to confirm to the Great and Little Osage Indians a reservation in the Indian Territory (17 Stat. 228). The Act with its recitals is printed in the margin. [FN1] The de scription ***81** of the tract conveyed is:

> 'Bounded on the east by the ninety-sixth meridian, on the south and west by the north ****62** line of the Creek country, and the main channel of the Arkansas river, and on the north by the south line of the state of Kansas.'

The Act of March 3, 1873 (17 Stat. 530, 538), directed the Secretary of the Treasury to transfer $1,650,600 from Osage funds to pay for lands purchased by the Osages from the Cherokees. The Act of March 3, 1883 (22 Stat. 603, 624), appropriated $300,000 to be paid to the Cherokees for this and other lands on condition of their executing a proper deed. The conveyance from the Cherokees to the United States in trust for the Osages recites the Cherokee Treaty of 1866 (14 Stat. 799), the ***82** Acts of June 5, 1872, March 3, 1873, and March 3, 1883, and conveys to the United States the tract of country described in the Act of June 5, 1872, except that, instead of its being bounded by the main channel of the Arkansas river, it is described as townships and fractional townships, 'the fractional townships being on the left bank of the Arkansas river.' The deed purports to be executed under authority of an act of the Cherokee Nation, which directed a deed under the Act of March 3, 1883, requiring conveyance, satisfactory to the Secretary of the Interior, to the United States in trust for the Osages now occupying said tract, 'as they occupy the same.'

[1][2] We have no doubt that the title to the river bed is to be determined by the language of the Act of June 5, 1872, ***83** and that the meaning of the Cherokee deed is to be interpreted not as if its words stood alone but in the light of the acts of Congress in pursuance of which it was made, and especially of the Act of 1872, under which the Osages took possession, and which was enough to vest in them

good title to the land described therein without the deed of 1883. Choate v. Trapp, 224 U. S. 665, 673, 32 Sup. Ct. 565, 56 L. Ed. 941; Jones v. Meehan, 175 U. S. 1, 10, 20 Sup. Ct. 1, 44 L. Ed. 49; Francis v. Francis, 203 U. S. 233, 237, 238, 27 Sup. Ct. 129, 51 L. Ed. 165.

Coming then to consider the effect of the words of the Act of 1872 in bounding the Osage reservation 'by the main channel of the Arkansas river,' we are met by the argument that the United States had no power to grant the bed of the Arkansas river, a navigable stream, to the Indians, because it held title to it only in trust to convey it to the states to be formed out of the Louisiana Purchase which when admitted to the Union must, in order to be equal in power to the other states, be vested with sovereign rights over the beds of navigable waters and streams. The case of Pollard's Lessee v. Hagan, 3 How. 212, 11 L. Ed. 565, is cited to sustain this proposition. That was a case where a Spanish claimant of land under navigable waters in Alabama, seeking to establish title against the state, relied on a confirmation **63 of an invalid Spanish grant by the United States enacted after Alabama became a state. Such a confirmation was held to be ineffective against the sovereign title of the state. The language of Mr. Justice McKinley, who spoke for the court, fully sustains the argument made here that even before statehood, the United States was without power to convey title to land under navigable water and deprive future states of their future ownership. Such a view was not necessary, however, to the case before the court and has since been qualified by the court through Chief Justice Taney in Goodtitle v. Kibbe, 9 How. 471, 478, 13 L. Ed. 220. Ward v. Race Horse, 163 U. S. 504, 16 Sup. Ct. 1076, 41 L. Ed. 244, relied on by counsel for appellants, *84 does not sustain their contention. The gist of the court's holding there was that a right to hunt upon the unoccupied lands of the United States so long as game might be found thereon granted by the United States in an Indian treaty made before the statehood of Wyoming was not to be construed as intended to continue thereafter or to give immunity from the Wyoming game laws.

The whole subject has been clarified after the fullest examination of all the authorities in a most useful opinion by Mr. Justice Gray, speaking for the court in Shively v. Bowlby, 152 U. S. 1, 14 Sup. Ct. 548, 38 L. Ed. 331. On page 47 of 152 U. S., on page 565 of 14 Sup. Ct. (38 L. Ed. 331), the learned Justice says:

> 'VIII. Notwithstanding the dicta contained in some of the opinions of this court, already quoted, to the effect that Congress has no power to grant any land below high-water mark of navigable waters in a territory of the United States, it is evident that this is not strictly true.'

And he then reviews the cases and thus states the court's conclusion (152 U. S. 48, 14 Sup. Ct. 566, 38 L. Ed. 331):

> 'We cannot doubt, therefore, that Congress has the power to make grants of lands below high-water mark of navigable waters in any territory of the United States, whenever it becomes necessary to do so in order to perform international obligations, or to effect the improvement of such lands for the promotion and convenience of commerce with foreign nations and among the several States, or to carry out other public purposes appropriate to the objects for which the United States hold the territory.
>
> 'IX. But Congress has never undertaken by general laws to dispose of such lands. And the reasons are not far to seek. * * *
>
> 'The Congress of the United States, in disposing of the public lands, has constantly acted upon the theory that those lands, whether in the interior, or on the coast, above high-water mark, may be taken up by actual occupants, in *85 order to encourage the settlement of the country; but that the navigable waters and the soils under them whether within or above the ebb and flow of the tide, shall be and remain public highway; and, being chiefly valuable for the public purposes of commerce, navigation and fishery, and for the improvements necessary to secure and promote those purposes, shall not be granted away during the period of territorial government; but, unless in case of some international duty or public exigency, shall be held by the United States in trust for future States, and shall vest in the several states, when organized and admitted into the Union, with all the powers and prerogatives appertaining to the older states in regard to such waters and soils within their respective jurisdictions; in short, shall not be disposed of piecemeal to individuals as private property, but shall be held as a whole for the purpose of being ultimately administered and dealt with for the public benefit by the state, after it shall have become a completely organized community.'

[3] We do not think the declared purpose of the Louisiana Purchase Treaty with France (8 Stat. 200) that statehood should be ultimately conferred on the inhabitants of the territory purchased, relied on by the appellants, varies at all the principles to be applied in this case. They are the same in respect to territory of

the United States whether derived from the older states, Spain, France of Mexico. If the Arkansas river were navigable in fact at the locus in quo, the unrestricted power of the United States when exclusive sovereign, to part with the bed of such a stream for any purpose, asserted by the Circuit Court of Appeals would be before us for consideration. If that could not be sustained, a second question would arise whether vesting ownership of the river bed in the Osages was for 'a public purpose appropriate to the objects for which the United States hold territory,' within the language of Mr. Justice Gray in Shively v. Bowlby above quoted. ***86** We do not find it necessary to decide either of these questions in view of the finding as a fact that the Arkansas is and was not navigable at the place where the river bed lots, here in controversy, are.

[4][5] A navigable river in this country is one which is used, or is susceptible of being used in its ordinary condition, as a highway for commerce over which trade and travel are or may be conducted in the customary modes of trade, and travel on water. It does not depend upon the mode by which commerce is conducted upon it, whether by steamers, sailing vessels or flat boats, nor upon the difficulties attending navigation, but upon the fact whether the river in its natural state is such that it affords a channel for useful commerce. Oklahoma v. Texas, 258 U. S. 574, 42 Sup. Ct. 406, 66 L. Ed. 771, decided May 1, 1922; Economy Light Co. v. United States, 256 U. S. 113, 41 Sup. Ct. 409, 65 L. Ed. 847; The Montello, 20 Wall. 430, 22 L. Ed. 391; The Daniel Ball, 10 Wall. 557, 563, 19 L. Ed. 999. Voluminous testimony was introduced in the District Court upon the issue of navigability. That court considered it all with evident care and had no difficulty in reaching ****64** the conclusion that the Arkansas River along the Osage Reservation was not, and had never been, navigable within the adjudged meaning of that term, and that the head of navigation is and was the mouth of the Grand river, near which was Fort Gibson, and this is a number of miles below the reservation. The Circuit Court of Appeals reviewed this finding and fully concurred in its correctness. Neither the argument nor the record discloses any ground which can overcome the weight which the findings of two courts must have with us. Washington Sec. Co. v. United States, 234 U. S. 76, 78, 34 Sup. Ct. 725, 58 L. Ed. 1220; Texas Railway Co. v. Louisiana R. R. Commission, 232 U. S. 338, 34 Sup. Ct. 438, 58 L. Ed. 630; Chicago, Junction Ry. Co. v. King, 222 U. S. 222, 224, 32 Sup. Ct. 79, 56 L. Ed. 173; Dun v. Lumbermen's Credit Association, 209 U. S. 20, 24, 28 Sup. Ct. 335, 52 L. Ed. 663, 14 Ann. Cas. 501. It is a natural inference that Congress in its grant to the Osage Indians in 1872 made it extend to the main channel of the river, only ***87** because it knew it was not navigable. This would be consistent with its general policy. Section 2476, Rev. Stat. (Comp. St. § 4918); Oklahoma v. Texas, decided May 1, 1922; Scott v. Lattig, 227 U. S. 229, 242, 33 Sup. Ct. 242, 57 L. Ed. 490,44 L. R. A. (N. S.) 107; Railroad Co. v. Schurmeir, 7 Wall. 272, 289, 19 L. Ed. 74. If the Arkansas river is not navigable, then the title of the Osages as granted certainly included the bed of the river as far as the main channel, because the words of the grant expressly carries the title to that line.

[6][7][8] But it is said that the navigability of the Arkansas river is a local question to be settled by the Legislature and the courts of Oklahoma, and that the Supreme Court of the state has held that at the very point here in dispute, the river is navigable. State v. Nolegs, 40 Okl. 479, 139 Pac. 943. A similar argument was made for the same purpose in Oklahoma v. Texas, supra, based on a decision by the Supreme Court of Oklahoma as to the Red river. Hale v. Record, 44 Okl. 803, 146 Pac. 587. The controlling effect of the state court decision was there denied because the United States had not been there, as it was not here, a party to the case in the state court. Economy Light Co. v. United States, 256 U. S. 113, 123, 41 Sup. Ct. 409, 65 L. Ed. 847. In such a case as this the navigability of the stream is not a local question for the state tribunals to settle. The question here is what title, if any, the Osages took in the river bed in 1872 when this grant was made, and that was thirty-five years before Oklahoma was taken into the Union and before there were any local tribunals to decide any such questions. As to such a grant, the judgment of the state court does not bind us, for the validity and effect of an act done by the United States is necessarily a federal question. The title of the Indians grows out of a federal grant when the Federal government had complete sovereignty over the territory in question. Oklahoma when she came into the Union took sovereignty over the public lands in the condition of ownership as they were then, and if the bed of a nonnavigable stream had then become the property ***88** of the Osages, there was nothing in the admission of Oklahoma into a constitutional equality of power with other states which required or permitted a divesting of the title. It is not for a state by courts or legislature, in dealing with the general subject of beds of streams to adopt a retroactive rule for determining navigability which would destroy a title already accrued under federal law and grant or would enlarge what actually passed to the state, at the

time of her admission, under the constitutional rule of equality here invoked.

[9] It is true that where the United States has not in any way provided otherwise, the ordinary incidents attaching to a title traced to a patent of the United States under the public land laws may be determined according to local rules; but this is subject to the qualification that the local rules do not impair the efficacy of the grant or the use and enjoyment of the property by the grantee. Thus the right of the riparian owner under such grant may be limited by the law of the state either to high or law water mark or extended to the middle of the streatm. Packer v. Bird, 137 U. S. 661, 669, 11 Sup. Ct. 210, 34 L. Ed. 819.

We said in Oklahoma v. Texas, decided May 1, 1922:

> 'Where the United States owns the bed of a nonnavigable stream and the upland on one or both sides, it, of course, is free when disposing of the upland to retain all or any part of the river bed; and whether in any particular instance it has done so is essentially a question of what is intended. If by a treaty or statute or the terms of its patent it has shown that it intended to restrict the conveyance to the upland or to that and a part only of the river bed, that intention will be controlling; and, if its intention be not otherwise shown, it will be taken to have assented that its conveyance should be construed and given effect in this particular according to the law of the state in which the land lies. Where it is disposing of tribal land of the Indians under its guardianship the same rules apply.'

***89** In government patents containing no words showing purpose to define riparian rights, the intention to abide the state law is inferred. Mr. Justice Bradley, speaking for the court in Hardin v. Jordan, 140 U. S. 371, 384, 11 Sup. Ct. 808, 813 (35 L. Ed. 428), said:

> 'In our judgment, the grants of the government for lands bounded on streams and other waters, without any reservation or restriction of terms, are to be construed as to their effect according to the law of the state in which the lands lie.'

Some states have sought to retain title to the beds of streams by recognizing them as ****65** navigable when they are not actually so. It seems to be a convenient method of preserving their control. No one can object to it unless it is sought thereby to conclude one whose right to the bed of the river granted and vesting before statehood, depends for its validity on nonnavigability of the stream in fact. In such a case, navigability vel non is not a local question. In Wear v. State of Kansas, 245 U. S. 154, 38 Sup. Ct. 55, 62 L. Ed. 214, Ann. Cas. 1918B, 586, upon which the plaintiffs in error rely, the patent of the United States under which Wear derived title was a grant, made before statehood, to land bordering on the Kansas river without restriction, reservation or expansion. The state tribunal took judicial notice of the navigability of the river, refused to hear evidence thereon, and held that the patent to land on a navigable stream did not convey the bed of the river. The United States by its unrestricted patent was properly taken to have assented to its construction according to the local law. Whether the local law worked its purpose by conclusively determining the navigability of the stream, without regard to the fact, or by expressly denying a riparian title to the bed of a nonnavigable stream, was immaterial. In either view the result there would have been the same. The case of Donnelly v. United States, 228 U. S. 243, 33 Sup. Ct. 449, 57 L. Ed. 820, Ann. Cas. 1913E, 710, is to be similarly distinguished, if, indeed it can be said after the qualification of the opinion, 228 U. S. 708, 711, 33 Sup. Ct. 1024, 57 L. Ed. 1035, Ann. Cas. 1913E, 710, to require distinguishing.

The decree of the Circuit Court of Appeals is affirmed.

> FN1 'Chap. CCCX. An act to confirm to the Great and Little Osage Indians a reservation in the Indian Territory.
>
> 'Whereas by the treaty of eighteen hundred and sixty-six between the United States and the Cherokee Nation of Indians, said nation ceded to the United States all its lands west of the ninety-sixth meridian west longitude, for the settlement of friendly Indians thereon; and whereas by act of Congress approved July fifteenth, eighteen hundred and seventy, the President was authorized and directed to remove the Great and Little Osage Indians to a location in the Cherokee country west of the ninety-sixth meridian, to be designated for them by the United States authorities; and whereas it was provided by the same act of Congress that the lands of the Osages in Kansas should be sold by the United States, and so much of the proceeds thereof as were necessary should be appropriated for the payment to the Cherokees for the lands set apart for the said Osages west of the ninety-sixth meridian;

and whereas under the provisions of the above mentioned treaty and act of Congress and concurrent action of the authorities of the United States and the Cherokee nation, the said Osages were removed from their former homes in the state of Kansas to a reservation set apart for them in the Indian Territory, at the time of the removal supposed to be west of the said ninety-sixth meridian, and bounded on the east thereby, and upon which said Osages have made substantial and valuable improvements; and whereas by a recent survey and establishment of the ninety-sixth meridian it appears that the most valuable portion of said Osage reservation, and upon which all their improvements are situated, lies east of the said meridian; and whereas it therefore became necessary to select other lands in lieu of those found to be east of the established ninety-sixth meridian for said Osage Indians; and whereas a tract has accordingly been selected, lying between the western boundary of the reservations heretofore set apart for said Indians and the main channel of the Arkansas river, with the south line of the state of Kansas for a northern boundary, and the north line of the Creek country and the main channel of the Arkansas river for a southern and western boundary; and whereas the act of Congress approved July fifteenth, eighteen hundred and seventy, restricts the said reservation for said Osage Indians to 'a tract of land in compact form equal in quantity to one hundred and sixty acres for each member of said tribe'; and whereas in a letter of the Cherokee delegation, addressed to the Secretary of the Interior on the eighth day of April, eighteen hundred and seventy-two, on behalf of the Cherokee nation, containing their approval of and assent to the proposition to provide for the settlement of the Osage and Kaw Indians on that portion of the Cherokee country lying west of the ninety-sixth degree west longitude, south of Kansas, east and north of the Arkansas river: Therefore,

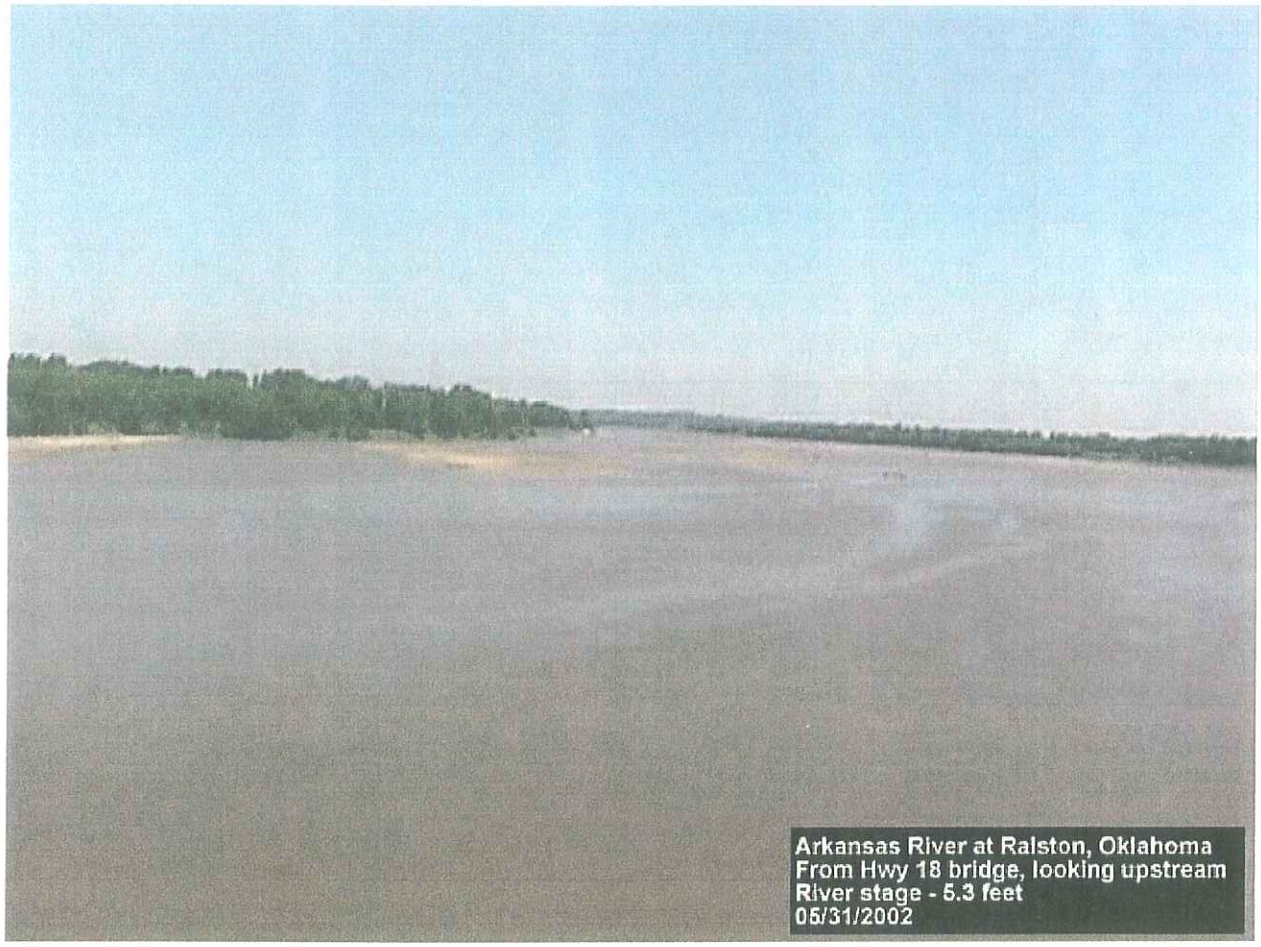
'Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that in order to provide said Osage tribe of Indians with a reservation, and secure to them a sufficient quantity of land suitable for cultivation, the following-described tract of country, west of the established ninety-sixth meridian, in the Indian Territory, be, and the same is hereby, set apart for and confirmed as their reservation, namely: Bounded on the east by the ninety-sixth meridian, on the south and west by the north line of the Creek country and the main channel of the Arkansas river, and on the north by the south line of the state of Kansas: Provided, that the location as aforesaid shall be made under the provisions of article sixteen of the treaty of eighteen hundred and sixty-six, so far as the same may be applicable thereto: And provided further, that said Great and Little Osage tribe of Indians shall permit the settlement within the limits of said tract of land (of) the Kansas tribe of Indians, the lands so settled and occupied by said Kansas Indians, not exceeding one hundred and sixty acres for each member of said tribe, to be paid for by said Kansas tribe of Indians out of the proceeds of the sales of their lands in Kansas, at a price not exceeding that paid by the Great and Little Osage Indians to the Cherokee nation of Indians.

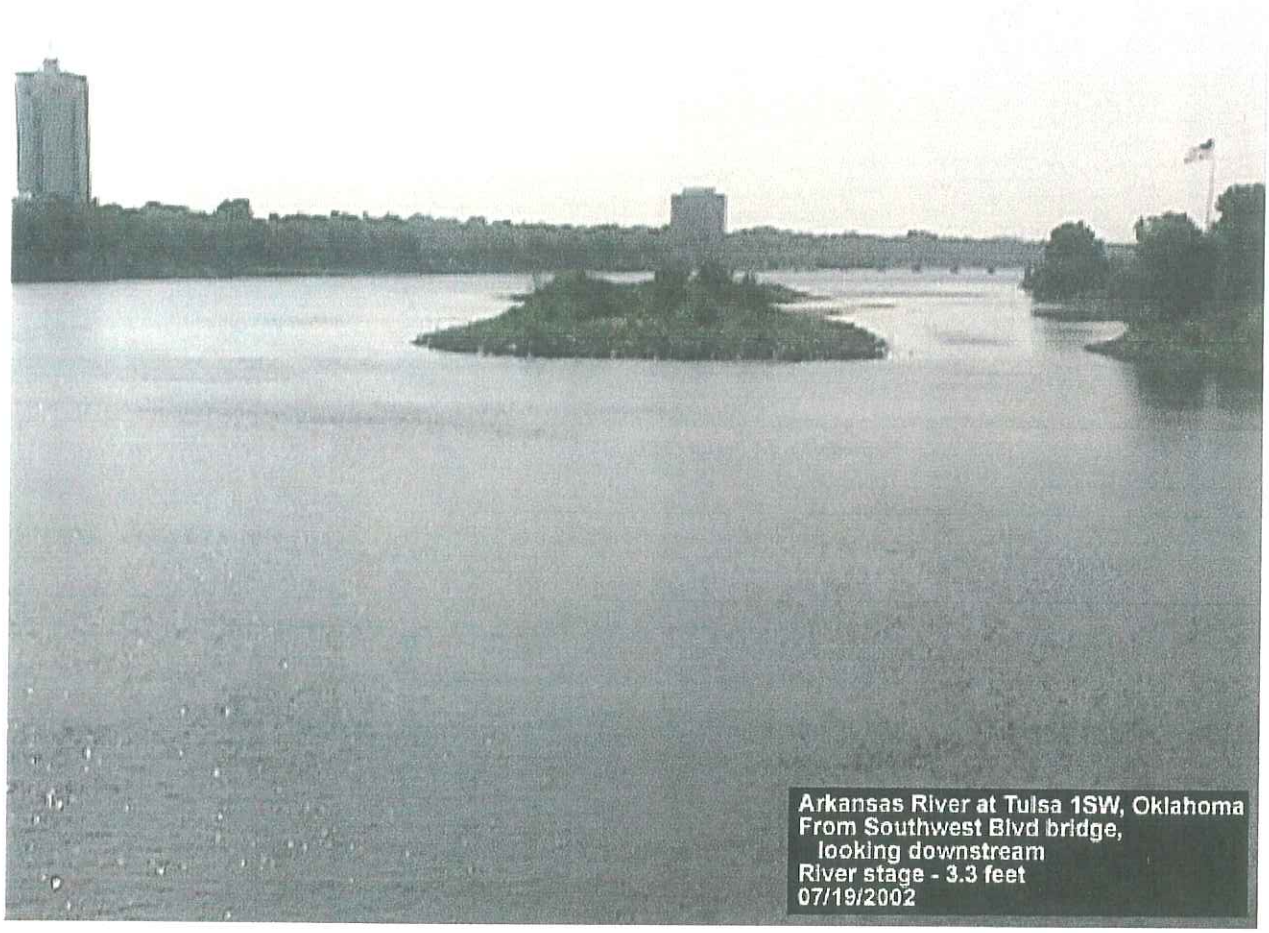
'Approved June 5, 1872.'

43 S.Ct. 60, 260 U.S. 77, 67 L.Ed. 140

END OF DOCUMENT

ADDITIONAL INFORMATION


Arkansas River at Ralston, Oklahoma
From Hwy 18 bridge, looking upstream
River stage - 5.3 feet
05/31/2002


Arkansas River at Tulsa 1SW, Oklahoma
From Southwest Blvd bridge,
looking downstream
River stage - 3.3 feet
07/19/2002

Water Resources

Data Category: Site Information | Geographic Area: Oklahoma | GO

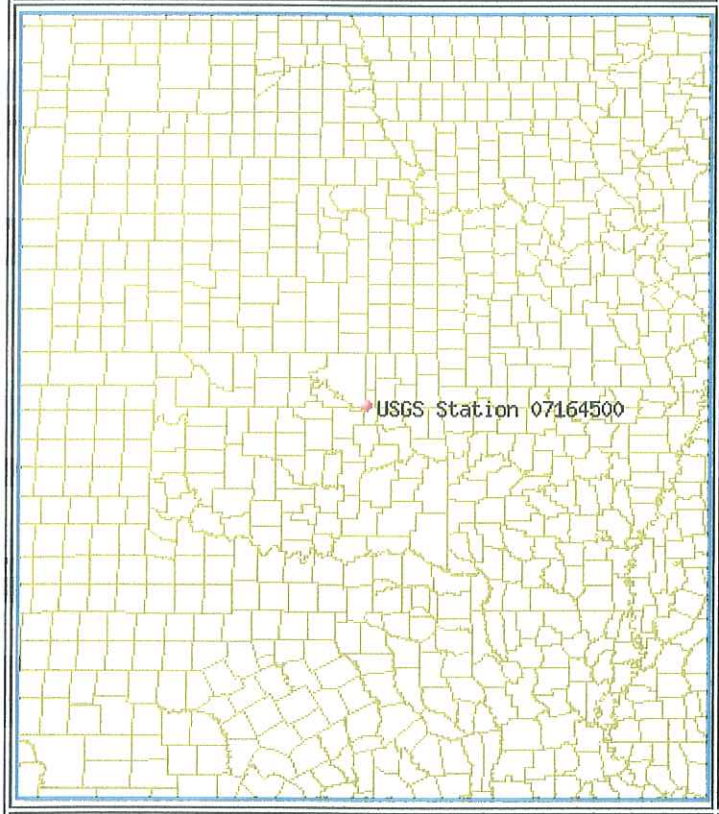
Site Map for Oklahoma

USGS 07164500 Arkansas River at Tulsa, OK

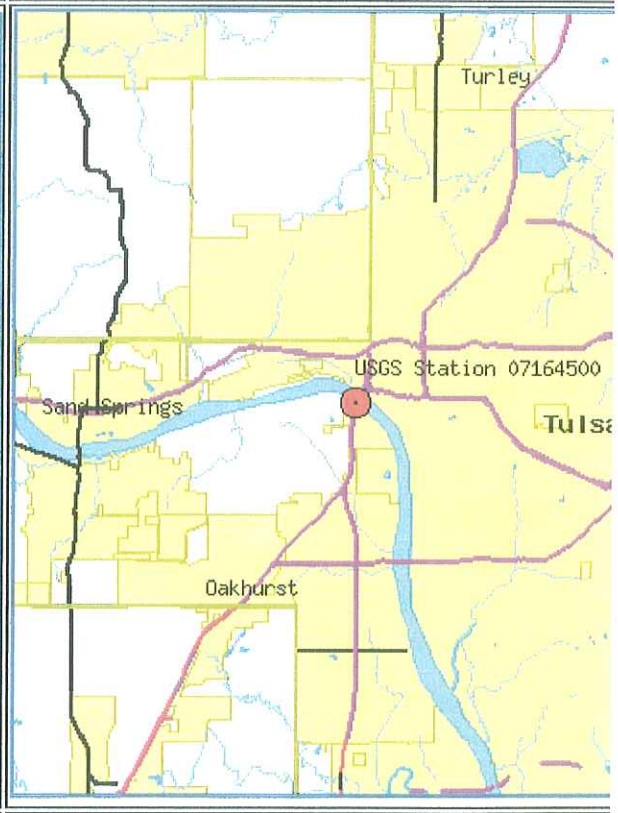
Available data for this site: Station site map | GO

Tulsa County, Oklahoma
Hydrologic Unit Code 11110101
Latitude 36°08'26", Longitude 96°00'22" NAD27
Drainage area 74,615 square miles
Contributing drainage area 62,074 square miles
Gage datum 615.23 feet above sea level NGVD29

Location of the site in Oklahoma.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov

Return to top of page

Water Resources

Data Category: Surface Water | Geographic Area: Oklahoma | GO

Calendar Year Streamflow Statistics for Oklahoma

USGS 07164500 Arkansas River at Tulsa, OK

Available data for this site: Surface-water: Annual streamflow statistics | GO

Tulsa County, Oklahoma
Hydrologic Unit Code 11110101
Latitude 36°08'26", Longitude 96°00'22" NAD27
Drainage area 74,615 square miles
Contributing drainage area 62,074 square miles
Gage datum 615.23 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1926	5,233	1945	11,010	1964	4,267	1982	8,143
1927	10,640	1946	3,045	1965	6,879	1983	8,374
1928	7,529	1947	7,658	1966	2,221	1984	7,893
1929	9,855	1948	8,145	1967	3,774	1985	11,800
1930	3,980	1949	13,430	1968	5,249	1986	13,790
1931	3,008	1950	7,751	1969	8,531	1987	15,020
1932	3,289	1951	16,460	1970	4,899	1988	7,993
1933	2,345	1952	3,988	1971	3,589	1989	7,792
1934	1,978	1953	1,932	1972	2,442	1990	7,023
1935	6,462	1954	1,070	1973	19,050	1991	2,636
1936	1,912	1955	4,562	1974	14,040	1992	7,941
1937	3,398	1956	555	1975	11,650	1993	20,630
1938	5,622	1957	15,240	1976	3,560	1994	6,254
1939	1,799	1958	7,491	1977	5,598	1995	16,350
1940	2,617	1959	10,790	1978	4,668	1996	6,699
1941	8,729	1960	9,666	1979	8,491	1997	12,709
1942	11,850	1961	13,360	1980	6,758	1998	16,430
1943	5,974	1962	6,237	1981	3,137	1999	17,560
1944	11,040	1963	3,552				

Water Resources

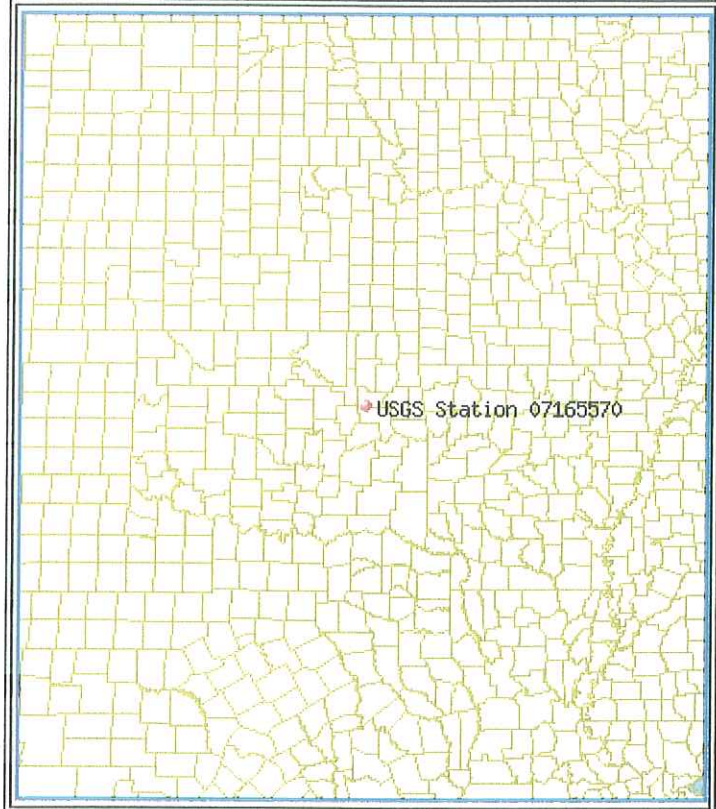
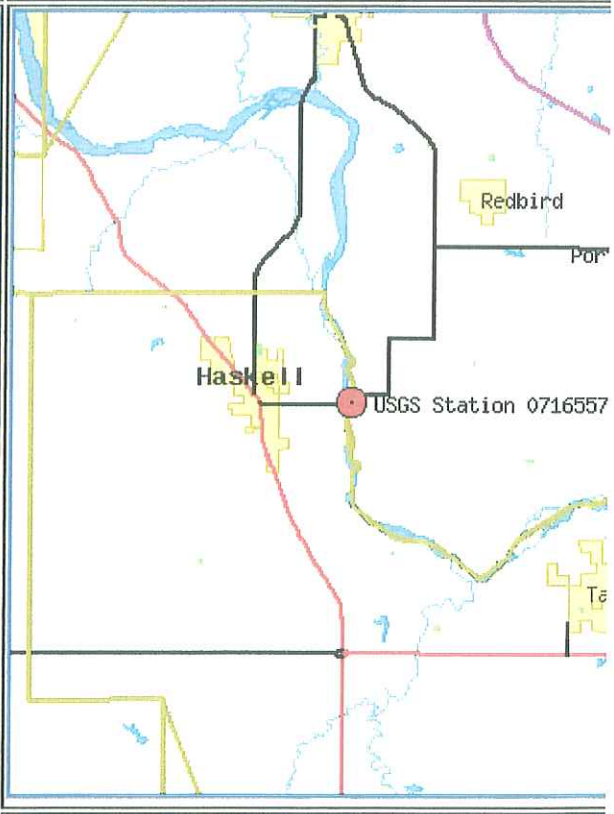
Data Category: Site Information | Geographic Area: Oklahoma | GO

Site Map for Oklahoma

USGS 07165570 Arkansas River near Haskell, OK

Available data for this site: Station site map | GO

Wagoner County, Oklahoma
Hydrologic Unit Code 11110101
Latitude 35°49'15", Longitude 95°38'19" NAD27
Drainage area 75,473 square miles
Contributing drainage area 62,932 square miles
Gage datum 530 feet above sea level NGVD29

Location of the site in Oklahoma.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov

Return to top of page

Water Resources

Data Category: Surface Water | Geographic Area: Oklahoma | GO

Calendar Year Streamflow Statistics for Oklahoma

USGS 07165570 Arkansas River near Haskell, OK

Available data for this site: Surface-water: Annual streamflow statistics | GO

Wagoner County, Oklahoma
Hydrologic Unit Code 11110101
Latitude 35°49'15", Longitude 95°38'19" NAD27
Drainage area 75,473 square miles
Contributing drainage area 62,932 square miles
Gage datum 530 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1973	20,270	1982	9,052	1991	3,222
1974	15,110	1983	9,118	1992	8,976
1975	12,360	1984	7,997	1993	22,730
1976	3,513	1985	13,289	1994	7,014
1977	5,561	1986	15,110	1995	18,820
1978	4,704	1987	17,410	1996	7,836
1979	7,307	1988	9,749	1997	12,810
1980	6,595	1989	8,428	1998	18,390
1981	3,564	1990	8,357	1999	19,750

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Oklahoma: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ok/nwis/annual/calendar_year?

Retrieved on 2003-03-04 09:20:31 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Oklahoma
Privacy Statement || Disclaimer || Accessibility
0.65 0.63

Armuchee Creek—Georgia

Reported Decision: Georgia Canoeing Ass'n v. Henry, 267 Ga. 814, 482 S.E. 2d 298 (1997)

Reach at Issue: Unknown

Judicial Determination: Non-navigable

Facts Reported in Decision:

"We conclude that the record supports a determination that the portion of Armuchee Creek at issue in this case is not a navigable stream under § 44-8-5(a) or the common law." 482 S.E.2d at 299.

Armuchee Creek
Georgia

REPORTED DECISION

H

Supreme Court of Georgia.

GEORGIA CANOEING ASSOCIATION et al.
v.
HENRY.

No. S96A1594.

March 10, 1997.
Reconsideration Denied April 4, 1997.

Canoeing association brought action seeking to temporarily and permanently enjoin property owner from stopping their free passage through his property on Armuchee Creek. Owner requested that association be permanently enjoined from traveling in boats and canoes through his property. The Superior Court, Chattooga County, Joseph E. Loggins, J., permanently restrained association from traveling on Armuchee Creek where it passed through the property, and association appealed. The Court of Appeals, 263 Ga. 77, 428 S.E.2d 336, reversed and remanded. On remand, the Superior Court again entered order granting owner's request for a permanent injunction, and association appealed. The Supreme Court, Sears, J., held that: (1) portion of Armuchee Creek at issue is not a navigable stream under federal law, common law, or Georgia statute, and (2) public has not acquired a right of passage by prescription.

Affirmed.

West Headnotes

[1] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence in suit by canoeing association to enjoin landowner from stopping free passage through his property on Armuchee Creek supported finding that creek, where it passed through the property, was not susceptible of carrying useful commerce between states in its natural and ordinary condition, and thus was not a "navigable stream " under federal law; evidence that also supported conclusion that portion of Armuchee Creek at issue was not a navigable stream under Georgia statute or the common law, precluding any public right of passage. O.C.G.A. § 44-8-5(a).

[2] **Navigable Waters** 16
270k16 Most Cited Cases

Public has not acquired a right of passage on Armuchee Creek either by prescription or under statute. Laws 1830, p. 127, § 17.

****298 *815** Bobby Lee Cook, Cook & Connelly, Summerville, John James Neely, III, Craig K. Pendergrast, Paul, Hastings, Janofsky & Walker, L.L.P., Atlanta, Todd Mitchell Johnson, Cook & Connelly, Summerville, for Georgia Canoeing Ass'n et al.

Archibald A. Farrar, Jr., Farrar & Farrar, Summerville, for Henry.

Denmark Groover, Jr., Frank H. Childs, Jr., Groover & Childs, Macon, Michael G. Gray, Lawrence C. Walker, Jr., Walker, Hulbert, Gray & Byrd, Perry, for amicus appellee.

Robert S. Bomar, Sr. Asst. Atty. Gen., Department of Law, Atlanta, for amicus appellant.

***814** SEARS, Justice.

This appeal concerns a dispute between the appellants--the Georgia Canoeing Association and Benny Young (hereinafter collectively ****299** referred to as "GCA")--and the appellee, Ralph Henry, regarding whether there is a public right of passage over Armuchee Creek where it flows through Henry's property. GCA brought this action, seeking to temporarily and permanently enjoin Henry from stopping their free passage through his property on the creek. Henry, on the other hand, requested that GCA be permanently enjoined from traveling in boats and canoes through his property. After a hearing on the question of permanent injunctive relief, [FN1] the trial court entered an order, concluding that Armuchee Creek was not a navigable stream within the meaning of relevant definitions under the federal law, the common law, or Georgia statutes. The trial court also ruled that the public had not acquired a right of passage by prescription. The trial court therefore permanently restrained GCA from traveling on Armuchee Creek where it passes through Henry's property. GCA has filed this appeal.

FN1. This is the third time this case has been before the Court. In its first appearance,

this Court affirmed, pursuant to Rule 59, the trial court's grant of an interlocutory injunction in favor of Henry. *Georgia Canoeing Association v. Henry*, 261 Ga. 29, 414 S.E.2d 490 (1991). Following that appeal, the trial court granted summary judgment to Henry on his request for a permanent injunction. On appeal, this Court reversed the grant of summary judgment, ruling that although the trial court resolved issues of fact for purposes of the interlocutory injunction, the trial court was authorized to resolve them only for that purpose and not for purposes of Henry's request for a permanent injunction. *Georgia Canoeing Association v. Henry*, 263 Ga. 77, 428 S.E.2d 336 (1993). On remand, the trial court held a hearing on the parties' requests for permanent injunctive relief, and entered a detailed order granting Henry's request for a permanent injunction.

[1][2] After a careful review of the record and relevant law, we affirm. First, the evidence supports a finding that Armuchee Creek, where it passes through Henry's property, is not susceptible of carrying useful commerce between states in its natural and ordinary condition and is ***815** thus not a navigable stream within the meaning of federal law. [fn2] MOREOVER, WITHOUT deciding whether the definition of navigability set forth in OCGA § 44-8-5(a), [FN3] by its express terms or by necessary implication, effected a change in the common law definition of navigability, [fn4] WE CONCLUDE THAt the record supports a determination that the portion of Armuchee Creek at issue in this case is not a navigable stream under § 44-8-5(a) or the common law. [FN5] Finally, we conclude that the public has not acquired a right of passage on Armuchee Creek either by prescription orunder Section 17 of Ga.Laws, 1830, p. 127. For the foregoing reasons, we affirm.

FN2. *State of North Dakota v. United States*, 972 F.2d 235, 238 (8th Cir.1992); *United States v. Holt State Bank*, 270 U.S. 49, 54-56, 46 S.Ct. 197, 198-99, 70 L.Ed. 465 (1926); *Leovy v. United* States, *177 U.S. 621, 632-34, 20 S.Ct. 797, 801-02, 44 L.Ed. 914 (1900); 78 AmJur2d 513, Waters, § 69.*

FN3. That code section defines a "navigable stream" as "a stream which is capable of transporting boats loaded with freight in the regular course of trade either for the whole or a part of the year. The mere rafting of timber or the transporting of wood in small boats shall not make a stream navigable."

FN4. " '[S]tatutes are not understood to effect a change in the common law beyond that which is clearly indicated by express terms or by necessary implication.' " *Avnet, Inc. v. Wyle Labs*, 263 Ga. 615, 620, 437 S.E.2d 302 (1993). Professor Farnham of Yale Law School has written that Georgia and several other states have adopted navigability statutes that are "limitations of the common law rule." 1 Farnham, Water and Water Rights, § 23g (1904).

FN5. See 1 Farnham at § 23.

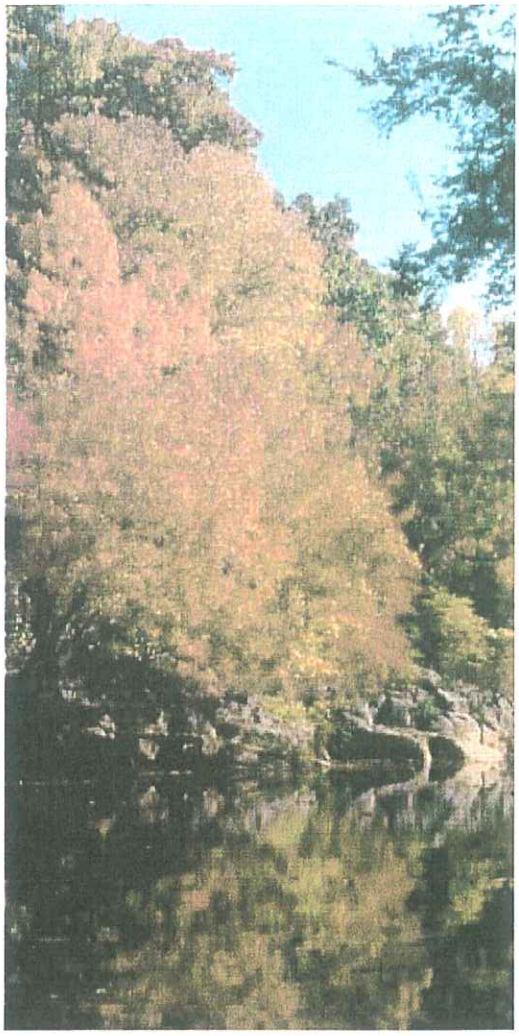
Judgment affirmed.

All the Justices concur.

482 S.E.2d 298, 267 Ga. 814, 97 FCDR 798

END OF DOCUMENT

ADDITIONAL INFORMATION



Coosa River Basin Initiative

CRBI

About Us

Partner Groups Education Advocacy Monitoring Restoration Bo

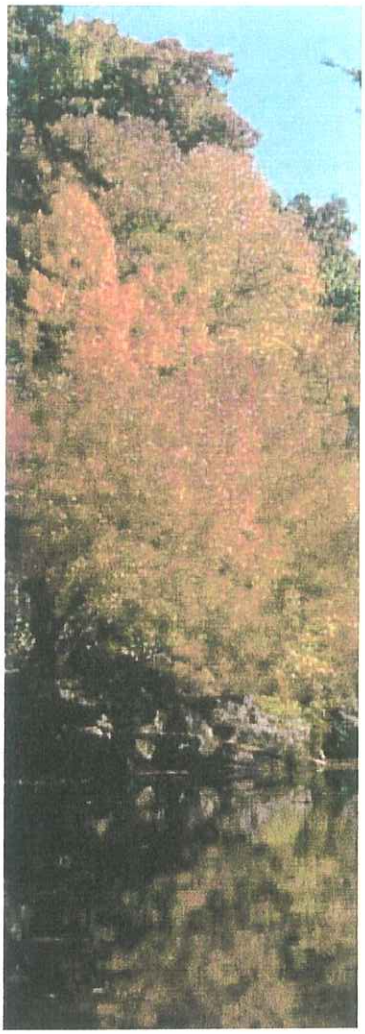
Home
About Us
The Coosa
Issues
Calendar
Join Us

408 Broad Street
Rome, Georgia 30161
706-232-2724
info@coosa.org
www.coosa.org

"When things get so far wrong as to attract their notice, the citizens, when well informed, can be relied upon to set them right."
-Thomas Jefferson

CRBI's goal is to provide a cleaner, healthier river basin by promoting responsible stewardship of our watershed. The rewards of our efforts will be healthy homes for our families, clean water, clean food, sustainable jobs and safe recreational areas, as well as a genuine sense of pride to live in such a majestic watershed.

CRBI's membership consists of concerned citizens, small businesses, local industry and other grassroots organizations through the Coosa River Basin and beyond. Our members range in age from eight to eighty, and are preachers, teachers, students, doctors, farmers, politicians, retirees, business people, sportsmen, fishermen and more.



Armuchee Creek

Click here to view our accomplishments!

Since its founding in 1992, CRBI has provided a mechanism for concerne to impact public and private decision making along the Coosa River, in b Georgia and NE Alabama. We operate at the most basic grassroots level, encouraging citizens to become meaningfully involved in the processes v create their future.

Cedar River—Washington

Reported Decision: Muckleshoot Indian Tribe v. Federal Energy Regulatory Comm'n, 993 F.2d 1428 (9th Cir. 1993)

Reach at Issue: Unknown

Judicial Determination: Non-navigable

Facts Reported in Decision:

"The Cedar River is entirely in Washington. It rises in the Cascade Mountains and flows in a general west-northwesterly direction into Chester Morse Lake where the Cedar Falls Hydroelectric Project is located. The project consists of a concrete overflow dike, which impounds Chester Morse Lake. The Cedar Masonry Dam is located 4,000 feet downstream from the dike and impounds a reservoir. Below Chester Morse Lake, the river falls 600 feet in the three miles to Cedar Falls." 993 F.2d at 1430.

"The Tribe relies on a 1977 raft trip by the Washington Department of Fisheries between the powerhouse and Landsburg. We consider '[u]se of private boats [as] relevant evidence [that] may demonstrate similar types of commercial navigation. . . . According to FERC, this rafting attempt was unsuccessful. The raft capsized in a turbulent stretch and was recovered downstream. Because of the water's shallowness in areas, the rafters had to wade downstream and pull the craft alongside them. FERC concluded that evidence of this difficult trip was not sufficient to show that the middle segment was navigable." 993 F.2d at 1432.

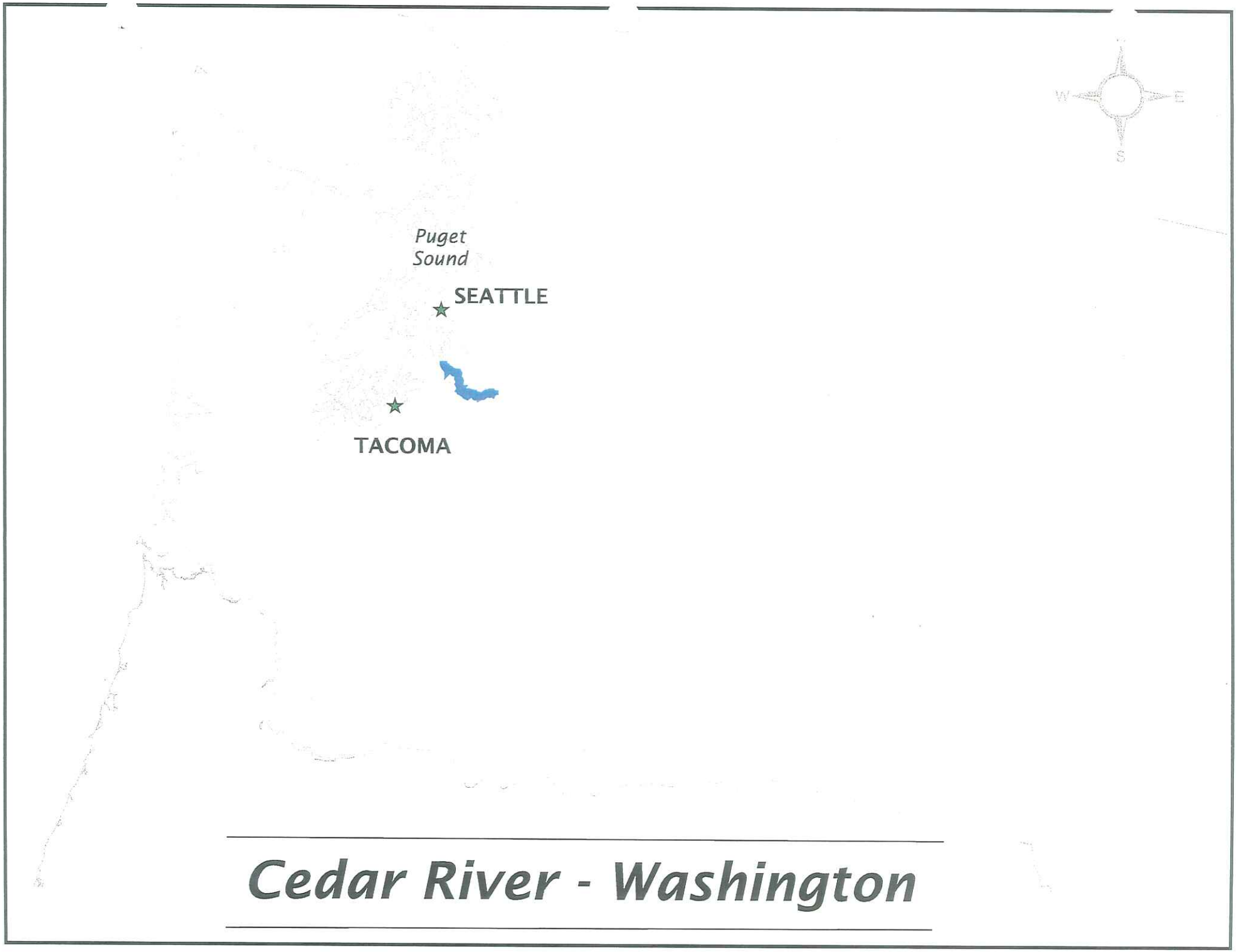
"Next, the Tribe relies on several historical excerpts taken from a 1962 Renton Public Library navigability reference file report. The report records interviews with persons who recalled seeing shingle bolt floats on the river and transportation by Indian canoe. Evidence of shingle bolt drives can support a finding of navigability. . . . Three long-time residents talked about shingle bolt drives and Indian canoeing, but the extent and location of these activities remains uncertain. . . . In contrast, the Tribe's evidence of canoeing and shingle bolts does not indicate that commerce occurred on the river's disputed middle segment. Taken as a whole, the evidence does not specify where commerce occurred, and the Tribe does not furnish this information." 993 F.2d at 1432.

"FERC also mentions a 1986 attempt by the state game department to launch a boat for disbursing steelhead fry in the river's middle section. The boat, designed for use in extreme adverse conditions, was severely battered by boulder rapids and removed about a mile from where it was launched." 993 F.2d at 1432 n.3.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Cedar Falls, WA	164	1946-2000



Cedar River - Washington

REPORTED DECISION

H

United States Court of Appeals,
Ninth Circuit.

MUCKLESHOOT INDIAN TRIBE, Petitioner,
v.
FEDERAL ENERGY REGULATORY COMMISSION, Respondent,
City of Seattle, Respondent-Intervenor.

No. 91-70519.

Argued and Submitted March 1, 1993.
Decided May 19, 1993.

Indian tribe sought review of decision of Federal Energy Regulatory Commission (FERC) that Cedar River was nonnavigable waterway under Federal Power Act and that city hydroelectric project was accordingly not subject to licensing jurisdiction of FERC. The Court of Appeals, Eugene A. Wright, J., held that: (1) portion of Cedar River on which hydroelectric project lay was not navigable waterway; and (2) disputed section, which comprised approximately 21 miles out of 55 miles of river, was not simply "mere interruption" but rendered entire river unsuitable for navigation for purposes of determining licensing jurisdiction of FERC.

Affirmed.

West Headnotes

[1] **Administrative Law and Procedure** 791
15Ak791 Most Cited Cases

[1] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

Court of Appeals reviews Federal Energy Regulatory Commission's (FERC's) finding of nonnavigable for substantial evidence; if supported by substantial evidence and not contrary to law, FERC's finding is conclusive. Federal Power Act, § 313(b), as amended, 16 U.S.C.A. § 825*l* (b).

[2] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Navigability under Federal Power Act, requiring that hydroelectric power projects on navigable waters be licensed by Federal Energy Regulatory Commission (FERC), requires river to be suitable, currently or in past, for transportation of property or persons between states; river may be deemed navigable in its natural or improved condition. Federal Power Act, § 23(b)(1), as amended 16 U.S.C.A. § 817(1).

[3] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Navigability for purposes Federal Power Act may exist despite falls and other mere interruptions between navigable parts of streams. Federal Power Act, § 3(8), as amended, 16 U.S.C.A. § 796(8).

[4] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

Cedar River was not navigable within meaning of the Federal Power Act, so as to give Federal Energy Regulatory Commission (FERC) licensing jurisdiction over city's hydroelectric program, where commercial logging activity appeared to have been confined to lake above river's disputed middle section, and evidence of shingle bolt drives and Indian canoeing did not indicate that commerce occurred on that disputed middle segment; evidence was insufficient to show where commerce occurred, and finding of navigability for middle segment could not be based on inferences of actual use elsewhere on river. Federal Power Act, § 23(b)(1), as amended, 16 U.S.C.A. § 817(1).

[5] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Lengthy absence of use caused by changed conditions or advent of modern transportation does not affect navigability of rivers in constitutional sense.

[6] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence of shingle bolt drives can support finding of navigability. Federal Power Act, § 23(b)(1), as amended, 16 U.S.C.A. § 817(1).

[7] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Stream may retain its navigable character despite presence of nonnavigable interruptions such as falls, rapids, sandbars, carries or shifting currents that

require portaging or "land carriage" to circumvent them. Federal Power Act, § 3(8), as amended, 16 U.S.C.A. § 796(8).

[8] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

Difficult stretch of river, for which there was no direct evidence of actual or substantial use for interstate commerce, was not simply "mere interruption" but rather rendered river unsuitable for navigation, given middle section's length in comparison to river as whole (21 miles out of, at most, 55); under circumstances it could not be inferred that that segment had ever been circumvented or was suitable for use in interstate commerce. Federal Power Act, § 3(8), as amended, 16 U.S.C.A. § 796(8).

[9] **Administrative Law and Procedure** 669.1
15Ak669.1 Most Cited Cases

[9] **Electricity** 1
145k1 Most Cited Cases

Court of Appeals may consider objection not raised before Federal Energy Regulatory Commission only if party offers reasonable grounds for failing to object. Federal Power Act, § 313(b), as amended, 16 U.S.C.A. § 825*l* (b).

[10] **Administrative Law and Procedure** 670
15Ak670 Most Cited Cases

[10] **Electricity** 1
145k1 Most Cited Cases

Washington territorial statute of 1864, when offered not as law but as supplementary evidence of navigability of river under Federal Power Act, could not be considered where it was not raised in proceedings before Federal Energy Regulatory Commission. Federal Power Act, § 313(b), as amended, 16 U.S.C.A. § 825*l* (b).

***1429** Robert L. Otsea, Jr., Office of the Tribal Atty., Muckleshoot Indian Tribe, Auburn, WA, for petitioner.

Randolph Lee Elliott, F.E.R.C., Washington, DC, for respondent.

Brian Faller, Asst. City Atty., Seattle, WA, for respondent-intervenor.

Appeal from the Federal Energy Regulatory Commission.

Before: WRIGHT, CANBY and REINHARDT, Circuit Judges.

EUGENE A. WRIGHT, Circuit Judge:

We consider whether the Cedar River is navigable within the meaning of the Federal Power Act, 16 U.S.C. § § 791-825r (1988), thereby giving the Federal Energy Regulatory Commission licensing jurisdiction over Seattle's Cedar Falls Project. Presently, this city-owned hydroelectric project operates ***1430** without a federal license. The Muckleshoot Indian Tribe appeals FERC's finding that it lacks licensing jurisdiction under 16 U.S.C. § § 797(e) and 817(1) because the river is nonnavigable. We have jurisdiction of FERC's final order under 16 U.S.C. § 825*l*(b). We affirm.

FACTS AND PROCEEDINGS BELOW

The Cedar River is entirely in Washington. [FN1] It rises in the Cascade Mountains and flows in a general west-northwesterly direction into Chester Morse Lake where the Cedar Falls Hydroelectric Project is located. The project consists of a concrete overflow dike, which impounds Chester Morse Lake. The Cedar Masonry Dam is located 4,000 feet downstream from the dike and impounds a reservoir. Below Chester Morse Lake, the river falls 600 feet in the three miles to Cedar Falls. The river next passes the Town of Landsburg and the City of Renton and flows into Lake Washington. The lake is connected to Puget Sound and the Pacific Ocean by way of the Lake Washington Ship Canal and the Hiram M. Chittenden Locks.

FN1. A map of the Cedar River is attached as Appendix A.

For ease of reference, we divide the river into three segments: (1) the lower segment, from the river's mouth at Lake Washington upstream 19 miles to Landsburg; (2) the middle segment, where the project is located, from Landsburg upstream 21 miles to the upper end of Chester Morse Lake; and (3) the upper segment, from the upper end of the lake upstream 10 to 15 miles to the river's headwaters.

This appeal focuses on the navigability of the river's middle segment.

In 1986, the Tribe and the Department of the Interior requested that FERC investigate whether the project required licensing under the Act. The Tribe maintained that the construction and operation of the project had negatively affected the river's anadromous fish. The Tribe contended that under federal licensing standards, the fish production would improve.

Director Springer, of the Office of Hydropower Licensing, found that the project was subject to FERC's mandatory licensing jurisdiction under § 817(1). City of Seattle, 43 FERC ¶ 62,124 (1988). He ruled that the project was located on a navigable waterway of the United States and ordered Seattle, as owner and operator, to obtain a license or an exemption for the project's continued operation. Seattle appealed, and the Tribe moved to intervene.

In November 1990, FERC granted Seattle's appeal and reversed the director's order. City of Seattle, 53 FERC ¶ 61,237 (1990). It held that the portion of the Cedar River on which the project was located was a nonnavigable waterway. The Tribe and Interior exhausted their administrative remedies, and the Tribe now appeals FERC's ruling of nonnavigability.

ANALYSIS

1. *FERC's Finding of Nonnavigability*

The Tribe makes several arguments. First, it contends that FERC erred when it held that the river did not form a "continuous highway" of interstate commerce. The Tribe argues that the river is navigable because it had been used and was susceptible of use for interstate commerce. Second, the Tribe maintains that the river's middle section qualifies as a "mere interruption" of navigability for purposes of § 796(8).

[1] We review FERC decisions to determine whether they are "arbitrary, capricious, an abuse of discretion, unsupported by substantial evidence, or not in accordance with law." *The Steamboaters v. FERC*, 759 F.2d 1382, 1388 (9th Cir.1985). "We show great deference to [FERC's] interpretation of the law which it is charged with administering." *Id.* (citation omitted). We review FERC's finding of nonnavigability for substantial evidence. *City of Centralia v. FERC*, 851 F.2d 278, 281 (9th Cir.1988). If supported by substantial evidence and not contrary to law, FERC's finding is conclusive. § 825*l*(b).

a. Standard for Navigability; Application

[2][3] Section 817(1) provides that hydroelectric power projects "across, along or in any of the navigable waters of the United States" must be licensed by FERC. Navigability ***1431** under § 796(8) requires a river to be suitable, currently or in the past, for transportation of property or persons between states. The river may be deemed navigable in its natural or improved condition. *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 406, 61 S.Ct. 291, 298, 85 L.Ed. 243 (1940). Also, navigability may still exist despite falls and other mere "interruptions between the navigable parts of such streams." § 796(8).

[4] The Supreme Court set forth the Commerce Clause standard for navigable waters in *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 19 L.Ed. 999 (1870). The Court held that a river is navigable in law when it is navigable in fact. Rivers are navigable in fact "when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes ... on water." *Id.* at 563. Rivers are navigable waters for interstate commerce purposes "when they form in their ordinary condition by themselves, or by uniting with other waters, a *continued highway* over which commerce is or may be carried on with other States or foreign countries in the customary modes in which such commerce is conducted by water." *Id.* (emphasis added). FERC applied these principles properly when it considered relevant evidence to make its finding of nonnavigability.

The Tribe contends that evidence of heavy logging activity around Chester Morse Lake indicates that the river's middle section was used to transport lumber for interstate commerce. The Tribe relies mostly on a navigability report prepared for the Office of Hydropower Licensing that FERC considered in its determination.

Although the report found evidence of logging during the turn of this century around Landsburg and Cedar Falls, it noted that "roads and railroads, rather than the Cedar River, appear to have served as the primary means of transport for the logs." While the report states that "it is possible" that the Cedar River may have been used to move logs downstream when its waters allowed, it found no evidence of such practice. The report concluded that "the river was probably not an important avenue of transportation

for logs, particularly in the turbulent stretch from the Crib Dam down to Cedar Falls."

The report also discusses a 1913 logging contract that permitted a local company to harvest all timber in the area that ultimately would be submerged by the lake's rising waters. The company agreed to transport the harvested logs on the city-owned railroad, which terminated at the Masonry Dam. From there, logs "were rafted from around the periphery of the lake to [an unnamed] bay and then loaded into railway cars."

FERC specifically held that the lake's logging activities did not support a "finding of navigability" as to the entire river. "The described activity appears to have been confined to the lake, and there is no record of any logs being floated downstream beyond the Masonry Dam, or in the 11-mile stretch of river between the powerhouse and Landsburg." FERC declined to infer otherwise absent substantial evidence.

In its order denying a rehearing, FERC relied on our holding in *Sierra Pacific Power Co. v. FERC*, 681 F.2d 1134 (9th Cir.1982), *cert. denied*, 460 U.S. 1082, 103 S.Ct. 1769, 76 L.Ed.2d 343 (1983). There, we rejected an agency finding of navigability for lack of evidence that the lumber industry had made commercial use of the section of a river that flowed across the border between two states. *Id.* 681 F.2d at 1139.

Here, too, the navigability report fails to show that harvested lumber was portaged around the dam and shipped downstream on its journey in interstate commerce. FERC emphasized that its finding was "squarely based on the lack of substantial evidence of use of the river from the project site to its mouth as part of a continuous highway of interstate commerce by water." We find no error in FERC's decision.

[5] The Tribe argues that other substantial evidence demonstrated that the river had been used and was suitable for interstate commerce. "[O]nce found to be navigable, a waterway remains so" for purposes of the Act. *Appalachian Elec. Power Co.*, 311 U.S. at 408, 61 S.Ct. at 299. A lengthy absence of use caused by changed conditions or the advent of modern transportation "does not ***1432** affect the navigability of rivers in the constitutional sense." *Id.* at 409-10, 61 S.Ct. at 300.

The Tribe relies on a 1977 raft trip by the Washington Department of Fisheries between the powerhouse and Landsburg. [FN2] We consider "[u]se of private boats [as] relevant evidence [that] may demonstrate similar types of commercial navigation." *City of Centralia*, 851 F.2d at 282. According to FERC, this rafting attempt was unsuccessful. The raft capsized in a turbulent stretch and was recovered downstream. Because of the water's shallowness in areas, the rafters had to wade downstream and pull the craft alongside them. FERC concluded that evidence of this difficult trip was not sufficient to show that the middle segment was navigable. [FN3]

FN2. This expedition is distinguishable from a canoe race considered in the latest case on this issue. In *Consolidated Hydro Inc. v. FERC*, 968 F.2d 1258 (D.C.Cir.1992), a lengthy 1973 canoe race that included a brief portage around a hydroelectric site, along with findings of the river's historical use for commercial navigation, provided substantial evidence of navigability. *Id.* at 1260-61. In contrast, the Tribe presents no evidence of portage around interruptions for commercial use. Rather, it draws inferences of such use.

FN3. FERC also mentions a 1986 attempt by the state game department to launch a boat for disbursing steelhead fry in the river's middle section. The boat, designed for use in extreme adverse conditions, was severely battered by boulder rapids and removed about a mile from where it was launched.

[6] Next, the Tribe relies on several historical excerpts taken from a 1962 Renton Public Library navigability reference file report. The report records interviews with persons who recalled seeing shingle bolt floats [FN4] on the river and transportation by Indian canoe. Evidence of shingle bolt drives can support a finding of navigability. *Puget Power*, 644 F.2d at 789. *But see Oregon v. Riverfront Protection Ass'n*, 672 F.2d 792, 794-95 (9th Cir.1982) (distinguishing *Puget Power* facts and clarifying that evidence of transporting logs by river sufficient when joined with other facts to support finding of navigability). The use of the river need not be "extensive, or long and continuous." *See Puget Power*, 644 F.2d at 789. The evidence also need not be overwhelming as "[u]se of a stream long abandoned by water commerce is difficult to prove

by abundant evidence." *Id.* (quoting *Appalachian Elec.Power Co.*, 311 U.S. at 416, 61 S.Ct. at 303).

FN4. Generally, shingle bolts are quartered sections of cedar logs and used for making shingles. *See Puget Power Sound & Light v. FERC*, 644 F.2d 785, 788 (9th Cir.), *cert. denied*, 454 U.S. 1053, 102 S.Ct. 596, 70 L.Ed.2d 588 (1981).

Three longtime residents talked about shingle bolt drives and Indian canoeing, but the extent and location of these activities remains uncertain. Mrs. Cavanugh remembered log and shingle bolt drives on the Cedar from fall until spring. Also, her father-in-law told her about Indian canoes on the river. Likewise, Mr. Gruenes recalled shingle bolts floating downstream several times and had heard of Indians coming up the river by canoe. He remembered that the railroad, however, was the major means of transportation out of the area. Mr. Mason described shingle bolt floats and remembered Indians on the river, but he too confirmed that once milled, lumber was shipped out by railroad.

The amount and reliability of this past use evidence pales in comparison to the navigability evidence we found determinative in similar cases. [FN5] For example, in *Puget Power*, 644 F.2d at 788, we held that the river was navigable based upon downstream flotation of shingle bolts. The evidence included the testimony of ten witnesses and twelve photographs of shingle bolt drives. The evidence showed that shingle bolts moved downstream year-round for more than 20 years. *Id.* at 788.

FN5. The evidence here is also insignificant in comparison to the historical evidence of repeated and substantial use of New York's Salmon River, held to be navigable in *State ex rel. New York State Dep't of Environmental Conservation v. FERC*, 954 F.2d 56, 61-62 (2nd Cir.1992).

In contrast, the Tribe's evidence of canoeing and shingle bolts does not indicate that commerce occurred on the river's disputed middle segment. Taken as a whole, this evidence does not specify where commerce occurred, and the Tribe does not furnish this information. A finding of navigability for the ***1433** middle segment may not be based on inferences of actual use elsewhere on the river.

b. Middle Segment as a "Mere Interruption"

The Tribe argues that FERC erred by finding that the stretch between Landsburg and the lower portion of Chester Morse Lake was not a mere interruption between the lake and the river segment below. FERC stated

> [T]he manifest unsuitability for navigation of this lengthy stretch of the river['s middle segment], combined with the lack of substantial evidence that it was ever used for navigation (or portaged around), leads one to the conclusion that the *river as a whole* is not and *was not a continuous highway* for interstate commerce.

City of Seattle, 55 FERC ¶ 61,511 (1991) (emphasis added).

[7] Under § 796(8), a stream may retain its navigable character despite the presence of nonnavigable interruptions such as falls, rapids, sand bars, carries or shifting currents that require portaging or "land carriage" to circumvent them. The Supreme Court has held that interruptions are simply factors to consider. *United States v. Utah*, 283 U.S. 64, 86, 51 S.Ct. 438, 444, 75 L.Ed. 844 (1931). [FN6] "[T]he vital and essential point is whether the natural navigation of the river is such that it affords a channel for useful commerce." *Id.*; *see Puget Power*, 644 F.2d at 789 ("[n]avigability depends upon the stream's usefulness as a transportation mechanism for commerce").

FN6. *United States v. Utah* involved application of *The Daniel Ball* test to determine navigability for the purpose of establishing title to riverbeds. Although navigability for purposes of title differs in some respects from navigability for purposes of FERC jurisdiction, *see Riverfront Protection Ass'n*, 672 F.2d at 794 n. 1, the differences are of no consequence in this case.

[8] The Tribe admitted in its brief that it lacked direct evidence of actual or substantial use of the middle segment for interstate commerce. In addition, the very length of the middle section relative to the length of the river as a whole (21 miles out of, at most, 55) raises a presumption that this difficult stretch of river is not simply a "mere

interruption" but, rather, renders the river unsuitable for navigation. For these reasons, we hold that FERC correctly declined to infer that this segment had ever been circumvented or was suitable for use in interstate commerce.

2. The 1864 Washington Territorial Statute

The Tribe claims that an 1864 Washington territorial statute "explicitly demonstrates" that the river's middle segment was suitable for commerce. [FN7] The Tribe did not raise this argument before FERC. Generally, parties must raise objections to agency proceedings during the actual proceeding. *United States v. L.A. Tucker Truck Lines, Inc.*, 344 U.S. 33, 36-37, 73 S.Ct. 67, 68-69, 97 L.Ed. 54 (1952).

> FN7. The statute authorized a company to clear log jams and obstructions from the mouth of the Cedar River to a point near Landsburg "with the privilege of continuing the clearing of said river of obstructions for such further distance as said company may deem advisable." 1863-64 Wash.Terr.Laws 98, 99.

[9] Under § 825*l*(b), we can consider an objection not raised before FERC only if the party offers reasonable grounds for failing to object. *Pacific Power & Light Co. v. FPC*, 141 F.2d 602, 605 (9th Cir.1944) (no review unless objecting party raised "the specific grounds of objection" before Commission).

[10] The Tribe offers no reasonable grounds for its failure to present this 1864 statute. It contends that the statute is a law and not "new documentary evidence." However, the Tribe attempts to use it to supplement evidence of navigability. Further, we may consider new evidence only after the offering party has obtained our permission to allow FERC to reexamine its findings in light of the new evidence. § 825*l*(b). The Tribe has made no such request. We need not consider the 1864 statute.

3. Attorney Fees Under the Equal Access to Justice Act

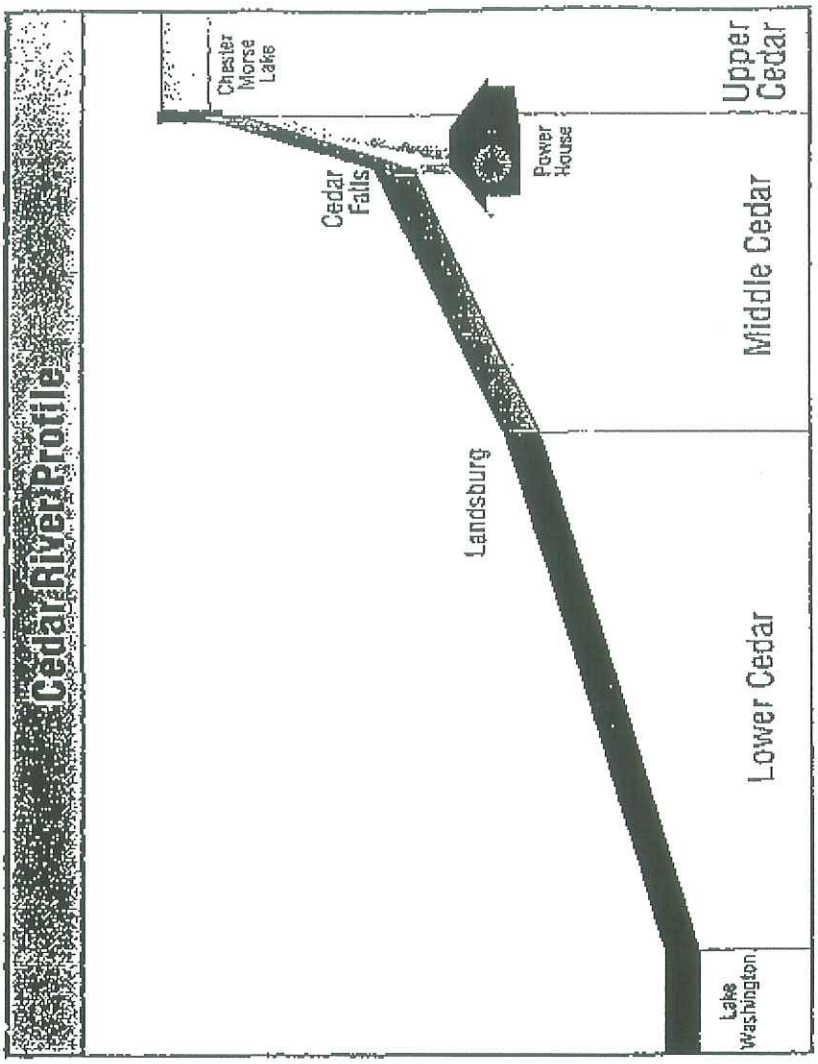
Because the Tribe is not the prevailing party, we may not award reasonable attorney fees and costs under the Equal Access to Justice Act, 28 U.S.C. § 2412(d)(1)(A) (1988).

***1434 CONCLUSION**

The portion of the Cedar River on which Seattle's Cedar Falls Project lies is not a navigable waterway of the United States because it is not a continuous highway for interstate commerce purposes. The Tribe has produced no evidence that the 21-mile stretch of the river's middle segment was ever portaged around. Evidence of rafting, canoeing and shingle bolt floats in this case is scant and none is offered with respect to the segment of the river in dispute. There is substantial evidence to support FERC's finding of nonnavigability.

AFFIRMED.

APPENDIX A



END OF DOCUMENT

ADDITIONAL INFORMATION

Cedar River - Taylor Creek Confluence

WRIA 8 Salmon Recovery Projects

Project Description

- Supports one of **healthiest, genetically unique chinook stocks** identified in WRIA 8
- Confluence with major tributary is important for productivity, ecological process
- Integrates with Cedar Legacy habitat preservation program, basin plan priorities

Other WRIA 8 Salmon Recovery Projects

For questions about the Water and Land Resources Web Page, please contact *Fred Bentler*, Visual Communication & GIS Unit.

Department of Natural Resources and Parks
Water and Land Resources Division

Updated: July 31, 2001

Go to

Salmon Recovery in the Lake Washington/ Cedar River/ Sammamish Drainage Area

Funding Sources for Watershed Stewardship Projects

Cedar River/Lake Washington Watershed page

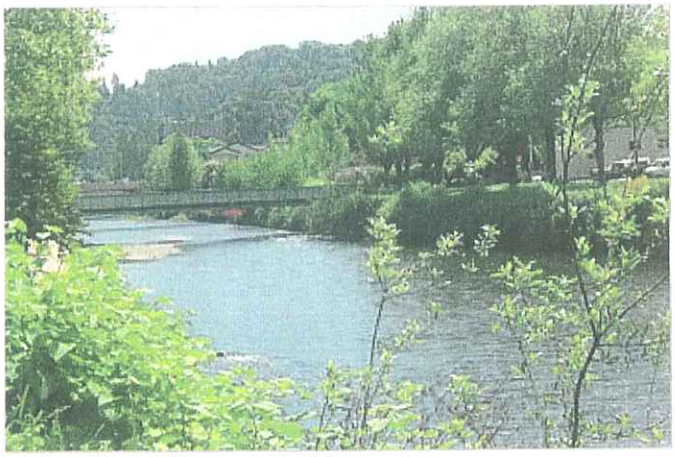
Lake Sammamish Watershed page

Salmon & Trout Topics

River & Stream Water Quality Monitoring

Water quality monitoring station

08C070 - Cedar R @ Logan St/Renton

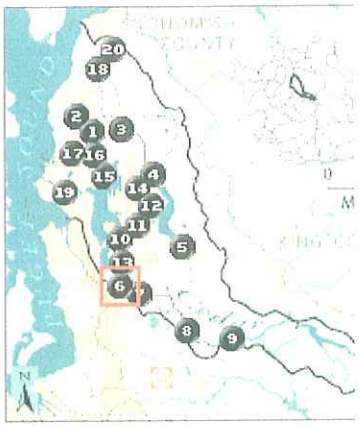


Selected station details

type	class	uwa	ecoregion	county	contact	map detail
long-term	A	186 mi^2	Puget Lowland	King	Ward	TopoZone.com®

Years when sampling has occurred:

03	02	01	00	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82
81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38



relief x1.33 historic

WRIA: 08, Cedar-Sammamish

20 stations (all including hist

id	station name
1 08A070	McAleer Cr nr Mouth
2 08A090	Upper McAleer Cr
3 08B070	Sammamish R @ Bothell
4 08B110	Sammamish R @ Redmond
5 08B130	Issaquah Cr nr Issaquah
6 08C070	Cedar R @ Logan St/Renton
7 08C080	Cedar R @ Maplewood
8 08C090	Cedar R @ Maple Valley
9 08C110	Cedar R nr Landsburg
10 08D070	Mercer Slough nr Bellevue
11 08E090	Kelsey Cr @ Monitor Site
12 08E110	Upper Kelsey Cr
13 08F070	May Cr nr Mouth
14 08G070	Valley Cr nr Mouth
15 08H070	Thornton Cr nr Mouth
16 08H100	North Branch Thornton Cr
17 08J070	West Branch Thornton Cr
18 08J100	Swamp Creek abv Lynnwood
19 08K090	Ship Canal @ Freemont
20 08K100	North Creek nr Everett

WASHINGTON STATE DEPT. OF ECOLOGY

Stream bioassessment summary for:

Cedar R abv Reservoir

site photo taken 13-Oct-1994

WRIA	ecoregion	elevation (ft)	latitude	longitude
08, Cedar-Sammamish	Cascades	1615	47° 21′ 57′′	121° 37′ 19′′

Monitoring visits

Date of visit	B-IBI score	comment
10/13/1994	41	Good, natural biological conditions indicated

CEDAR R ABV RESERVOIR, OCTOBER 13, 1994 - RESULTS SUMMARY

Habitat conditions

stream flow	
stream_flow (cubic ft./sec.)	12.5
water quality measurements	
water temperature (Celsius)	9.9
conductivity (µmhos/cm)	43
dissolved oxygen (mg/liter)	9.7
acidity (pH)	7.3
stream gradient	

WASHINGTON STATE DEPT. OF ECOLOGY

Stream bioassessment summary for:

Cedar R nr Cedar Falls

site photo taken 14-Oct-1994

WRIA	ecoregion	elevation (ft)	latitude	longitude
08, Cedar-Sammamish	Puget Lowland	848	47° 24′ 30″	121° 50′ 06″

Monitoring visits

Date of visit	B-IBI score	comment
10/14/1994	43	Good, natural biological conditions indicated

CEDAR R NR CEDAR FALLS, OCTOBER 14, 1994 - RESULTS SUMMARY

Habitat conditions

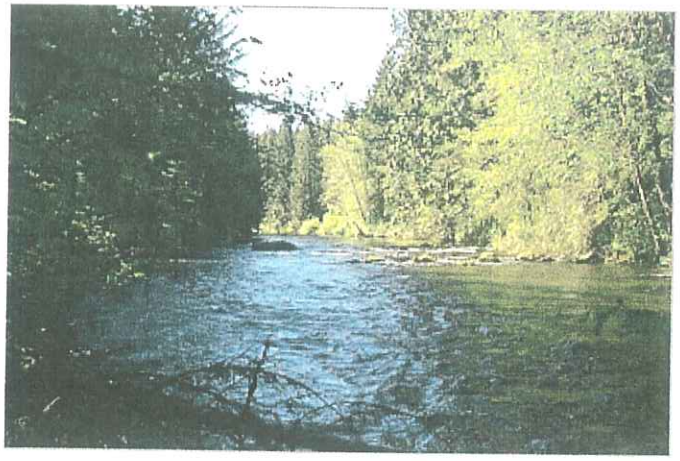
stream flow	
stream_flow (cubic ft./sec.)	176.0
water quality measurements	
water temperature (Celsius)	12.2
conductivity (µmhos/cm)	33
dissolved oxygen (mg/liter)	10.4
acidity (pH)	7.8
stream gradient	

River & Stream Water Quality Monitoring

environmental information > river & stream WQ monitoring > state network >

Water quality monitoring station

08C110 - Cedar R nr Landsburg



Selected station details

type	class	uwa	ecoregion	county	contact	map detail
long-term	AA	122 mi^2	Puget Lowland	King	Ward	TopoZone.com®

Years when sampling has occurred:

03	02	01	00	99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82
81	80	79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38

relief x1.33 historic

WRIA: 08, Cedar-Sammamish

20 stations (all including hist

id	station name
1 08A070	McAleer Cr nr Mouth
2 08A090	Upper McAleer Cr
3 08B070	Sammamish R @ Bothell
4 08B110	Sammamish R @ Redmond
5 08B130	Issaquah Cr nr Issaquah
6 08C070	Cedar R @ Logan St/Renton
7 08C080	Cedar R @ Maplewood
8 08C090	Cedar R @ Maple Valley
9 08C110	Cedar R nr Landsburg
10 08D070	Mercer Slough nr Bellevue
11 08E090	Kelsey Cr @ Monitor Site
12 08E110	Upper Kelsey Cr
13 08F070	May Cr nr Mouth
14 08G070	Valley Cr nr Mouth
15 08H070	Thornton Cr nr Mouth
16 08H100	North Branch Thornton Cr
17 08J070	West Branch Thornton Cr
18 08J100	Swamp Creek abv Lynnwood
19 08K090	Ship Canal @ Freemont
20 08K100	North Creek nr Everett

station overview | assessment | exceedences | finalized data | preliminary data | te

Cascade Crest
Upper Watershed
Reservoirs
Cedar Falls Area
> Lower Watershed

The Landsburg Diversion Dam releases 2/3 of the annual flow of the Cedar River to provide water for Lake Washington, the Hiram M. Chittenden Locks and four species of salmon.

> To end the virtual tour

Water Resources

Data Category: Site Information | Geographic Area: Washington | GO

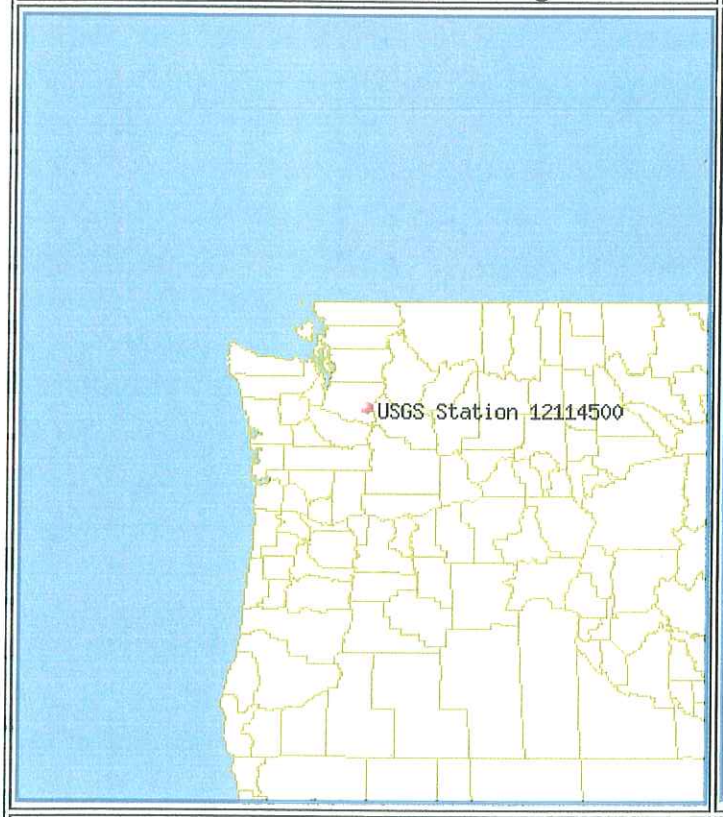
Site Map for Washington

Click Here for information on data reliability,
or for more water resources data for Washington State.

USGS 12114500 CEDAR R. BELOW BEAR CR., NEAR CEDAR FALLS, WASH.

Available data for this site | Station site map | GO

King County, Washington
Hydrologic Unit Code 17110012
Latitude 47°20'32", Longitude 121°32'52" NAD27
Drainage area 25.40 square miles
Gage datum 1,880.00 feet above sea level NGVD29

Location of the site in Washington.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Water Resources

Data Category: Surface Water | Geographic Area: Washington | GO

Calendar Year Streamflow Statistics for Washington

Click Here for information on data reliability,
or for more water resources data for Washington State.

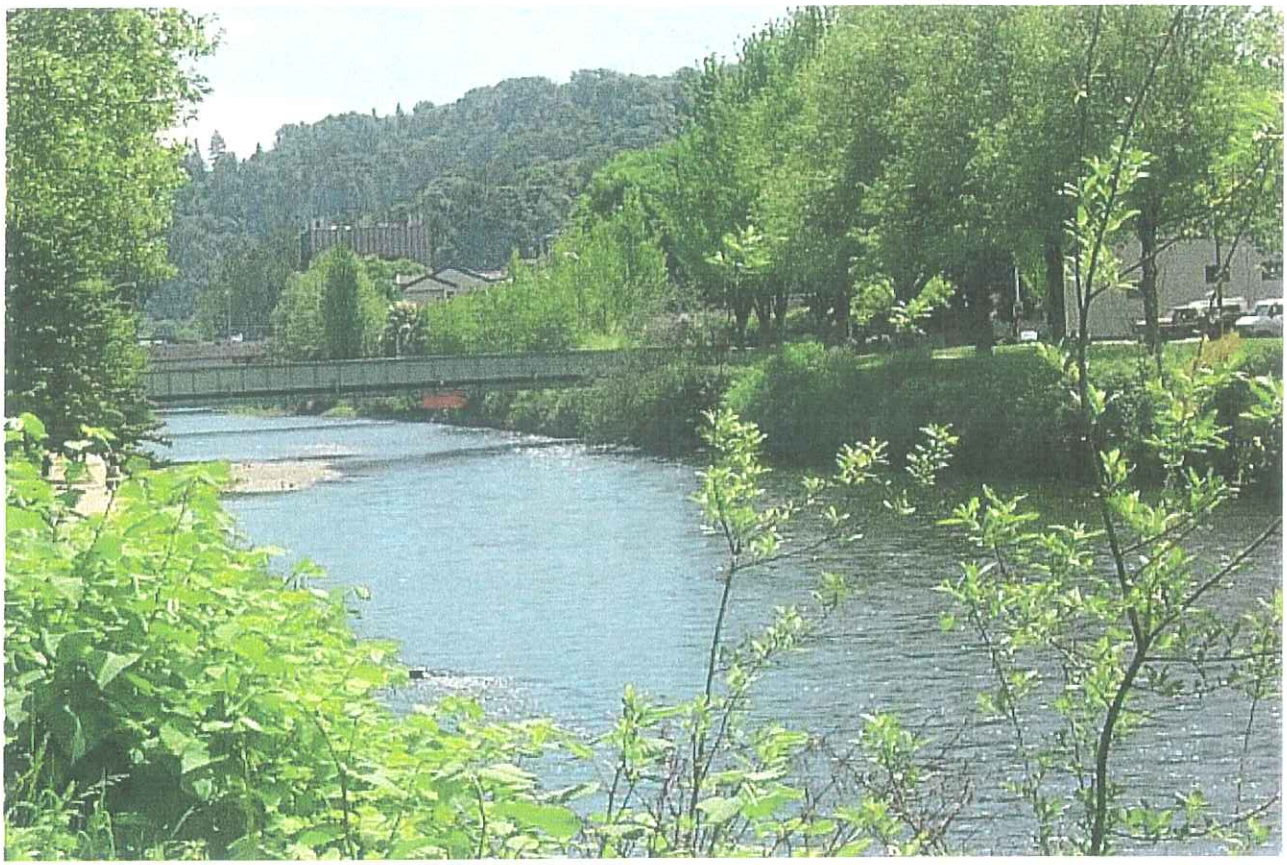
USGS 12114500 CEDAR R. BELOW BEAR CR., NEAR CEDAR FALLS, WASH.

Available data for this site: Surface-water: Annual streamflow statistics | GO

King County, Washington
Hydrologic Unit Code 17110012
Latitude 47°20'32", Longitude 121°32'52" NAD27
Drainage area 25.40 square miles
Gage datum 1,880.00 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1946	190	1957	123	1980	155	1991	170
1947	184	1958	183	1981	132	1992	105
1948	170	1959	235	1982	174	1993	131
1949	198	1960	152	1983	148	1994	133
1950	226	1961	191	1984	167	1995	185
1951	163	1962	164	1985	156	1996	167
1952	116	1963	123	1986	137	1997	215
1953	198	1976	152	1987	103	1998	142
1954	179	1977	152	1988	160	1999	190
1955	211	1978	111	1989	162	2000	116
1956	220	1979	134	1990	216		



Chattahoochee River—Georgia

Reported Decision: United States v. Crow, Pope & Land Enters., Inc., 340 F. Supp. 25 (N.D. Ga. 1972)

Reach at Issue: Between Peachtree Creek and Buford Dam

Judicial Determination: Non-navigable

Facts Reported in Decision:

"The Chattahoochee River . . . is an interstate waterway over 400 miles in length running in a generally southwesterly direction from its source in northeast Georgia, to the Georgia-Alabama state lines where it bends to a generally southerly direction. . . . The defendant's property is located at approximately mile 306 on the river. The river near the defendant's property is quite shallow and the current is swift." 340 F. Supp. at 29.

"Columbus, Georgia (mile 170.7) was the head of steamboat navigation in the early 1800's, and bateaux (flat bottomed boats) could carry 70 bales of cotton from Franklin, Georgia (mile 239.9) to West Point, Georgia (mile 201.4). No commercial craft has ever navigated the river above Columbus." 340 F. Supp. at 29.

"In the 1890's, a gold dredging, flat bottom, barge operated for three to five years on the river adjoining the barge owner's property in what is now Fulton and Gwinnett Counties. Around the turn of the century, raft-type ferries would traverse the river at several points. The barge and ferries would use poles, ropes and the current as their means of locomotion, and would draw no more than two feet of water." 340 F. Supp. at 29-30.

"Presently, only light pleasure craft, *e.g.*, canoes, kayaks, rubber innertubes and rafts, drawing only a few inches of water, can and do float down the river. . . . No craft of any kind has ever proceeded upstream due to the rapid current and frequent obstructions. . . . The topography of the river and surrounding property reveals a hill bound region between Roswell, Georgia (mile 323.7) and Atlanta (mile 306.2) with perpendicular rock cliffs on both sides of the water. The fall is great, the current is rapid, and the channel is filled with projecting rock. The river alternatively expands and contracts and follows a generally winding course through what remains a greatly wooded territory. . . . There are an unknown number of rapids, shoals or similar obstructions in the area here concerned. . . . The gradient of the river between those areas of interference appears to be rather uniform and regular. . . . The only admissible evidence as to the quantity of water involved, indicates that peak flows are of short duration while minimum flows are of longer duration. In addition, the release of water from Buford Dam alters the water flow at different times of the week. . . . The United States Army Corps of Engineers consider a channel at least 100 feet wide, nine feet deep, with locks 50 feet wide as sufficient to accommodate and sustain useful commerce." 340 F. Supp. at 30.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Buford Dam, GA	2,031	1943-2000
Roswell, GA	2,062	1977-2000

Chattahoochee River
Georgia

REPORTED DECISION

H

United States District Court
N. D. Georgia,
Atlanta Division.

UNITED STATES of America
v.
CROW, POPE & LAND ENTERPRISES, INC.

Civ. A. No. 15844.

March 21, 1972.

Suit to enforce the Refuse Act. The District Court, Albert J. Henderson, Jr., J., held that the Chattahoochee River between Peachtree Creek and Buford Dam was not navigable water of the United States.

Order accordingly.

West Headnotes

[1] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Point along course of river between its mouth and its source at which navigability ceased was evidentiary question.

[2] **Evidence** 11
157k11 Most Cited Cases

Court could take judicial notice of recent population and economic growth in area adjoining river.

[3] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

In suit to enforce Refuse Act, court considered navigability of segment of river approximately 47 miles in length without regard to navigability of river at any other point. Rivers and Harbors Appropriation Act of 1899, § § 10, 13, 33 U.S.C.A. § § 403, 407; 28 U.S.C.A. § 1345.

[4] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Those rivers must be regarded as public navigable rivers in law which are navigable in fact.

[5] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Rivers are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in customary modes of trade and travel on water.

[6] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Rivers constitute navigable waters of the United States, within meaning of acts of Congress, in contradistinction from navigable waters of the states, when they form in their ordinary condition by themselves, or by uniting with other waters, a continued highway over which commerce is or may be carried on with other states or foreign countries in customary modes in which such commerce is conducted on water. Rivers and Harbors Appropriation Act of 1899, § § 10, 13, 33 U.S.C.A. § § 403, 407; 28 U.S.C.A. § 1345.

[7] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

True test of navigability does not depend on mode by which commerce is, or may be, conducted, nor on difficulties attending navigation.

[8] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Capability of use by public for purposes of transportation and commerce, rather than extent and manner of that use, constitutes true criterion of navigability of river.

[9] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Obstructions rendering navigation difficult will not defeat navigability if commerce is nevertheless successfully being conducted.

[10] **Navigable Waters** 1(5)
270k1(5) Most Cited Cases

Mere fact that river will occasionally float logs, poles and rafts downstream in times of high water does not make river navigable.

[11] **Navigable Waters** 1(3)

270k1(3) Most Cited Cases

[11] **Navigable Waters** 1(5)
270k1(5) Most Cited Cases

In order to give body of water character of navigable stream, it must be generally and commonly useful to some purpose of trade or agriculture, and it is not every small creek in which a fishing skiff or gunning canoe can be made to float at high water which is deemed navigable.

[12] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

To be considered navigable, waterway must be susceptible of use as channel of useful commerce and not merely capable of exceptional transportation during periods of high water.

[13] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Existence of occasional obstructions will not deprive river of its navigable status.

[14] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

River need not be open for commercial navigation at all seasons of year or at all stages of water in order to be considered navigable.

[15] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

To be considered navigable, river must have capacity in its natural state for carrying interstate commerce.

[16] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Fact that artificial, as opposed to natural, obstructions may exist does not prevent navigability, when such obstructions are capable of abatement by due exercise of public authority and where, supposing them to be abated, river would be navigable in fact in its natural state.

[17] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

River once found to be navigable cannot be deprived of that status through commercial disuse for period of time.

[18] **Navigable Waters** 1(2)
270k1(2) Most Cited Cases

Even if, because of changed conditions, either geographic or economic, usefulness of river as means of transportation has lessened, river's navigability status remains unchanged pending official abandonment by Congress.

[19] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

For purposes of requirement that stream, to be navigable, be useful for trade and travel in "natural and ordinary condition", quoted words mean only volume of water, gradient and regularity of flow.

[20] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Even where stream is not passable in its natural and ordinary condition, if, by reasonable improvement, it may be rendered navigable, stream is navigable without such improvement.

[21] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In determining whether river is navigable in that it is susceptible to "reasonable" improvement, there must be balance between cost and need at time when improvement would be useful.

[22] **Commerce** 82.35
83k82.35 Most Cited Cases
(Formerly 83k18)

Federal power over navigation is not enlarged by improvements to waterways, but improvements may make applicable to waterways existing power over commerce. U.S.C.A.Const. art. 1, § 8, cl. 3; art. 3, § 2, cl. 1.

[23] **Commerce** 82.35
83k82.35 Most Cited Cases
(Formerly 83k48)

[23] **Waters and Water Courses** 36
405k36 Most Cited Cases

Congress may exercise control over nonnavigable stretches of river in order to promote or protect

commerce on navigable portions.

[24] **Environmental Law** 165
149Ek165 Most Cited Cases
(Formerly 199k25.7(3) Health and Environment, 270k35)

Refuse Act provision forbidding deposit of matter in tributary of navigable body of water was intended to promote or protect commerce on navigable waters. Rivers and Harbors Appropriation Act of 1899, § 13, 33 U.S.C.A. § 407.

[25] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Navigability depends upon whether body of water (1) is presently being used or is suitable for use for transportation of persons or property, (2) has been used or was suitable for such use in past or (3) could be made suitable for use in future by reasonable improvements.

[26] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Pleasure boating can sometimes indicate a river's susceptibility for commercial use, for purposes of applying navigability test.

[27] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Even small traffic compared to available commerce of region is sufficient to show navigability of river.

[28] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

As regards navigability, existence of ferries is no more evidence of commercial use than presence of bridge or railroad trestle whose primary purpose is to avoid river rather than to employ it as means for trade and transportation.

[29] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Isolated and exceptional example of person's use of gold dredging barge for a few miles, primarily along his own property, to extract gold-bearing silt from river bed was insufficient to demonstrate navigability.

[30] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Though court held serious doubts as to correctness of 1880 recommendations, where 1972 determination of Corps of Engineers adopted findings and recommendations of 1880 report, latter provided only evidentiary matter which court could consider on question of whether river could be made navigable by reasonable improvements.

[31] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Issue is whether river can be made navigable in future through reasonable improvements and not whether at sometime in past river could have been sufficiently improved to meet the then needs of area; and river could not be deemed navigable today merely because it could have been made navigable in 1880.

[32] **Evidence** 18
157k18 Most Cited Cases

Court could not take judicial notice that improvements, of unknown cost, necessary to make river navigable would be "reasonable."--

[33] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

The Chattahoochee River between Peachtree Creek and Buford Dam was not navigable water of the United States.

[34] **Federal Civil Procedure** 773
170Ak773 Most Cited Cases
(Formerly 170Ak773.1, 170Ak773)

United States Attorney for Northern District of Georgia was not party to action brought in that district by United States to enforce the Refuse Act, and no counterclaim could be asserted against him as an individual. Fed.Rules Civ.Proc. rule 14(a), 28 U.S.C.A.

[35] **Federal Civil Procedure** 287
170Ak287 Most Cited Cases

The United States District Attorney for the Northern District of Georgia could not be liable to defendant for all or part of government's claim against defendant under Refuse Act and, therefore, could not

be made third-party defendant even if properly served with summons and complaint for trespass upon defendant's property. Fed.Rules Civ.Proc. rule 14(a), 28 U.S.C.A.

[36] **Federal Courts** 218
170Bk218 Most Cited Cases
(Formerly 106k284)

Defendant's claim against United States Attorney for Northern District of Georgia for trespass upon defendant's property was purely one of state law, and in government's suit to enforce Refuse Act, federal court was without jurisdiction of subject matter of defendant's claim. Rivers and Harbors Appropriation Act of 1899, § § 10, 13, 33 U.S.C.A. § § 403, 407; 28 U.S.C.A. § 1345; Fed.Rules Civ.Proc. rules 13, 14, 28 U.S.C.A.

[37] **Environmental Law** 173
149Ek173 Most Cited Cases
(Formerly 199k25.7(4) Health and Environment, 270k35)

In absence of evidence that what defendant was depositing in nonnavigable section of river would either float or be washed downstream to navigable portion of river, claim under Refuse Act could not be upheld on "tributary theory." Rivers and Harbors Appropriation Act of 1899, § § 10, 13, 33 U.S.C.A. § § 403, 407; 28 U.S.C.A. § 1345; Fed.Rules Civ.Proc. rules 13, 14, 28 U.S.C.A.

***28** John W. Stokes, Jr., U. S. Atty., Atlanta, Ga., for plaintiff.

Moreton Rolleston, Jr., Atlanta, Ga., for defendant.

ORDER

ALBERT J. HENDERSON, Jr., District Judge.

In this suit, the federal government seeks to enforce Sections 10 and 13 of the Rivers and Harbors Appropriation Act of 1899, 33 U.S.C. § § 403 [FN1] and 407 [FN2] more commonly referred to as the "1899 Refuse Act", against the defendant, a real estate developer and apartment complex owner. Jurisdiction is founded on 28 U.S.C. § 1345.

FN1. § 403 provides:
The creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of the Army; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army prior to beginning the same. Mar. 3, 1899, c. 425, § 10, 30 Stat. 1151.

FN2. § 407 provides:
It shall not be lawful to throw, discharge, or deposit, or cause, suffer, or procure to be thrown, discharged, or deposited either from or out of any ship, barge, or other floating craft of any kind, or from the shore, wharf, manufacturing establishment, or mill of any kind, any refuse matter of any kind or description whatever other than that flowing from streets and sewers and passing therefrom in a liquid state, into any navigable water of the United States, or into any tributary of any navigable water from which the same shall float or be washed into such navigable water; and it shall not be lawful to deposit, or cause, suffer, or procure to be deposited material of any kind in any place on the bank of any navigable water, or on the bank of any tributary of any navigable water, where the same shall be liable to be washed into such navigable water, either by ordinary or high tides, or by storms or floods, or otherwise, whereby navigation shall or may be impeded or obstructed: Provided, That nothing herein contained shall extend to, apply to, or prohibit the operations in connection with the improvement of navigable waters or construction of public works, considered

> necessary and proper by the United States officers supervising such improvement or public work: And provided further, That the Secretary of the Army, whenever in the judgment of the Chief of Engineers anchorage and navigation will not be injured thereby, may permit the deposit of any material above mentioned in navigable waters, within limits to be defined and under conditions to be prescribed by him, provided application is made to him prior to depositing such material; and whenever any permit is so granted the conditions thereof shall be strictly complied with, and any violation thereof shall be unlawful. Mar. 3, 1899, c. 425, § 13, 30 Stat. 1152.

By its answer , the defendant contends that 33 U.S.C. § 401 et seq., is inapplicable to the waters here involved; that the plaintiff's interpretation of the pertinent statutes would constitute an illegal and unconstitutional deprivation of the defendant's property without just and adequate compensation therefor; and that if allowed to proceed, the plaintiff's actions amount to an illegal attempt at selective enforcement. The defendant also brings what is denominated as a counterclaim against John W. Stokes, Jr., United States Attorney for the Northern District of Georgia, for trespass upon the defendant's property.

Prior to the hearing on the plaintiff's demand for preliminary injunction, the court entered a consent decree disposing of all matters pertaining to preliminary relief while reserving all issues of liability. Further, it was stipulated by the parties that the preliminary hearing would constitute the final hearing on the ***29** issue of navigability. This order is based on the evidence then presented and the stipulation of the parties thereafter submitted to the court.

[1] The defendant's property, known as Riverbend, is located on the west bank of the Chattahoochee River and slightly south of Powers Ferry Bridge. When describing distances and locations on the Chattahoochee River, it is desirable to refer to their mileage from the confluence of the Chattahoochee and Flint Rivers as determined by the United States Army Corps of Engineers. Therefore, for ease of reference, the property in question is located at approximately mile 306 (understood to mean the distance from the juncture of the Chattahoochee and Flint Rivers). The segment of the Chattahoochee River relevant to the present inquiry is that portion between Peachtree Creek (mile 300.54) and Buford Dam (mile 348.82), *i. e.*, a distance of 47.78 miles. Located north of Buford Dam is the Buford Reservoir (or Lake Sidney Lanier), which, in a different context (admiralty), has previously been determined to be non-navigable, see, In Re Henry H. Stephens, 341 F.Supp. 1404, Civil Action No. 8749 (N.D.Ga. March 31, 1965). [FN3] Consequently, since the navigability of the river below Peachtree Creek will not be considered in this order, it is an evidentiary question as to where along the course of the river between its mouth and its source navigability ceases. United States v. Rio Grande Dam and Irrig. Co., 174 U.S. 690, 19 S.Ct. 770, 43 L.Ed. 1136 (1899).

> FN3. Judge Hooper also discussed the portion of the river here involved and found that "[t]he Chattahoochee River is not in fact a 'continuously navigable water' except at a point many miles south of Lake Lanier. It is not navigable at all north of Lake Lanier, nor south of Lake Lanier until it reaches Columbus, Georgia.
> "There is no navigation above Lake Lanier to the north, nor any navigation from the lake in a southerly direction where the dam is located. The river is not navigable below the dam. There are, however, comparatively short stretches in the river above and below the dam which might be called navigable."

Following a hearing on the stipulated issue of navigability, counsel for each party was directed to submit written arguments, proposed findings of fact and conclusions of law. The parties have complied with that direction and the case is ready for decision.

The court has reviewed the admissible evidence presented by the parties hereto and makes the following:

FINDINGS OF FACT

1. The Chattahoochee River (hereinafter sometimes referred to as the "river") is an interstate waterway over 400 miles in length running in a generally southwesterly direction from its source in northeast Georgia, to the Georgia- Alabama state lines where it bends to a generally southerly direction. In the southwest corner of the state, it unites with the Flint River to form the Apalachicola River, which, in slightly more than 100 miles, crosses the Florida

panhandle to empty into the Gulf of Mexico. Specific locations along the Chattahoochee River are stated in miles from a specific point of reference determined to be the confluence of the Chattahoochee and Flint Rivers.

2. The defendant's property is located at approximately mile 306 on the river. The river near the defendant's property is quite shallow and the current is swift. Peachtree Creek, Morgan Falls Dam and Buford Dam are locted at miles 300.54, 312.62 and 348.82 respectively.

3. Columbus, Georgia (mile 170.7) was the head of steamboat navigation in the early 1800's, and bateaux (flat bottomed boats) could carry 70 bales of cotton from Franklin, Georgia (mile 239.9) to West Point, Georgia (mile 201.4). No other commercial craft has ever navigated the river above Columbus.

4. In the 1890's, a gold dredging, flat bottom, barge operated for three to five years on the river adjoining the barge owner's property in what is now Fulton and Gwinnett Counties. Around the turn of the century, raft-type ferries would traverse the river at several points. The barge and the ferries would use *30 poles, ropes and the current as their means of locomotion, and would draw no more than two feet of water.

5. Evidence of farmers and moonshiners using the river to transport their wares is scant, and, if true, appears without specificity as to location and frequency.

6. Presently, only light pleasure craft, *e. g.*, canoes, kayaks, rubber innertubes and rafts, drawing only a few inches of water, can and do float down the river.

7. No craft of any kind has ever proceeded upstream due to the rapid current and frequent obstructions.

8. The topography of the river and surrounding property reveals a hill bound region between Roswell, Georgia (mile 323.7) and Atlanta (mile 306.2) with perpendicular rock cliffs on both sides of the water. The fall is very great, the current is rapid, and the channel is filled with projecting rock. The river alternately expands and contracts and follows a generally winding course through what remains a greatly wooded territory.

9. There are an unknown number of rapids, shoals or similar obstructions in the area here concerned. However, taken from the original 1878 and 1879 surveys and studies of the river by the Corps of Engineers, there are below what is now Buford Dam at least 18 areas of shoals and/or reefs some of which are up to two miles in length with a fall ranging from a gentle 0.30 foot to 19.95 feet. Between Roswell and Atlanta the fall averages 5.7 feet per mile.

10. The gradient of the river between those areas of interference appears to be rather uniform and regular.

11. The only admissible evidence as to the quantity of water involved, indicates that peak flows are of short duration while minimum flows are of longer duration. In addition, the release of water from Buford Dam significantly alters the water flow at different times of the week.

12. The United States Army Corps of Engineers consider a channel at least 100 feet wide, nine feet deep, with locks 50 feet wide as sufficient to accommodate and sustain useful commerce. These dimensional prerequisites obtain on the river from its confluence with the Flint River up to Columbus where a project depth of three feet is authorized to Franklin, Georgia. Locks of at least 50 feet in width exist at the Jim Woodruff Lock and Dam (mile 0.0), the Columbia Lock and Dam (mile 46.5), and the Walter F. George Lock and Dam (mile 75.2).

13. The West Point Dam (under construction 30 miles south of Franklin, Georgia), the Morgan Falls Dam and the Buford Dam do not have locks which would permit through navigation by any vessel.

14. There is no evidence, admissible or inadmissible, that matter or refuse placed in the Chattahoochee River would float or be washed downstream to any other portion of the river.

15. The Georgia Legislature, by enactments approved in 1820, 1826, 1835 and 1852, indicated its desire to improve the navigability of the Chattahoochee River. No findings were ever reported following the implementation of this legislation, nor is there any indication of the work actually performed.

16. It is the conclusion of the Corps of Engineers, based upon the 1878 and 1879 surveys of the river between Thompson's Bridge (Gainesville, Georgia) and the Western and Atlantic Railroad crossing (Atlanta, Georgia) that the section "... was susceptible of ready improvibility [sic] at a reasonable cost to accommodate vessels normal to the river at that time."

17. The Annual Report of the Chief of Engineers for 1880, as adopted by the Corps of Engineers on January 12, 1972, states that the needed improvements for a channel *80 feet wide and three feet deep* between Gainsville and Atlanta would require *either* 12 locks and dams, with an average lift of 12 feet, *seven of which will be between Roswell and Atlanta, or* 28 locks, with seven to 16 feet ***31** in lift, averaging 11 feet, at an approximate 1880 cost of $1,523,655.00. No adjustment has been made by the recent report to account for the subsequent construction of Buford and Morgan Falls Dams. The 1880 monetary estimate is based primarily upon the needed improvements being constructed from locally available timber. No evidence was offered to reflect the present cost of improvements required by the report.

18. Citing as the need for the stated improvements, the Corps of Engineers, in the 1880 Report and adopted in January, 1972, stressed the following:

> Above Atlanta the counties north of the river are without transportation, except by wagonroads. The improvement of the river would afford a cheap and certain means of getting to market a large and very rich agricultural section. The great gold region lies upon the waters of this stream and around the head of the proposed improvement. Much of this country is rich in magnetic iron ore and other minerals of great value.

[2] 19. While no other evidence was presented as to the present need of the Atlanta area for such an additional avenue of commerce, the court can and does take judicial notice of the recent population and economic growth adjoining the river at and around the greater metropolitan Atlanta area.

20. The United States Attorney for the Northern District of Georgia, John W. Stokes, Jr., did, on or about November 1, 1971, ride down the Chattahoochee River in a canoe, and did proceed along the west bank of the river south of Powers Ferry Bridge.

DISCUSSION

[3] As previously stated, the sole question to be adjudicated in this order is whether the Chattahoochee River is navigable between Peachtree Creek and Buford Dam. Support for considering a section of the river is found in United States v. Appalachian Electric Power Co., 311 U.S. 377, 61 S.Ct. 291, 85 L.Ed. 243 (1940), wherein the Court independently and separately reviewed the lower court's findings as to a middle segment of the New River apart from and irrespective of the Court's observation that adjoining portions of the New River were clearly navigable. Consequently, this court will consider a segment of the Chattahoochee River approximately 47 miles in length without regard to the navigability of the river at any other point. In addition, the court is limited in its findings to the facts presented by the parties hereto, since there is no relevant prior holding of which the court could take judicial notice.

It is perhaps appropriate at this stage of the proceedings to make an observation concerning the sufficiency of the evidence presented. The court, in its research of the subject area has reviewed numerous decisions of the United States Supreme Court, as well as a multitude of lower federal rulings, which have held various waterways of the United States to be either navigable or non-navigable. Even a cursory reading of the evidence upon which these decisions were based reveals the frequently astounding amount of factual information, expert testimony and historical data ordinarily recited in support of the court's findings. However, in the case at bar, either because such evidence does not exist, or because the parties did not deem it advisable to proffer that information, the court has found itself in the uncomfortable position of having to rule on a significant question of law and fact without the quality and quantity of evidence cited by other tribunals in their determinations. Therefore, the present holding is necessarily limited to the scant factual evidence submitted by the parties, and, as will be hereinafter discussed, without the requisite evidentiary bases necessary to sustain the burden of proof.

[4][5][6][7][8][9] In discussing the question of navigability, it is important to note the landmark decision in The Daniel Ball, 10 Wall. 557, 19 L.Ed. 999 (1890), which, in rejecting the English tide-water test ***32** as appropriate for this country, announced the following guidelines:

> Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water. And they constitute navigable waters of the United States within the meaning of the Acts of Congress, in contradistinction from the navigable waters of the States, when they form in their ordinary

> condition by themselves, or by uniting with other waters, a continued highway over which commerce is or may be carried on with other States or foreign countries in the customary modes in which such commerce is conducted on water.

Id., at 563, 19 L.Ed. 999. By way of further clarification and as a further refinement of the test laid down in *The Daniel Ball,* the Court stated that,

> ... the true test does not depend on the mode by which commerce is, or may be, conducted, nor the difficulties attending navigation....
>
> The capability of use by the public for purposes of transportation and commerce affords the true criterion of the navigability of the river, rather than the extent and manner of that use.

The Montello, 20 Wall. 430, 441, 22 L.Ed. 391 (1874). The Court also for the first time recognized that obstructions rendering navigation difficult would not defeat a finding of navigability where commerce was nevertheless successfully being conducted. *Id.*, at 442, 22 L.Ed. 391. These and related principles have been repeated many times in later Supreme Court decisions, see, *e. g.*, Packer v. Bird, 137 U.S. 661, 11 S.Ct. 210, 34 L.Ed. 819 (1891); United States v. Cress, 243 U.S. 316, 37 S.Ct. 380, 61 L.Ed. 746 (1917); United States v. Holt State Bank, 270 U.S. 49, 46 S.Ct. 197, 70 L.Ed. 465 (1926); United States v. Utah, 283 U.S. 64, 51 S.Ct. 438, 75 L.Ed. 844 (1931), and with a few variations and modifications remain the true test today.

[10][11][12] The mere fact that a river will occasionally float logs, poles and rafts downstream in times of high water does not make the river navigable. United States v. Rio Grande Dam & Irrig. Co., *supra,* and,

> [i]t is not, however, as Chief Justice Shaw said (Rowe v. [Granite] Bridge Co., 21 Pick., 344), "every small creek in which a fishing skiff or gunning canoe can be made to float at high water, which is deemed navigable, but, in order to give it the character of a navigable stream, it must be generally and commonly useful to some purpose of trade or agriculture."

The Montello, supra, 20 Wall. at 442, 22 L.Ed. 391. Instead, with one exception, the principle that a river is navigable when it is used or is susceptible for use in its ordinary condition as a highway of commerce has been consistently followed by the federal courts. That exception is Leovy v. United States, 177 U.S. 621, 20 S.Ct. 797, 44 L.Ed. 914 (1900), where the Court, in reviewing a criminal conviction under the predecessor statute to 33 U.S.C. § 401, more narrowly defined the term "navigable waters of the United States", to include only those waters where commerce is of a "substantial and permanent character". *Id.*, at 632, 20 S.Ct. 797, at 801, 44 L.Ed. 914. Therefore, the waterway must be susceptible for use as a channel of useful commerce and not merely capable of exceptional transportation during periods of high water. Brewer-Elliott Oil & Gas Co. v. United States, 260 U.S. 77, 43 S.Ct. 60, 67 L.Ed. 140 (1922).

[13][14][15][16] Since *Montello,* it is conceded that the existence of occasional obstructions will not deprive a river of its navigable status, and a river need not be open for commercial navigation at all seasons of the year or at all stages of *33 the water. See, Economy Light & Power Co. v. United States, 256 U.S. 113, 41 S.Ct. 409, 65 L.Ed. 847 (1921) (under the 1899 Refuse Act); St. Anthony Falls Water Power Co. v. St. Paul Water Commissioners, 168 U.S. 349, 18 S.Ct. 157, 42 L.Ed. 497 (1897). The river must have the capacity in its natural state for carrying interstate commerce. The fact that artificial, as opposed to natural, obstructions may exist does not prevent navigability, when such obstructions are capable of abatement by the due exercise of public authority, and where supposing them to be abated, the river would be navigable in fact in its natural state. See, Economy Light & Power Co. v. United States, *supra,* 256 U.S. at 118, 41 S.Ct. 409, 65 L.Ed. 847.

[17][18] The Supreme Court, in *Economy Light, supra,* also rejected the contention that a river once found to be navigable can be deprived of that status through commercial disuse for a period of time. If, because of changed conditions, either geographic or economic, the usefulness of a river as a means of transportation has lessened, the river's navigability status remains unchanged pending an official abandonment by Congress. *Id.*, at 124, 41 S.Ct. 409, 65 L.Ed. 847; Arizona v. California, 283 U.S. 423, 51 S.Ct. 522, 75 L.Ed. 1154 (1931). As applied to the case at bar, if the river ever was navigable within the tests previously and hereinafter discussed, then it must remain so today.

[19][20][21] In recent years, the most significant and definitive ruling by the Supreme Court on the question of navigability was stated in United States v. Appalachian Electric Power Co., *supra.* The suit was brought by the United States to enjoin the construction and maintenance of a proposed dam without first having obtained a license from the Federal Power Commission pursuant to Section 23 of the Federal Water Power Act of 1920, 16 U.S.C. § 816, and for further violations of Sections 9 and 10 of

the Rivers and Harbors Act of 1899, 33 U.S.C. § § 401 and 403. As Mr. Justice Roberts noted in the dissenting opinion, the Court by its holding, added two additional tests to the uniform current of authority. First, as used in previous decisions of the Court, the phrase "natural and ordinary conditions" see, United States v. Oregon, 295 U.S. 1, 15, 55 S.Ct. 610, 79 L.Ed. 1267 (1935), was held to mean only volume of water, gradient and regularity of flow. Secondly, the Court held that even where a stream is not passable in its natural and ordinary condition, if, by "reasonable" improvements it may be rendered navigable, then the stream is navigable without such improvement. *Id.*, 311 U.S. at 432-433, 61 S.Ct. 291, 85 L.Ed. 243. Making a determination of what is reasonable, by necessity, requires a balance "... between cost and need at a time when the improvement would be useful." *Id.*, at 407-408, 61 S.Ct. at 299.

Since those improvements, however, need not be completed or even authorized, the court looked to whether the New River could be used for interstate commerce when and if reasonable improvements were ever made. In addition, the Court reviewed the substantial prior use of the selected 59-mile stretch, and concluded that the river was a navigable waterway of the United States.

[22] As it relates to the present dispute, the court is not unmindful of the difference between suits brought to fix the rights of riparian owners, those concerned with the determination of admiralty jurisdiction, Art. III, § 2, cl. 1 of the U.S.Const., and the scope of Congress' regulatory power over navigable waters under the "commerce clause", Art. I, § 8, cl. 3. The expansiveness of the latter power is amply demonstrated by reading Oklahoma ex rel. Phillips v. Guy F. Atkinson, Co., 313 U.S. 508, 61 S.Ct. 1050, 85 L.Ed. 1487 (1941); and Arizona v. California, *supra.* However, to forestall any conclusion that improvements broaden the constitutional power over commerce, the Supreme Court stated:

> [i]t cannot properly be said that the federal [commerce] power over navigation is enlarged by the improvements ***34** to the waterways. It is merely that improvements make applicable to certain waterways the existing power over commerce.

United States v. Appalachian Electric Power Co., *supra,* 311 U.S. at 409, 61 S.Ct. at 300; see, United States v. Cress, *supra.*

[23][24] Accordingly, the court does not here dispute the authority of Congress to legislate the expropriation of property along a non-navigable tributary which affects a clearly navigable river of the kind and character discussed in United States v. 531.13 Acres of Land, Etc., 366 F.2d 915 (4th Cir. 1966). Nor can the court's conclusion be denied that Congress may exercise control over non-navigable stretches of a river in order to promote or protect commerce on the navigable portions. *Id.*, at 921, citing Oklahoma ex rel. Phillips v. Guy F. Atkinson Co., *supra.* Clearly, that was the intent of the 1899 Refuse Act when it forbade the deposit of refuse matter "... into any tributary of any navigable water from which the same shall float or be washed into such navigable water." 33 U.S.C. § 407. However, as stated several times in this order, the government presented no evidence that what is deposited in the river by the defendant will float or be washed downstream to any other segment of the river, and has specifically disavowed any intent to rely upon the so-called "tributary theory" under the Act. Instead, the plaintiff contends solely that the river adjoining the defendant's property is navigable.

[25] With due regard to the liberality frequently accorded the federal regulatory powers, the court notes the well reasoned analysis and summarization of the "*Appalachian* guidelines" in Rochester Gas and Electric Corp. v. Federal Power Comm., 344 F.2d 594 (2nd Cir. 1965), cert. denied, 382 U.S. 832, 86 S.Ct. 72, 15 L.Ed.2d 75 (1965), wherein the following threefold test of navigability was deduced,

> ... if (1) it *presently* is being used or is suitable for use, or (2) it has been used or was suitable for use in the *past,* or (3) it could be made suitable for use in the *future* by reasonable improvements. (emphasis added).

Id., 344 F.2d at 596. This synopsis of *Appalachian* has been cited with approval and followed by the courts in Marine Stevedoring Corp. v. Oosting, 398 F.2d 900, 908 (4th Cir. 1968) reversed on other grounds, 396 U.S. 212, 90 S.Ct. 347, 24 L.Ed.2d 371 (1969); Spiller v. Thomas M. Lowe and Assoc., Inc., 328 F.Supp. 54, 60 (W.D.Ark.1971); Pitship Duck Club v. Town of Sequim, 315 F.Supp.309, 310 (W.D.Wash.1970); Pennsylvania Environmental Council, Inc. v. Bartlett, 315 F.Supp. 238, 252 (M.D.Pa.1970); C. J. Montag and Sons, Inc. v. O'Leary, 304 F.Supp. 188, 189 (D.Ore.1969), and, because of its obvious relevance to the present dispute, will guide further consideration of the Chattahoochee River.

[26] No meaningful argument can be made that the Chattahoochee River is *presently* being used or is susceptible for commercial navigation. The

uncontradicted testimony clearly reveals that current boat travel on the river is limited to very light sporting craft such as canoes, kayaks and rubber rafts, drawing no more than a few inches of water, and that even these floating devices often scrape the rocky bed of the river. While pleasure boating can sometimes indicate a river's susceptibility for commercial use, see, United States v. Utah, 283 U.S. 64, 51 S.Ct. 438, 75 L.Ed. 844, the type of craft and persons presently using, and enjoying, the river demonstrates that the river's main appeal lies in the frequent excitement one encounters in "running the rapids", observing the "white water", and having short interims of "good water" upon which to relax. It would be an affront to the public's intelligence to classify the river *presently* suitable for any kind of commercial navigation.

***35** [27][28][29] A closer question exists when discussing whether the river has been used or was suitable for commercial use in the *past.* With the exception of the gold dredging barge, and two or three ferries operating upon the river, the government has shown no other prior use of the river in the subject section. Even though a small amount of traffic compared to the available commerce of the region is sufficient, United States v. Appalachian Electric Power Co., *supra,* the existence of ferries is no more an example of commercial use than the presence of a bridge or railroad trestle whose primary purpose is to avoid the river rather than to employ it as a means for trade and transportation. Rochester Gas and Electric Corp. v. Federal Power Comm., *supra.* Similarly, the barge is but an isolated and exceptional example of a person using the river for a few miles primarily along his own property, to extract gold-bearing silt from the river bed. While there are cases in which a slightly more substantial history of commercial use has failed to result in a finding of navigability, see, United States v. Oregon, *supra;* United States v. Rio Grande Dam and Irrig. Co., *supra;* Brewer-Elliott Oil and Gas Co. v. United States, *supra;* Oklahoma v. Texas, 258 U.S. 574, 42 S.Ct. 406, 66 L.Ed. 771 (1922), no case known to the court has gone so far as to hold that one verified example, such as we have here, is sufficient to demonstrate navigability under law. *cf.,* George v. Beavark, Inc., 402 F.2d 977 (8th Cir. 1968). Consequently, the stretch of the river presently under consideration was neither used nor susceptible for use as a highway of commerce in the *past.*

[30] Finally, the court must decide whether the river could be made suitable for use in the *future* by reasonable improvements. In this regard, the January 12, 1972, determination of the Corps of Engineers isoffered by the government as proof that the river can reasonably be improved. However, as noted previously in this order, the most recent interagency memorandum of the Corps of Engineers is founded upon certain findings collected by surveys and studies performed in 1878 and 1879, and published in Part II, Annual Report of the Chief of Engineers for 1880, Ex.Doc. I, Part 2, Volume II, 46th Congress, 3d Session. While the court holds serious doubts as the correctness of those recommendations today in light of subsequent reports issued and published by the Corps, see, Report of Chief of Engineers, 1962, Document No. 570, 87th Congress, 2d Session, and Report of Chief of Engineers, 1939, House Document No. 342, 76th Congress, 1st Session, since the 1972 determination adopts the findings and recommendations of the 1880 Report, the latter provides the only evidentiary matter which the court may consider on the question of necessary improvements.

[31] In light of the Supreme Court's admonition in *Appalachian* that a determination of what constitutes reasonable improvements will depend upon a balancing of cost and need at a time when the improvement would be useful, the court notes and rejects the Corps' legal conclusion that the river is navigable today because it could have been made navigable in 1880. In other words, recognizing that the river in 1880 was not susceptible to commercial transportation, the Corps is attempting to engraft the "future improvement" criterion upon the test of past susceptibility. Clearly, the question, properly phrased, is whether a presently non-navigable river can be made navigable in the future through the implementation of reasonable improvements. The issue is *not,* as the Corps of Engineers apparently believes, whether at some time in the past the river could have been sufficiently improved to meet the then needs of the area. The court is without evidence as to the present need of the Atlanta area for such an avenue of commerce, and, similarly, has no knowledge as to how much it would cost to make the river available for commercial traffic. Absent a more thorough showing of these two crucial factors, the court cannot balance the opposing interests ***36** involved in accordance with the mandate of the Supreme Court.

[32] In addition, the court is unable to determine whether the natural and ordinary condition of the river, *i. e.,* volume of water, gradient, and regularity of flow, is capable of supporting navigation since that information, with the exception of a few generalities,

has not been presented. The data the court was able to extract from the various reports of the Corps of Engineers, especially the 1880 Report, show that between Peachtree Creek and Buford Dam, the stretches of "good water" are infrequent, and that a considerable number of dams and locks would be necessary to make the river passable by craft normal at this time. Without the guidance of experts in the field, the court cannot independently take judicial notice that improvements, of unknown cost, would be reasonable.

[33] In summary, the court has reviewed the testimony of the witnesses for the plaintiff, as well as all the reports and exhibits offered to support a finding of navigability. Under the law as it now exists, the evidence does not meet the necessary minimal requirements found sufficient by other judicial tribunals. As much as the court sympathizes with the obvious and worthwhile purpose underlying the institution of this action, the application of common sense to the facts presented herein demands a finding that the Chattahoochee River between Peachtree Creek and Buford Dam is not a navigable water of the United States.

Because the defendant's counterclaim is clearly without merit, little need be said in granting the motion to dismiss, other than to recite and restate the grounds therefor.

[34][35][36] First, because John W. Stokes, Jr., is not a party to the original action, no counterclaim could be asserted against him as an "individual". See Introductory Paragraph to Defendant's Counterclaim. Second, if the defendant desires to make Stokes a third-party defendant, pursuant to Rule 14 of the Federal Rules of Civil Procedure, then he must be served with a summons and complaint, a fact which does not here exist. Fed.R.Civ.P. 14(a). Third, it conclusively appears that Stokes could not be liable to the defendant for all or part of the plaintiff's claim against him, as required by Rule 14(a), and, therefore, could not be a third-party defendant even if properly served. Cook & Nichol, Inc. v. Plimsoll Club, 451 F.2d 505 (5th Cir. 1971). Finally, since John Stokes is not a party to the original suit, and in view of the fact that the claim is purely one of state law, the court lacks both jurisdiction over the person and the subject matter of the defendant's claim.

Therefore, the motion to dismiss the defendant's counterclaim is meritorious.

CONCLUSIONS OF LAW

1. The court has jurisdiction of this action pursuant to 33 U.S.C. § § 403 and 407; 28 U.S.C. § 1345.

2. The Chattahoochee River between Peachtree Creek and Buford Dam is not a navigable water of the United States within the meaning of 33 U.S.C. § § 403 and 407, and, therefore, the defendant, Crow, Pope & Land Enterprises, Inc., is not subject to the provisions of those statutes.

[37] 3. Since there exists no evidence that what the defendant is depositing in the subject section of the river will either float or be washed downstream to a navigable portion of the river, the plaintiff's claim upon the "tributary theory" is without merit, and is hereby rejected. The defendant, therefore, is not liable under the tributary provisions of 33 U.S.C. § 407.

4. Because the defendant's individual claim against John W. Stokes, Jr., is improper under both Rules 13 and 14 of the Federal Rules of Civil Procedure, the motion of the plaintiff to dismiss the counterclaim of the defendant is, accordingly, granted.

*37 To the extent that any findings of fact set forth in this order are deemed to be conclusions of law, or to the extent that any of the foregoing conclusions of law are deemed to be findings of fact, the same shall be deemed conclusions of law or findings of fact as the case may be.

Let judgment issue accordingly.

340 F.Supp. 25, 4 ERC 1382, 2 Envtl. L. Rep. 20,700

END OF DOCUMENT

ADDITIONAL INFORMATION

North Georgia Trout Online

You are

STREAM_PHOTOS/CHATTAHOOCHEE RIVER (285 TO DULUTH)/CHATR1[1].JPG

Next >>

Home | Previous | Random | Up/Down | Next

NGTO Photos
Stream Photos
Chattahoochee River (285 to Duluth)
chatr1[1].jpg

Viewing Options: Small | Medium | Large | Full Size | Fullscreen Slideshow

Not Rated

Rate It

E-Mail This Page

Viewed 1 time (first viewing).

Album

Back To Album

North Georgia Trout Online

You are

STREAM_PHOTOS/CHATTAHOOCHEE RIVER (DULUTH TO DAM)/JONES[1].JPG

Login Browse Search Random Upload Rec

NGTO Photos
Stream Photos
Chattahoochee River (Duluth to Dam)
jones[1].jpg

Viewing Options: Small Medium Large Full Size Fullscreen Slideshow

Not Rated

Rate It

E-Mail This Page

Viewed 1 time (first viewing).

Album

Back To Album

North Georgia Trout Online

You are

STREAM_PHOTOS/CHATTAHOOCHEE RIVER (DULUTH TO DAM)/JB1[1].JPG

Not Rated

Viewed 1 time (first viewing).

NATIONAL PARK SERVICE

experience YOUR AMERICA

Chattahoochee River
National Recreation Area
Located in Atlanta, GA

TRAVEL BASICS - CAMPING - LODGING
ACTIVITIES - FACILITIES - FEES/PERMITS

Printable Travel Guide

The steel truss ruins of Settles Bridge near river milepost 344.5 (NPS Photo)

IN BRIEF
The Recreation Area lies within four counties, north and northeast of downtown Atlanta, Georgia. It consists of 16 land units along a 48-mile stretch of the Chattahoochee River. In addition to providing recreational activities such as fishing, hiking, picnicking, and boating, the park contains a wide variety of natural habitats, flora and fauna, nineteenth century historic sites, and Native American archeological sites.

PARK RESOURCES
» Nature & Science

NEWS & EVENTS more...
» Events Calendar
» General Management Plan

QUICK LINKS
» CRNRA BacteriaAlert Program
» Commercial-led Activities
» Current Job Openings
» Johnson Ferry EA
» Youth Conservation Corps

MAPS
BOOKSTORE
CONTACT
LINKS
VOLUNTEER
FACTS/DOCS

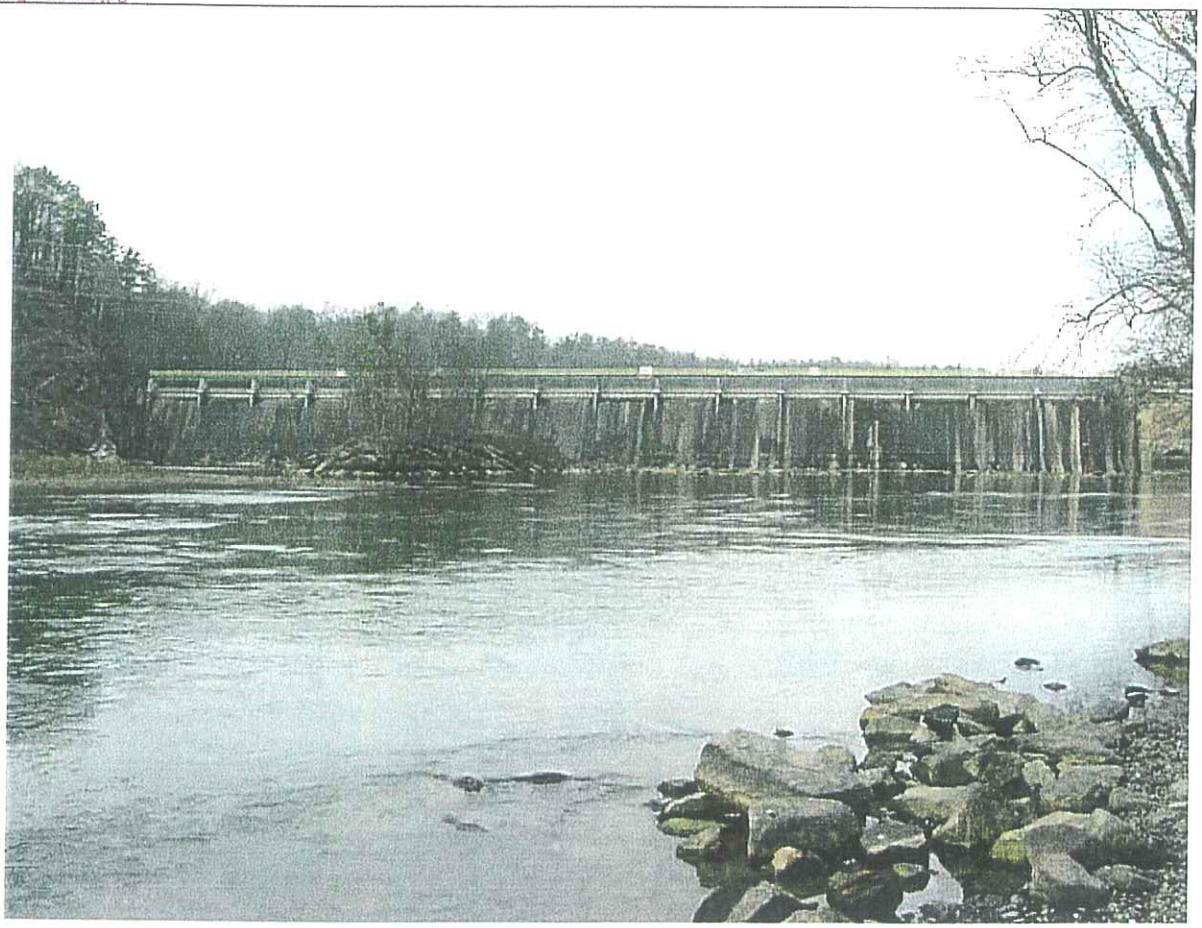
park guide | search | main

http://www.nps.gov/chat/index.htm
Last Updated: Tuesday, 11-Feb-03 15:22:42

North Georgia Trout Online

You are

STREAM_PHOTOS/CHATTAHOOCHEE RIVER (285 TO DULUTH)/MORGANFALL



Not Rated

Viewed 1 time (first viewing).

Water Resources

Data Category: Site Information | Geographic Area: Georgia | GO

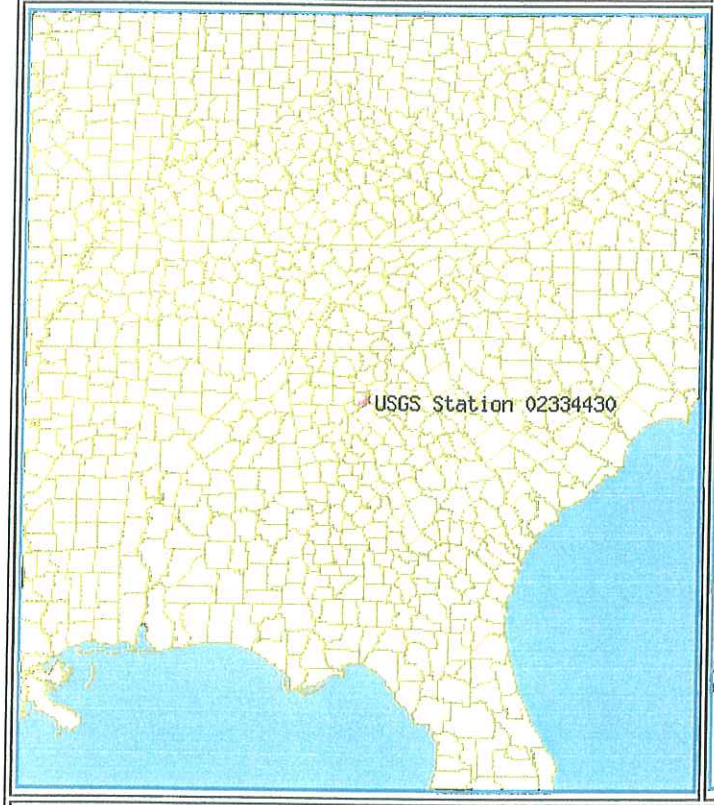
Site Map for Georgia

USGS 02334430 CHATTAHOOCHEE RIVER AT BUFORD DAM, NEAR BUFORD, GA

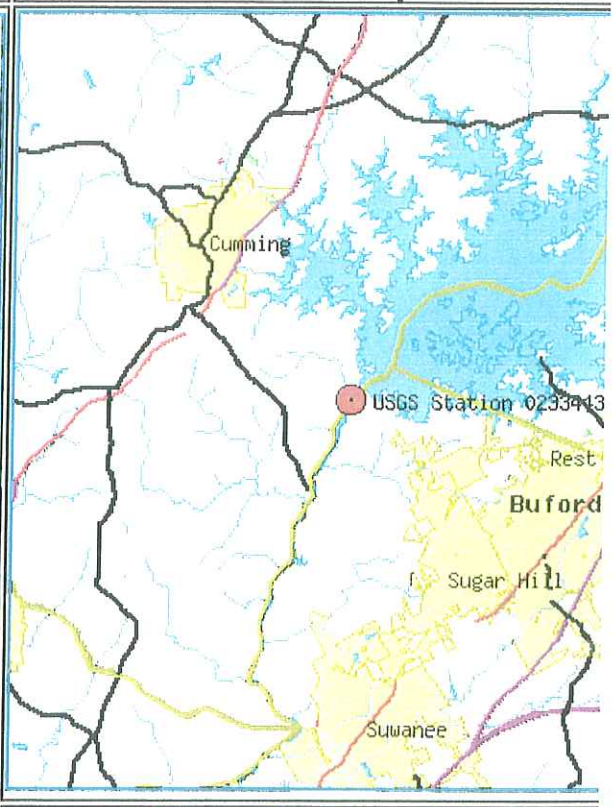
Available data for this site | Station site map | GO

Gwinnett County, Georgia
Hydrologic Unit Code 03130001
Latitude 34°09'25", Longitude 84°04'44" NAD83
Drainage area 1,040.00 square miles
Contributing drainage area 1,040 square miles
Gage datum 912.04 feet above sea level NGVD29

Location of the site in Georgia.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ga_NWISWeb_Data_Inquiries@usgs.gov

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Georgia | GO

Calendar Year Streamflow Statistics for Georgia

USGS 02334430 CHATTAHOOCHEE RIVER AT BUFORD DAM, NEAR BUFORD, GA

Available data for this site: Surface-water: Annual streamflow statistics | GO

Gwinnett County, Georgia
Hydrologic Unit Code 03130001
Latitude 34°09'25", Longitude 84°04'44" NAD83
Drainage area 1,040.00 square miles
Contributing drainage area 1,040 square miles
Gage datum 912.04 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1943	2,185	1958	1,154	1973	2,807	1987	1,490
1944	2,164	1959	1,649	1974	2,564	1988	1,052
1945	1,886	1960	2,453	1975	2,103	1989	1,414
1946	3,000	1961	2,231	1976	2,703	1990	2,869
1947	1,824	1962	2,503	1977	2,215	1991	2,010
1948	2,547	1963	1,878	1978	2,440	1992	2,029
1949	3,256	1964	3,028	1979	2,194	1993	2,690
1950	1,991	1965	1,668	1980	2,759	1994	1,660
1951	1,722	1966	1,862	1981	1,407	1995	2,197
1952	2,230	1967	2,659	1982	1,179	1996	2,599
1953	2,059	1968	2,444	1983	2,210	1997	1,895
1954	1,724	1969	2,276	1984	2,407	1998	2,587
1955	1,384	1970	1,799	1985	1,326	1999	1,066
1956	819	1971	1,830	1986	1,163	2000	1,201
1957	840	1972	2,489				

Questions about data gs-w-ga_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ga_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Georgia: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ga/nwis/annual/calendar_year?

Water Resources

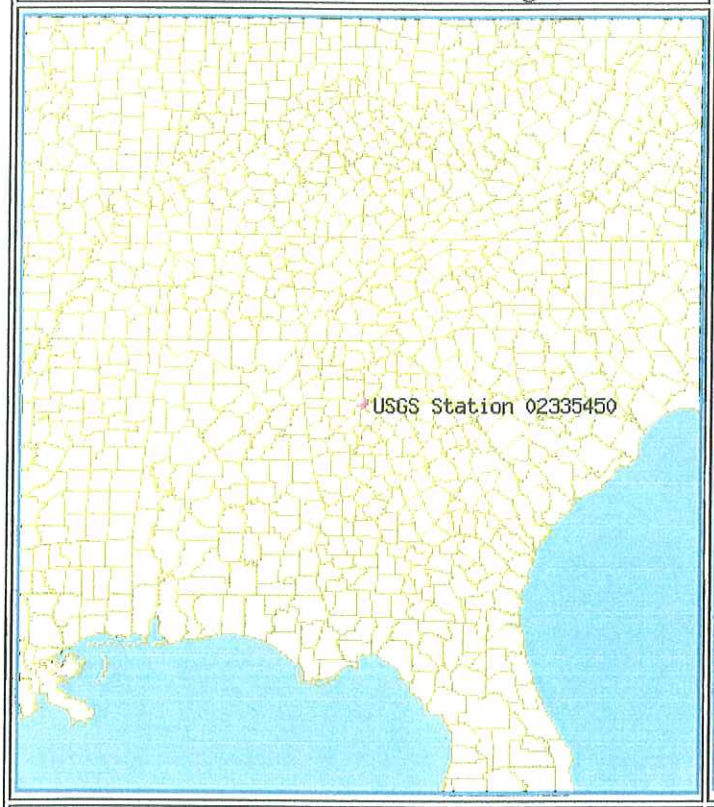
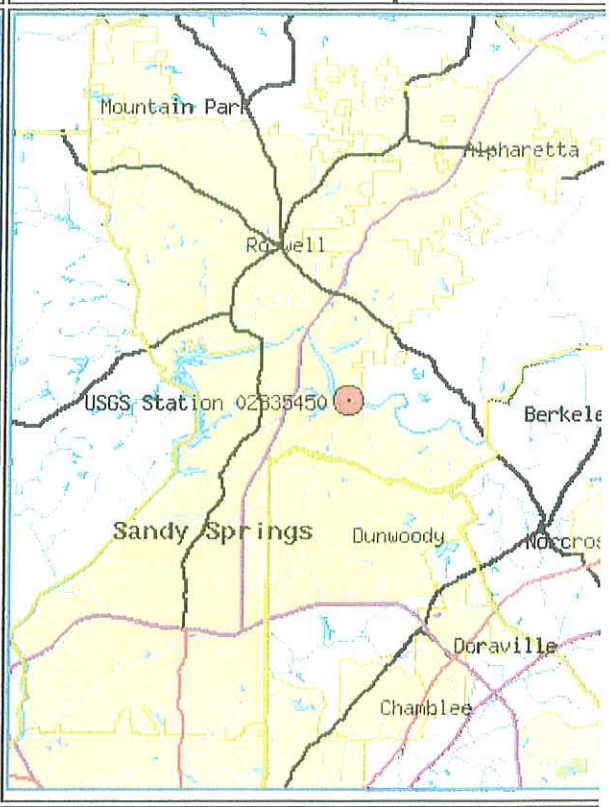
Data Category: Site Information Geographic Area: Georgia GO

Site Map for Georgia

USGS 02335450 CHATTAHOOCHEE RIVER ABOVE ROSWELL, GA

Available data for this site Station site map GO

Fulton County, Georgia
Hydrologic Unit Code 03130001
Latitude 33°59'09", Longitude 84°18'58" NAD27
Drainage area 1,220.00 square miles
Gage datum 858.01 feet above sea level NGVD29

Location of the site in Georgia.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ga_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ga_NWISWeb_Maintainer@usgs.gov
Return to top of page

NWIS Site Inventory for Georgia: Site Map

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Georgia | GO

Calendar Year Streamflow Statistics for Georgia

USGS 02335450 CHATTAHOOCHEE RIVER ABOVE ROSWELL, GA

Available data for this site: Surface-water: Annual streamflow statistics | GO

Fulton County, Georgia
Hydrologic Unit Code 03130001
Latitude 33°59'09", Longitude 84°18'58" NAD27
Drainage area 1,220.00 square miles
Gage datum 858.01 feet above sea level NGVD29

Output formats

HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1977	2,454	1984	2,834	1991	2,326
1978	2,627	1985	1,516	1992	2,394
1979	2,420	1986	1,236	1993	2,926
1980	2,979	1987	1,577	1994	1,801
1981	1,517	1988	1,063	1995	2,339
1982	1,438	1989	1,642	1999	1,110
1983	2,666	1990	3,156	2000	1,273

Questions about data gs-w-ga_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ga_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Georgia: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ga/nwis/annual/calendar_year?

Retrieved on 2003-03-04 09:52:00 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Georgia
Privacy Statement || Disclaimer || Accessibility
0.67 0.64

Colorado River (Grand River)—Utah

Reported Decision: United States v. Utah, 283 U. S. 64 (1931)

Reach at Issue: Entire length

Judicial Determination: Navigable in part

Facts Reported in Decision:

"A distinction in descriptive terms should be noted. When Utah became a state, the Grand river, rising in Colorado and flowing through that state and within Utah to the junction with the Green river, was designated on all government maps and reports as separate from the Colorado river, and the name Colorado river was applied only to the river formed by the confluence of the Green river and the Grand river. The Congress, by the Act of July 25, 1921, . . . provided that the river theretofore known as the Grand river, from its source in Colorado to the point where it joined the Green river in Utah and formed the Colorado river, should thereafter be designated as the Colorado river. Considering that this act had no retroactive effect, and as it expressly provided that the change in name should not affect the rights of Colorado and Utah, the master has followed in his report the earlier designations and thus has dealt with four rivers, the beds of which are in question, instead of three; that is, the Green river, the Grand river, the Colorado river (below the junction of the Green and Grand) and the San Juan river." 283 U.S. at 73 (footnote omitted).

"The Grand river rises in North-Central Colorado and flows to its junction with the Green river in Utah, approximately 423 miles. Its course is through a succession of long, narrow, fertile valleys, alternating with deep canyons with walls, in places, of over 2,000 feet in height. There are many difficult and dangerous rapids. The total drop from Grand Junction, Colo., to Castle Creek Utah (where the section in controversy begins), is from 4,552 feet in elevation to 3,993 feet, a drop of 559 feet in 94 miles. From Castle Creek to the Town of Moab, 14 miles, the slope averages 3.5 feet per mile, and there are slight rapids or riffles and rocks in the stream. At Moab, there is an open valley, leaving which the Grand river flows 65 ½ miles largely through rock canyons having walls of 600 to 2,100 feet in height. The course of the Grand river in this section is slightly more tortuous than that of the Green river; the width of the river averages about 500 feet, and the slope below Moab is only a little over 1 foot per mile. The government's gauge was located at Cisco, about 17 miles above Castle Creek. From readings at that point, the master finds the depths of the river vary from 2.9 to 3 feet for 16 days in the year to over 7 feet for 61 days, and that for 349 days in the year there is a depth of 3 feet or over. There is a discharge of over 2,000 cubic feet per second for 351 days in the year, and 169 days of over 4,200 cubic feet per second." 283 U.S. at 78-79.

"The master finds that on the Grand river, in the 79 miles between Castle Creek and the junction with the Green river, there is a stretch of about three miles out of the first 14 miles between Castle Creek and Moab Bridge in which there are three small rapids, and

that, in this stretch, the river is less susceptible of practical navigation for commercial purposes than in the remainder of the river. But the master finds that, even in this 3-mile stretch, the river is susceptible of being used for the transportation of lumber rafts, and that there has been in the past considerable use of the river for that purpose." 283 U.S. at 79.

"The Colorado river, that is, treating the river as beginning at the junction of the Green and Grand rivers, flows southwesterly and finally reaches the Gulf of California. The distance from the confluence of the Green and Grand rivers in Utah to the Utah-Arizona boundary is about 189 miles; the boundary being about 27 miles above the point known as Lees Ferry in Arizona. The table of distances gives the junction of the Green and the Grand rivers as being 216.5 miles above Lees Ferry. The master finds that the Colorado river is nonnavigable from this junction down to the end of Cataract Canyon at Mile 176 above Lees Ferry. The state of Utah contests the finding of the master with respect to the first 4.35 miles of this stretch of the river; that is, to a point 212.15 miles above Lees Ferry (a question to which we shall return in dealing with Utah's exceptions), where it is said that the first rapid or cataract of Cataract Canyon begins. But there is no controversy as to the nonnavigability of the stream from this point through Cataract Canyon down to Mile 176 above Lees Ferry. Through this canyon, with rock walls from 1,500 to 2,700 feet in height, the river has a rapid descent or slope of about 399 feet, a drop of 11 feet per mile, with a long series of high and dangerous rapids." 283 U. S. at 79-80

"As the Colorado river approaches the Utah-Arizona boundary, the canyon walls increase in height and average 1,300 to 1,600 feet. There are various points at which bottom lands are cultivated in the river beds. The width of the river averages from 600 to 700 feet. Its slope through this section is gentle, being less than 2 feet per mile. As to the 90 miles of Glen Canyon, that is, from Mile 176 above Lees Ferry to the mouth of the San Juan river, the master states that there are no gauging station figures of any discharge, flow, and depth which are applicable, but the master finds that, as the waters of the Green and the Grand rivers join and form the Colorado river, there must be a discharge of water in the Glen Canyon stretch equal to the combined discharge of the other two rivers, and hence at all times sufficient water for navigation so far as discharge alone is concerned. As to depth, the master finds that the Colorado river in this stretch should have a depth at least equal to that of the Green and Grand river. Between the mouth of the San Juan river and the Utah-Arizona boundary, figures were obtained from the Lees Ferry gauging station from which it appears that the average depths range from between 3 and 4 feet for 17 days in the year to over 8 feet for 121 days in the year, and that the discharge varies from less than 4,000 cubic feet per second for 13 days in the year, to over 6,000 cubic feet per second for 352 days a year." 283 U. S. at 80-81.

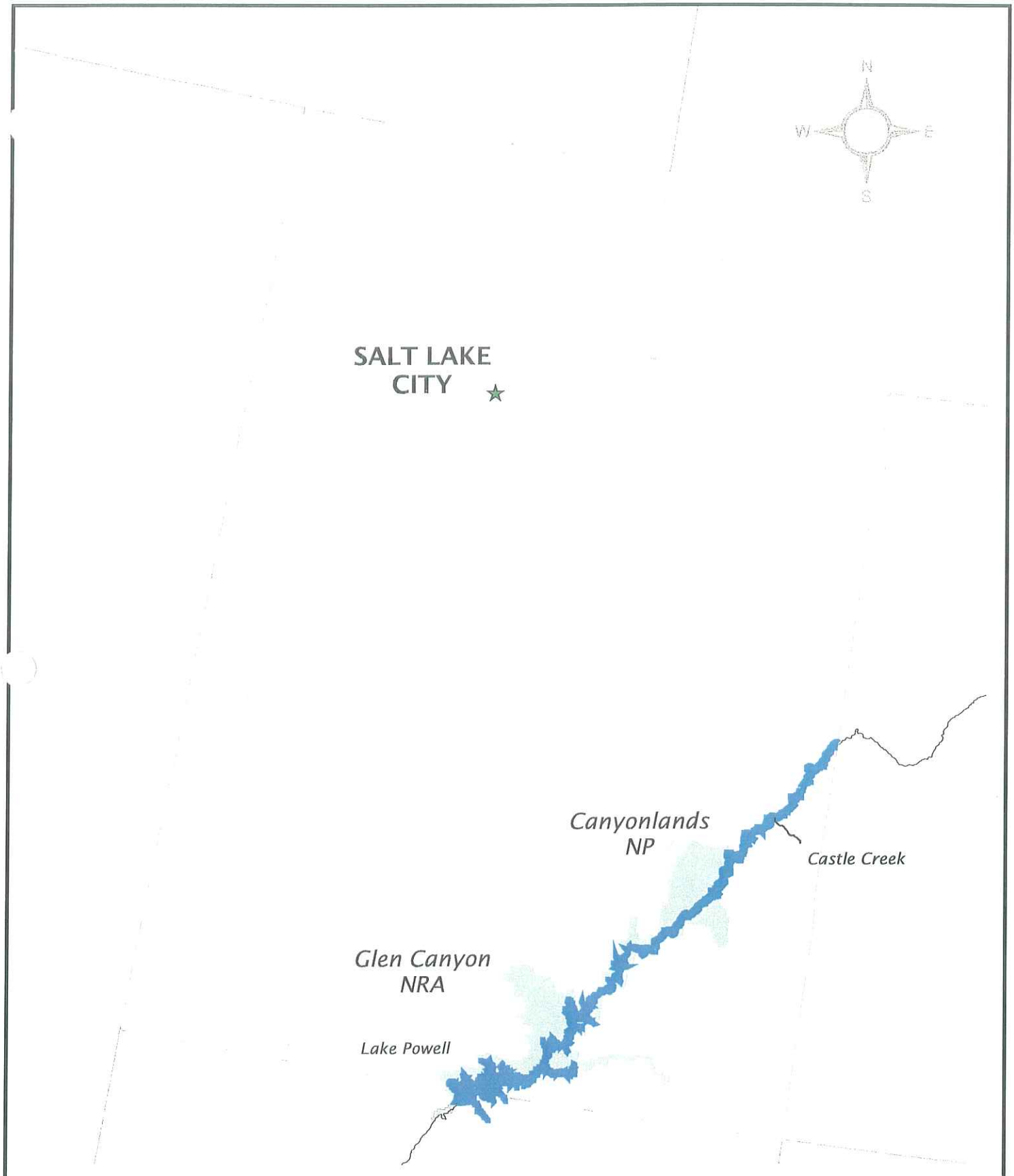
"The bed of the Colorado river above the mouth of the San Juan is found to be more gravelly than that of the Green and Grand rivers. There are, however, long high sandbars of sand and gravel on which placer mining has been done and also a few side bars or bottoms which have been cultivated. Crossing bars, occur, not as frequently as on the Green and Grand rivers, and they cause less trouble. After the recession of the water at the end of the high-water season, the channel remains more or less stable during the rest

of the year, although there are temporary changes. In general, the channel is less shifting than on the Green and Grand rivers, and the river is less tortuous." 283 U.S. at 86.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Cisco, UT	7,316	1914-2000
Colorado/Utah state line	8,436	1952-2000



Colorado River - Utah

REPORTED DECISION

C

Supreme Court of the United States.

UNITED STATES
v.
STATE OF UTAH. [FN*]

FN* For decree pursuant to opinion, see 283 U. S. 801, 51 S. Ct. 497, 75 L. Ed. --.

No. 14 original.

Argued Feb. 25, 26, 1931.
Decided April 13, 1931.

Original suit to quiet title by the United States against the State of Utah. On exceptions to the report of a special master.

Decree in accordance with opinion.

West Headnotes

[1] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

Title to beds of rivers, if navigable, within state, passed to state on admission to Union.

[2] **Waters and Water Courses** 89
405k89 Most Cited Cases

Title to beds of rivers not then navigable remained in United States on state's admission to Union.

[3] **Federal Courts** 194
170Bk194 Most Cited Cases
(Formerly 106k288)

In suit by United States against state to quiet title to river beds, question of navigability, being determinative of controversy, was federal question, though rivers were concededly not "navigable waters of United States."

[4] **States** 4
360k4 Most Cited Cases

State laws cannot affect titles vested in United States.

[5] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence regarding navigation after state's admission to Union held properly received on issue of navigability of rivers at time state was admitted.

[6] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Susceptibility in ordinary condition to navigation, rather than manner or extent of actual use, was test in determining whether rivers were "navigable."--

[7] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

It is susceptibility of rivers to use as highways which gives public right of control to exclusion of private ownership, either of waters or soils thereunder.

[8] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

State should not be denied title to beds of rivers navigable in fact at time of admission to Union, though, because of circumstances, recourse to navigation was late adventure or large scale commercial utilization awaits future demands.

[9] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In determining navigability, capacity of rivers to meet future commercial needs may be shown by physical characteristics and experimentation as well as actual uses.

[10] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Mere presence of sandbars impeding navigation does not make rivers "nonnavigable".

[11] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In determining whether river is "navigable," presence of sandbars must be considered with other factors.

[12] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

Navigability is to be determined by the facts of each case.

[13] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

United States cannot, without state's consent, divest state of title to beds of rivers state acquired.

[14] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence held to justify findings that certain sections, within Utah, of Green, Grand (now Colorado), and Colorado rivers were navigable when state was admitted to Union; hence title to beds vested in Utah.

[15] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence held not to sustain finding of non-navigability of four miles, and fraction, of Colorado river, south from confluence of Green river with Grand, now Colorado, river.

[16] **Federal Courts** 442.1
170Bk442.1 Most Cited Cases
(Formerly 170Bk442, 106k379)

Decree determining respective titles of United States and state in river beds would not prevent former from protecting navigability of navigable waters of United States.

[17] **Federal Courts** 442.1
170Bk442.1 Most Cited Cases
(Formerly 170Bk442, 106k379)

In decree determining respective titles of United States and state in river beds, provision preserving United States' right to protect navigability of navigable waters of United States may be properly included.

****439 *66** The Attorney General and Mr. Charles M. Blackmar, of Kansas City, Mo., for the United States.

***69** Messrs. P. T. Farnsworth, Jr., and Waldemar Van Cott, both of Salt Lake City, Utah, for the State of Utah.

***71** Mr. Chief Justice HUGHES delivered the opinion of the Court.

The United States brought this suit to quiet its title to certain portions of the beds of the Green, Colorado, and San Juan rivers within the state of Utah, as follows:

The Green river, from a point where the river crosses the line between townships 23 and 24 south, range 17 east, Salt Lake base and meridian (approximately he mouth of the San Rafael river) down to the confluence of the Green river with the Colorado river, 95 miles.

The Colorado river from the mouth of Castle creek (about 14 miles above the town of Moab) to the boundary line between Utah and Arizona, 296 miles (including the portion of the Colorado river above the mouth of the Green river which had formerly been known as the Grand river).

The San Juan river from the mouth of Chinle creek (5 miles below the town of Bluff) to its confluence with the Colorado river, 133 miles.

The complaint alleges that by the Guadalupe-Hidalgo Treaty of February 2, 1848, [FN1] the United States acquired ***72** from the Republic of Mexico the title to all the lands riparian to these rivers, together with the river beds, within the state of Utah, and that the United States remains the owner of these lands, with certain stated exceptions of lands granted by it; that the Green, Colorado, and San Juan rivers throughout their entire length within the state of Utah are not, and never have been, navigable, and that they have not been used, nor are they susceptible of being used, in their natural and ordinary condition as permanent highways or channels for useful commerce within the state of Utah or between states or with any foreign nation; that the United States, as proprietor, has executed and delivered numerous prospecting permits covering portions of the river beds in question, giving to the permittees the exclusive right of prospecting for petroleum, oil, and gas minerals, and that the permittees have entered upon development work; that the state of Utah claims title adverse to the United States in these river beds, asserting that the rivers always have been and are navigable, and that title to the river beds vested in the state when it was admitted to the Union; and that Utah, without the consent or authority of the United States, has executed and delivered numerous oil and gas leases covering portions of these river beds and purporting to give exclusive rights and privileges. The United States asks that the claim of Utah to any right, title, or interest in the river beds in question be adjudged to be null and void, that it be determined

that the United States has full and exclusive title thereto, and that injunction issue accordingly.

FN1 9 Stat. 922.

By its answer, Utah denies ownership by the United States of the river beds described in the complaint and sets up title in the state, alleging the navigability of the rivers.

The Court referred the case to Charles Warren as special master to take the evidence and to report it with his findings of fact, conclusions of law, and recommendations for decree. Hearings have been had before the master, voluminous evidence has been received, and the master *73 has filed his report. The report gives a comprehensive statement of the facts adduced with respect to the topography of the rivers, their history, **440 impediments to navigation,and the use, and susceptibility to use, of the rivers as highways of commerce.

A distinction in descriptive terms should be noted. When Utah became a state, the Grand river, rising in Colorado and flowing through that state and within Utah to the junction with the Green river, was designated on all government maps and reports as separate from the Colorado river, and the name Colorado river was applied only to the river formed by the confluence of the Green river and the Grand river. The Congress, by the Act of July 25, 1921, [FN2] provided that the river theretofore known as the Grand river, from its source in Colorado to the point where it joined the Green river in Utah and formed the Colorado river, should thereafter be designated as the Colorado river. Considering that this act had no retroactive effect, and as it expressly provided that the change in name should not affect the rights of Colorado and Utah, the master has followed in his report the earlier designations and thus has dealt with four rivers, the beds of which are in question, instead of three; that is, the Green river, the Grand river, the Colorado river (below the junction of the Green and Grand) and the San Juan river.

FN2 42 Stat. 146.

The master has made his findings as to navigability as of January 4, 1896, the date of the admission of Utah to the Union. [FN3] The master finds that at that time the following streams in question were navigable waters of Utah: The Green river, from a point where the river crossed the township line between townships 23 and 24 south, range 17 east, Salt Lake base and meridian down to its confluence with the Grand river (about 95 miles); the Grand river, from the mouth of Castle creek down to the confluence of the Grand river with the Green *74 river (about 79 miles); and the Colorado river, from Mile 176 above Lees Ferry south to the Utah-Arizona boundary (about 150 miles); and that the following streams were nonnavigable waters of Utah: The Colorado river, south from the confluence of the Green and the Grand rivers down to the end of Cataract Canyon at Mile 176 above Lees Ferry (about 40 miles); and the San Juan river from the mouth of Chinle creek at Mile 133 above the confluence of the San Juan river and the Colorado river down to the mouth of San Juan river.

FN3 29 Stat. 876.

On these findings, the master has concluded that the title to the beds of the rivers, where the rivers were found to be navigable as above stated, was in the state of Utah, and, where the rivers were found to be nonnavigable, was in the United States. Accordingly, the master has recommended that the Court enter a decree dismissing the complaint so far as it relates to the bed of the Green river to that portion of the bed of the Colorado river which in 1896 constituted the Grand river, and to that portion of the bed of the Colorado river from Mile 176 above Lees Ferry south to the Utah-Arizona boundary; and that the Court decree that the title to the bed of the Colorado river, from the confluence of the Green river with the Grand river down to the end of Cataract Canyon at Mile 176 above Lees Ferry, and to the bed of the San Juan river, was vested in the United States on January 4, 1896 (except so far as theretofore granted by the United States), and that Utah be enjoined from asserting title or interest therein.

Both parties have filed exceptions to the master's report.

Neither party excepts to the finding and conclusion with respect to the nonnavigability of the San Juan river, or of the Colorado river from the first rapid or cataract at Mile 212.15 above Lees Ferry down to the end of Cataract Canyon at Mile 176 above Lees Ferry.

The United States has a large number of exceptions to the findings and conclusions of the masteras to the navigability *75 of the Green river, and of the Grand river down to its junction with the Green river, and of the Colorado river from Mile 176 above Lees Ferry to the Utah-Arizona boundary.

Utah excepts to the findings and conclusion of the master as to the nonnavigability of the Colorado river from the confluence of the Green river and the Grand river at Mile 216.5 above Lees Ferry down to the first rapid or cataract at Mile 212.15 above Lees Ferry.

[1][2][3][4] The controversy is with respect to certain facts, and the sufficiency of the basis of fact for a finding of navigability, rather than in relation to the general principles of law that are applicable. In accordance with the constitutional principle of the equality of states, the title to the beds of rivers within Utah passed to that state when it was admitted to the Union, if the rivers were then navigable; and, if they were not then navigable, the title to the river beds remained in the United States. [FN4] The question of navigability **441 is thus determinative of the controversy, and that is a federal question. This is so, although it is undisputed that none of the portions of the rivers under consideration constitute navigable waters of the United States, that is, they are not navigable in interstate or foreign commerce, and the question is whether they are navigable waters of the State of Utah. [FN5] State laws [FN6] cannot affect titles vested in the United States. [FN7]

FN4 Shively v. Bowlby, 152 U. S. 1, 26, 27, 14 S. Ct. 548, 38 L. Ed. 331; Scott v. Lattig, 227 U. S. 229, 242, 243, 33 S. Ct. 242, 57 L. Ed. 490, 44 L. R. A. (N. S.) 107; Donnelly v. United States, 228 U. S. 243, 260, 33 S. Ct. 449, 57 L. Ed. 820, Ann. Cas. 1913E, 710; Oklahoma v. Texas, 258 U. S. 574, 583, 42 S. Ct. 406, 66 L. Ed. 771; United States v. Holt State Bank, 270 U. S. 49, 55, 46 S. Ct. 197, 70 L. Ed. 465; Massachusetts v. New York, 271 U. S. 65, 89, 46 S. Ct. 357, 70 L. Ed. 838.

FN5 See The Daniel Ball, 10 Wall. 557, 563, 19 L. Ed. 999; The Montello, 11 Wall. 411, 415, 20 L. Ed. 191.

FN6 In 1927, the Utah Legislature passed an act declaring 'the Colorado River in Utah and the Green River in Utah' to be navigable streams. Laws of Utah, 1927, c. 9, p. 8.

FN7 Brewer-Elliott Oil & Gas Company v. United States, 260 U. S. 77, 87, 43 S. Ct. 60, 67 L. Ed. 140; United States v. Holt State Bank, 270 U. S. 49, 55, 56, 46 S. Ct. 197, 70 L. Ed. 465.

*76 The test of navigability has frequently been stated by this Court. In The Daniel Ball, 10 Wall. 557, 563, 19 L. Ed. 999, the Court said: 'Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.' In The Montello, 20 Wall. 430, 441, 442, 22 L. Ed. 391, it was pointed out that 'the true test of the navigability of a stream does not depend on the mode by which commerce is, or may be, conducted, nor the difficulties attending navigation,' and that 'it would be a narrow rule to hold that in this country, unless a river was capable of being navigated by steam or sail vessels, it could not be treated as a public highway.' The principles thus laid down have recently been restated in United States v. Holt State Bank, 270 U. S. 49, 56, 46 S. Ct. 197, 199, 70 L. Ed. 465, where the Court said:

> 'The rule long since approved by this court in applying the Constitution and laws of the United States is that streams or lakes which are navigable in fact must be regarded as navigable in law; that they are navigable in fact when they are used, or are susceptible of being used, in their natural and ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water; and further that navigability does not depend on the particular mode in which such use is or may be had-whether by steamboats, sailing vessels or flatboats-nor on an absence of occasional difficulties in navigation, but on the fact, if it be a fact, that the stream in its natural and ordinary condition affords a channel for useful commerce.' [FN8]

FN8 See, also, Packer v. Bird, 137 U. S. 661, 667, 11 S. Ct. 210, 34 L. Ed. 819; St. Anthony Falls Water Power Co. v. Board of Water Commissioners, 168 U. S. 349, 359,

18 S. Ct. 157, 42 L. Ed. 497; United States v. Rio Grande Dam & Irrigation Co., 174 U. S. 690, 698, 19 S. Ct. 770, 43 L. Ed. 1136; Leovy v. United States, 177 U. S. 621, 627, 20 S. Ct. 797, 44 L. Ed. 914; Donnelly v. United States, 228 U. S. 243, 260, 33 S. Ct. 449, 57 L. Ed. 820, Ann. Cas. 1913E, 710; Id., 228 U. S. 708, 709, 33 S. Ct. 1024, 57 L. Ed. 1035; United States v. Cress, 243 U. S. 316, 321, 37 S. Ct. 380, 61 L. Ed. 746; Economy Light & Power Co. v. United States, 256 U. S. 113, 122, 123, 41 S. Ct. 409, 65 L. Ed. 847; Oklahoma v. Texas, supra; Brewer-Elliott Oil & Gas Co. v. United States, supra.

*77 In the present instance, the controversy relates only to the sections of the rivers which are described in the complaint, and the master has limited his findings and conclusions as to navigability accordingly. The propriety of this course, in view of the physical characteristics of the streams, is apparent. Even where the navigability of a river, speaking generally, is a matter of common knowledge, and hence one of which judicial notice may be taken, it may yet be a question, to be determined upon evidence, how far navigability extends. [FN9] The question here is not with respect to a short interruption of navigability in a stream otherwise navigable, [FN10] or of a negligible part, which boats may use, of a stream otherwise nonnavigable. We are concerned with long reaches with particular characteristics of navigability or nonnavigability, which the master's report fully describes.

FN9 United States v. Rio Grande Dam & Irrigation Co., 174 U. S. 690, 698, 19 S. Ct. 770, 43 L. Ed. 1136.

FN10 St. Anthony Falls Water Power Co. v. St. Paul Water Commissioners, supra; Economy Light & Power Co. v. United States, supra.

The Green river has its source in the mountains of Western Wyoming and has a total length of about 700 miles. After passing through a series of canyons, the rock walls of which are of great height, it enters the Green River valley in which the town of Green River, Utah, is situated, about 117 miles above the river's mouth. The drop in elevation between the town of Green River, Wyo., and Green River, Utah, is from 6,067 to 4,046 feet-2,021 feet in 387 miles causing many difficult and dangerous rapids. For the first 23 miles below the town of Green River, Utah, to the point where the San Rafael river enters from the west, the country is more or less open. From *78 the mouth of the San Rafael river (approximately the beginning of the section to which the controversy relates) to the junction of the Green and Grand rivers, there is a very gradual slope, there being a drop of 111 feet in the 94 miles. In this section the river flows through Labyrinth and Stillwater Canyons, the rock walls of which in many places rise almost vertically **442 from the water's edge, and in other places are over a thousand feet apart, with heights of 600 to 1,300 feet. The average width of the river is from 500 to 700 feet. In four or five places there are bottom lands along the side in the canyons. The course of the river is tortuous; the distance (in this section) in a straight line being less than one-half that by the river. The government maintains gauging stations to measure the depth, the velocity, and the amount of discharge of water. On the Green river the gauge was located at or near the town of Green River, Utah. From these measurements the master finds that the depth of the Green river ranged from between 1 1/2 and 3 feet for 53 days in the year to between 7 and 12 feet for 60 days, and that for 312 days in the year there was a depth of 3 feet or over. For 290 days in the year there was a discharge of over 2,000 cubic feet per second, and, for 149 days, of over 4,200 cubic feet per second.

The Grand river rises in North-Central Colorado and flows to its junction with the Green river in Utah, approximately about 423 miles. Its course is through a succession of long, narrow, fertile valleys, alternating with deep canyons, with walls, in places, of over 2,000 feet in height. There are many difficult and dangerous rapids. The total drop from Grand Junction, Colo., to Castle Creek, Utah (where the section in controversy begins), is from 4,552 feet in elevation to 3,993 feet, a drop of 559 feet in 94 miles. From Castle Creek to the town of Moab, 14 miles, the slope averages 3.5 feet per mile, and there are slight rapids or riffles and rocks in the stream. At *79 Moab there is an open valley, leaving which the Grand river flows 65 1/2 miles largely through rock canyons having walls 600 to 2,100 feet in height. The course of the Grand river in this section is slightly more tortuous than that of the Green river; the width of the river averages about 500 feet and the slope below Moab is only a little over 1 foot per mile. The government's gauge was located at Cisco, about 17

miles above Castle Creek. From readings at that point, the master finds that the depths of the river vary from 2.9 to 3 feet for 16 days in the year to over 7 feet for 61 days, and that for 349 days in the year there is a depth of 3 feet or over. There is a discharge of over 2,000 cubic feet per second for 351 days in the year, and for 169 days of over 4,200 cubic feet per second.

The master finds that on the Grand river, in the 79 miles between Castle Creek and the junction with the Green river, there is a stretch of about three miles out of the first 14 miles between Castle Creek and Moab Bridge in which there are three small rapids, and that, in this stretch, the river is less susceptible of practical navigation for commercial purposes than in the remainder of the river. But the master finds that, even in this 3-mile stretch, the river is susceptible of being used for the transportation of lumber rafts, and that there has been in the past considerable use of the river for that purpose.

The Colorado river, that is, treating the river as beginning at the junction of the Green and Grand rivers, flows southwesterly and finally reaches the Gulf of California. The distance from the confluence of the Green and Grand rivers in Utah to the Utah-Arizona boundary is about 189 miles; the boundary being about 27 miles above the point known as Lees Ferry in Arizona. The table of distances gives the junction of the Green and the Grand rivers as being 216.5 miles above Lees Ferry. The master finds that the Colorado river is nonnavigable from this junction down to the end of Cataract Canyon at Mile ***80** 176 above Lees Ferry. The state of Utah contests the finding of the master with respect to the first 4.35 miles of this stretch of the river; that is, to a point 212.15 miles above Lees Ferry (a question to which we shall return in dealing with Utah's exceptions), where it is said that the first rapid or cataract of Cataract Canyon begins. But there is no controversy as to the nonnavigability of the stream from this point through Cataract Canyon down to Mile 176 above Lees Ferry. Through this canyon, with rock walls from 1,500 to 2,700 feet in height, the river has a rapid descent or slope of about 399 feet, a drop of 11 feet per mile, with a long series of high and dangerous rapids.

The master's finding of navigability relates to the section of the river from Cataract Canyon to the Utah-Arizona boundary. At the end of Cataract Canyon (the end of the portion of it known as Dark Canyon), the country becomes more open, the river somewhat wider, and the canyon walls not over 600 feet in height, this stretch being known as Glen Canyon. Two rivers enter from the west, the Fremont and the Escalante, and one from the east, the San Juan. As the Colorado river approaches the Utah-Arizona boundary, the canyon walls increase in height and average 1,300 to 1,600 feet. There are various points at which bottom lands are cultivated in the river beds. The width of the river averages from 600 to 700 feet. Its slope through this section is gentle, being less than 2 feet per mile. As to the 90 miles of Glen Canyon, that is, from Mile 176 above Lees Ferry to the mouth of the San Juan river, the master states that there are no gauging station figures of any discharge, flow, and depth which are applicable, but the master finds that, as the waters of the Green and the Grand rivers join and form the Colorado river, there must be a discharge of water in the Glen Canyon stretch equal to the combined discharge of the other two rivers, and hence at ***81** all times ****443** sufficient water for navigation so far as discharge alone is concerned. As to depth, the master finds that the Colorado river in this stretch should have a depth at least equal to that of the Green or the Grand river. Between the mouth of the San Juan river and the Utah-Arizona boundary, figures were obtained from the Lees Ferry gauging station from which it appears that the average depths range from between 3 and 4 feet for 17 days in the year to over 8 feet for 124 days in the year, and that the discharge varies from less than 4,000 cubic feet per second for 13 days in the year to over 6,000 feet per second for 352 days in the year.

[5] The question thus comes to the use, and the susceptibility to use, for commerce of the sections of these rivers which the master has found to be navigable.

The United States, in support of its exceptions, stresses the absence of historical data showing the early navigation of these waters by Indians, fur traders, and early explorers, that is, uses of the sort to which this Court has had occasion to refer in considering the navigability of certain other streams. [FN11] The master has made an elaborate review of the history of the rivers from the year 1540 to 1869, and reaches the conclusion that neither 'the limited historical facts put in evidence by the Government or the more comprehensive investigation into the history of these regions' tends to support the contention that the nonuse of these rivers in this historical period 'is weighty evidence that they were non-navigable in 1896 in fact and in law.' The master points out that the nonsettlement of Eastern Utah in these years, the fact that none of the trails to Western Utah or to

California were usable to advantage in connection with these rivers, and many other facts, are to be considered in connection with that of nonuse.

FN11 E. g., The Montello, supra; Economy Light & Power Co. v. United States, supra.

***82** Coming to the later period, that is, since 1869, the master has set forth with much detail the actual navigation of the rivers with full description of the size and character of boats, and the circumstances of use. It appears that navigation began in 1869 with the expedition of Major John W. Powell down the Green and the Colorado rivers, and this was followed by his second trip in 1871. It is said that there were no further attempts at navigation for 17 years. There was a survey by Robert Brewster Stanton in 1889, and in the succeeding years there were a large number of enterprises, with boats of various sorts, including rowboats, flatboats, steamboats, motorboats, barges and scows, some being used for exploration, some for pleasure, some to carry passengers and supplies, and others in connection with prospecting, surveying, and mining operations. Much of this evidence as to actual navigation relates to the period after 1896, but the evidence was properly received and is reviewed by the master as being relevant upon the issue of the susceptibility of the rivers to use as highways of commerce at the time Utah was admitted to the Union.

[6][7] The question of that susceptibility in the ordinary condition of the rivers, rather than of the mere manner or extent of actual use, is the crucial question. The government insists that the uses of the rivers have been more of a private nature than of a public, commercial sort. But, assuming this to be the fact, it cannot be regarded as controlling when the rivers are shown to be capable of commercial use. The extent of existing commerce is not the test. The evidence of the actual use of streams, and especially of extensive and continued use for commercial purposes may be most persuasive, but, where conditions of exploration and settlement explain the infrequency or limited nature of such use, the susceptibility to use as a highway of commerce may still be satisfactorily proved. As the Court said, in Packer v. Bird, 137 U. S. 661, 667, 11 S. Ct. 210, 211, 34 L. Ed. 819: 'It ***83** is, indeed, the susceptibility to use as highways of commerce which gives sanction to the public right of control over navigation upon them, and consequently to the exclusion of private ownership, either of the waters or the soils under them.' In Economy Light & Power Company v. United States, 256 U. S. 113, 122, 123, 41 S. Ct. 409, 412, 65 L. Ed. 847, the Court quoted with approval the statement in The Montello, supra, that 'the capability of use by the public for purposes of transportation and commerce affords the true criterion of the navigability of a river, rather than the extent and manner of that use.'

[8][9] It is true that the region through which the rivers flow is sparsely settled. The towns of Green River and Moab are small, and otherwise the county in the vicinity of the streams has but few inhabitants. In view of past conditions, the government urges that the consideration of future commerce is too speculative to be entertained. Rather is it true that, as the title of a state depends upon the issue, the possibilities of growth and future profitable use are not to be ignored. Utah, with its equality of right as a state of the Union, is not to be denied title to the beds of such of its rivers as were navigable in fact at the time of the admission of the state either because the location of the rivers and the circumstances of the exploration and settlement of the country through which they flowed had made recourse to navigation a late adventure or because ****444** commercial utilization on a large scale awaits future demands. The question remains one of fact as to the capacity of the rivers in their ordinary condition to meet the needs of commerce as these may arise in connection with the growth of the population, the multiplication of activities, and the development of natural resources. And this capacity may be shown by physical characteristics and experimentation as well as by the uses to which the streams have been put.

***84** The controversy as to navigability is largely with respect to impediments to navigation in the portions of the rivers found by the master to be navigable, and as to these impediments there is much testimony and a sharp conflict in inferences and argument. The government describes these impediments as being logs and debris, ice, floods, rapids, and riffles in certain parts, rapid velocities with sudden changes in the water level, sand and sediment which, combined with the tortuous course of the rivers, produce a succession of shifting sand bars, shallow depths, and instability of channel.

The master states that, while there is testimony that in floods and periods of high water these rivers carry a considerable quantity of logs and driftwood, the evidence as to actual trips made by witnesses discloses little danger thereby incurred except in the case of paddle-wheel boats. The master's finding,

which the evidence supports, is that this condition does not constitute a serious obstacle to navigation. With respect to ice, it is sufficient to say, as the master finds, that ice periods on these rivers do not prevail in every winter, and that they are shorter than on most of the rivers in the Northern and Northeastern States of the country. As to floods, it appears that there are months of extreme high water caused by the melting of snows in the mountains and also local floods of short duration caused by rainstorms. From the testimony of the witnesses who have actually boated on these rivers, the master is unable to find that this element of variation in flow, or of rapidity of variation, has constituted any marked impediment to the operation of boats except possibly in one or two instances. In relation to rapids, riffles, rapid water, and velocity of current, the master uses the classifications of an engineer presented by the government, and finds that in the portions of the Green river involved in this suit there are no rapids, riffles, or rapid water, and that the slope of the bed is only a little over ***85** one foot per mile; that there is a stretch on the Grand river (above Moab Bridge) where there are three small rapids, already mentioned, and also 2 1/2 miles of rapid water, but that this is a stretch of only six miles in all, and is not characteristic of the whole section of the Grand river here in controversy. It appears that, neither the current nor the velocity of the Green and Grand rivers impede navigation to any great extent except in the days of extreme or sudden flood, and that motorboats of proper construction, power, and draft can navigate upstream without trouble, so far as current or velocity alone is concerned. The slope of the section of the Colorado river which the master has found to be navigable is for the most part slight, as already stated; there are four drops in elevation which may be called small rapids, but it appears that these do not ordinarily make necessary any portage of boat or cargo.

[10][11] The principal impediment to navigation is found is shifting sandbars. As the rivers carry large amounts of fine silt, sandbars of various types are formed. The master's report deals with this matter at length. Referring to the Green and the Grand rivers, the master states that the most constant type of sandbar forms on the sides of the rivers on the convex curves or inside of the bends; that changes in discharge and in velocity, and floods caused by sudden heavy rains, may affect the size, shape, and height of these side sandbars, but, in general, after the spring high water has receded, these sandbars have constant and fixed locations. There is a second type of bar which forms at the mouth of tributary streams, creeks, or washes, usually at times of sudden floods caused by heavy summer rains, and these generally are of short duration. A third type consists of what is termed 'crossing bars' which are formed below the places where the rivers cross from one side to the other in following the curves or bends; wherever these crossing bars occur, there ***86** is generally more or less difficulty in ascertaining the course of the channel, as the stream may divide into several channels, or it may distribute itself over the full length of the bar so as greatly to lessen the depth of the water from that prevailing in the well-defined channels which follow the bends. There are frequent and sudden variations in these bars resulting in changes in the course of the channel. The bed of the Colorado river above the mouth of the San Juan is found to be more gravelly than that of the Green and Grand rivers. There are, however, long high side bars of sand and gravel on which placer mining has been done and also a few sandbars or bottoms which have been cultivated. Crossing bars, occur, but not as frequently as on the Green and Grand rivers, and they cause less trouble. After the recession of the water at the end of the high-water season, the channel remains more or less stable during the rest of the year, although there are temporary changes. In general, the channel is less shifting than on the Green and Grand rivers, and the river is less tortuous.

****445** Recognizing the difficulties which are thus created, the masteris plainly right in his conclusion that the mere fact of the presence of such sandbars causing impediments to navigation does not make a river nonnavigable. It is sufficient to refer to the well-known conditions on the Missouri river and the Mississippi river. The presence of sandbars must be taken in connection with other factors making for navigability. In The Montello, supra, the Court said: 'Indeed, there are but few of our fresh-water rivers which did not originally present serious obstructions to an uninterrupted navigation. In some cases, like the Fox River, they may be so great while they last as to prevent the use of the best instrumentalities for carrying on commerce, but the vital and essential point is whether the natural navigation of the river is such that it affords a channel for useful commerce. If this be so the river is navigable in fact, although its navigation may be encompassed with difficulties ***87** by reason of natural barriers, such as rapids and sand-bars.'

[12] The government invites a comparison with the conditions found to exist on the Rio Grande river in New Mexico, and the Red river and the Arkansas river, above the mouth of the Grand river, in

Oklahoma, which were held to be nonnavigable, but the comparison does not aid the government's contention. Each determination as to navigability must stand on its own facts. In each of the cases to which the government refers, it was found that the use of the stream for purposes of transportation was exceptional, being practicable only in times of temporary highwater. [FN12] In the present instance, with respect to each of the sections of the rivers found to be navigable, the master has determined upon adequate evidence that 'its susceptibility of use as a highway for commerce was not confined to exceptional conditions or short periods of temporary high water, but that during at least nine months of each year the river ordinarily was susceptible of such use as a highway for commerce.'

FN12 In the case of the Rio Grande in New Mexico, the Court said (United States v. Rio Grande Dam & Irrigation Co., 174 U. S. 690, 699, 19 S. Ct. 770, 773, 43 L. Ed. 1136): 'Its use for any purposes of transportation has been and is exceptional, and only in times of temporary high water. The ordinary flow of water is insufficient. It is not like the Fox river, which was considered in The Montello, in which was an abundant flow of water and a general capacity for navigation along its entire length, and, although it was obstructed at certain places by rapids and rocks, yet these difficulties could be overcome by canals and locks, and when so overcome would leave the stream, in its ordinary condition, susceptible of use for general navigation purposes.' In Oklahoma v. Texas, 258 U. S. 574, 587, 42 S. Ct. 406, 411, 66 L. Ed. 771, the Court, describing the Red river in the western part of Oklahoma, said that 'only for short intervals, when the rainfall is running off, are the volume and depth of the water such that even very small boats could be operated therein. * * * The rises usually last from 1 to 7 days and in the aggregate seldom cover as much as 40 days in the year'; and, in relation to the eastern part of the river, it was found (Id., page 591 of 258 U. S., 42 S. Ct. 406, 413) that 'its characteristics are such that its use for transportation has been and must be exceptional, and confined to the irregular and short periods of temporary highwater.' In Brewer-Elliott Oil & Gas Co. v. United States, 260 U. S. 77, 86, 43 S. Ct. 60, 67 L. Ed. 140, the Court accepted the findings of the two courts below as to the nonnavigability of the Arkansas river above the mouth of the Grand river in Oklahoma, and the District Court, to whose findings the Circuit Court of Appeals referred, had said that 'The use of that portion of the river for transportation boats has been exceptional and necessarily on high water, was found impractical, and was abandoned. The rafting of logs or freight has been attended with difficulties precluding utility. There was no practical susceptibility to use as a highway of trade or travel.' Id. (D. C.) 249 F. 609, 623; Id. (C. C. A.) 270 F. 100, 103.

***88** [13] The government invokes an Executive Order of May 17, 1884, withdrawing lands from sale and settlement in order to provide a reservation for Indian purposes in Utah, in which the boundary of the reservation wad described as running 'up and along the middle of the channel' of the Colorado and San Juan rivers. This is said to have included the Colorado river from the Utah-Arizona boundary to the mouth of the San Juan river. This Executive Order was revoked by another Executive Order of November 19, 1892, so far as it affected lands west of the 110th degree of west longitude and within the Territory of Utah, thus excluding the lands in question along the Colorado river. The earlier Executive Order did not constitute a grant such as that which was under consideration in Brewer-Elliott Oil & Gas Company v. United States, 260 U. S. 77, 80, 85, 43 S. Ct. 60, 67 L. Ed. 140, and it does not appear that the question of the navigability of the rivers was considered when that order was made. The government also refers to proceedings since Utah became a state, with respect to governmental investigations, operations under placer claims, and withdrawals for power and reservoir sites. It is not necessary to review these transactions in detail, as nothing that has been done alters the essential facts with respect to the navigability of the streams, and the United States could ***89** not, without the consent of Utah, divest that state of title to the beds of the rivers which the state had acquired. Nor has Utah taken any action which could be deemed to estop the state from asserting title.

[14] We conclude that the findings of the master, so far as they relate to the sections of the Green, the Grand, and the Colorado rivers, found by him to be navigable, are justified by the evidence and that the title to the beds of these sections of the rivers vested

in Utah when that state was admitted to the Union. ****446** The exceptions of the government are overruled.

[15] The state of Utah excepts to the finding of the master as to nonnavigability so far as it relates to the first 4.35 miles of the stretch of the Colorado river south from the confluence of the Green river with the Grand river. In the master's report, this short stretch is included, without separate or particular characterization, in the section of the Colorado river found to be nonnavigable through Cataract Canyon to Mile 176 above Lees Ferry. Utah contends that the portion of the Colorado river immediately below the junction of the Green and the Grand rivers, at Mile 216.5 above Lees Ferry, does not differ in its characteristics, with respect to navigability, from these streams as they reach the point of confluence, save that there is more water and a slightly increased gradient, and that no difficulties in navigation appear until the first rapid in Cataract Canyon is reached at Mile 212.15 above Lees Ferry. In the classification made by the government engineer with respect to rapids and rapid water, to which reference has been made, 4.2 miles of this stretch (to Mile 212.3 above Lees Ferry) are described as quiet water, and the government has not called our attention to any facts which would substantially differentiate this portion of the Colorado river, immediately below the confluence of the Green and Grand rivers, from those parts of these rivers found by the master to be navigable. ***90** On the assumption that there is not basis for such a differentiation as to navigability in fact, the exception of Utah in this respect should be sustained. In this view, however, the exact point at which navigability may be deemed to end, in the approach to Cataract Canyon, should be determined precisely. This determination may be left, for the present, to the agreement of the parties, and, if they are unable to agree, they may submit their views in connection with the settlement of the decree.

[16][17] Utah also excepts to the recommendation of the master that the decree contain a proviso that the United States 'shall in no wise be prevented from taking any such action in relation to said rivers or any of them as may be necessary to protect and preserve the navigability of any navigable waters of the United States.' While a statement to that effect is not necessary, as the United States would have this authority in any event, the provision is not inappropriate in a decree determining the right, title, or interest of the United States and of Utah, respectively, in relation to the beds of the rivers in question, and its inclusion may avoid misapprehension of the effect of the decree. This exception and the remaining exception of Utah, which does not require separate examination, are overruled.

Decree will be entered dismissing the complaint of the United States so far as it relates to the beds of the portions of the Green, Grand, and Colorado rivers found to be navigable, as above stated, and adjudging that title to such beds was vested in Utah on January 4, 1896, except so far as the United States may theretofore have made grants thereof; and also adjudging that, on that date (except as to lands theretofore granted), title to the beds of the portion of the Colorado river and of the San Juan river, where there rivers are found to be nonnavigable, was vested in the United States. The decree shall also contain the proviso above mentioned. Each party will ***91** pay its own costs, one-half of the expenses incurred by the master, and one-half of the amount to be fixed by the Court as his compensation.

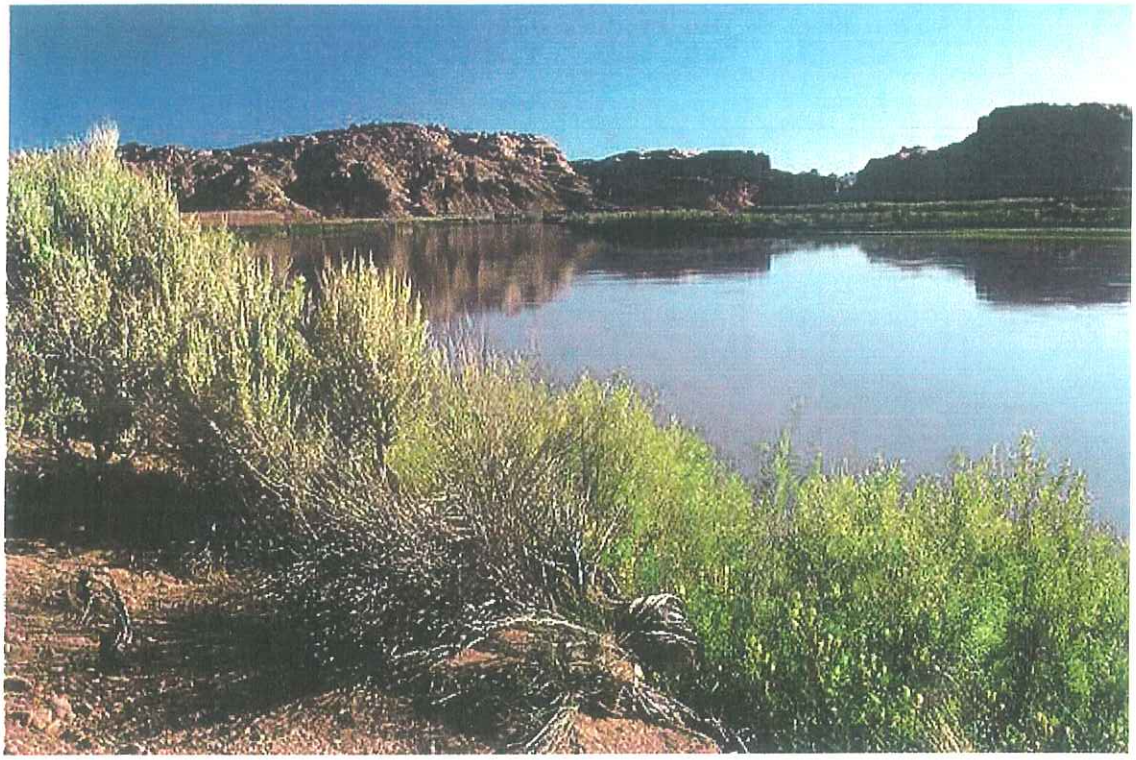
The government will prepare a form of decree in accordance with this decision, and furnish a copy to the state of Utah within 15 days; and, within 10 days after such submission, the draft decree, together with suggestions on behalf of the state of Utah, if any, will be submitted to the Court. [FN1]

FN1 For decree, see 283 U. S. 801, 51 S. Ct. 497, 75 L. Ed. --.

51 S.Ct. 438, 283 U.S. 64, 75 L.Ed. 844

END OF DOCUMENT

ADDITIONAL INFORMATION




The Confluence - Canyonlands National Park

USGS

Water Resources

Data Category: Site Information | Geographic Area: Utah | GO

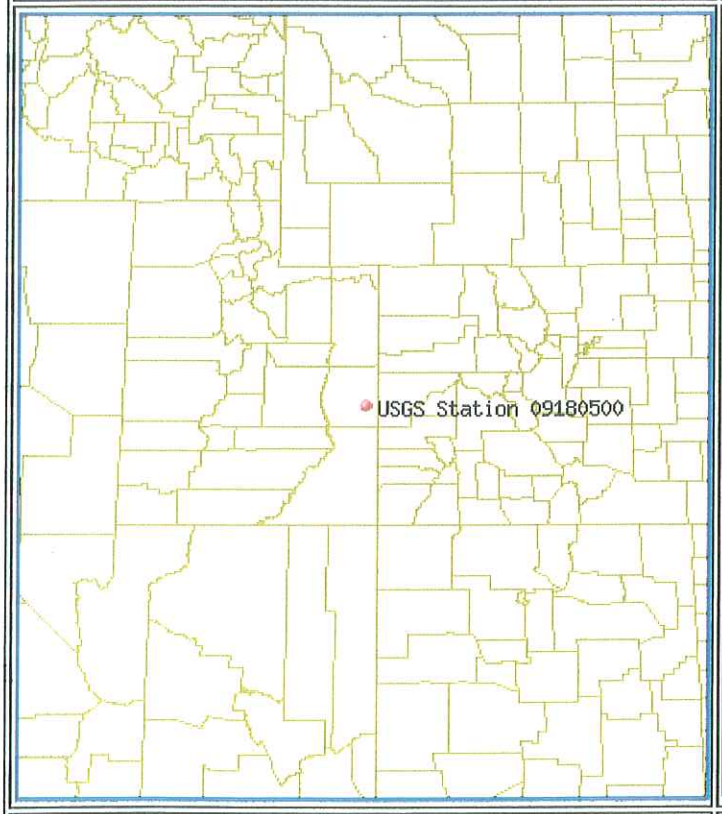
Site Map for Utah

USGS 09180500 COLORADO RIVER NEAR CISCO, UT

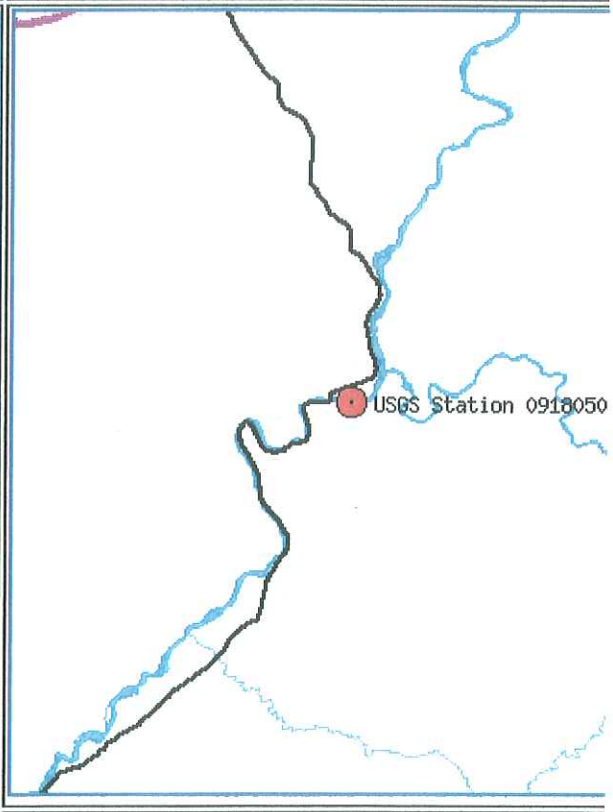
Available data for this site: Station site map | GO

Grand County, Utah
Hydrologic Unit Code 14030005
Latitude 38°48'38", Longitude 109°17'34" NAD27
Drainage area 24,100 square miles
Gage datum 4,090.00 feet above sea level NGVD29

Location of the site in Utah.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov
NWIS Site Inventory for Utah: Site Map

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Utah | GO

Calendar Year Streamflow Statistics for Utah

USGS 09180500 COLORADO RIVER NEAR CISCO, UT

Available data for this site: Surface-water: Annual streamflow statistics | GO

Grand County, Utah
Hydrologic Unit Code 14030005
Latitude 38°48'38", Longitude 109°17'34" NAD27
Drainage area 24,100 square miles
Gage datum 4,090.00 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1914	11,950	1941	9,762	1961	4,690	1981	3,525
1915	7,060	1942	9,804	1962	9,082	1982	7,332
1916	10,760	1943	7,201	1963	3,570	1983	12,740
1923	10,340	1944	8,045	1964	4,728	1984	15,260
1924	7,910	1945	7,604	1965	9,286	1985	12,090
1925	7,186	1946	5,607	1966	4,369	1986	11,280
1926	8,911	1947	8,643	1967	4,346	1987	7,897
1927	10,840	1948	8,666	1968	5,765	1988	4,715
1928	9,986	1949	8,756	1969	6,777	1989	3,905
1929	12,110	1950	5,627	1970	8,272	1990	3,179
1930	7,962	1951	5,507	1971	7,538	1991	5,144
1931	3,898	1952	10,630	1972	4,888	1992	4,721
1932	9,175	1953	5,610	1973	8,804	1993	9,846
1933	6,378	1954	3,167	1974	6,100	1994	4,517
1934	2,856	1955	4,399	1975	7,325	1995	11,020
1935	6,741	1956	4,916	1976	4,655	1996	7,392
1936	7,893	1957	12,280	1977	2,293	1997	11,010
1937	6,520	1958	8,349	1978	6,647	1998	7,562
1938	10,330	1959	4,439	1979	9,125	1999	6,686
1939	5,639	1960	5,514	1980	8,609	2000	4,966

1940	5,053			

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Utah: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ut/nwis/annual/calendar_year?

Retrieved on 2003-03-04 11:14:59 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Utah
Privacy Statement || Disclaimer || Accessibility
0.68 0.67

Water Resources

Data Category: Site Information | Geographic Area: Colorado | GO

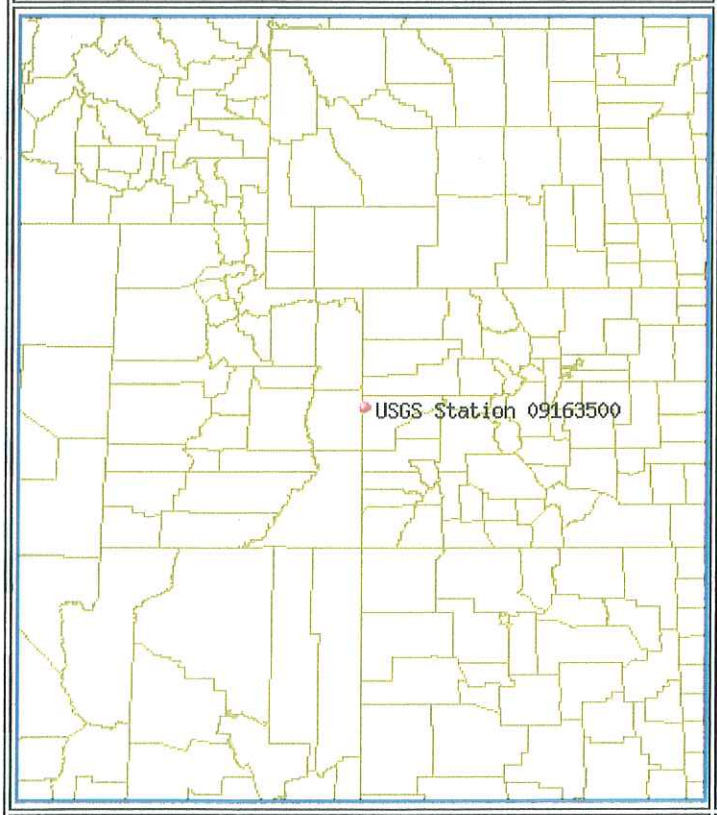
Site Map for Colorado

USGS 09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

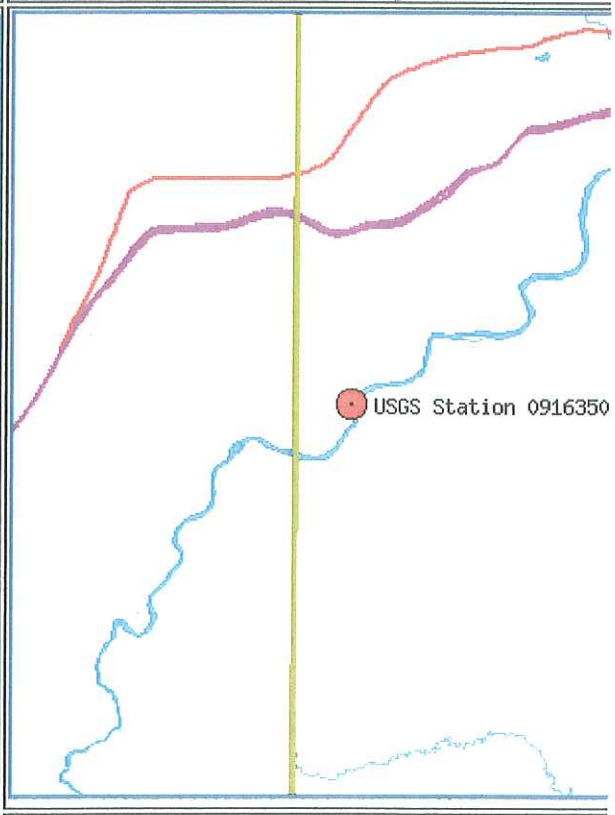
Available data for this site: Station site map | GO

Mesa County, Colorado
Hydrologic Unit Code 14010005
Latitude 39°07'58", Longitude 109°01'35" NAD27
Drainage area 17,843.00 square miles
Contributing drainage area 17,843 square miles
Gage datum 4,325.00 feet above sea level NGVD29

Location of the site in Colorado.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-co_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-co_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Colorado | GO

Calendar Year Streamflow Statistics for Colorado

USGS 09163500 COLORADO RIVER NEAR COLORADO-UTAH STATE LINE

Available data for this site: Surface-water: Annual streamflow statistics | GO

Mesa County, Colorado
Hydrologic Unit Code 14010005
Latitude 39°07'58", Longitude 109°01'35" NAD27
Drainage area 17,843.00 square miles
Contributing drainage area 17,843 square miles
Gage datum 4,325.00 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1952	9,437	1964	4,363	1976	4,383	1988	4,555
1953	5,175	1965	8,256	1977	2,212	1989	3,804
1954	2,877	1966	3,723	1978	5,698	1990	3,098
1955	3,941	1967	4,173	1979	7,851	1991	5,140
1956	4,542	1968	5,246	1980	7,316	1992	4,368
1957	10,870	1969	6,179	1981	3,559	1993	8,854
1958	7,159	1970	7,713	1982	6,657	1994	4,358
1959	4,222	1971	7,194	1983	11,100	1995	10,320
1960	5,029	1972	4,828	1984	13,769	1996	7,413
1961	4,174	1973	7,346	1985	10,720	1997	10,230
1962	8,458	1974	5,860	1986	10,450	1999	6,037
1963	3,246	1975	6,736	1987	6,533	2000	4,513

Questions about data gs-w-co_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-co_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Colorado: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/co/nwis/annual/calendar_year?

Retrieved on 2003-03-04 11:21:53 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Colorado
Privacy Statement || Disclaimer || Accessibility
0.66 0.66

Elk River—California

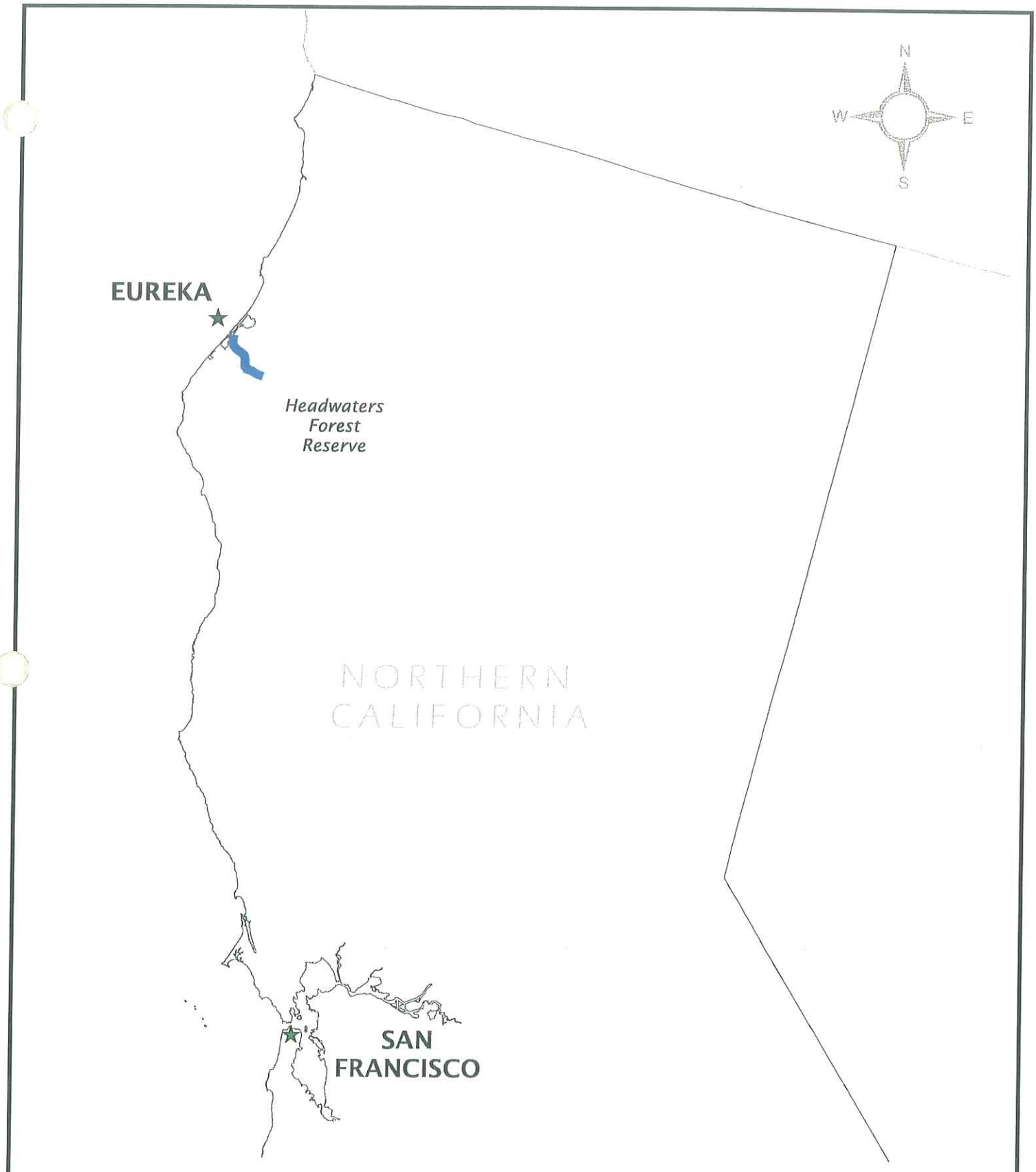
Reported Decision: People v. Elk River Mill & Lumber Co., 107 Cal. 221, 40 P. 531 (1895)

Reach at Issue: Unknown

Judicial Determination: Non-navigable

Facts Reported in Decision:

"Upon this issue the court found, in effect, that the south fork of Elk River is a small stream, insufficient to float single saw logs except during extreme freshets and with the aid of dams to increase the flow of the stream; that it is not navigable, and was not made so by section 2349, Pol. Code." 40 P. at 532.



Elk River - California

REPORTED DECISION

C

Supreme Court of California.

PEOPLE ex rel. RICKS WATER CO.
v.
ELK RIVER MILL & LUMBER CO.

No. 15,907.

May 2, 1895.

Department 2. Cross appeals from superior court, Humboldt county; G. W. Hunter, Judge.

Action on the relation of the Ricks Water Company against the Elk River Mill & Lumber Company. From the decree rendered, both parties appeal. Affirmed.

West Headnotes

Navigable Waters 1(2)
270k1(2) Most Cited Cases

The South Fork of Elk river was a small stream, insufficient to float saw logs, except during extreme winter freshets and with the aid of dams; and, though it was used at such times and in that way in early years, the use was abandoned as impracticable. Held, that the stream was not made navigable by Pol.Code, § 2349 (repealed. See Harbors and Navigation Code, § § 101-106), declaring navigable all branches of Elk river which were at any time used for floating logs.

Waters and Water Courses 40
405k40 Most Cited Cases

Const. art. 14, § 1, which makes the use of water for sale, rental, or distribution a public use, does not abridge the rights of an upper riparian owner on the stream from which a city water company distributes water.

Waters and Water Courses 75
405k75 Most Cited Cases

Where the lower riparian owners did not complain of the use by an upper riparian owner in the operation of a sawmill which rendered the lower waters unfit for public consumption, and most of them depended on the lumbering business and the operation of the mill for their support, the court would not, at the instance of the attorney general, who appeared for such owners to enable the making of a proper decree, suppress the use made by the upper owner by the granting of an injunction against its continuance.

Waters and Water Courses 196
405k196 Most Cited Cases

Though the use of a stream by an upper riparian owner in the operation of a sawmill rendered the lower waters unfit for public concumption, it could not be enjoined at the instance of a city water company, which subsequently appropriated the lower waters to supply the public, on the ground that it was in violation of Pen.Code, § 374 (repealed. See Health and Safety Code, § 40000), prohibiting the pollution of streams from which the inhabitants of towns are supplied.

****531 *222** Barclay Henley, J. N. Gillett, L. F. Puter, E. W. Wilson, and Atty. Gen. Hart, for plaintiff.

F. A. Cutler and S. M. Buck, for defendant.

TEMPLE, J.

This action was brought to restrain the defendant from polluting the waters of Elk river, from which the Ricks Water Company obtains water to sell to the inhabitants of the city of Eureka. ***223** The complaint charges defendant with polluting Elk river (1) by maintaining its barns, slaughterhouse, corral, and stables so near the stream that the water becomes polluted thereby; (2) by maintaining water-closets so that the drainage from them flows into the stream; (3) by allowing sawdust to find its way into the stream; (4) by discharging into the stream slops from its kitchen; and (5) by impounding a large number of redwood logs in the stream, from which logs a dark, juicy liquid escapes, and which logs are covered ****532** with dust and other deleterious substances, by all of which the water is polluted and discolored, so as to be unfit for domestic use. The court declined to enjoin the defendant from impounding logs in the stream, or from dumping sawdust upon the banks, or from allowing the kitchen drainage to flow into the stream, or to abate the privies as nuisances. From that portion of the decree, and from a refusal to award a new trial, plaintiff takes this appeal. The court did enjoin the defendant from allowing the accumulation of manure and filth on the banks of the stream above its dam, and allowing the washings from the same

and from the hog pen to escape into the stream. From that portion of the decree awarding the plaintiff this relief the defendant has appealed.

In a separate count the plaintiff also averred that Elk river is a navigable stream, and was made so by section 2349, Pol. Code; that in 1886 defendant wrongfully constructed, and has ever since maintained, a dam across said stream, whereby said stream has been and is wholly obstructed. Upon this issue the court found, in effect, that the south fork of Elk river is a small stream, insufficient to float single saw logs except during extreme winter freshets and with the aid of dams to increase the flow of the stream; that it is not navigable, and was not made so by section 2349, Pol. Code. By that section all streams emptying into Elk river are declared navigable 'which are now or at any time ***224** have been used for the purpose of floating logs or timber.' It is found that the south fork of Elk river had been so used in former years during extensive floods, and with the aid of dams, but that its use for that purpose was found impracticable, and had been abandoned. It is contended that this legislative declaration makes the river a navigable stream. I do not think so. In the first place, it will not be presumed that the language of the act refers to such a use as would not bring the river within the definition of a navigable stream. Conceding that the definition includes all streams floatable for logs, still it must be capable of being used to an extent that would make it of some value as a highway; or at least a stream that would be so used for some portions of the year. That it could be so used for a few days in the rainy season and by the aid of dams would not make the river navigable.

The court also found that the bed of the stream is private property. Perhaps this is only another finding that the river is nonnavigable. If the stream is in fact nonnavigable, it is not a public way, and the legislature cannot make it such by merely enacting a law declaring it navigable. Private property cannot be taken for a public use without compensation. The fact that a small stream trickles through land which the public proposes to take for a highway does not authorize its being taken without compensation. On this point, see Gould, Waters, § 111, and authorities cited in the note. The finding upon the subject is fully supported by the law and the evidence. The dam is therefore not a purprestur e.

The charge in the complaint in regard to putting sawdust into the stream is found untrue. It is found that the sawdust is burned, and that such care is taken that very little gets into the water, and that which does reach the stream has no appreciable effect upon the water. It was also found that the water is not essentially impaired by the waste water from the kitchen, or by the ***225** escape of oily substances or waste matter from the mill, or by the erection of privies or the escape of offal from the slaughterhouse. It cannot be denied that there was evidence tending to sustain all these findings. There was evidence whichtended to show that the water was not polluted to such a degree by any or all the matters complained of as to render it unfit for use or unwholesome. Even the expert witnesses did not agree upon this proposition. But when the sources of pollution are suppressed which are enjoined by the decree, it cannot be said that, aside from the coloring matter which comes from the impounding of the logs, there is evidence that the water is materially polluted. The evidence shows that the offal from the slaughterhouse is not thrown into the stream, and does not get into the water; that only a portion of the drainage from the kitchen reaches the stream; that the privies are not over, or immediately upon, the banks of the stream. The people who are employed at defendant's mill themselves comprise a portion of the public. They have as much right to live on the south fork of Elk river as the inhabitants of Eureka have to live at Eureka. The one community cannot be suppressed for the benefit of the other. Since they have the right to live there, they have a right to maintain privies, taking all reasonable precautions against unnecessarily polluting the water. All natural streams to some extent operate as sewers. The surface of the land is drained by them, and all industries, as well as mere inhabitancy, tend to add to the impurities of the natural streams. The inhabitants and property owners upon these streams cannot be compelled to remove from them, or be expropriated for the benefit of urban communities. It is contended that the law of the case is changed by section 1, art. 14, of the state constitution, which makes the use of water for sale, rental, or distribution ***226** a public use. Certainly it was not intended by that provision to appropriate such water for the use of the public without compensation. The section recognizes the use as one in behalf of which the right of eminent domain may be invoked, and asserts the right of the state to regulate and control the sale, rental, and distribution of much as it has been for many years back. ****533** the same. People v. Stephens, 62 Cal. 209; McCrary v. Beaudry, 67 Cal. 120, 7 Pac. 264.

Nor do I see how the plaintiff's case is helped by section 374 of the Penal Code. I do not doubt the power of the legislature to make criminal the acts therein specified, when the direct effect of such acts is to pollute such waters. But there is nothing in the language of the section which makes it necessary to

suppose that it was intended thereby to deprive riparian owners of property rights. It is not necessary to say that in the interest of public health the legislature lature cannot so restrict the rights of such owners as to materially interfere with the value of such rights. Such intent will not be presumed when the language leaves it doubtful. The section, if it can be construed as limiting riparian rights at all, only has that effect as to certain riparian owners. In this case the defendant had expended, as it is found, $90,000 in his mill and other property connected with his business many years before water was taken from the stream for the supply of Eureka. The use it is making of the stream, as between itself and inferior riparian owners, may be a reasonable one. It was so found. After he had built his mill and had been for years engaged in manufacturing lumber, the relator built its works, and in defiance of law, which provides that it shall only supply the city with pure water, commenced taking the water from the stream, 4 1/2 miles below the mill, to sell to the inhabitants of Eureka. The water had been condemned by the board of health of the city of Eureka before it was taken by the relator. Apparently the relator is attempting through this proceeding to enable itself to perform its duty to sell pure, fresh *227 water. Instead of taking pure water, as the court found it could have done, it will make this stream pure by destroying the property of the defendant. On the supposition made, the industry and the mode of conducting it were perfectly lawful before the relator constructed its works, and would have continued to be so but for the unlawful selection of this stream as the source from which relator would take its supply. It is not the law nor the act of the defendant alone which constitutes the nuisance. The selection of this stream by the relator renders the act unlawful which before was not. Perhaps such a thing may be done when it is absolutely necessary. The power of the legislature in this regard is very broad. But I do not think the legislature can, under the undefined and undefinable power called the 'police power,' take private property for public use without compensation, when such property can be condemned and paid for.

I have called attention to the fact that the law is not uniform in its operation, not only because it does not afford the same protection to rural and urban populations, but because it authorizes private persons in charge of a public use to select certain riparian owners, and, if the construction contended for by appellant be correct, take without compensation, for the pecuniary advantage of private speculators, a valuable portion of their property. Conceding that the plant of defendant and its mode of conducting its work is lawful and proper as against inferior riparian owners, the relator had no right, under the law, to take water for the purpose of selling it to the inhabitants of Eureka, without first removing the causes of pollution. This it could do, so far as defendant's mill is concerned, by condemning and paying for it. It cannot in this proceeding, nor could the legislature in the exercise of the police power authorize it to, take the property without compensation. As was said by the supreme court of Massachusetts: 'The law will not allow rights of property *228 to be invaded under the guise of a police regulation for the preservation of the health or protection against a threatened nuisance, and when it appears that such is not the real object and purpose of the legislation the courts will interfere to protect the rights of citizens.' Watertown v. Mayo, 109 Mass. 315. If this law, therefore, has any force as applied to this case, its sole effect must be to render criminal the specific acts mentioned in the statute. These were already unlawful, for they constitute nuisances. To declare them criminal is not to limit riparian rights.

The court found also that a considerable number of people reside upon the borders of the stream below the mill of defendant, who use the waters of said stream. They are inferior riparian owners, and the attorney general may present their grievances in this case.

The court found: 'That during the greater part of the year defendant keeps in its dam large quantities of redwood, spruce, and pine logs. That a liquid containing some coloring matter is discharged by the redwood logs into the water, which to some extent discolors the water of said stream, and gives it a darkish appearance, and in a slight degree this discoloration remains in the water to the intake of the Ricks Water Company; but the quantity of liquid that escapes from said logs is comparatively small, and it does not render the waters of said stream offensive or repulsive to the senses, or greatly discolor, deteriorate, defile, or contaminate them, and it does not injure or essentially impair them for domestic and drinking purposes.' That the logs are not covered with foul organic matter or other substance which contaminates the water. That prior to the erection of defendant's dam the waters of Elk river had a darkish appearance, owing to the falling of leaves into the stream, to juices from the roots of trees and fallen timber, and the condition of the water now in respect to color is very much as it has been for many years back. **534 It was also found that sawdust is not put into the *229 stream nor allowed to decay on its banks, so that water percolating through it discolors or pollutes the stream; that all necessary precautions are taken to prevent the sawdust from getting into the

river; that the same is burned upon the banks; and that the little that unavoidably gets into the river does not materially affect or discolor the waters of the stream. Upon the facts, so found, I do not think we can interfere with the decree in behalf of lower riparian owners. So far as they have appeared in the case,--which is only as witnesses,--they seem to be entirely satisfied with existing conditions. Apparently all--or nearly all--depend upon the lumbering industry for their means of subsistence, and most of them upon the business conducted by the defendant. It would be rather hard for them to have the industry suppressed by a proceeding in their behalf by the attorney general. I must confess that, to my mind, whether the impounding of logs in the river and the consequent discoloration and pollution of the water is not a nuisance of which lower riparian owners may complain, is a close question. But, under the circumstances of this case, I do not think the decree should be disturbed. The judgment and order are affirmed.

We concur: HENSHAW, J.; McFARLAND, J.

40 P. 531, 107 Cal. 221

END OF DOCUMENT

Fisheating Creek—Florida

Reported Decision: Lykes Bros., Inc. v. Corps of Eng'rs, 821 F. Supp. 1457 (M.D. Fla. 1993), aff'd, 64 F.3d 630 (11th Cir. 1995)

Reach at Issue: Entire length

Judicial Determination: Non-navigable

Facts Reported in Decision:

"In 1842, boat parties of Marines left Fort Center on a scouting reconnaissance mission, led by George Henry Preble, to proceed upstream on FEC [Fisheating Creek]. Preble's account of this trip showed that these boat parties had to push or carry their canoes through Cowbone Marsh ("CBM"). Preble determined the head of FEC to be in what is now referred to as the Sand Lake area, or approximately where the flow of FEC turns from a southerly direction to an easterly direction. 821 F. Supp. at 1458-59.

"The maps and historical records show that the traffic between the west coast of Florida and Fort Center did not use any part of FEC to transport men or supplies." 821 F. Supp. at 1459.

"In 1871 official government surveys were done of the land surrounding FEC. Surveyor Tannehill meandered one bank of FEC from LOK to approximately three miles west of the present location of Palmdale." 821 F. Supp. at 1459.

"Surveyors were paid wages for meandering streams and they would have been paid additionally for meandering both sides of FEC. The surveyors were the 'eyes' of the federal government to determine navigability.' 821 F. Supp. at 1459.

"The historical records show that the settlement patterns in the FEC area did not develop as they did along navigable water bodies in central Florida. Even though land transportation was difficult in the FEC area, it appears that land transportation was the exclusive mode of transportation. . . . There is no evidence in the historical record that FEC was ever used upstream of Fort Center to transport goods or people in commerce. If water transportation on FEC had been feasible, FEC would have been used to transport goods and people in commerce. There is evidence that Billy Bowlegs, a Seminole Indian Chief, traveled from LOK up FEC to Sand Lake, eventually making it through Rainey Slough to the Peace River for the purpose of a bartering enterprise. This, however, was accomplished during a very wet season and there is no evidence that the dugouts were actually paddled or poled through FEC. This adventuresome journey of Billy Bowlegs does not rise to the level of rendering FEC a navigable water." 821 F. Supp. at 1459.

"In 1915 the Corps made an investigation of FEC and described the creek as 'impassable even in a small skiff boat ... where the creek spreads into a broad expanse of marsh." . . . CBM had no defined channel. The Corps also noted that no commerce was carried on

the creek and would not likely be carried on the creek even if the creek were improved." 821 F. Supp. at 1459-60.

"The Corps of Engineers before 1967 and the United States Coast Guard after 1967, exercised jurisdiction to grant permits for bridges over navigable waters of the United States. The Corps' and the Coast Guard's records show that no permit has been issued for construction of a railroad bridge or the highway bridges across FEC." 821 F. Supp. at 1460.

"All of the land in the FEC corridor in Glades County has been deeded to private interests and there are no reservations in any of those deeds for land within FEC." 821 F. Supp. at 1460.

"FEC is a series of small pothole lakes, shoal areas, sandbars, narrow creek bed and marshes that begins in Highlands County, winds south to the Sand Lake area, veers east and disappears into CBM. . . . The small pothole lakes are wide places in the creek which are joined by narrow, winding creek beds that are dry much of the year. The creek also flows through dense cypress swamp or marshes where there is no defined channel. Hunting and trapping was done on the creek and was accomplished by transporting small boats or canoes to sections of the creek and then hauling them over impassable areas." 821 F. Supp. at 1460.

"The flow in FEC depends completely on rainfall. The creek rises rapidly with rainfall and drops rapidly when the rain stops. The creek is a rapidly varying stream and a rapidly fluctuating stream. There is no base flow, either by reservoir or ground water, to produce predictable and reliable water levels." 821 F. Supp. at 1460-61.

"The only use of FEC by watercraft has involved small, shallow-draft canoes, small shallow-draft John boats, and small dugouts. These canoes and boats are in the range of 10-15 feet long, 3 feet to 4 feet wide and draw 3 to 6 inches of water. The only dugout canoes about which there was testimony on FEC were also of the small variety, about 12-14 feet long." 821 F. Supp. at 1461.

"Navigability by watercraft capable of transporting goods or people in commerce it is not feasible through the cypress swamps or the narrow shallow creek beds between the pothole lakes." 821 F. Supp. at 1461.

"Lykes presented several witnesses who had attempted unsuccessfully to travel FEC by canoe. The Corps did not present any witness who had attempted to travel FEC from Highlands County to LOK." 821 F. Supp. at 1461.

"FEC between Double Lakes and Fort Center is winding and tortuous, is subject to having shoals, sandbars, and extremely sharp bends. This portion of FEC is not suitable for navigation by watercraft capable of transporting goods and people in commerce." 821 F. Supp. at 1461.

"FEC is a productive habitat for certain fish and animals. Fishing and hunting, when conducted from watercraft, have involved the transportation of those watercraft by vehicle to a pothole lake. The hunting and fishing are then conducted and the boat is loaded onto the truck to depart from FEC." 821 F. Supp. at 1461.

"From sometime in the 1970's until the mid-1980's, Lykes offered canoe trips from Ingram's Crossing to the campground at Palmdale. This was an adventure trip for recreational purposes. The trip was made in small shallow-draft canoes. This portion of FEC was landlocked by CBM while the canoe trail was operated." 821 F. Supp. at 1460.

"The hydrology of FEC supports a finding that FEC is not navigable. FEC is a rapidly varying stream with a rapidly fluctuating flow. One cannot say in any given month of a given year what the flow will be in relation to the mean or median flow. FEC is not sufficiently reliable to support commercial navigation. The median flow of FEC is 45 cubic feet per second, which is a very small flow, and considerably less than other navigable streams presented for the Court's consideration." 821 F. Supp. at 1462.

"One cannot reliably predict weather and accordingly the amount of rain in the FEC basin. The flow of this rapidly varying stream, in terms of its discharge and stage, cannot be reliably predicted." 821 F. Supp. at 1463

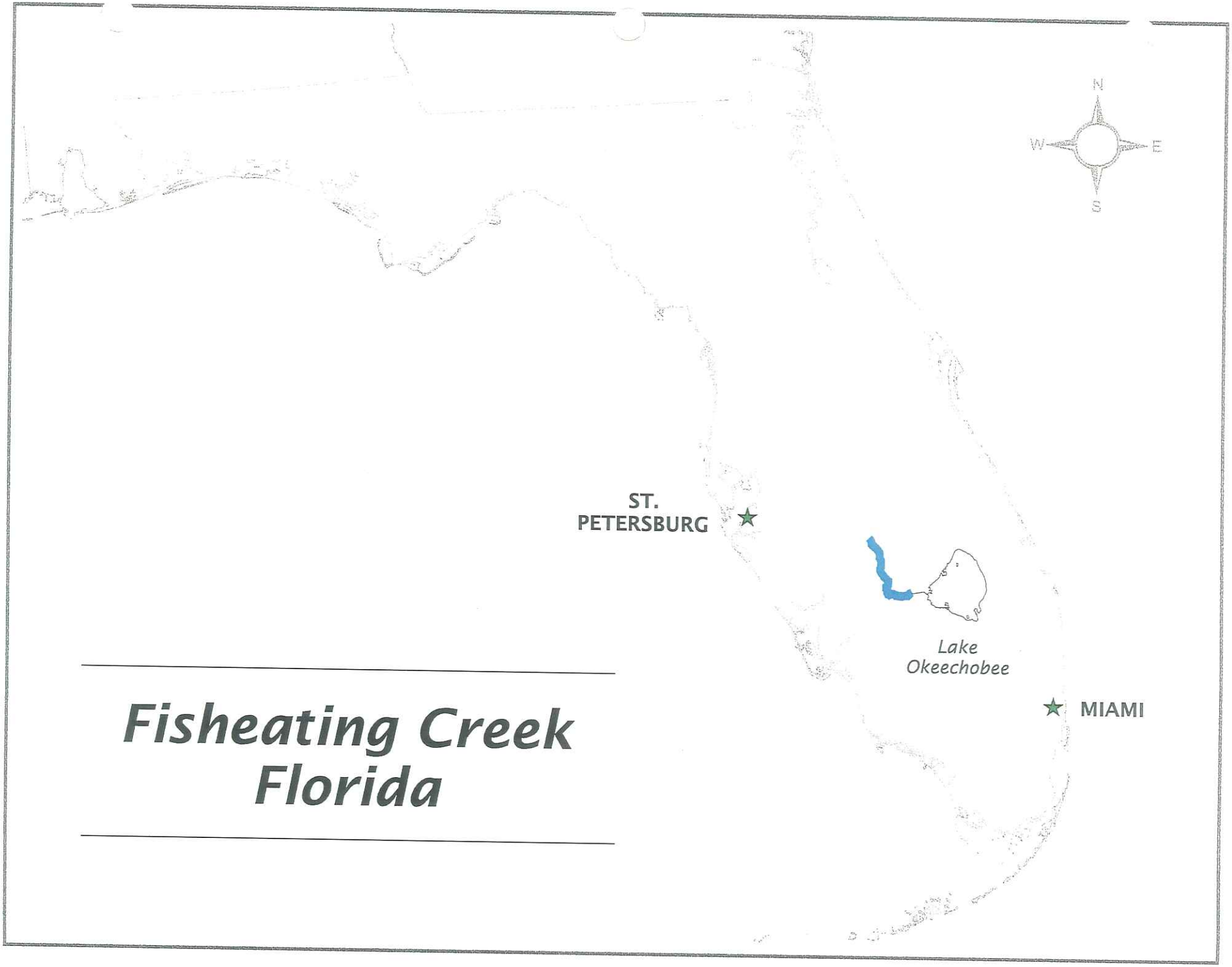
"The physical characteristics of FEC make commercial navigation on FEC impractical and impossible. Much of the creek was described as requiring the operator of canoe to carry or drag the boat over impenetrable vegetation or cypress knees several feet high and often following a thread of the creek to find it end in a broad expanse of marsh or an impenetrable wall of cypress trees." 821 F. Supp. at 1463.

"[A]ny type of boat that could possibly be used in commerce on FEC is prevented from access to LOK by the impenetrable CBM because of its shallow depth and overgrown vegetation, thus negating the possibility of interstate commerce. . . . The type of small, shallow-draft canoe and John boat use that occurred on Fisheating Creek does not support a finding of commercial interstate navigability." 821 F. Supp. at 1463-64.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Palmdale, FL	252	1932-2000
Lakeport, FL	340	1999 only



Fisheating Creek Florida

REPORTED DECISION

United States District Court,
M.D. Florida,

Fort Myers Division.

LYKES BROS. INC., Plaintiff,
v.
UNITED STATES ARMY CORPS OF ENGINEERS, Defendant.

No. 90-82-CIV-FTM-17.

May 4, 1993.

Florida corporation brought action to set aside determination of Army Corps of Engineers that Fisheating Creek was a navigable water of the United States subject to the corps' jurisdiction. The District Court, Kovachevich, J., held that Fisheating Creek was not a navigable waterway of the United States.

Judgment for plaintiff.

West Headnotes

[1] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

"Navigable waterway" of the United States is a waterway which is used, or is susceptible of being used, in its ordinary condition, as a highway for commerce, over which trade and travel are or may be conducted in customary modes of trade and travel on water.

[2] **Commerce** 82.30
83k82.30 Most Cited Cases

To qualify as "navigable waterway" of the United States subject to federal jurisdiction under commerce clause, waterway must form, either by itself or by uniting with other waters, continued highway over which commerce may be carried on with other states or foreign countries in customary modes in which commerce is conducted by water.

[3] **Commerce** 82.30
83k82.30 Most Cited Cases

Fisheating Creek from Fort Center in Florida was not a navigable waterway of the United States subject to federal jurisdiction under commerce clause; there was no evidence in historical record that creek was ever used upstream to transport goods or people in commerce. U.S.C.A. Const. Art. 1, § 8, cl. 3.

[4] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

[4] **Navigable Waters** 1(5)
270k1(5) Most Cited Cases

To be considered susceptible for commercial navigation so as to be a navigable waterway, waterway in its ordinary and natural condition must have sufficiently well-defined, passable channel, and water levels must be able to sustain commercial navigation on predictable and reliable basis.

[5] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Evidence of navigation during periods of flooding or abnormally high water is not sufficient to support finding of navigability.

[6] **Navigable Waters** 1(5)
270k1(5) Most Cited Cases

Type of small, shallow-draft canoe and John boat use that occurred on Fisheating Creek did not support finding of commercial interstate navigability.

[7] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence of hyacinth eradication did not support finding of navigability of Fisheating Creek in that hyacinth program was eradication program involving navigable and nonnavigable water bodies and was to serve various other purposes as well as navigation.

[8] **Commerce** 82.30
83k82.30 Most Cited Cases

Land-locked waterway with no direct navigable link to interstate or foreign waterway cannot be considered a "navigable waterway" of the United States subject to federal jurisdiction under commerce clause. U.S.C.A. Const. Art. 1, § 8, cl. 3.

***1458** Charles W. Pittman, Harold D. Oehler, Macfarlane Ferguson, Lester Merrin Blain, Blain & Cone, P.A., Tampa, FL, for plaintiff.

Douglas Molloy, U.S. Attorney's Office, M.D. Florida, Fort Myers, FL, Carl Strass, U.S. Dept. of Justice, Environment & Natural Resources Div., Environmental Defense Section, W. Christian Schumann, Environment and Natural Resources Div., Eileen T. McDonough, U.S. Dept. of Justice, Environmental Defense Section, Washington, DC, William A. Baxter, U.S. Army Engineer Dist., Jacksonville, FL, Christopher S. Vaden, Dept. of Justice, Environmental Defense Section, Washington, DC, for defendant.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

KOVACHEVICH, District Judge.

This cause is before the Court on the trial of this case, which took place on July 6th through 17th, 1992, and September 14th through 28th, 1992. This Court, having heard the testimony of witnesses, having considered the evidence presented, having considered the memoranda of the parties, and being fully advised in the premises, hereby enters the following findings of fact and conclusions of law. To the extent that any findings of fact are deemed to be conclusions of law, and vice versa, the same shall be deemed conclusions of law or findings of fact, as the case may be.

This Court has meandered through the tales of the creek, from the laundering at Hattie's Wash to the adventures of Billy Bowlegs, and has chained across every fact from Ingram's Crossing through the Head of the Bushes and on down through Fort Center. This Court has expended a great amount of time to fully digest the voluminous testimony, enough exhibits to fill every wall of the courtroom, and the learned memoranda of the parties.

ISSUE

The issue is whether Fisheating Creek is a navigable water of the United States under Section 10 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 403.

FINDINGS OF FACT

1. Plaintiff, Lykes Bros. Inc. ("Lykes") is a Florida corporation.

2. The Defendant is the United States Army Corps of Engineers, ("Corps").

3. Lykes filed this action pursuant to 5 U.S.C. § 706 to set aside the Corps' determination that Fisheating Creek ("FEC") is a navigable water of the United States subject to the Corps' jurisdiction under the River and Harbors Act of 1899.

4. There is an extensive history relating to the Fisheating Creek area because of the Second and Third Seminole Wars. In 1842, boat parties of Marines left Fort Center on a scouting reconnaissance mission, led by George Henry Preble, to proceed upstream on FEC. Preble's account of this trip showed that these boat parties had to push or carry their canoes through Cowbone Marsh ("CBM"). Preble determined the head of FEC to be in what is now referred to as the Sand Lake area, or approximately ***1459** where the flow of FEC turns from a southerly direction to an easterly direction. Preble's account shows that CBM was not navigable in 1842.

5. The maps and records show that the military established Fort Center on FEC about six miles west of Lake Okeechobee ("LOK") in about 1840. The maps and historical records show that the traffic between the west coast of Florida and Fort Center did not use any part of FEC to transport men or supplies. Men and supplies were brought from the Fort Myers area upstream on the Caloosahatchee River to Fort Thompson or Fort Denaud, which were in the area now known as LaBelle. From that point, men carrying boats and supplies traveled overland in a northeasterly direction to a point just south of FEC in the area now known as Palmdale. The military did not enter FEC in this area, but continued their overland journey in an easterly direction paralleling FEC on the south side all the way to Fort Center. It seems probable that if FEC had been navigable, the military would have used FEC to transport men and supplies from the Palmdale area to Fort Center rather than carrying these supplies overland.

6. In 1871 official government surveys were done of the land surrounding FEC. Surveyor Tannehill meandered one bank of FEC from LOK to approximately three miles west of the present location of Palmdale. Tannehill's contract and instructions required him to meander both banks of any water body which he determined to be navigable. Tannehill was required to meander only the right bank of streams that were "non-navigable" but which were well-defined arteries of internal communication. Tannehill's meandering of one bank of FEC shows that Tannehill determined FEC to be a non-navigable water body.

7. Surveyor Stearns surveyed FEC from approximately three miles west of what is now known as Palmdale to Highlands County, which is the balance of FEC subject to this litigation. Stearns operated under the same instructions as Tannehill. Stearns did not meander either bank of FEC, thereby indicating that he found FEC not to be a well-defined natural artery of internal communication.

8. Surveyors were paid wages for meandering streams and they would have been paid additionally for meandering both sides of FEC. The surveyors were the "eyes" of the federal government to determine navigability. The navigability determination was important because water bodies that were not meandered on both banks were subject to being conveyed to private interests. The surveyor who testified on behalf of the Corps agreed that he was not in a position to say that the surveyors were wrong, and he testified, "I think we have to go along with the record." (Gibson: 8/105).

9. Other surveys were done in 1859, 1907 and in the 1930's. These independent surveyors did not take issue with the determinations made by Tannehill and Stearns.

10. The historical records show that the settlement patterns in the FEC area did not develop as they did along navigable water bodies in central Florida. Even though land transportation was difficult in the FEC area, it appears that land transportation was the exclusive mode of transportation.

11. There is no evidence in the historical record that FEC was ever used upstream of Fort Center to transport goods or people in commerce. If water transportation on FEC had been feasible, FEC would have been used to transport goods and people in commerce. There is evidence that Billy Bowlegs, a Seminole Indian Chief, traveled from LOK up FEC to Sand Lake, eventually making it through Rainey Slough to the Peace River for the purpose of a bartering enterprise. This, however, was accomplished during a very wet season and there is no evidence that the dugouts were actually paddled or poled through FEC. This adventuresome journey of Billy Bowlegs does not rise to the level of rendering FEC a navigable water.

12. In 1915 the Corps made an investigation of FEC and described the creek as "impassable even in a small skiff boat ... where the creek spreads into a broad expanse of marsh." (LEX 117.04, p. 4). CBM had no defined channel. The Corps also noted that no commerce was carried on the ***1460** creek and would not likely be carried on the creek even if the creek were improved. (LEX 117.04, p. 2).

13. The aerial photographs from 1940 through 1990 show that CBM has not been navigable during this time frame. The Corps has admitted that CBM has not been navigable since either 1940 or 1959. These aerial photographs cover a time frame of fifty years. During this fifty years the runs in the northeast corner of CBM, where they join together to form a channel into Double Lakes, have remained virtually unchanged as to location and configuration. These photographs show that CBM has become wetter over these fifty years. The Hoover Dike has caused water to be contained in the FEC basin that formerly would have flowed to the southeast through Nicodemus Slough into LOK. Cypress and other wetland vegetation have invaded this area on the north side of Hoover Dike along the south side of CBM. These aerials from 1940 through 1990 do not give any indication that there has been a channel through CBM. There would have been some vegetation signature in 1940 if a channel through CBM had recently filled up.

14. The Corps of Engineers before 1967 and the United States Coast Guard after 1967, exercised jurisdiction to grant permits for bridges over navigable waters of the United States. The Corps' and the Coast Guard's records show that no permit has been issued for construction of a railroad bridge or the highway bridges across FEC. In 1978, the Coast Guard declined to exercise jurisdiction regarding permitting of a bridge over FEC at State Road 78, which is well downstream from Fort Center. The Coast Guard determined that the "subject waters are not navigable waterways of the United States." (LEX 1184)

15. Actions by the State of Florida for many years show that Florida has considered FEC to be non-navigable. All of the land in the FEC corridor in Glades County has been deeded to private interests and there are no reservations in any of those deeds for land within FEC. Lykes has deeds to most of the land under and around FEC in Glades County, and Lykes and its predecessors have been paying taxes on that land for over one hundred years. There are several fences across FEC and several fences within CBM.

16. From 1959 to 1985, the State of Florida leased lands from Lykes and operated a wildlife management area in Glades County west of U.S. 27

and a wildlife refuge in Glades County east of U.S. 27. These areas encompass the FEC corridor. Fences were placed around the perimeters of these areas and across the creek in several locations. Access by the public was either limited or prohibited.

17. The information collected by agencies of the State of Florida, Division of State Lands and Department of Natural Resources, did not indicate navigability of FEC except from Fort Center to LOK. The Executive Director of the Department of Natural Resources advised the Governor and the Cabinet of these circumstances, but the State took no further action.

18. John Adams was Chief of the Corps' Regulatory Division in 1989 and he was charged with making an investigation and recommendation on the navigability of FEC. Mr. Adams' investigation indicated that FEC was not a navigable waterway of the United States.

19. A number of area residents testified about their experiences on FEC. FEC is a series of small pothole lakes, shoal areas, sandbars, narrow creek bed and marshes that begins in Highlands County, winds south to the Sand Lake area, veers east and disappears into CBM. FEC reforms at the east side of CBM and flows past the former site of Fort Center and into LOK. The small pothole lakes are wide places in the creek which are joined by narrow, winding creek beds that are dry much of the year. The creek also flows through dense cypress swamp or marshes where there is no defined channel. Hunting and trapping was done on the creek and was accomplished by transporting small boats or canoes to sections of the creek and then hauling them over impassable areas.

20. The flow in FEC depends completely on rainfall. The creek rises rapidly with rainfall and drops rapidly when the rain stops. The creek is a rapidly varying stream ***1461** and a rapidly fluctuating stream. There is no base flow, either by reservoir or by ground water, to produce predictable and reliable water levels. The rainfall in the FEC basin is unpredictable, as was demonstrated in the cross examination of the Corps' expert on hydrology when he was asked to predict from hindsight the flow of FEC in July 1981 (McQuivey: 9/124-25). The Corps' expert stated the precipitation would have been approximately seven and a half inches, when in fact records showed it had been zero (McQuivey: 9/125).

21. The only use of FEC by watercraft has involved small, shallow-draft canoes, small shallow-draft John boats, and small dugouts. These canoes and boats are in the range of 10-15 feet long, 3 feet to 4 feet wide and draw 3 to 6 inches of water. The only dugout canoes about which there was testimony on FEC were also of the small variety, about 12-14 feet long.

22. Navigability by watercraft capable of transporting goods or people in commerce is not feasible through the cypress swamps, or through the narrow shallow creek beds between the pothole lakes.

23. Lykes presented several witnesses who had attempted unsuccessfully to travel FEC by canoe. The Corps did not present any witness who had attempted to travel FEC from Highlands County to LOK.

24. The Head of the Bushes ("HOB") area and CBM are impenetrable by any kind of craft capable of carrying goods or people in commerce. This was the case during the time period that Lykes operated their recreational canoe trip on FEC. Thus, it would have been impossible for the canoes to travel to LOK from anywhere up stream of CBM.

25. FEC between Double Lakes and Fort Center is winding and tortuous, is subject to having shoals, sandbars, and extremely sharp bends. This portion of FEC is not suitable for navigation by watercraft capable of transporting goods and people in commerce.

26. FEC is a productive habitat for certain fish and animals. Fishing and hunting, when conducted from watercraft, have involved the transportation of those watercraft by vehicle to a pothole lake. The hunting and fishing are then conducted and the boat is loaded onto the truck to depart from FEC.

27. From some time in the 1970's until the mid 1980's, Lykes offered canoe trips from Ingram's Crossing to the campground at Palmdale. This was an adventure trip for recreational purposes. The trip was made in small shallow- draft canoes. This portion of FEC was landlocked by CBM while the canoe trail was operated.

28. The 1929 map is not reliable for the purpose of establishing the existence of a channel through CBM in 1929. The purpose of the 1929 map was to prepare for flood conditions where water would rise above the banks of any streams or lakes, and into the

flood plain. These mappers were concerned with general topography in areas that would flood, and not with the width or depth of FEC. The mappers did not meander the thread of any stream through CBM in 1929. The contour lines that purport to cross the thread of a channel show a negligible depression that does not indicate any defined channel or any levees. Furthermore, the lakes in CBM are not shown on the 1929 map.

29. When the 1929 map is put into the historical context, it is unlikely that a well-defined, navigable channel existed through CBM in 1929. The records from the Seminole Indian Wars in the 1840's-1850's, the 1871 surveys, the 1915 Corps investigation, and the 1940-1990 aerial photographs negate the existence of a well-defined, navigable channel through CBM in 1929 and at other times.

30. The vegetation patterns do not show any signature that is consistent with a channel having existed in CBM as of 1929. The 1940 aerial photographs would show a vegetation pattern if a channel that existed as recently as 1929 had filled up, but there is no vegetation signature.

31. CBM has been a non-navigable marsh for hundreds of years, without any defined or navigable channel. The historical record, the surveys, and the Corps' investigation in 1915, all show that there was no defined or navigable channel through CBM. The Corps' expert on Hydrology took soil samples inside and outside of what he believed was a channel ***1462** running through CBM (McQuivey: 11/30). He did not note any difference in the soil samples and found muck three feet deep in many places where he believed there was a channel (McQuivey: 11/31-32). The presence of a three foot layer of muck in CBM shows that CBM has been vegetated for hundreds of years, and that vegetation has decayed and deposited where it grew. Nothing has occurred to materially change CBM in the last 150 years.

32. The soil borings taken by the Corps show the absence of an old channel in CBM. The Corps' borings in CBM disclosed a relatively uniform three-foot deep deposit of muck in areas both inside and outside what the Corps sought to prove was the old channel bed. The Corps hypothesized that an old channel bed or the levees alongside an old channel would exhibit layers of different materials. This is a valid hypothesis. The Corps took several hundred core borings in CBM which did not exhibit any layering. The absence of layering establishes that these cores were not taken in an old channel bed that had filled up and were not taken in the levee of an old abandoned channel. The failure to find any layering shows that there was no channel where the cores were taken which is where the Corps sought to prove the existence of an old abandoned channel.

33. The three foot layer of muck in CBM shows that CBM has been a marsh for hundreds of years. Muck is deposited by vegetation that grew and died in the same location where it is deposited. Three feet of muck in CBM would require 1,500 years to form. A three foot fairly uniform layer of muck shows that CBM has been stable and in the same condition in which it is found today for a long period of time.

34. The existence of lakes in CBM is inconsistent with an old channel through CBM that filled up. The Corps argues that one of the lakes in CBM was part of the old channel. This lake is not shown on the 1929 map. This lake and other lakes have remained open, which is inconsistent with the filling up of a channel that is subject to the high energy of moving water.

35. McQuivey's opinions concerning an old abandoned channel through CBM do not have a valid basis, and accordingly, lack utility. The Court finds there was no well-defined thread of a channel through CBM.

36. The lowering of LOK has not significantly affected CBM, and did not eliminate any channel from CBM. In pre-drainage times the Lake level did not exceed 14.6 feet except for unusual periods of high rainfall. When LOK rose to 18 feet, an additional 13 miles of lake frontage, or a total of 32 miles of lake frontage, on the south side of LOK would overflow. The ordinary high water mark or lake margin in pre-drainage days was 18 feet, which is 2 to 3 feet below the level of CBM.

37. The hydrology of FEC supports a finding that FEC is not navigable. FEC is a rapidly varying stream with a rapidly fluctuating flow. One cannot say in any given month of a given year what the flow will be in relation to the mean or median flow. FEC is not sufficiently reliable to support commercial navigation. The median flow of FEC is 45 cubic feet per second, which is a very small flow, and considerably less than other navigable streams presented for the Court's consideration.

38. Hyacinth spraying involved an eradication program. This was a federal- state cooperative effort that involved "navigable waters, tributary streams,

connecting channels, and other allied waters ... in the combined interest of navigation, flood control, drainage, agriculture, fish and wildlife conservation, public health and related purposes...." (LEX 607, p. 3). Evidence of hyacinth eradication is not probative of the issue of navigability because non-navigable water bodies and interests other than navigation were involved.

39. FEC is not a navigable water body of the United States upstream from Fort Center as a whole.

CONCLUSIONS OF LAW

1. The Court has jurisdiction over this case pursuant to Title 28, U.S.C. § § 1331 and 1356.

[1] 2. A navigable waterway of the United States is a waterway which is used, or ***1463** is susceptible of being used, in its ordinary condition, as a highway for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water. *Hardy Salt Co. v. Southern Pacific Transportation Company*, 501 F.2d 1156, 1167-1169 (10th Cir.1974); (citing to *The Daniel Ball*, 77 U.S. (10 Wall) 557, 559-64, 19 L.Ed. 999, 1001 (1871)).

[2] 3. To qualify as a navigable waterway of the United States subject to federal jurisdiction under the Commerce Clause, the waterway must form, either by itself or by united with other waters, a continued highway over which commerce may be carried on with other states or foreign countries in the customary modes in which commerce is conducted by water. *The Daniel Ball*, 77 U.S. (10 Wall) 557, 559-64, 19 L.Ed. 999, 1001 (1871); *The Montello*, 87 U.S. (20 Wall) 430, 437-39, 22 L.Ed. 391, 393 (1874); *Kaiser Aetna v. U.S.*, 444 U.S. 164, 170, n. p. 4, 100 S.Ct. 383, 388 n. p. 4, 62 L.Ed.2d 332, 340 n. p. 4 (1979).

[3] 4. This Court finds that FEC is not a navigable waterway of the United States subject to federal jurisdiction upstream from Fort Center. Therefore, the determination of the Corps of Engineers that FEC is a navigable waterway of the United States subject to federal jurisdiction must be set aside and vacated. Furthermore, FEC upstream from Fort Center has not been used and has not be susceptible for use to transport interstate commerce under the navigability test set out in the cases cited above.

[4] 5. To be considered susceptible for commercial navigation, the waterway in its ordinary and natural condition must have a sufficiently well-defined, passable channel, and the water levels must be able to sustain commercial navigation on a predictable and reliable basis. *U.S. v. Harrell*, 926 F.2d 1036, 1040 (11th Cir.1991) (susceptibility of use should not be confined to exceptional circumstances). *U.S. v. Ladley*, 4 F.Supp. 580, 582 (D.Idaho 1933); *U.S. v. Crow, Pope & Land Enterprises, Inc.*, 340 F.Supp. 25, 32-33 (N.D.Ga.1972). One cannot reliably predict weather and accordingly the amount of rain in the FEC basin. The flow of this rapidly varying stream, in terms of its discharge and stage, cannot be reliably predicted.

[5] 6. Evidence of navigation during periods of flooding or abnormally high water is not sufficient to support a finding of navigability. *U.S. v. Harrell*, 926 F.2d at 1039-1040 (11th Cir.1991) (citing to *U.S. v. Utah*, 283 U.S. 64, 87, 51 S.Ct. 438, 445, 75 L.Ed. 844 (1931)); *U.S. v. Crow, Pope & Land Enterprises, Inc.*, 340 F.Supp. at 32 (N.D.Ga.1972).

7. This Court, having tried this case during the events of Hurricane Andrew, and, noting that sea-going vessels were found in small inland canals, finds that if the law were interpreted in any other manner many of South Florida's streets would have been considered navigable. A similar phenomenon could explain the testimony of the Corps' lay witness Reeves Hendry, who testified as to the prow of a Spanish vessel purportedly being in CBM. If there were a prow of a boat in the middle of CBM, it could have arrived there by a number of means. A hurricane or an unnamed storm such as those which occur in Florida not infrequently could explain the purported existence of a boat prow in CBM.

8. The physical characteristics of FEC make commercial navigation on FEC impractical and impossible. Much of the creek was described as requiring the operator of canoe to carry or drag the boat over impenetrable vegetation or cypress knees several feet high and often following a thread of the creek to find it end in a broad expanse of marsh or an impenetrable wall of cypress trees. *U.S. v. Oregon*, 295 U.S. 1, 55 S.Ct. 610, 79 L.Ed. 1267 (1934); *Oklahoma v. Texas*, 258 U.S. 574, 587-588 (1922) (there are intervals of dry sand interspersed with irregular ribbons of shallow water and occasional deeper pools causing the river to not be susceptible of being used in its natural condition for commerce); *U.S. v. Harrell*, 926 F.2d 1036 (11th Cir.1991) (small, narrow, shallow, obstructed, partially dry creek that is incapable of any type of waterborne commerce).

9. Additionally, any type of boat that could possibly be used in commerce on FEC ***1464** is prevented from access to LOK by the impenetrable CBM because of its shallow depth and overgrown vegetation, thus negating the possibility of interstate commerce. *Guillory v. Outboard Motor Corp.*, 956 F.2d 114 (5th Cir.1992).

[6] 10. The type of small, shallow-draft canoe and John boat use that occurred on Fisheating Creek does not support a finding of commercial interstate navigability. *U.S. v. Oregon*, 295 U.S. 1, 23, 55 S.Ct. 610, 619, 79 L.Ed. 1267 (1934) (use of waterway by trappers and hunters in light-draft boats and canoes is insufficient to establish navigability); *Adams v. Montana Power Co.*, 528 F.2d 437, 439 (9th Cir.1975); *U.S. v. Crow, Pope & Land Enterprises, Inc.*, 340 F.Supp. 25, 34 (N.D.Ga.1972).

11. The canoe trail operated by Lykes was an adventure trip for recreational purposes. In recent years, most watercraft usage has been small, shallow-draft canoes and John boats engaged in recreational pursuits, and the nature and type of this activity does not support a conclusion that Fisheating Creek has been used or is susceptible of being used for commercial navigation. *Loevy v. U.S.*, 177 U.S. 621, 634, 20 S.Ct. 797, 802, 44 L.Ed. 914, 920 (1900). The recreational activities of these noncommercial fishing excursions, boating in small John boats and canoe trips do not render FEC susceptible of being used as an artery of commerce. *Adams*, 528 F.2d at 439.

12. The Corps argued that *Goodman v. City of Crystal River*, 669 F.Supp. 394 (M.D.Fla.1987), which was heard in this Court's District, is analogous to the case at bar and should lead to the finding that FEC is navigable. However, the *Goodman* case is distinguishable from the case at bar on numerous points, one of which is that waterway, Three Sisters Springs (TSS), in *Goodman* was directly connected to the Gulf of Mexico. There was substantial evidence that the TSS was regularly used for commercial fishing and diving as well as glass-bottom boat sightseeing. Aerial photography of TSS established the existence of a channel as early as 1944, as compared with aerial photography of FEC from 1940 through 1990 which demonstrates a channel has never existed through CBM. The only natural obstructions of TSS were low hanging tree limbs, whereas FEC was demonstrated to have tortuous shoals, sandbars and narrow twisting creek beds terminating in either impenetrable walls of cypress or expansive marsh. There are three natural springs which produce a constant base flow for the body of water, never allowing the depth to go below one to two feet at its shallowest point. In contrast, FEC is not fed by a spring; thus, is not provided a constant base flow and many of the sections of the FEC become dry sandbars. There was insufficient evidence presented in *Goodman* to demonstrate that TSS was not navigable; conversely, there was substantial evidence provided through expert testimony, lay witnesses and exhibits to show that FEC is not navigable.

13. The Court concludes that the evidence presented does not support a finding that Fisheating Creek could be made navigable by reasonable improvements. The Corps failed to present any evidence of the cost of such improvements or evidence of any commerce which would rely on the creek should such improvements be made. Without this evidence, this Courtcannot determine whether the costs of improvement would be justified by the benefits to commercial transit in this area. *U.S. v. Appalachian Elec. Power Co.*, 311 U.S. 377, 407-408, 61 S.Ct. 291, 299, 85 L.Ed. 243 (1940); *Sierra Pacific Power Co. v. FERC*, 681 F.2d 1134, 1139 (9th Cir.1982).

[7] 14. Furthermore, evidence of hyacinth eradication does not support a finding of navigability in that the hyacinth program was an eradication program that involved navigable and non-navigable water bodies and the program was to serve various other purposes as well as navigation.

[8] 15. The Court concludes that Cowbone Marsh has been a non-navigable marsh for at least 150 years, which has blocked for at least 150 years access to Lake Okeechobee from any point upstream of Cowbone Marsh by any watercraft capable of conducting commercial transportation. The argument that hunters or trappers traveled on FEC to deliver their hides or other products to markets ***1465** that would ship the goods to other states by land transportation does not constitute navigability. A land-locked waterway with no direct navigable link to interstate or foreign waterways cannot be considered a "navigable waterway of the United States" under the *Daniel Ball* test. *Hardy Salt v. Southern Pacific Transportation Co.*, 501 F.2d 1156 (10th Cir.1974) (connecting a land locked body of water to a railhead to transport goods in interstate commerce does establish navigability under the Rivers and Harbors Act); *Minnehaha Creek Watershed District v. Hoffman*, 597 F.2d 617 (8th Cir.1978); *National Wildlife Federation v.*

Alexander, 613 F.2d 1054, 1059- 60 (D.C.Cir.1979); *Sierra Pacific Power Co. v. FERC*, 681 F.2d 1134, 1138, 1140 (9th Cir.1982).

16. The Court concludes that Fisheating Creek upstream from Fort Center is not a navigable water body of the United States based upon the historical records, military activities, the Seminole Indian Wars, official government surveys, settlement patterns circa 1900, 1915 Corps investigation, aerial photographs from 1940 to 1990, Corps and Coast Guard bridge permitting determinations, activity by the State of Florida, observations by area residents and others who have personal experiences on Fisheating Creek, and other evidence presented.

17. The Court concludes upon the evidence as a whole that Fisheating Creek upstream from Fort Center is not a navigable water body of the United States subject to federal jurisdiction under the Commerce clause.

Plaintiff is directed to present within ten days a final judgment based on these Findings of Fact and Conclusions of Law after consultation with Defendant as to the form of such final judgment.

DONE and ORDERED.

821 F.Supp. 1457, 1994 A.M.C. 605, 23 Envtl. L. Rep. 21,456

END OF DOCUMENT

H

United States Court of Appeals,
Eleventh Circuit.

LYKES BROS., INC., a Florida corporation,
Plaintiff-Appellee,
v.
UNITED STATES ARMY CORPS OF ENGINEERS, Defendant-Appellant.

No. 93-3179.

Sept. 20, 1995.

Property owner sued Army Corps of Engineers seeking review of Corps' determination that creek running through property was navigable and subject to federal jurisdiction under Rivers and Harbors Act. The United States District Court for the Middle District of Florida, No. 90-82-Civ-FTM-17D, Elizabeth A. Kovachevich, J., 821 F.Supp. 1457, concluded that creek was not navigable under Rivers and Harbors Act. Corps appealed. The Court of Appeals, Cox, Circuit Judge, held that: (1) trial court's finding that creek was not navigable was not clearly erroneous; (2) state of Florida's failure to reserve public rights of access to creek was probative of whether state considered creek to be navigable at time property was conveyed; and (3) although initial report of Chief of Corps' Regulatory Division concluding that creek was not navigable waterway of United States was not adopted by district engineer who concluded creek was navigable, initial report was relevant and was properly considered by district court.

Affirmed.

West Headnotes

[1] **Federal Courts** 776
170Bk776 Most Cited Cases

[1] **Federal Courts** 850.1
170Bk850.1 Most Cited Cases

Court of Appeals reviews district court's factual findings for clear error and reviews application of law to those facts de novo.

[2] **Federal Courts** 850.1
170Bk850.1 Most Cited Cases

Clear error standard of review of factual findings does not change when district court adopts verbatim the findings of one of the parties, but practice is strongly disapproved.

[3] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Waterway is "navigable water of the United States," within meaning of Rivers and Harbors Act, if it is used, or is susceptible of being used, in its ordinary condition, as highway for commerce, over which trade and travel are or may be conducted in customary modes of trade and travel on water. 33 U.S.C.A. § 403.

[4] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

To be "navigable water of the United States," within meaning of Rivers and Harbors Act, waterway must form, either by itself or by uniting with other waters, continued highway over which commerce is or may be carried on with other states or foreign countries in customary modes in which such commerce is conducted by water. 33U.S.C.A. § 403.

[5] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Once waterway is found to be "navigable," under Rivers and Harbors Act, it remains so; therefore, if waterway at one time was navigable in its natural or improved state, or was susceptible to navigation by way of reasonable improvement, it retains its navigable status, even though it is not presently used for commerce, or is presently incapable of use because of changed conditions or presence of obstructions. 33 U.S.C.A. § 403.

[6] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

Creek was not "navigable," under Rivers and Harbors Act, as matter of law, before 1880s, whether or not internally navigable, where creek's only link to interstate commerce lay through lake which had no navigable water passage to either Atlantic Ocean or Gulf of Mexico. 33 U.S.C.A. § 403.

[7] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

[7] **Navigable Waters** 19
270k19 Most Cited Cases

District court's finding that creek was navigable only a few miles upstream from its mouth and was not "navigable water of the United States," subject to Army Corps of Engineers' jurisdiction under Rivers and Harbors Act, was not clearly erroneous; thus, state could not compel property owner to remove trees and fences blocking public access to creek. 33 U.S.C.A. § 403.

[8] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Explorer's account of his journey up creek did not necessarily support finding of "navigability," under Rivers and Harbors Act, where explorer reported that on his way up creek, when party reached what was probably marsh, they proceeded with great difficulty, pushing canoes through weeds and hauling canoes over two troublesome places and that on return trip, after two haulovers, party had to search for significant length of time to find creek. 33 U.S.C.A. § 403.

[9] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

"Navigability" under Rivers and Harbors Act is not destroyed by occasional obstructions or portages. 33 U.S.C.A. § 403.

[10] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Public land survey performed by surveyor that showed "meander" readings on only one side of creek was probative that creek was not "navigable," under Rivers and Harbors Act, at time of survey; surveyors were required to meander both sides of what they concluded were navigable waters and to meander one bank of what surveyor thought were well defined natural arteries of "internal communication." 33 U.S.C.A. § 403.

[11] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Although surveyors do not settle questions of "navigability," under Rivers and Harbors Act, surveyor's actions are probative of issue. 33 U.S.C.A. § 403.

[12] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Surveyor's measuring of width of creek by triangulation did not necessarily show that channel was well defined and deep so as to be "navigable," under Rivers and Harbors Act, at time of survey, where record indicated that there were other reasons surveyor might have used triangulation, such as if channel were very wide and filled with obstacles. 33 U.S.C.A. § 403.

[13] **Evidence** 359(1)
157k359(1) Most Cited Cases

[13] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Aerial photographs of creek from early 1940s were probative as to whether creek was "navigable," under Rivers and Harbors Act, at time of photographs, where photographs showed no sign of recently filled channel, indicating that no channel existed for some time before 1940. 33 U.S.C.A. § 403.

[14] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

District court properly considered fact that Coast Guard did not include creek in its publication, *Bridges Over Navigable Waters*, as indicating creek was not "navigable," under Rivers and Harbors Act; publication, which provided list of permitted and unpermitted bridges, was relevant, although not dispositive, on issue of "navigability" of creek because permit was required only for construction of bridge over navigable waters. 33 U.S.C.A. § 403.

[15] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Memorandum of United States Coast Guard stating that creek had no physical characteristics indicative of present or past use for substantial commercial navigation and no reasonable susceptibility for future substantial commercial use and has not been determined congressionally or by controlling case law to be navigable waterway of United States was relevant, although not dispositive, on issue of "navigability" of creek, under Rivers and Harbors Act. 33 U.S.C.A. § 403.

[16] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

State of Florida's failure to reserve public rights of access to creek in deeds surrounding creek was probative of whether state considered creek to be "navigable" at time property was conveyed, even though, under Florida law, failure to reserve public rights did not divest state of title. 33 U.S.C.A. § 403.

[17] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Actions by state of Florida in leasing creek from owner of property encompassing creek corridor and limiting access by public to creek by placing fences was probative of whether state considered creek to be "navigable" and under sovereign ownership. 33 U.S.C.A. § 403.

[18] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Investigation and report by Chief of Army Corps of Engineers' Regulatory Division concluding that creek was not navigable waterway of United States, under River and Harbors Act, was properly considered by district court in determining navigability of creek, even though District Engineer, decisionmaker on navigability, conducted more thorough investigation and concluded that creek was navigable; although initial report was not adopted by District Engineer, it was relevant and properly considered by district court. 33 U.S.C.A. § 403.

***632** Douglas Molloy, Asst. U.S. Atty., Ft. Myers, FL, Vicki L. Plaut, David C. Shilton, ***633** Dept. of Justice, Env. & Natural Resources Div., Washington, DC, for appellants.

Charles W. Pittman, Ted R. Manry, III, Susan W. Fox, Harold D. Oehler, L.M. Buddy Blain, Tampa, FL, for appellee.

Appeal from the United States District Court for the Middle District of Florida.

Before COX, Circuit Judge, FAY, Senior Circuit Judge, and CARNES [FN*], District Judge.

FN* Honorable Julie E. Carnes, U.S. District Judge for the Northern District of Georgia, sitting by designation.

COX, Circuit Judge:

INTRODUCTION

Lykes Bros., Inc. ("Lykes") brought this civil action pursuant to 5 U.S.C. § 704 against the U.S. Army Corps of Engineers ("Corps") seeking to review and set aside the Corps' determination that Fisheating Creek in Glades County, Florida, is a navigable water of the United States from its mouth at the western shore of Lake Okeechobee to the bridge at State Road 731 near Venus, Florida, some 30 miles upstream. Lykes also sought a declaratory judgment determining that the creek is not a navigable water of the United States. After aseventeen-day trial, the district court reversed the Corps' determination, concluding that Fisheating Creek is navigable only for several miles, from its mouth at Lake Okeechobee to Fort Center, Florida. *Lykes Bros., Inc. v. U.S. Army Corps of Engrs.*, 821 F.Supp. 1457 (M.D.Fla.1993). The Corps appeals, contending that the district court's findings of fact are clearly erroneous and that the district court misapplied the governing law. We affirm.

I. BACKGROUND

Fisheating Creek is a nontidal freshwater waterway in southcentral Florida. The creek begins just south of Hog Island Hammock in Highlands County, and runs south and east about 30 to 40 miles through Glades County. [FN1] The creek flows through Cowbone Marsh and then through Fort Center before entering Lake Okeechobee near the community of Lakeport. A significant portion of Fisheating Creek flows through lands owned by Lykes. According to the Corps, the public had full access to Fisheating Creek until 1988. Then, Lykes felled approximately 80 trees at various portions of the creek to block public access, posted "no trespassing" signs, and erected barbed wire fences and gates across the creek in several places.

FN1. Distances along Fisheating Creek are difficult to determine from the record because the creek does not follow a direct route, snaking back and forth before emptying into Lake Okeechobee. Therefore, the distances mentioned in this opinion are rough approximations discerned from the maps and testimony in the record.

The State of Florida sued Lykes in federal district court to compel removal of the trees and fences under the Rivers and Harbors Act, 33 U.S.C. § 403, which generally prohibits the obstruction of navigable waters. [FN2] The district court dismissed the action, holding that the State must first pursue administrative remedies, such as a determination of navigability by the Corps and subsequent administrative enforcement of § 403.

FN2. Section 403 prohibits the obstruction of the navigable capacity of any waters of the United States, unless affirmatively authorized by Congress. 33 U.S.C. § 403 (1988). Congress has delegated its authority to authorize certain structures which obstruct navigable waters. *Wisconsin v. Illinois*, 278 U.S. 367, 411-13, 49 S.Ct. 163, 169-70, 73 L.Ed. 426 (1929). Thus, such structures are permitted only upon the recommendation of the Chief of Engineers of the Corps and authorization by the Secretary of the Army. 33 U.S.C. § 403 (1988).

The State then sued the Corps in federal district court to compel the Corps to make a navigability determination. In response, the Corps prepared a report of findings in which it concluded that Fisheating Creek is a navigable water of the United States between Lake Okeechobee and the bridge over State Road 731 near Venus, Florida. The Corps' action led the State to dismiss its suit. After the Corps' finding of navigability, Lykes took down its fences, removed the trees, and filed a permit application with the Corps under 33 U.S.C. § 403 to maintain fencing and operable ***634** gates at two crossings along the creek. Lykes then sued the Corps in federal district court, seeking review of the Corps' navigability determination. The Corps has suspended action on the permit application until after resolution of this litigation.

Lykes moved for a trial de novo in district court. [FN3] The court granted the motion, held a seventeen-day trial, and concluded that Fisheating Creek is navigable only to Fort Center, a few miles upstream from its mouth. The Corps appeals the district court's judgment, asserting that the court's factual determinations are clearly erroneous, and that the court misapplied the applicable law.

FN3. The Corps does not challenge the procedure the district court used to review the Corps' determination. Thus, this appeal presents no issue relative to what deference should be given the Corps' determination and no issue relative to the court's de novo determination of navigability.

II. ISSUES ON APPEAL

The Corps raises two issues on appeal. The first issue is whether the district court's factual findings are clearly erroneous. The second issue is whether the district court applied the appropriate legal standard to its determination of navigability.

III. STANDARDS OF REVIEW

[1][2] This court reviews a district court's factual findings for clear error, and reviews the application of law to those facts de novo. *United States v. Harrell*, 926 F.2d 1036, 1039 (11th Cir.1991). For a factual finding to be clearly erroneous, this court, after reviewing all of the evidence, must be "left with the definite and firm conviction that a mistake has been committed." *United States v. United States Gypsum Co.*, 333 U.S. 364, 395, 68 S.Ct. 525, 542, 92 L.Ed. 746 (1948). [FN4]

FN4. The district court adopted verbatim many of Lykes's proposed findings. The clear error standard does not change when the district court adopts verbatim the findings of one of the parties, but the practice is strongly disapproved. *Anderson v. Bessemer City*, 470 U.S. 564, 570- 72, 105 S.Ct. 1504, 1510-11, 84 L.Ed.2d 518 (1985); *Cabriolet Porsche Audi, Inc. v. American Honda Motor Co.*, 773 F.2d 1193, 1198 n. 2 (11th Cir.1985), *cert. denied*, 475 U.S. 1122, 106 S.Ct. 1641, 90 L.Ed.2d 186 (1986).

IV. DISCUSSION

A. Relevant Considerations

[3][4] A waterway is regarded as "navigable water of the United States" within the meaning of § 10 of the Rivers and Harbors Act, 33 U.S.C. § 403, if it is used, or is susceptible of being used, in its ordinary condition, as a highway for commerce, over which

trade and travel are or may be conducted in the customary modes of trade and travel on water. *United States v. Harrell*, 926 F.2d 1036, 1038-39 (11th Cir.1991); *Hardy Salt Co. v. Southern Pac. Transp. Co.*, 501 F.2d 1156, 1167 (10th Cir.) (citing *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563, 19 L.Ed. 999 (1871)), *cert. denied*, 419 U.S. 1033, 95 S.Ct. 515, 42 L.Ed.2d 308 (1974). Thus, the waterway must form, either by itself "or by uniting with other waters, a continued highway over which commerce is or may be carried on with other States or foreign countries in the customary modes in which such commerce is conducted by water." *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563, 19 L.Ed. 999 (1871).

[5] Once a waterway is found to be navigable, it remains so. Therefore, if a waterway at one time was navigable in its natural or improved state, or was susceptible to navigation by way of reasonable improvement, it retains its navigable status even though it is not presently used for commerce, or is presently incapable of use because of changed conditions or the presence of obstructions. *Harrell*, 926 F.2d at 1039 & n. 7 (citing *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 408, 61 S.Ct. 291, 299, 85 L.Ed. 243 (1940); 33 C.F.R. § 329).

[6] Fisheating Creek empties into Lake Okeechobee. Until the late 1880s, no navigable water passage existed between Lake Okeechobee and either the Atlantic Ocean or the Gulf of Mexico. Fisheating Creek's only link to interstate commerce lies through Lake Okeechobee. Thus, it could not be navigable as a matter of law before the late 1880s, whether or not internally navigable, because no water route linked the creek with other states or countries.

***635** The parties agree that Cowbone Marsh has been occluded from at least 1940. Lykes contends that Cowbone Marsh has always presented a barrier to travel on Fisheating Creek. The Corps, on the other hand, argues that a channel existed through Cowbone Marsh through 1929, disappearing sometime before 1940. Because it is uncontroverted that Cowbone Marsh has blocked travel on Fisheating Creek since at least 1940, and because the creek had no water link to interstate commerce until the late 1880s, the critical period in this case is between the late 1880s and 1940. In reviewing the district court's factual findings and its application of law to those findings, we are concerned with whether Fisheating Creek was susceptible to commerce during that period.

B. The District Court's Factual Findings

1. Cowbone Marsh

[7] The centerpiece of this litigation has been Cowbone Marsh, which is located some six miles, as the crow flies, from the mouth of the creek at Lakeport. The district court found that Cowbone Marsh "has been a non- navigable marsh for hundreds of years, without any defined or navigable channel." *Lykes Bros., Inc.*, 821 F.Supp. at 1461 (Finding 31). The Corps contends that the district court clearly erred in finding that Cowbone Marsh had always been a barrier to navigation in Fisheating Creek. The Corps argues that certain evidence clearly shows that Cowbone Marsh was once navigable.

The Corps points first to a map prepared by George Preble, who led a military exploratory expedition up Fisheating Creek in 1842. The Corps contends that Preble's map indicates that a channel existed through Cowbone Marsh because Preble drew a solid line indicating a channel through what appears on the map to be Cowbone Marsh. Therefore, the Corps contends that Preble's map supports a finding of navigability.

[8] However, as the district court noted, Preble's account of his journey up Fisheating Creek does not necessarily support a finding of navigability. Preble proceeded upstream from Fort Center, through Cowbone Marsh, to what is now referred to as the Sand Lake area. Preble reported that on his way up the creek, when the party reached what was probably Cowbone Marsh, they proceeded with great difficulty, pushing the canoes through the weeds, and hauling the canoes over two troublesome places. On the return trip through what was probably Cowbone Marsh, the Preble party had little difficulty with the haulovers; however, after the two haulovers, they had to search for a significant length of time to find the creek.

[9] The district court found that this account supported a finding that Cowbone Marsh was not navigable in 1842. Although we recognize that navigability is not destroyed by occasional obstructions or portages, *Economy Light & Power Co. v. United States*, 256 U.S. 113, 122, 41 S.Ct. 409, 412, 65 L.Ed. 847 (1921), the district court did not clearly err in concluding that Preble's account shows that travel through Cowbone Marsh was very difficult in 1842. Moreover, we note that Preble's expedition

took place in 1842, over 40 years before Lake Okeechobee was linked with the Atlantic or the Gulf. Thus, the probative value of Preble's account is not as high as the Corps asserts.

[10][11] The Corps also contends that an 1871 public land survey performed by a disinterested surveyor, J.C. Tannehill, shows that there was a well-defined channel through Cowbone Marsh because, in mapping the area, Tannehill drew a solid line through his depiction of Cowbone Marsh. However, the line Tannehill drew is accompanied by "meander" readings on one side. Surveyors were required to meander both sides of what they concluded were navigable rivers, and to meander one bank of what the surveyor thought were well-defined natural arteries of "internal communication." Because Tannehill only meandered one bank of Fisheating Creek, the district court found that Tannehill had determined Fisheating Creek to be nonnavigable. Given the instructions under which Tannehill operated, his meandering of only one bank of Fisheating Creek is probative of whether Fisheating ***636** Creek was navigable in 1871. [FN5]

> FN5. Although we recognize that surveyors do not settle questions of navigability, the surveyor's actions are probative. *See Denson v. Stack*, 997 F.2d 1356, 1364-65 (11th Cir.1993) (Clark, Senior Circuit Judge, dissenting) (noting the probative value of meander lines in determining navigability).

[12] The Corps also argues that the way Tannehill measured the width of Fisheating Creek in Cowbone Marsh indicates there was a channel. Tannehill measured the width of the creek by using triangulation, as opposed to pulling a chain across the creek. The Corps argues that this indicates that the stream was too deep or too swift to cross with a chain. The district court did not address this in its opinion, but the record indicates that there were other reasons a surveyor might have used triangulation, such as if the channel were very wide and filled with obstacles. As a marsh is often very wide and filled with obstacles such as dense vegetation, measuring width by triangulation does not necessarily show that the channel is well defined and deep.

The Corps also contends that several other maps indicate there was a channel through Cowbone Marsh. In particular, the Corps refers to a 1929 Corps of Engineers survey, a 1926 map of Glades County, an 1899 Atlas Map of Florida, and an 1856 military map. In each of these maps, Fisheating Creek is shown as either a stream or a river. The district court discounted the 1929 Corps of Engineers survey because it was designed for flood-control purposes. The court found that the "contour lines that purport to cross the thread of a channel show a negligible depression that does not indicate any defined channel or any levees." *Lykes Bros., Inc.*, 821 F.Supp. at 1461 (Finding 28). In light of all of the evidence, this conclusion is not clearly erroneous. Moreover, the other maps, although probative, must be considered in light of all of the evidence.

The Corps also contends that the testimony of its expert witness supports a conclusion that a navigable channel once existed through Cowbone Marsh. The district court found that the expert's testimony indicated that three feet of muck existed throughout Cowbone Marsh, and that this indicated that the marsh has been vegetated for hundreds of years. The court also found that the soil borings in Cowbone Marsh fail to show the existence of a channel through Cowbone Marsh for hundreds of years. We have reviewed the testimony of this witness, and agree with the Corps that parts of his testimony support a conclusion that a navigable channel once existed through Cowbone Marsh. Other parts, however, support the district court's findings, and we do not conclude that the district court mischaracterized his testimony.

[13] The district court also based its finding that Cowbone Marsh has been nonnavigable for hundreds of years on other evidence. Lykes presented a number of witnesses, some of whom were lifetime residents of the area, who testified that a navigable channel had never existed through Cowbone Marsh, and that Fisheating Creek had not been navigable or used for commerce upstream from Fort Center. Two of these witnesses were born as early as 1919, and they recalled the conditions of Fisheating Creek and Cowbone Marsh from the early to mid 1920s. The court also considered a 1915 Corps investigation that described Cowbone Marsh as "impassable even in a small skiff boat." *Lykes Bros., Inc.*, 821 F.Supp. at 1459 (Finding 12). The 1915 investigation also noted that no commerce was carried on the creek, and that it was unlikely that creek improvements would catalyze commerce. In addition, the court considered aerial photographs from 1940 through 1990, which show that Cowbone Marsh has remained virtually unchanged and nonnavigable throughout the period. Although we are primarily interested in the period between the late 1880s and 1940, the early

1940s photographs are probative because they show no sign of a recently filled channel, indicating that no channel existed for some time before 1940.

For a reviewing court to conclude that a district court clearly erred in its findings of fact, the reviewing court, after examining the entire record, must be left with "the definite and firm conviction that a mistake has been committed." ***637***United States Gypsum Co.*, 333 U.S. at 395, 68 S.Ct. at 542. After reviewing all of the evidence regarding Cowbone Marsh, we find that there is significant evidence to support a finding of nonnavigability between the late 1880s and 1940, as well as before and after that period. We hold that the district court did not clearly err in its findings relative to Cowbone Marsh.

2. Other Factual Considerations Regarding the Navigability of Fisheating Creek [FN6]

> FN6. The Corps also challenges the district court's findings regarding the navigability of the creek upstream from Cowbone Marsh. The district court characterized Fisheating Creek above Cowbone Marsh as a "series of small pothole lakes, shoal areas, sandbars, narrow creek bed and marshes." *Lykes Bros., Inc.*, 821 F.Supp. at 1460 (Finding 19). Since we find that the court did not clearly err in finding Cowbone Marsh to be nonnavigable, the conditions above Cowbone Marsh are not determinative.

[14] The Corps challenges several other of the district court's factual findings, contending that the factual findings are clearly erroneous; even if the findings are correct, the Corps argues, consideration of the findings was clear error. First, the Corps contends that the district court found that the failure to include Fisheating Creek in the Coast Guard's publication, *Bridges Over Navigable Waters,* indicates that the creek is not navigable, and that this was error because the publication is not meant to set forth a list of navigable waters, but is designed to provide a list of bridges, both permitted and unpermitted, in order to assist mariners.

[15] Permits are required for the construction of bridges over navigable waters. The district court found that the actions of the Corps and the United States Coast Guard in not requiring permits for bridges over Fisheating Creek because the creek was found to be nonnavigable was relevant in determining the navigability of Fisheating Creek. In a memorandum admitted into evidence, the Coast Guard found that Fisheating Creek "[has] no physical characteristics indicative of present or past use for substantial commercial navigation[,] ... [has] no reasonable susceptibility for future substantial commercial use[,] ... [and has] not been determined Congressionally or by controlling case law to be a navigable waterway of the United States." (Plaintiff Ex. 1184.) The Corps contention that Finding 14 is clearly erroneous because *Bridges Over Navigable Waters* does not set forth a list of navigable waters is completely without merit. First, the district court, in Finding 14, did not refer to *Bridges Over Navigable Waters,* (Plaintiff Ex. 1162,) but rather to a memorandum by the Coast Guard regarding Coast Guard jurisdiction over Fisheating Creek. (Plaintiff Ex. 1184.) Second, the opinion of the Coast Guard is relevant, although not dispositive, on the issue of navigability. The district court did not err in considering this evidence.

[16] Second, the Corps challenges the district court's factual findings dealing with the manner in which the State of Florida has treated Fisheating Creek. In determining the navigability of Fisheating Creek, the district court gave weight to Florida's treatment of the creek. The court stated:

> All of the land in the [Fisheating Creek] corridor in Glades County has been deeded to private interests and there are no reservations in any of those deeds for land within [Fisheating Creek].... From 1959 to 1985, the State of Florida leased lands from Lykes [encompassing the creek] corridor. Fences were placed around the perimeters of these areas and across the creek in several locations. Access by the public was either limited or prohibited.... The information collected by agencies of the State of Florida, Division of State Lands and Department of Natural Resources, did not indicate navigability of [Fisheating Creek] except from Fort Center to [Lake Okeechobee].

Lykes Bros., Inc., 821 F.Supp. at 1460 (Findings 15-17). The Corps contends that the State has always taken the position that the creek is a public waterway for which there must be free public access. Moreover, the Corps contends that the reservation of public rights in deeds surrounding Fisheating Creek is irrelevant because, under Florida law, the failure to reserve such public rights does not divest the state of title to navigable ***638** waters. *See Coastal Petroleum Co. v. American Cyanamid Co.*, 492 So.2d 339, 343 (Fla.1986), *cert. denied,* 479 U.S. 1065, 107 S.Ct. 950, 93 L.Ed.2d 999 (1987). The Corps also

contends that the operation of a wildlife management area typically involves restriction and supervision of access to the area, and therefore the district court's consideration of these findings was erroneous.

[17] We find the Corps' contentions to be without merit. Although under Florida law the failure to reserve public rights does not divest the State of title, Florida's failure to reserve those rights is still probative of whether the State considered Fisheating Creek to be navigable at the time the property was conveyed. Moreover, Florida's other actions, such as leasing Fisheating Creek from Lykes and limiting access to Fisheating Creek, are also probative because it logically follows that the State may not have considered Fisheating Creek to be navigable and under sovereign ownership. Thus, the district court did not err in considering this evidence.

[18] Third, the Corps challenges the district court's consideration of an investigation and report by John Adams, Chief of the Corps' Regulatory Division, which concluded that Fisheating Creek was not a navigable waterway of the United States. The Corps argues that consideration of this report was error because the District Engineer, the decisionmaker on navigability, conducted a more thorough investigation and concluded that Fisheating Creek is navigable. Although the initial report of John Adams was not adopted by the District Engineer, its admissibility is not challenged on this appeal. It is relevant, and the district court did not err in considering the report.

3. Summary of our Review of the District Court's Factual Findings

In summary, we hold that the district court did not clearly err in its findings of fact. The Corps correctly argues that there is evidence in the record that would support a finding that there was, during the relevant period, a defined and navigable channel through Cowbone Marsh, and that the creek was navigable during the relevant period from Lake Okeechobee to State Road 731 near Venus, Florida. But there is substantial evidence to support a contrary finding, and the resolution of such factual disputes is the province of the trial court.

C. Application of Law to the District Court's Factual Findings

The Corps challenges the district court's legal conclusions, but its challenge assumes that the court's factual findings are erroneous. The Corps asserts that "[i]f the district court was wrong about these facts, particularly about the absence of a channel through Cowbone Marsh, its conclusion that the Creek is not navigable above Fort Center cannot stand." (Appellant's Brief at 38, 39.) Our determination that the trial court's factual findings are not clearly erroneous undermines the Corps' challenge to the court's legal conclusions.

V. CONCLUSION

We holdthat the district court did not clearly err in its findings of fact, and we find no error in its determination that Fisheating Creek upstream from Fort Center is not a navigable water body of the United States subject to federal jurisdiction under 33 U.S.C. § 403. Therefore, we affirm the judgment of the district court.

AFFIRMED.

64 F.3d 630, 1996 A.M.C. 302, 26 Envtl. L. Rep. 20,157

END OF DOCUMENT

ADDITIONAL INFORMATION

0130/10/P1B3

0131/11/P1C3

0132/12/P1D3

0133/13/P1A4

0134/14/P2B4

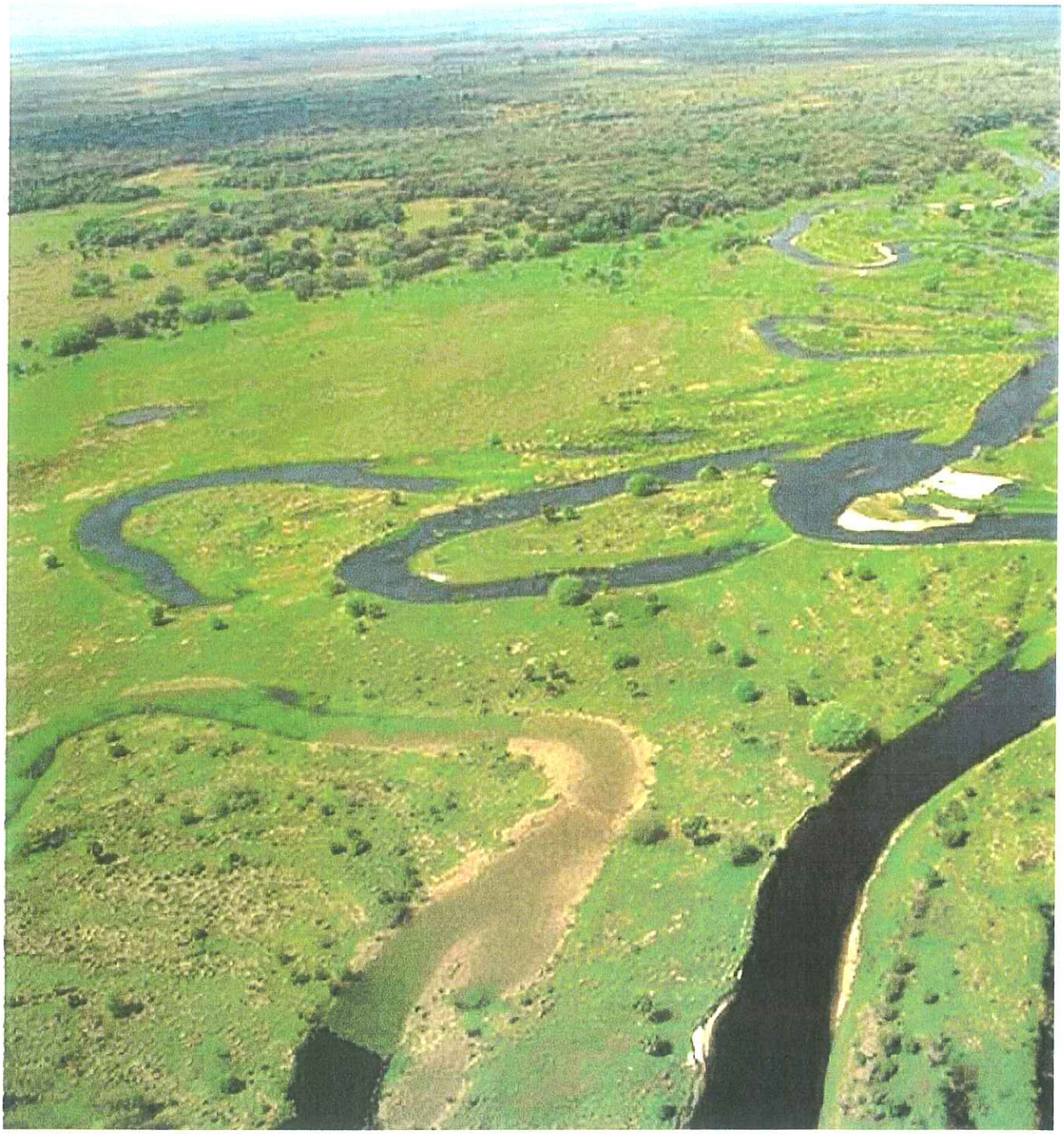
0135/15/P1C4

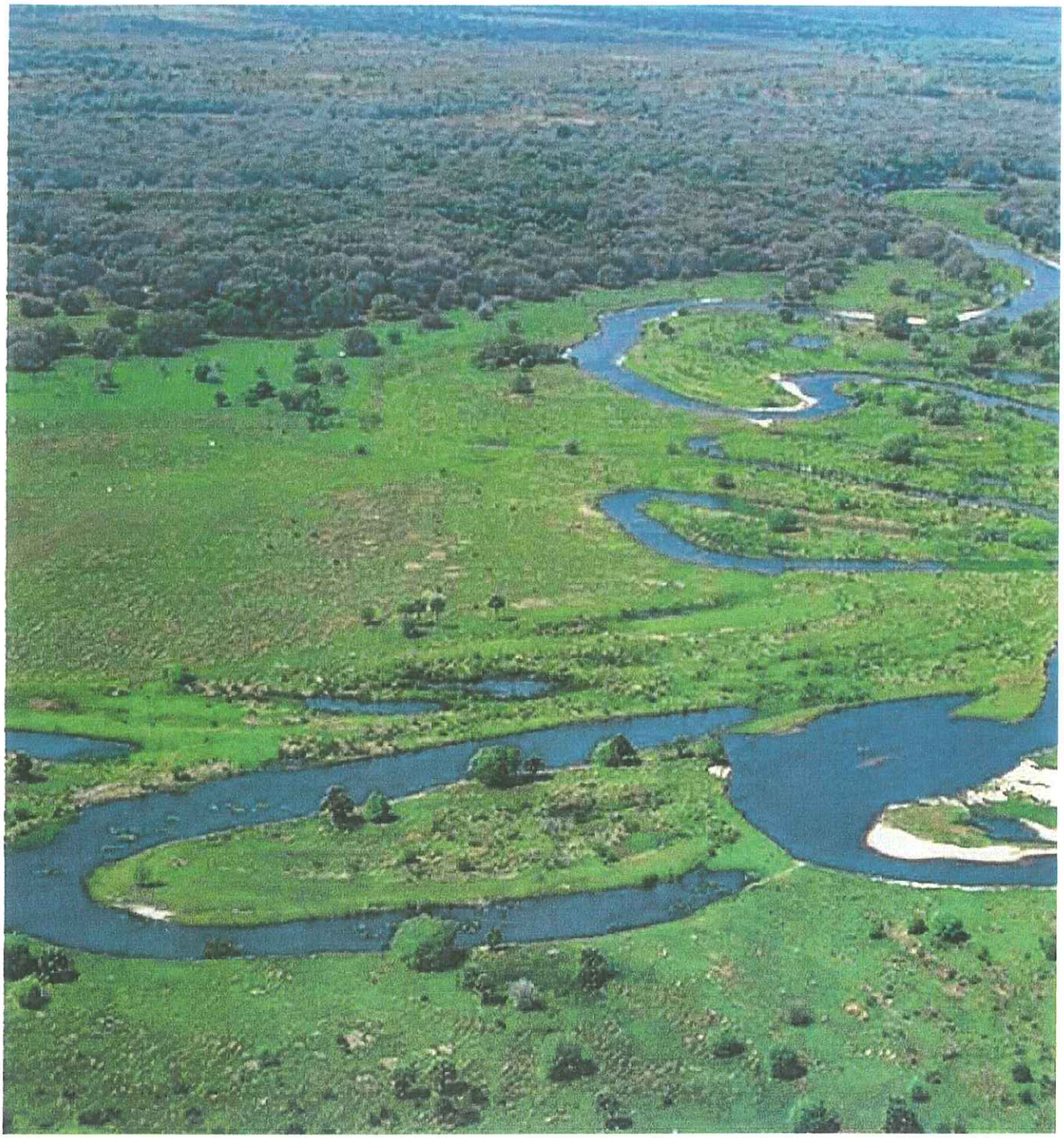
0136/16/P1D4

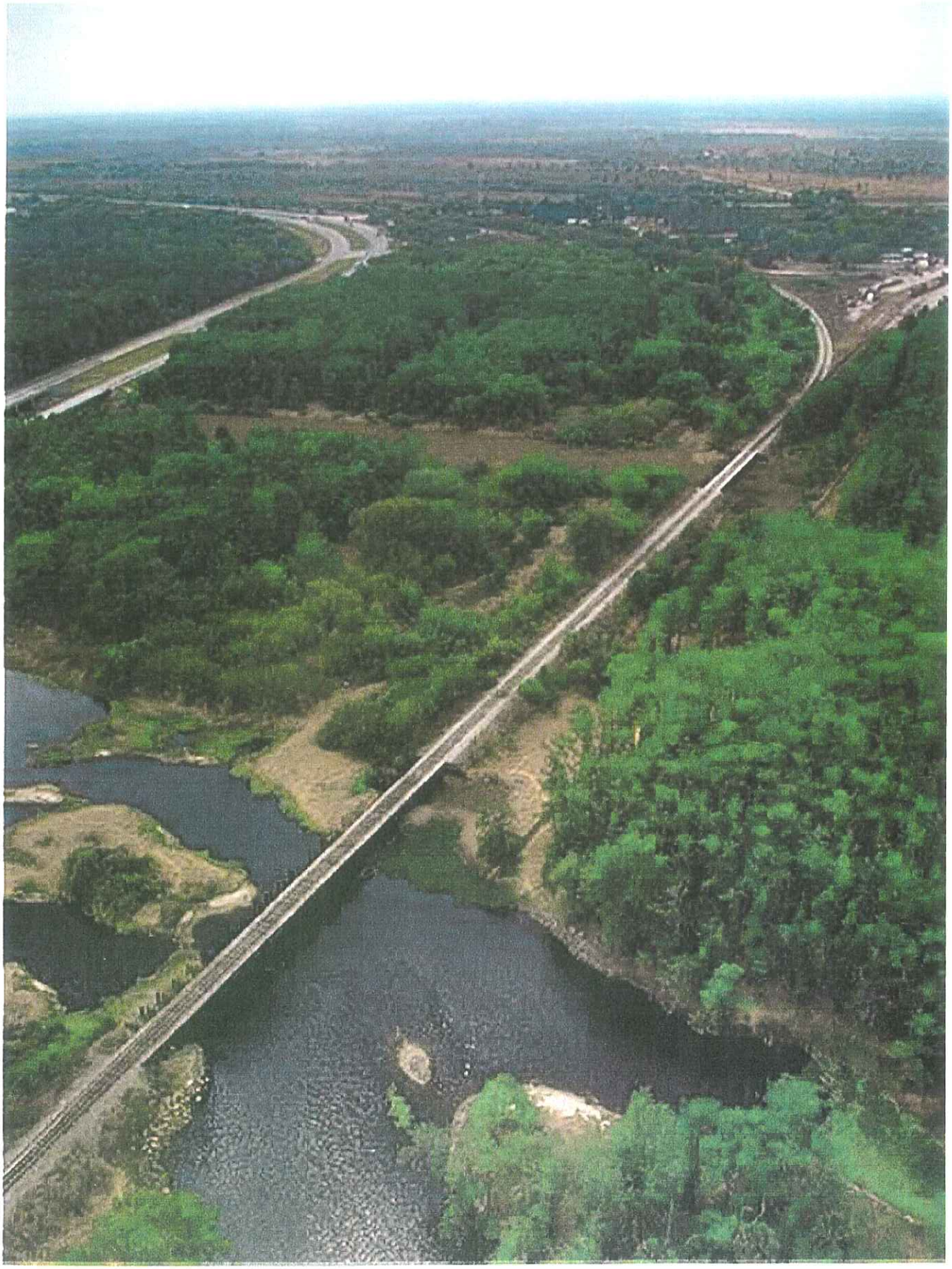
0137/17/P1A5

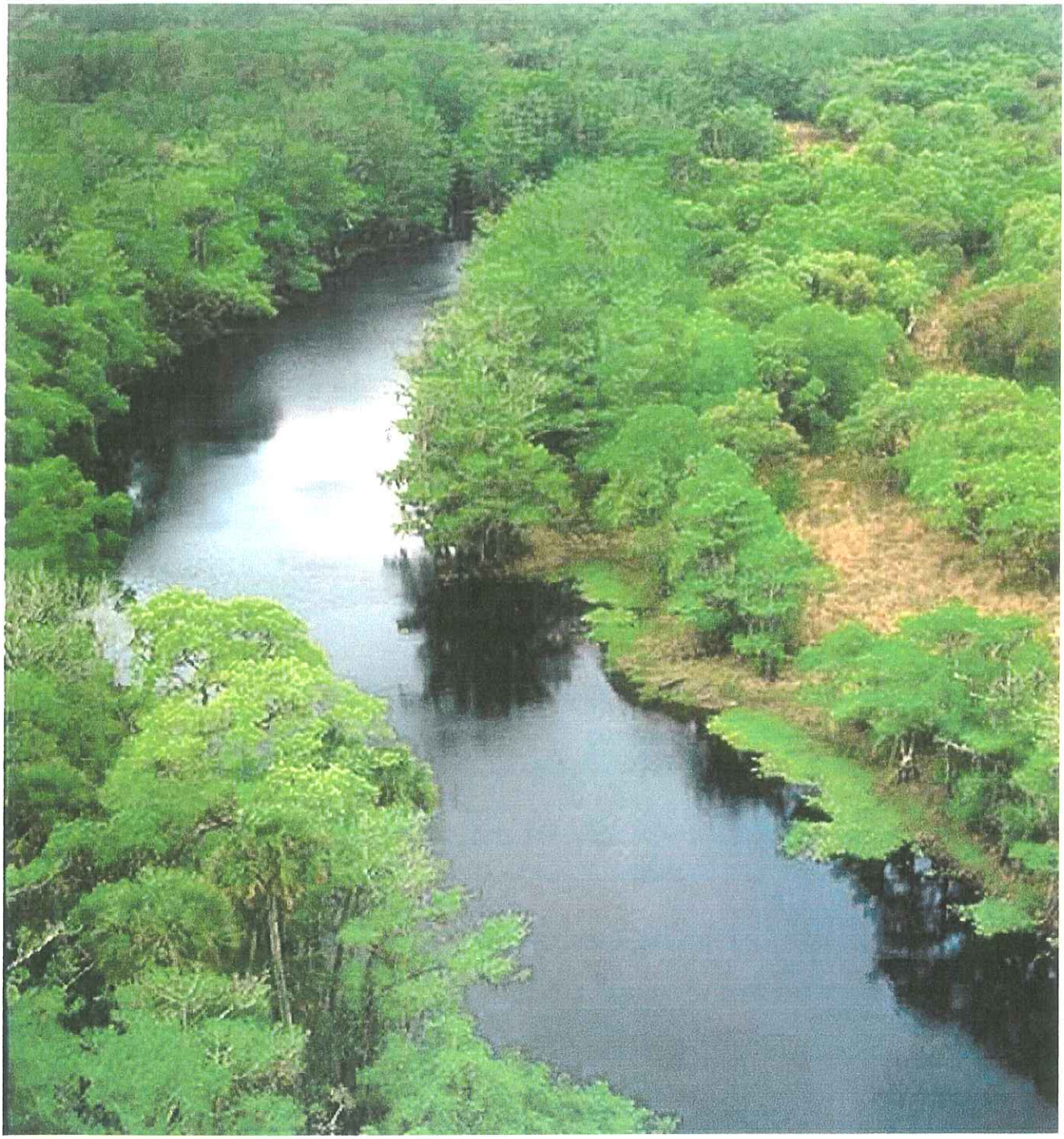
0138/18/P1B5

home (text version) || home (graphics version) || Back to Photo page || High resolution images || E-Mail Photography









Water Resources

Data Category: Site Information | Geographic Area: Florida | GO

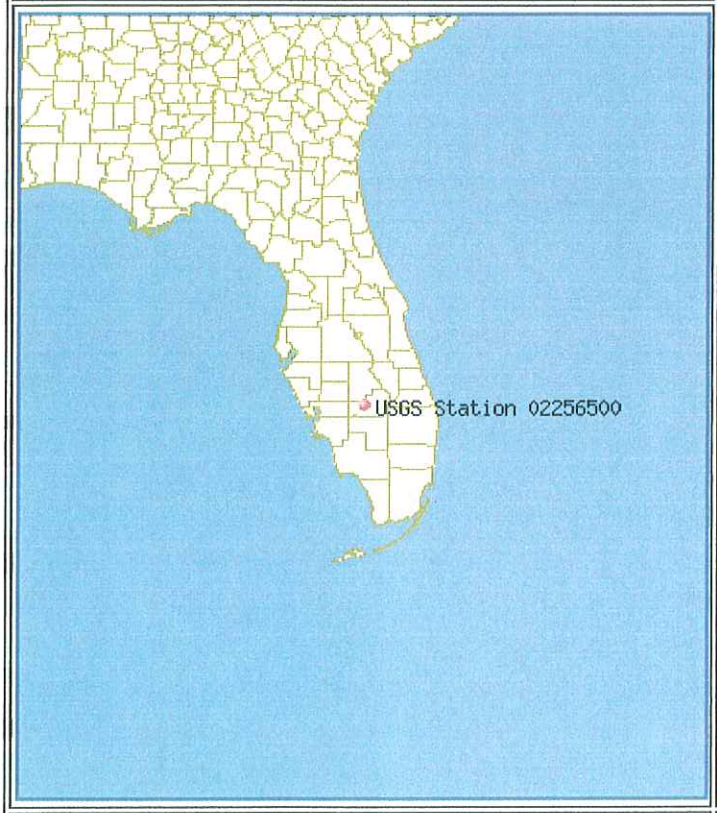
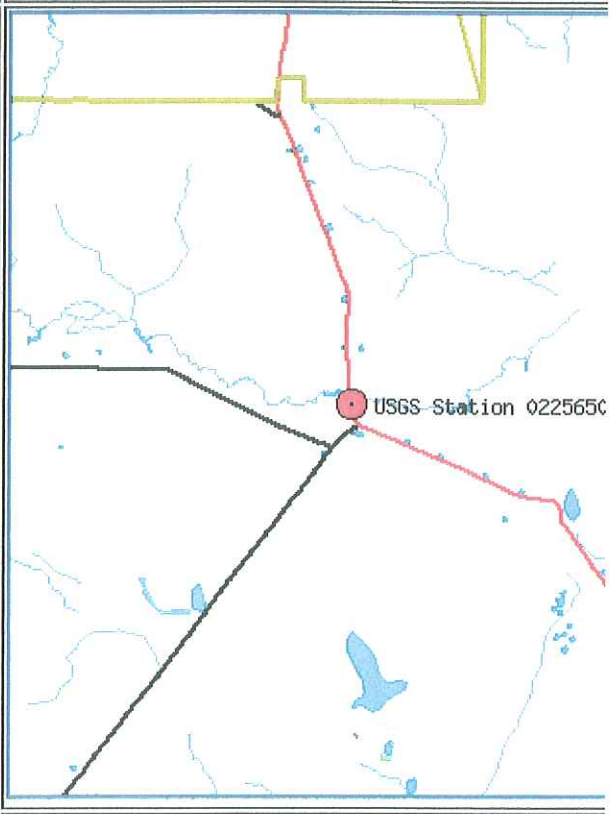
Site Map for Florida

Click Here for information on data reliability

USGS 02256500 FISHEATING CREEK AT PALMDALE, FLA.

Available data for this site: Station site map | GO

Glades County, Florida
Hydrologic Unit Code 03090103
Latitude 26°55'56", Longitude 81°18'54" NAD27
Drainage area 311.00 square miles
Gage datum 27.19 feet above sea level NGVD29

Location of the site in Florida.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Florida | GO

Calendar Year Streamflow Statistics for Florida

Click Here for information on data reliability

USGS 02256500 FISHEATING CREEK AT PALMDALE, FLA.

Available data for this site: Surface-water: Annual streamflow statistics | GO

Glades County, Florida
Hydrologic Unit Code 03090103
Latitude 26°55'56", Longitude 81°18'54" NAD27
Drainage area 311.00 square miles
Gage datum 27.19 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1932	233	1950	25.3	1967	122	1984	432
1933	203	1951	428	1968	326	1985	127
1934	77.8	1952	200	1969	320	1986	212
1935	61.6	1953	734	1970	367	1987	210
1936	365	1954	290	1971	143	1988	109
1937	254	1955	73.0	1972	97.9	1989	118
1938	129	1956	24.7	1973	239	1990	206
1939	309	1957	342	1974	398	1991	257
1940	293	1958	320	1975	145	1992	218
1941	371	1959	581	1976	202	1993	238
1942	223	1960	607	1977	130	1994	314
1943	238	1961	62.0	1978	219	1995	446
1944	74.5	1962	279	1979	427	1996	98.9
1945	398	1963	85.0	1980	51.1	1997	272
1946	92.0	1964	154	1981	43.1	1998	456
1947	706	1965	249	1982	434	1999	276
1948	421	1966	278	1983	333	2000	23.1

1949	214			

Questions about data gs-w-fl_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-fl_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Florida: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/fl/nwis/annual/calendar_year?

Retrieved on 2003-03-05 09:14:34 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Florida
Privacy Statement || Disclaimer || Accessibility
0.71 0.67

Water Resources

Data Category: Site Information | Geographic Area: Florida | GO

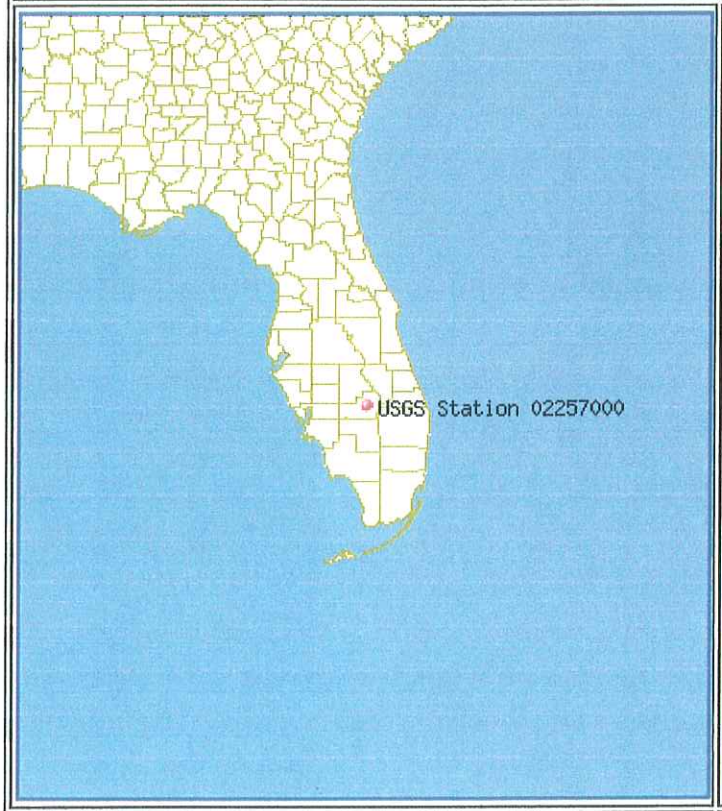
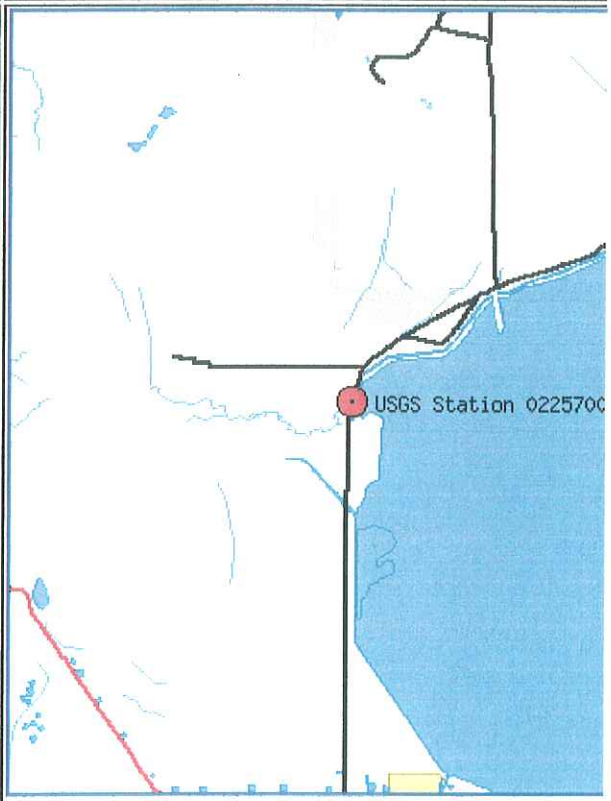
Site Map for Florida

Click Here for information on data reliability

USGS 02257000 FISHEATING CREEK AT LAKEPORT FLA

Available data for this site: Station site map | GO

Glades County, Florida
Hydrologic Unit Code 03090103
Latitude 26°57'44", Longitude 81°07'15" NAD27
Drainage area 456.00 square miles

Location of the site in Florida.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Florida GO

Calendar Year Streamflow Statistics for Florida

Click Here for information on data reliability

USGS 02257000 FISHEATING CREEK AT LAKEPORT FLA

Available data for this site Surface-water: Annual streamflow statistics GO

Glades County, Florida
Hydrologic Unit Code 03090103
Latitude 26°57'44", Longitude 81°07'15" NAD27
Drainage area 456.00 square miles

1998	706

Year	Annual mean streamflow, in ft^3/s
1999	340

Year	Annual mean streamflow, in ft^3/s

Questions about data gs-w-fl_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-fl_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Florida: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/fl/nwis/annual/calendar_year?

Retrieved on 2003-03-05 09:15:47 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Florida
Privacy Statement || Disclaimer || Accessibility
0.68 0.65

Great Miami River—Ohio

Reported Decision: Miami Valley Conservancy Dist. v. Alexander, 692 F.2d 447 (6th Cir. 1982)

Reach at Issue: Entire length

Judicial Determination: Navigable in part, non-navigable in part

Facts Reported in Decision:

"The District Court counted sixteen 'instances' of flatboat travel on the Great Miami River from 1800 to 1830. However, the court found that flatboat travel was 'at best sporadic, limited to periods of highwater, and only on a seasonal basis.' The court also determined that citizens of the area would not have invested money in the Miami-Erie Canal if the River had been navigable by customary modes of trade and travel." 692 F.2d at 450.

"Official records from the Port of New Orleans report flatboats arriving from the Great Miami River in each year from 1800 to 1830. Fleets containing as many as seventy-nine and one hundred thirty flatboats were sighted on the Great Miami River. Testimony also demonstrated that the high water on the River, necessary for downstream travel, lasted for several months in the spring. The average size of flatboats on the River was seventy feet long and twenty feet wide with a three-foot draft when fully loaded. Flatboats on the Great Miami River were the same as most flatboats floating downstream to New Orleans by way of the Ohio and Mississippi Rivers." 692 F.2d at 450.

"A more complete statement of the evidence produced at trial shows that the elements of navigability are present. Like many large rivers in the Mississippi River system, the Great Miami River afforded predictable albeit not always dependable use during spring high water fluctuations. Downstream flatboat travel was the customary mode of travel in the early 1800's and the Great Miami River was no exception. Finally, the Great Miami River was used as a commercial highway to float goods from southwestern Ohio to New Orleans. The record establishes inescapably the Great Miami River was navigable as a matter of law from its mouth to Mile 117." 692 F.2d at 450-51.

"The Corps has failed to prove that the Great Miami River from Mile 117 to Mile 153.5 and its tributaries are navigable as a matter of law. Evidence of commercial navigation on the rivers in southwestern Ohio is primarily of a general and non-specific character. The District Court did not err in its factual or legal conclusions that the upper portion of the river and the tributaries were not navigable." 692 F.2d at 451.

"The Corps' determination of navigability of the Greenville Creek and the Great Miami River from Mile 117 to Mile 153.5 rests on early military expeditions. In the late Eighteenth Century military expeditions transported supplies up the rivers to several forts in southwestern Ohio. As many as thirty-two men could have been required to pull a

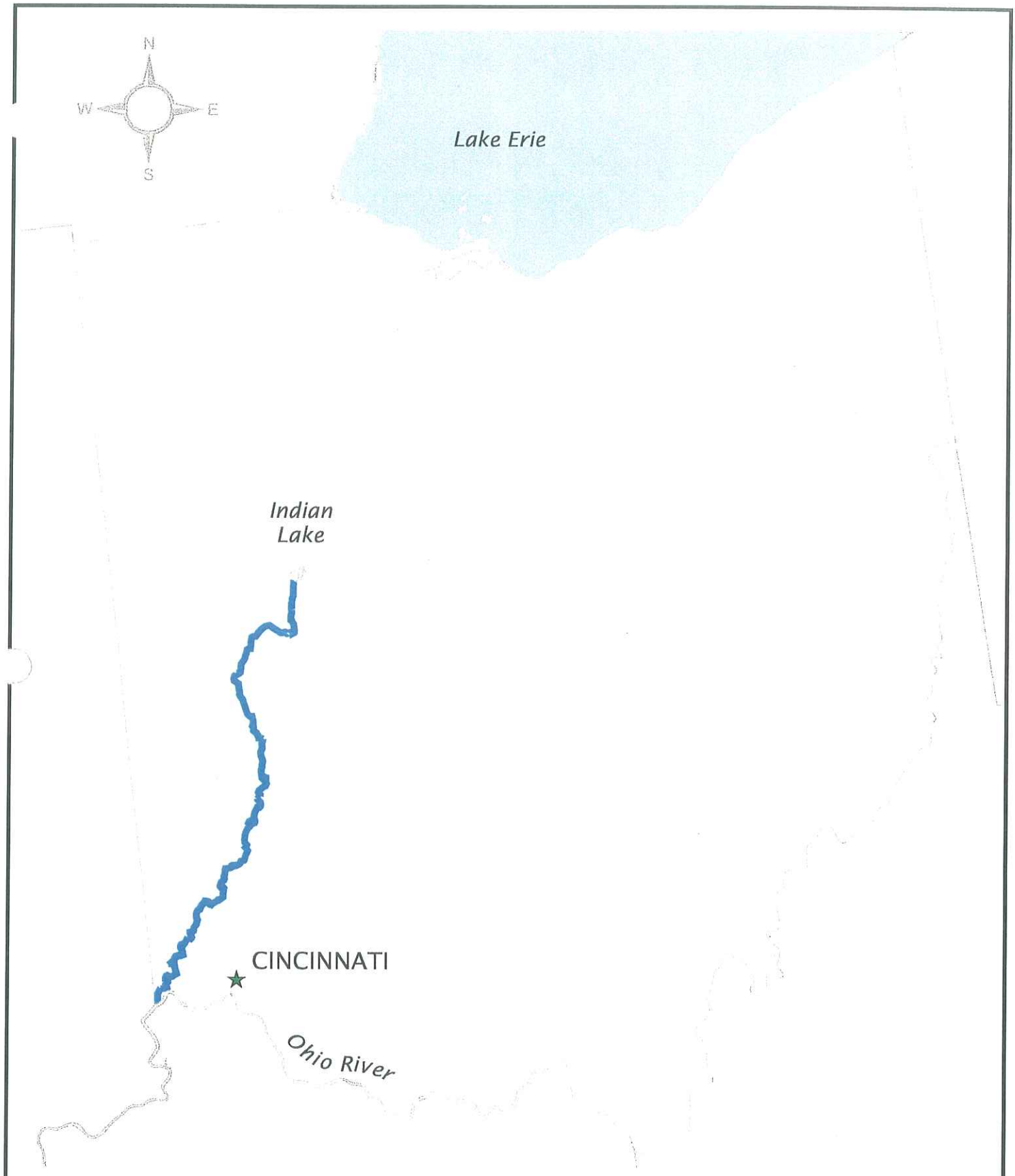
loaded flatboat upstream. Military use of the rivers through great quantities of manpower was not the customary mode of travel for settlers and farmers of the time. This use of the rivers by military expeditions does not prove the susceptibility of use for interstate commerce. The Great Miami River from Mile 117 to Mile 153.5 and the Greenville Creek are not, therefore, navigable waters of the United States." 692 F.2d at 451.

"Evidence to support navigability on Loramie Creek consisted of Dr. Johnson's testimony for the Corps. Dr. Johnson testified that two keel boat lines were established on the Great Miami and Maumee Rivers in 1809 and 1819. He produced no specific instances of keelboat use on Loramie Creek nor of the success of the lines. Evidence suggested that these keelboat lines included portages of six, twelve, or one hundred fifty miles. Additionally, Dr. Johnson admitted that keelboat commerce on these rivers was 'limited.' The District Court concluded from this sparse record that keelboat use was 'sporadic,' 'minimal,' and 'uniformly unsuccessful.' . . . The Loramie Creek is not a navigable waterway of the United States." 692 F.2d at 451.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Dayton, OH	2,227	1914-2000
Middletown, OH	3,160	1995-2000
At Miamisburg, OH	2,517	1919-1994
Below Miamisburg, OH	2,756	1992-2000
Hamilton, OH	3,429	1928-2000



Great Miami River - Ohio

REPORTED DECISION

H

United States Court of Appeals,
Sixth Circuit.

The MIAMI VALLEY CONSERVANCY DISTRICT, Plaintiff-Appellee,
v.
Clifford ALEXANDER, Jr., Secretary U.S. Army; Lt. General J.W. Morris, Chief of Engineers, U.S. Army; Major General Louis W. Prep, Jr., Corps of Engineers, Col. Thomas P. Nack, Corps of Engineers, Defendants-Appellants,
Dayton Power and Light; Board of Commissioners of Montgomery County; City of Moraine & City of West Carrolton; City of Dayton; City of Piqua, Intervenors.

No. 81-3243.

Argued May 20, 1982.
Decided Nov. 12, 1982.

Action was brought for declaratory judgment concerning navigability of the Great Miami River and its tributaries. The United States District Court for the Southern District of Ohio, Carl B. Rubin, Chief Judge, 507 F.Supp. 924, held that the river and its tributaries were not navigable streams. Appeal was taken. The Court of Appeals, Boyce F. Martin, Jr., Circuit Judge, held that portion of Great Miami River constituted navigable waters and were under jurisdiction of the Corps of Engineers; however, portion of river and its tributaries were not navigable and not under jurisdiction of the Corps.

Reversed in part and affirmed in part.

West Headnotes

[1] **Navigable Waters** 2
270k2 Most Cited Cases

The Corps of Engineers has authority to assert federal jurisdiction over "navigable waters of the United States," under the Rivers and Harbors Act of 1899 and other acts of Congress. Rivers and Harbors Appropriation Act of 1899, § 10, 33 U.S.C.A § 403; Federal Water Pollution Control Act Amendments of 1972 (Clean Water Act), § § 101-517, 33 U.S.C.A. § § 1251-1376.

[2] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

A river is "navigable" if it can be made useful through reasonable improvements.

[3] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

A river is navigable despite occasional natural obstructions or portages; however, where commercial use or susceptibility to use is "sporadic and ineffective," river is not navigable.

[4] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

A waterway is not navigable when its use for any purposes of transportation has been and is exceptional, and only at times of temporary high water. Rivers and Harbors Appropriation Act of 1899, § 10, 33 U.S.C.A. § 403.

[5] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

A navigable river is one of general and common usefulness for purposes of trade and commerce. Rivers and Harbors Appropriation Act of 1899, § 10, 33 U.S.C.A. § 403.

[6] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

A navigable waterway of the United States must be or have been used or susceptible of use in customary modes of trade and travel on water as highway for interstate commerce. Rivers and Harbors Appropriation Act of 1899, § 10, 33 U.S.C.A. § 403.

[7] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

[7] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence compelled finding that portion of the Great Miami River was highway for interstate commerce before 1830 and thus that portion of river was navigable water of the United States and since it was navigable as a matter of law, the Corps of Engineers had jurisdiction over it under the Rivers and Harbors Act of 1899. Rivers and Harbors Appropriation Act

of 1899, § 10, 33 U.S.C.A. § 403.

[8] **Navigable Waters 1(7)**
270k1(7) Most Cited Cases

The Corps of Engineers failed to prove that a portion of the Great Miami River and its tributaries were navigable as a matter of law in light of evidence of commercial navigation on rivers primarily being of general and nonspecific character, and thus, Corps of Engineers could not assert jurisdiction over those tributaries and particular portion of river. Rivers and Harbors Appropriation Act of 1899, § 10, 33 U.S.C.A. § 403.

[9] **Navigable Waters 1(3)**
270k1(3) Most Cited Cases

Use of rivers by military expeditions does not prove susceptibility of use for interstate commerce and does not establish navigability of water for purposes of the Rivers and Harbors Appropriation Act of 1899. Rivers and Harbors Appropriation Act of 1899, § 10, 33 U.S.C.A. § 403.

***448** Ann Marie Tracey, Asst. U.S. Atty., Cincinnati, Ohio, for defendants- appellants.

Arthur A. Ames, Robert N. Farquhar, Dayton, Ohio, for plaintiff-appellee.

Stephen F. Kozair, Dayton, Ohio, for Dayton Power and Light.

Kenneth R. Pohlman, Asst. Pros. Atty., Dayton, Ohio, for Board of Com'rs of Montgomery County.

Phillip B. Herron, Dayton, Ohio, for City of Moraine and City of West Carrolton.

Stephen E. Klein, Piqua, Ohio, for City of Piqua.

Thomas Randolph, City Atty., Dayton, Ohio, for City of Dayton.

Before KENNEDY and MARTIN, Circuit Judges, and GUY, District Judge. [FN*]

FN* Honorable Ralph B. Guy, Jr., United States District Judge for the Eastern District of Michigan, sitting by designation.

BOYCE F. MARTIN, Jr., Circuit Judge.

The Army Corps of Engineers appeals an order of the Southern District of Ohio enjoining it from asserting jurisdiction over the Great Miami River and certain tributaries. Under section 10 of the Rivers and Harbors Act of 1899, 33 U.S.C. § 403, the Corps has jurisdiction over a river only if the river is "navigable." The District Court found that the Great Miami River and its tributaries were not navigable and granted an injunction to the Miami Valley Conservancy District. We affirm in part and reverse in part.

Jurisdiction over the following portions of the Great Miami River system is in controversy: The Great Miami River from Mile 7.5 to Mile 153.5; the Loramie Creek from its mouth to Mile 20.8; the Stillwater River from its mouth to Mile 33.0; the Greenville Creek from its mouth to Mile 23.6; and the Mad River from its mouth to Mile 26.2. Jurisdiction over the Little Miami River and its tributaries is not an issue in this case. The Miami Valley Conservancy District conceded the Corps' jurisdiction over the Great Miami River from its mouth to Mile 7.5.

The Ohio legislature created the Miami Valley Conservancy District in 1914 to control the River's periodic but severe floods. The Conservancy District's duties have been expanded to include the supervision of waste treatment and recreation on the River.

[1] The Corps of Engineers has authority to assert federal jurisdiction over "navigable ***449** waters of the United States," under the Rivers and Harbors Act of 1899 and other Acts of Congress. In *National Resources Defense Council, Inc., et al. v. Callaway*, 392 F.Supp. 685 (D.D.C.1975), the District Court for the District of Columbia held that the Corps of Engineers may not alter the congressional definition of "waters of the United States" present in the "Water Act." Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. § § 1251-1376. As an aside, the court advised the Corps to assert jurisdiction over all navigable streams in the nation or forfeit its jurisdiction. In response to *Callaway* the Corps focused its attention on the Great Miami River and its tributaries. In 1979 the Corps determined that the River was navigable as a matter of law and asserted jurisdiction over the River through its power under the Rivers and Harbors Act.

The Conservancy District challenged the Corps' determination of navigability by seeking injunctive relief. The question of navigability turns on whether the river has ever been or is now used as a water highway for interstate commerce. The parties agreed that the navigability of the Great Miami River depends on whether or not it had been used for commerce prior to the construction of the Miami-Erie Canal in 1830. The parties also agreed that all River traffic was directed to the Canal after its construction. The District Court examined evidence of River use by Indians and fur traders, by military expeditions, and by commercial traders with flatboats and keelboats. In conclusion the court found that the Great Miami River and its tributaries "are not now nor have they ever been navigable streams within the meaning of section 10 of the Rivers and Harbors Act of 1899." Accordingly, the injunction issued.

The earliest and most frequently cited definition of navigability appeared in *The Daniel Ball v. United States,* 77 U.S. (10 Wall.) 557, 563, 19 L.Ed. 999 (1871). The Supreme Court held:

> Those rivers must be regarded as public navigable rivers in law whichare navigable in fact. And they are navigable in fact when they are *used, or are susceptible of being used,* in their ordinary condition, as *highways for commerce,* over which trade and travel are or may be conducted in the *customary modes of trade and travel* on water.

(emphasis added).

[2][3][4] Subsequent cases have refined the definition of navigability. A river is navigable if it can be made useful through reasonable improvements. *United States v. Appalachian Electric Power Co.,* 311 U.S. 377, 409, 61 S.Ct. 291, 300, 85 L.Ed. 243 (1940). The use of navigable streams may be limited to travel during seasonal water level fluctuations. *Economy Light and Power Co. v. United States,* 256 U.S. 113, 122, 41 S.Ct. 409, 412, 65 L.Ed. 847 (1921). Moreover, a river is still navigable despite "occasional natural obstructions or portages...." *Id.* However, where commercial use or susceptibility of use is "sporadic and ineffective," the river is not navigable. *United States v. State of Oregon,* 295 U.S. 1, 23, 55 S.Ct. 610, 619, 79 L.Ed. 1267 (1935). A waterway is not navigable when "its use for any purposes of transportation has been and is exceptional, and only in times of temporary high water." *United States v. Rio Grande Dam & Irrigation Co.,* 174 U.S. 690, 699, 19 S.Ct. 770, 773, 43 L.Ed. 1136 (1899).

[5] The Supreme Court has emphasized repeatedly that a navigable waterway of the United States must be "of practical service as a highway of commerce." *Economy Light,* 256 U.S. at 124, 41 S.Ct. at 413. A navigable river is one of "general and common usefulness for purposes of trade and commerce." *Oregon,* 295 U.S. at 23, 55 S.Ct. at 619. The Rivers and Harbors Act protects "the Nation's right that its waterways be utilized for the interests of the commerce of the whole country." *Appalachian Electric,* 311 U.S. at 405, 61 S.Ct. at 298.

> When it is remembered that the source of the power of the general government to act at all in this matter arises out of its power to regulate commerce with foreign countries and among the states, it is obvious ***450** that what the Constitution and acts of Congress have in view is *the promotion and protection of commerce in its international and interstate aspect,* and a practical construction must be put on these enactments as intended for such large and important purposes.

Leovy v. United States, 177 U.S. 621, 633, 20 S.Ct. 797, 801, 44 L.Ed. 914 (1900) (emphasis added).

Under the historical use test of navigability a river is "indelibly navigable." *State of Oklahoma ex rel. Phillips v. Guy F. Atkins,* 313 U.S. 508, 61 S.Ct. 1050, 85 L.Ed. 1487 (1941). That is, a river is navigable as a matter of law if it has ever been navigable. For a river to be considered a navigable water of the United States, it is sufficient that the river has been used as a commercial highway even though it no longer is or can be used as such.

[6] The test of navigability has been stated and restated by the federal courts for the last one hundred years. Navigability has been defined in countless ways but its essential elements have remained constant. The District Court here properly identified these elements: A navigable waterway of the United States must (1) be or have been (2) used or susceptible of use (3) in the customary modes of trade and travel on water (4) as a highway for interstate commerce.

The Corps here challenges all the factual and legal conclusions of the District Court. A review of the evidence leads us to agree with the Corps that the District Court erred in holding that the Great Miami River from Mile 7.5 to Mile 117, near Piqua, is not navigable. However, the record clearly supports the District Court's holdings that the tributaries of the River and the River from Mile 117 to Mile 153.5 are not navigable.

The District Court counted sixteen "instances" of flatboat travel on the Great Miami River from 1800 to 1830. However, the court found that flatboat travel was "at best sporadic, limited to periods of highwater, and only on a seasonal basis." The court also determined that citizens of the area would not have invested money in the Miami-Erie Canal if the River had been navigable by customary modes of trade and travel.

These factual findings do not present an accurate picture of the trial evidence. Official records from the Port of New Orleans report flatboats arriving from the Great Miami River in each year from 1800 to 1830. Fleets containing as many as seventy-nine and one hundred thirty flatboats were sighted on the Great Miami River. Testimony also demonstrated that the high water on the River, necessary for downstream travel, lasted for several months in the spring. The average size of flatboats on the River was seventy feet long and twenty feet wide with a three-foot draft when fully loaded. Flatboats on the Great Miami River were the same as most flatboats floating downstream to New Orleans by way of the Ohio and the Mississippi Rivers.

Furthermore, the District Court relied heavily on the construction of the Miami-Erie Canal to support its conclusion that the River was not navigable. The court concluded that the citizens of southwestern Ohio would not have built the Canal if the River had been navigable. Unfortunately this conclusion is flawed. Before the Canal was built, traders were forced to rely on the River for transportation. There was abundant evidence that commercial traders used the Canal after its construction because it was a *better* highway for commerce than the River. The fact that people used the Canal rather than the River says only that the River was less navigable than the Canal. It says nothing about the navigability of the River in absolute terms. The existence and use of the Canal after 1830 does not rebut proof of the River's navigability before 1830.

[7] A more complete statement of the evidence produced at trial shows that the elements of navigability are present. Like many larger rivers in the Mississippi River system, the Great Miami River afforded ***451** predictable albeit not always dependable use during spring high water fluctuations. Downstream flatboat travel was the customary mode of travel in the early 1800's and the Great Miami River was no exception. Finally, the Great Miami River was used as a commercial highway to float goods from southwestern Ohio to New Orleans. The record establishes inescapably that the Great Miami River was navigable as a matter of law from its mouth to Mile 117.

[8] The Corps has failed to prove that the Great Miami River from Mile 117 to Mile 153.5 and its tributaries are navigable as a matter of law. Evidence of commercial navigation on the rivers in southwestern Ohio was primarily of a general and non-specific character. The District Court did not err in its factual or legal conclusions that the upper portion of the River and the tributaries were not navigable.

[9] The Corps' determination of navigability of the Greenville Creek and the Great Miami River from Mile 117 to Mile 153.5 rests on early military expeditions. In the late Eighteenth Century military expeditions transported supplies up the rivers to several forts in southwestern Ohio. As many as thirty-two men could have been required to pull a loaded flatboat upstream. Military use of the rivers through great quantities of manpower was not the customary mode of travel for settlers and farmers of the time. This use of the rivers by military expeditions does not prove the susceptibility of use for interstate commerce. The Great Miami River from Mile 117 to Mile 153.5 and the Greenville Creek are not, therefore, navigable waters of the United States.

Evidence to support navigability on Loramie Creek consisted of Dr. Johnson's testimony for the Corps. Dr. Johnson testified that two keelboat lines were established on the Great Miami and Maumee Rivers in 1809 and 1819. He produced no specific instances of keelboat use on Loramie Creek nor of the success of the lines. Evidence suggested that these keelboat lines included portages of six, twelve, or one hundred fifty miles. Additionally, Dr. Johnson admitted that keelboat commerce on these rivers was "limited." The District Court concluded from this sparse record that keelboat use was "sporadic," "minimal," and "uniformly unsuccessful." Without specific evidence of successful commercial navigation on the Loramie Creek, by keelboats or otherwise, we cannot find that the Creek was used as a highway for interstate commerce. The Loramie Creek is not a navigable waterway of the United States.

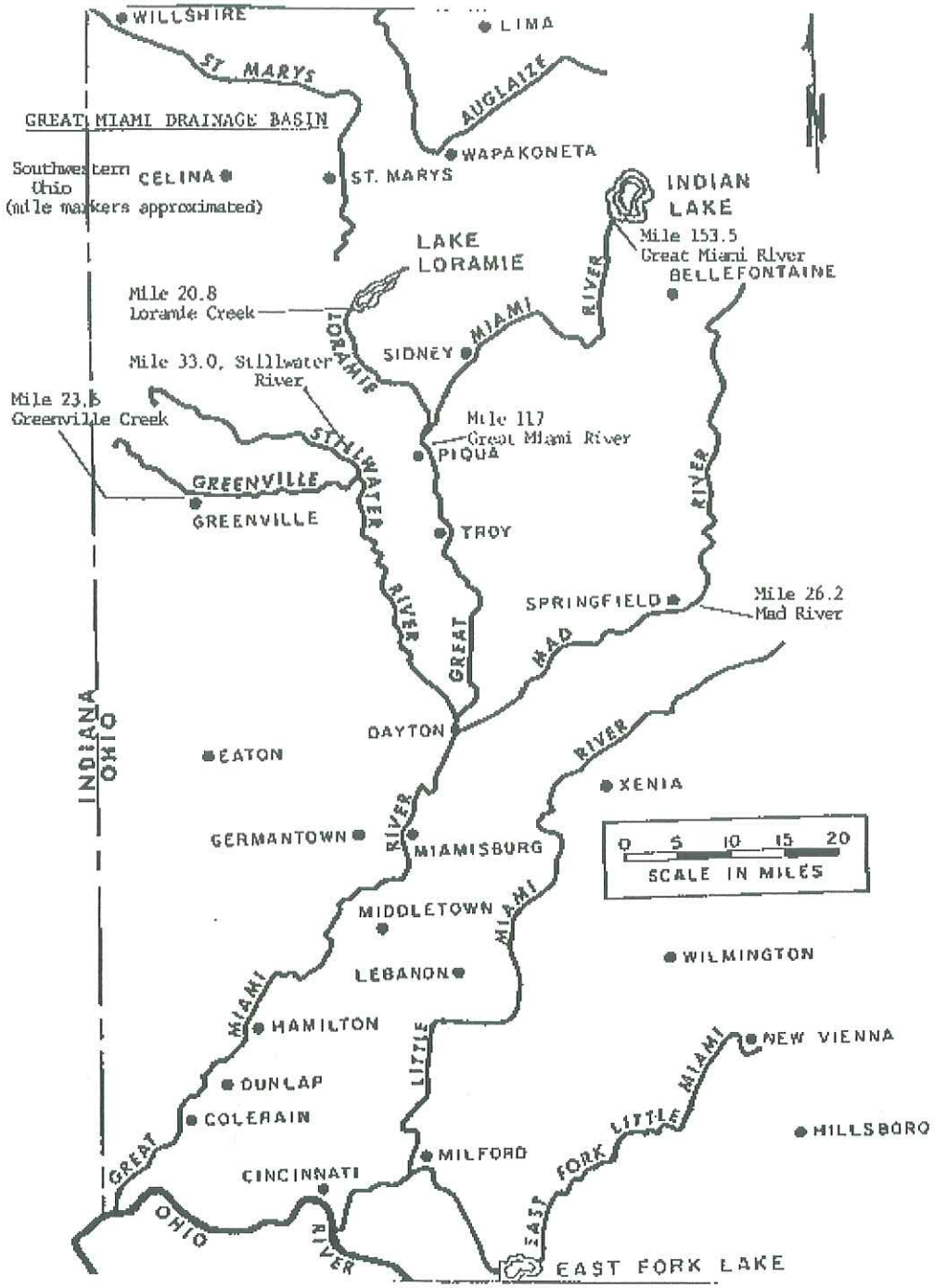
The Corps demonstrated at trial no specific instances of navigation on the Mad and Stillwater Rivers. The Corps' claim of navigability rests in part on

Eighteenth Century Indian and fur trader use of rivers throughout Ohio and the Midwest. For additional support the Corps points to the extensive use of flatboats on the Great Miami River from 1800 to 1830. Without specific evidence of commercial use of the rivers or their susceptibility of use, like the District Court, we decline to hold that the Mad and Stillwater Rivers are navigable as a matter of law.

In summary, we affirm the District Court's judgment that the tributaries of the Great Miami River are not navigable under the Rivers and Harbors Act of 1899. However, we reverse the District Court's determination regarding the River itself. We hold the evidence compels the finding that the Great Miami River from its mouth to Mile 117 was a highway for interstate commerce before 1830. Hence, this portion of the River is a navigable water of the United States. And because this portion of Great Miami River is navigable as a matter of law, the Corps of Engineers may assert jurisdiction over it under the Rivers and Harbors Act of 1899.

Judgment reversed in part and affirmed in part.

***452** APPENDIX



END OF DOCUMENT

ADDITIONAL INFORMATION

USGS

Water Resources

Data Category: Site Information | Geographic Area: Ohio | GO

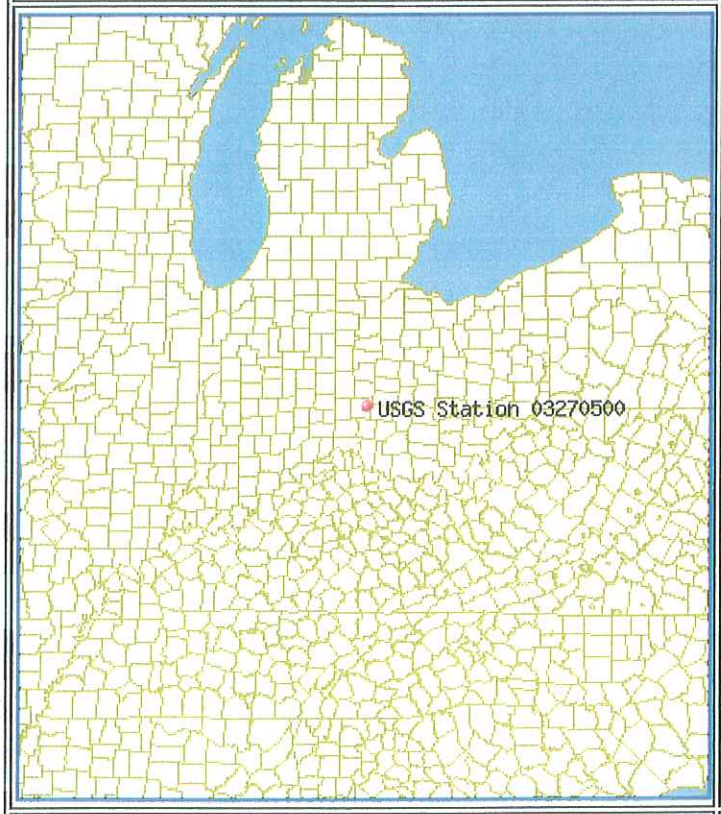
Site Map for Ohio

USGS 03270500 G MIAMI R AT DAYTON OH

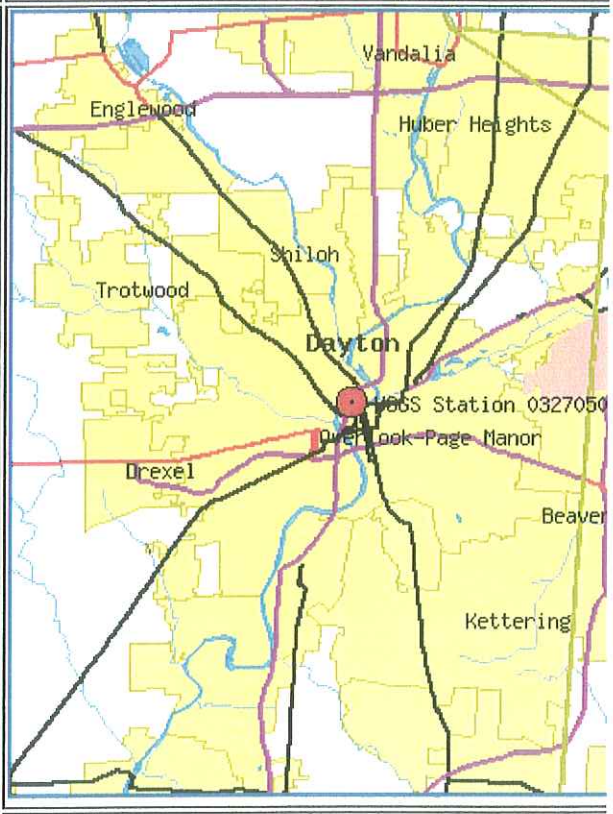
Available data for this site: Station site map | GO

Montgomery County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°45'55", Longitude 84°11'51" NAD27
Drainage area 2,511.00 square miles
Contributing drainage area 2,511 square miles
Gage datum 700.00 feet above sea level NGVD29

Location of the site in Ohio.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Ohio | GO

Calendar Year Streamflow Statistics for Ohio

USGS 03270500 G MIAMI R AT DAYTON OH

Available data for this site: Surface-water: Annual streamflow statistics | GO

Montgomery County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°45'55", Longitude 84°11'51" NAD27
Drainage area 2,511.00 square miles
Contributing drainage area 2,511 square miles
Gage datum 700.00 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1914	1,433	1936	1,622	1958	3,156	1980	2,684
1915	2,436	1937	3,415	1959	2,611	1981	2,370
1916	2,990	1938	2,599	1960	1,063	1982	3,056
1917	1,999	1939	2,246	1961	2,234	1983	2,003
1918	1,898	1940	1,557	1962	1,700	1984	2,429
1919	2,287	1941	714	1963	1,517	1985	2,381
1920	3,136	1942	1,510	1964	1,773	1986	3,307
1921	3,572	1943	1,950	1965	1,588	1987	1,477
1922	2,738	1944	1,343	1966	1,522	1988	954
1923	1,862	1945	2,504	1967	2,370	1989	2,938
1924	2,586	1946	1,538	1968	2,183	1990	3,916
1925	1,528	1947	2,857	1969	2,419	1991	2,199
1926	2,905	1948	2,826	1970	1,915	1992	2,098
1927	3,332	1949	2,665	1971	1,542	1993	3,677
1928	1,935	1950	4,344	1972	3,258	1994	1,579
1929	3,371	1951	2,833	1973	3,439	1995	2,490
1930	2,325	1952	2,592	1974	2,476	1996	4,154
1931	1,043	1953	1,336	1975	2,996	1997	2,387
1932	1,917	1954	718	1976	1,535	1998	2,441
1933	2,917	1955	1,777	1977	1,431	1999	1,675

1934	626	**1956**	1,823	**1978**	2,372	**2000**	1,844
1935	1,036	**1957**	2,846	**1979**	3,489		

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Ohio: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/oh/nwis/annual/calendar_year?

Retrieved on 2003-03-06 07:46:21 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Ohio
Privacy Statement || Disclaimer || Accessibility
0.71 0.68

Water Resources

Data Category: Site Information | Geographic Area: Ohio | GO

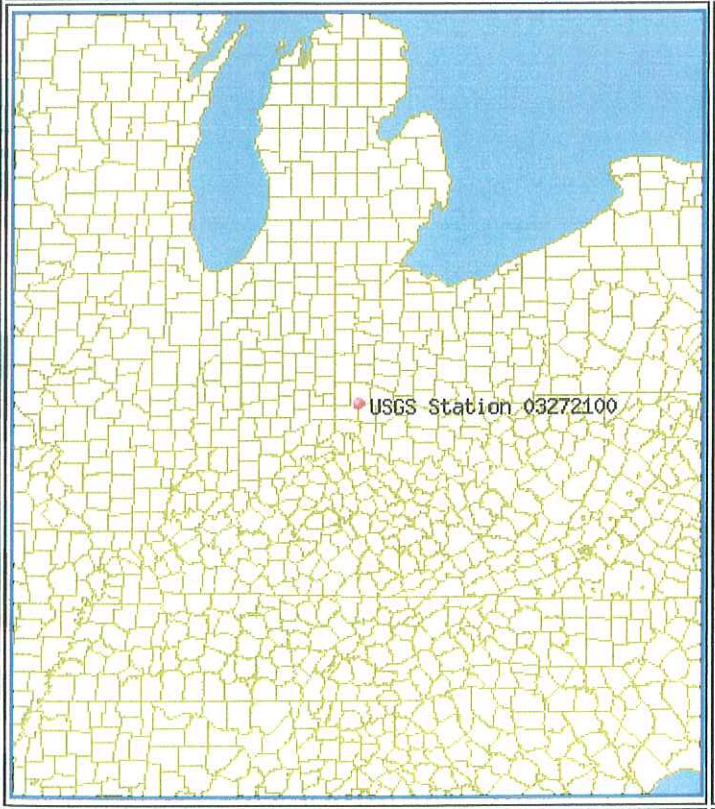
Site Map for Ohio

USGS 03272100 G MIAMI R AT MIDDLETOWN OH

Available data for this site: Station site map | GO

Butler County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°32'31", Longitude 84°21'27" NAD27
Drainage area 3,134.00 square miles

Location of the site in Ohio.



Site map.

ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Ohio: Site Map
http://waterdata.usgs.gov/oh/nwis/nwismap?

Water Resources

Data Category: Surface Water | Geographic Area: Ohio | GO

Calendar Year Streamflow Statistics for Ohio

USGS 03272100 G MIAMI R AT MIDDLETOWN OH

Available data for this site: Surface-water: Annual streamflow statistics | GO

Butler County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°32'31", Longitude 84°21'27" NAD27
Drainage area 3,134.00 square miles

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1995	3,095	1997	2,897	1999	2,268
1996	5,194	1998	3,156	2000	2,347

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Ohio: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/oh/nwis/annual/calendar_year?

Retrieved on 2003-03-06 07:55:30 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Ohio
Privacy Statement || Disclaimer || Accessibility
0.65 0.64

Water Resources

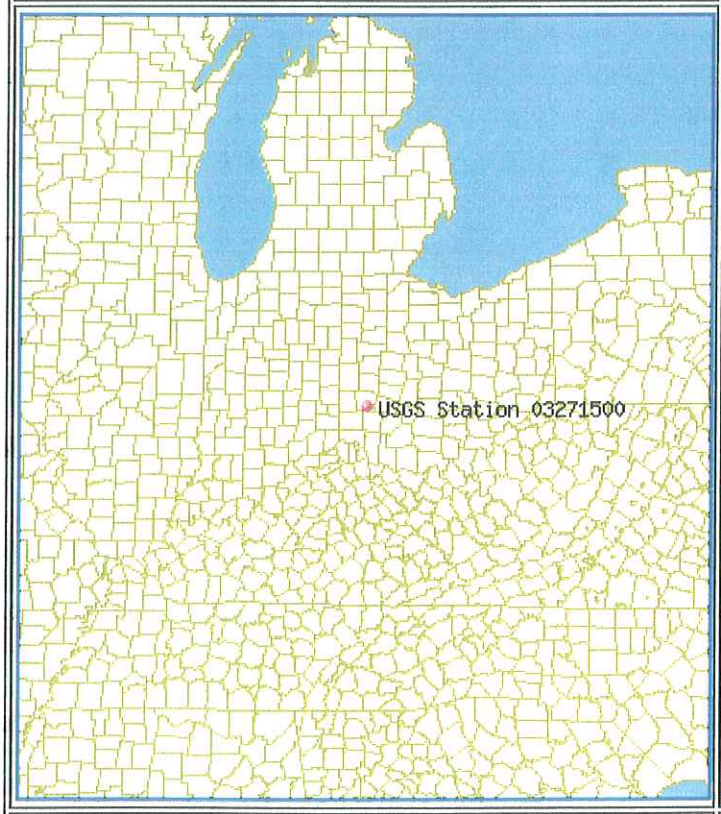
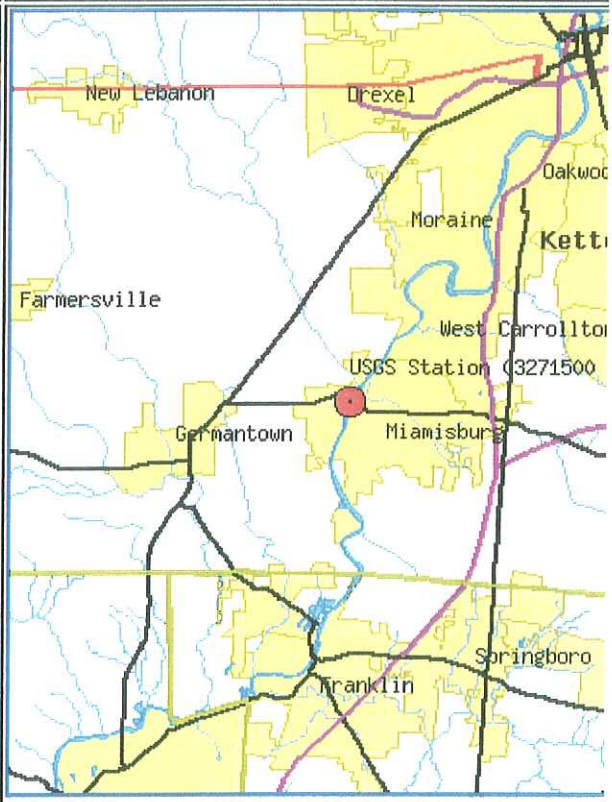
Data Category: Site Information | Geographic Area: Ohio | GO

Site Map for Ohio

USGS 03271500 G MIAMI R AT MIAMISBURG OH

Available data for this site: Station site map | GO

Montgomery County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°38'40", Longitude 84°17'23" NAD27
Drainage area 2,711.00 square miles
Contributing drainage area 2,711. square miles
Gage datum 678.60 feet above sea level NGVD29

Location of the site in Ohio.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Ohio | GO

Calendar Year Streamflow Statistics for Ohio

USGS 03271500 G MIAMI R AT MIAMISBURG OH

Available data for this site: Surface-water: Annual streamflow statistics | GO

Montgomery County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°38'40", Longitude 84°17'23" NAD27
Drainage area 2,711.00 square miles
Contributing drainage area 2,711. square miles
Gage datum 678.60 feet above sea level NGVD29

Output formats

HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1919	2,592	1956	2,057	1969	2,798	1982	3,190
1925	1,802	1957	3,120	1970	2,200	1983	2,217
1926	3,305	1958	3,582	1971	1,718	1984	2,654
1927	3,873	1959	3,008	1972	3,420	1985	2,644
1928	2,229	1960	1,254	1973	3,709	1986	3,620
1929	3,705	1961	2,619	1974	2,748	1987	1,758
1930	2,648	1962	1,971	1975	3,265	1988	1,152
1931	1,228	1963	1,755	1976	1,787	1989	3,172
1932	2,240	1964	2,069	1977	1,593	1990	4,343
1933	3,257	1965	1,963	1978	2,703	1991	2,442
1934	711	1966	1,835	1979	4,025	1992	2,287
1953	1,499	1967	2,695	1980	3,187	1993	3,864
1954	850	1968	2,540	1981	2,506	1994	1,795
1955	2,033						

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Ohio: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/oh/nwis/annual/calendar_year?

Retrieved on 2003-03-06 07:52:13 EST
Department of the Interior, U.S. Geological Survey

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Ohio | GO

Calendar Year Streamflow Statistics for Ohio

USGS 03271601 G MIAMI R BL MIAMISBURG OH

Available data for this site: Surface-water: Annual streamflow statistics | GO

Montgomery County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°36'24", Longitude 84°17'13" NAD27
Drainage area 2,715 square miles

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1992	2,299	1995	2,841	1998	2,697
1993	3,895	1996	4,671	1999	1,908
1994	1,807	1997	2,615	2000	2,073

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Ohio: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/oh/nwis/annual/calendar_year?

Retrieved on 2003-03-06 07:54:23 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Ohio
Privacy Statement || Disclaimer || Accessibility
0.65 0.64

Water Resources

Data Category: Site Information | Geographic Area: Ohio | GO

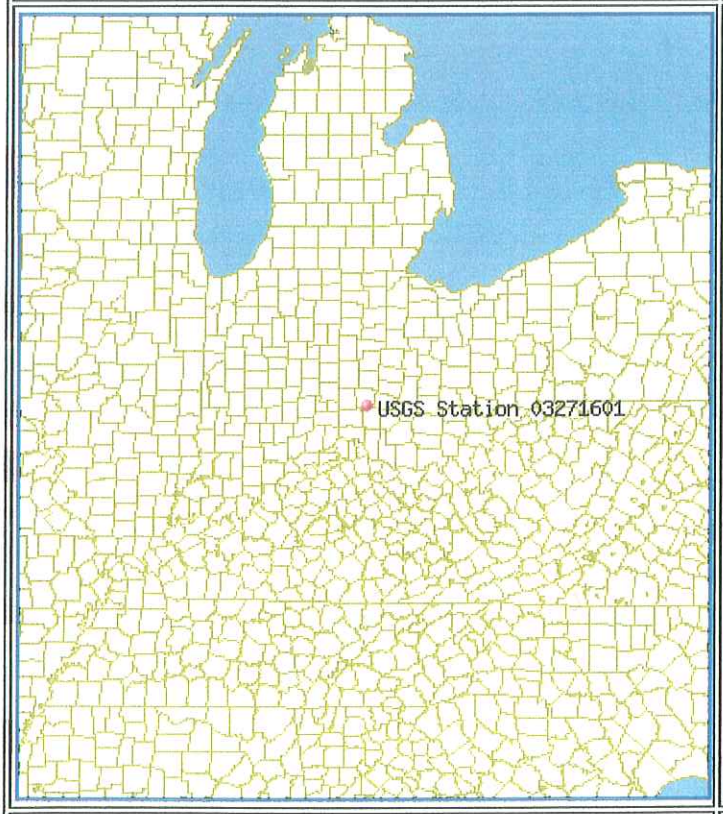
Site Map for Ohio

USGS 03271601 G MIAMI R BL MIAMISBURG OH

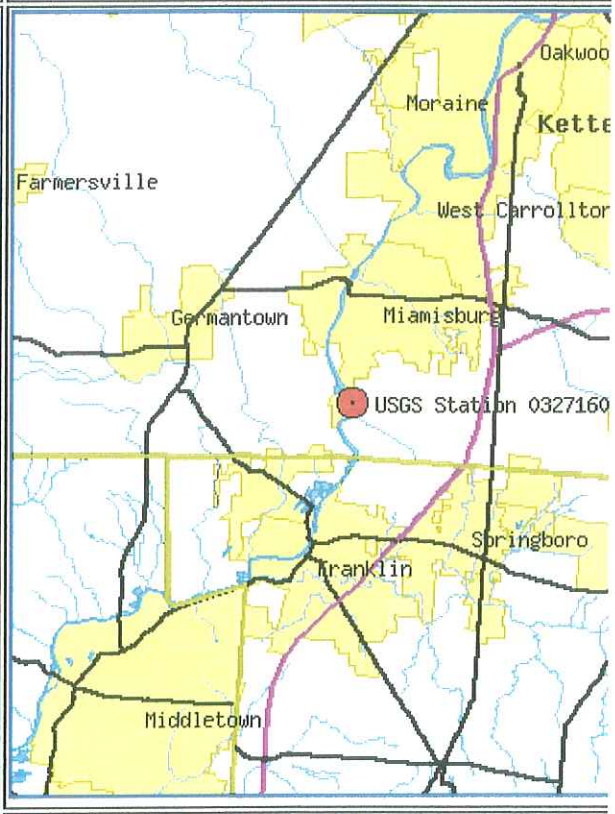
Available data for this site: Station site map | GO

Montgomery County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°36'24", Longitude 84°17'13" NAD27
Drainage area 2,715 square miles

Location of the site in Ohio.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Ohio: Site Map
http://waterdata.usgs.gov/oh/nwis/nwismap?

Water Resources

Data Category: Site Information | Geographic Area: Ohio | GO

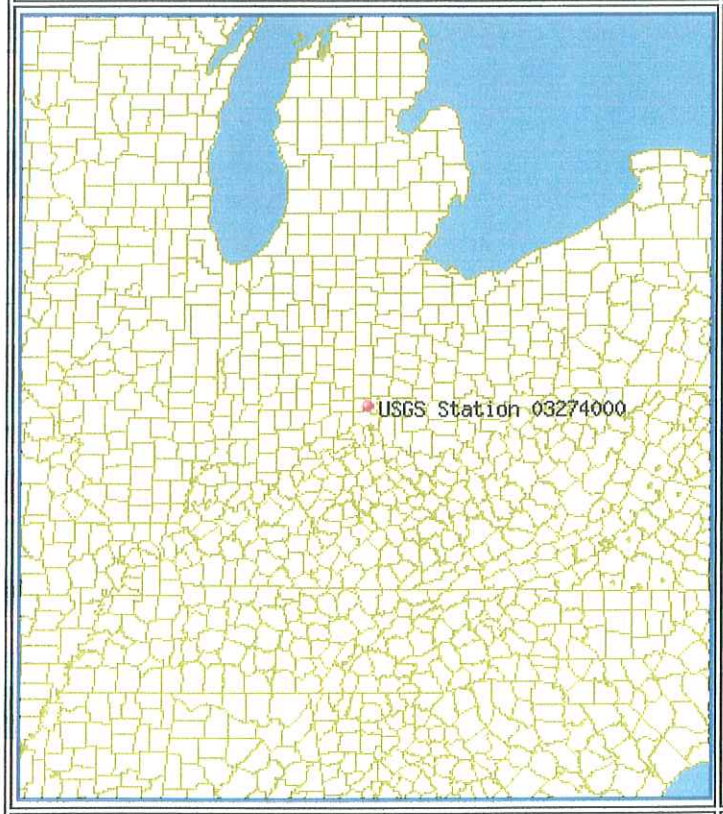
Site Map for Ohio

USGS 03274000 G MIAMI R AT HAMILTON OH

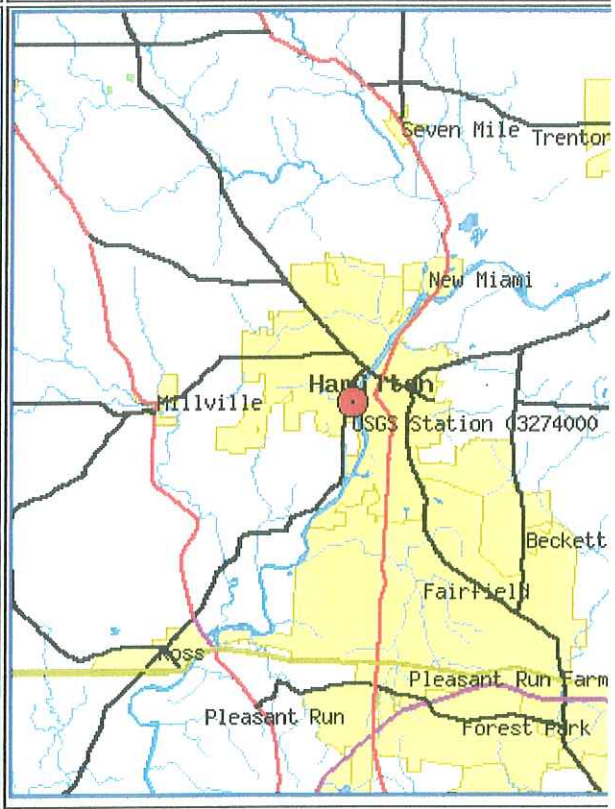
Available data for this site: Station site map | GO

Butler County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°23'28", Longitude 84°34'20" NAD27
Drainage area 3,630.00 square miles
Contributing drainage area 3,630 square miles
Gage datum 499.98 feet above sea level NGVD29

Location of the site in Ohio.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-oh_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-oh_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Ohio | GO

Calendar Year Streamflow Statistics for Ohio

USGS 03274000 G MIAMI R AT HAMILTON OH

Available data for this site: Surface-water: Annual streamflow statistics | GO

Butler County, Ohio
Hydrologic Unit Code 05080002
Latitude 39°23'28", Longitude 84°34'20" NAD27
Drainage area 3,630.00 square miles
Contributing drainage area 3,630 square miles
Gage datum 499.98 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1928	2,616	1947	4,409	1965	2,558	1983	3,048
1929	4,714	1948	4,089	1966	2,572	1984	3,682
1930	3,081	1949	3,960	1967	3,536	1985	3,713
1931	1,567	1950	6,288	1968	3,469	1986	4,373
1932	3,058	1951	4,175	1969	3,567	1987	2,056
1933	4,633	1952	3,930	1970	2,887	1988	1,676
1934	941	1953	1,903	1971	2,391	1989	4,337
1935	1,593	1954	1,031	1972	4,389	1990	5,728
1936	2,617	1955	2,808	1973	4,944	1991	3,211
1937	5,523	1956	2,681	1974	3,799	1992	2,801
1938	4,024	1957	4,126	1975	4,336	1993	4,793
1939	3,458	1958	4,575	1976	2,277	1994	2,367
1940	2,371	1959	3,857	1977	2,247	1995	3,469
1941	1,145	1960	1,653	1978	3,610	1996	6,294
1942	2,445	1961	3,568	1979	5,299	1997	3,542
1943	3,074	1962	2,609	1980	4,222	1998	3,542
1944	1,986	1963	2,305	1981	3,284	1999	2,388
1945	3,955	1964	2,720	1982	4,469	2000	2,702
1946	2,407						

Green River—Utah

Reported Decision: United States v. Utah, 283 U.S. 64 (1931)

Reach at Issue: Various reaches

Judicial Determination: Navigable

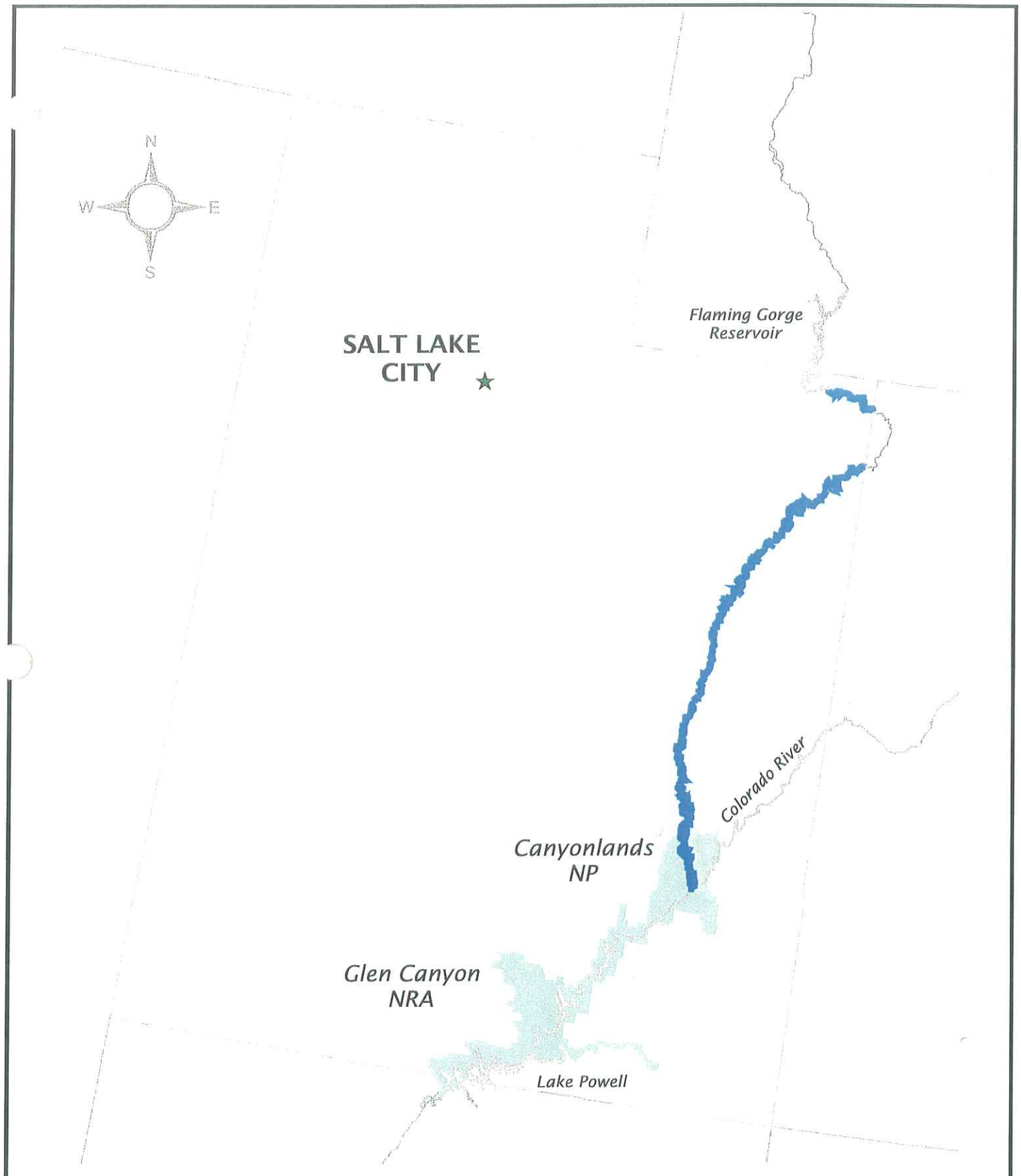
Facts Reported in Decision:

"The Green river has its source in the mountains of Western Wyoming and has a total length of 700 miles. After passing through a series of canyons, the rock walls of which are of great height, it enters the Green River valley in which the town of Green River, Utah, is situated, about 117 miles above the river's mouth. The drop in elevation between the town of Green River, Wyo., and Green River, Utah, is from 6,067 to 4,046 feet—2,021 feet in 387 miles causing many difficult and dangerous rapids. For the first 23 miles below the town of Green River, Utah, to the point where the San Rafael river enters from the west, the country is more or less open. From the mouth of the San Rafael river (approximately the beginning of the section to which the controversy relates) to the junction of the Green and Grand rivers there is a very gradual slope, there being a drop of 111 feet in the 94 miles. In this section the river flows through Labyrinth and Stillwater Canyons, the rock walls of which in many places rise almost vertically from the water's edge, and in other places are over a thousand feet apart, with heights of 600 to 1,300 feet. The average width of the river is from 500 to 700 feet. In four or five places there are bottom lands along the side in the canyons. The course of the river is tortuous; the distance (in this section) in a straight line being less than one-half that by the river. The government maintains gauging stations to measure the depth, the velocity, and the amount of discharge of water. On the Green river the gauge was located at or near the town of Green River, Utah. From these measurements the master finds that the depth of the Green river ranged from between 1½ and 3 feet for 53 days in the year to between 7 and 12 feet for 60 days, and that for 312 days in the year there was a depth of 3 feet or over. For 200 days in the year there was discharge over 2,000 cubic feet per second, and, for 149 days, of over 4,200 cubic feet per second." 283 U.S at 77-78.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Green River, UT	6,230	1895-2000
Jensen, UT	3,920	1947-2000
Greendale, UT	2,113	1951-2000



Green River - Utah

REPORTED DECISION

C

Supreme Court of the United States.

UNITED STATES
v.
STATE OF UTAH. [FN*]

FN* For decree pursuant to opinion, see 283 U. S. 801, 51 S. Ct. 497, 75 L. Ed. ---.

No. 14 original.

Argued Feb. 25, 26, 1931.
Decided April 13, 1931.

Original suit to quiet title by the United States against the State of Utah. On exceptions to the report of a special master.

Decree in accordance with opinion.

West Headnotes

[1] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

Title to beds of rivers, if navigable, within state, passed to state on admission to Union.

[2] **Waters and Water Courses** 89
405k89 Most Cited Cases

Title to beds of rivers not then navigable remained in United States on state's admission to Union.

[3] **Federal Courts** 194
170Bk194 Most Cited Cases
(Formerly 106k288)

In suit by United States against state to quiet title to river beds, question of navigability, being determinative of controversy, was federal question, though rivers were concededly not "navigable waters of United States."

[4] **States** 4
360k4 Most Cited Cases

State laws cannot affect titles vested in United States.

[5] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence regarding navigation after state's admission to Union held properly received on issue of navigability of rivers at time state was admitted.

[6] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Susceptibility in ordinary condition to navigation, rather than manner or extent of actual use, was test in determining whether rivers were "navigable."--

[7] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

It is susceptibility of rivers to use as highways which gives public right of control to exclusion of private ownership, either of waters or soils thereunder.

[8] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

State should not be denied title to beds of rivers navigable in fact at time of admission to Union, though, because of circumstances, recourse to navigation was late adventure or large scale commercial utilization awaits future demands.

[9] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In determining navigability, capacity of rivers to meet future commercial needs may be shown by physical characteristics and experimentation as well as actual uses.

[10] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Mere presence of sandbars impeding navigation does not make rivers "nonnavigable".

[11] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In determining whether river is "navigable," presence of sandbars must be considered with other factors.

[12] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

Navigability is to be determined by the facts of each case.

[13] **Navigable Waters 36(1)**
270k36(1) Most Cited Cases

United States cannot, without state's consent, divest state of title to beds of rivers state acquired.

[14] **Navigable Waters 1(7)**
270k1(7) Most Cited Cases

Evidence held to justify findings that certain sections, within Utah, of Green, Grand (now Colorado), and Colorado rivers were navigable when state was admitted to Union; hence title to beds vested in Utah.

[15] **Navigable Waters 1(7)**
270k1(7) Most Cited Cases

Evidence held not to sustain finding of non-navigability of four miles, and fraction, of Colorado river, south from confluence of Green river with Grand, now Colorado, river.

[16] **Federal Courts 442.1**
170Bk442.1 Most Cited Cases
(Formerly 170Bk442, 106k379)

Decree determining respective titles of United States and state in river beds would not prevent former from protecting navigability of navigable waters of United States.

[17] **Federal Courts 442.1**
170Bk442.1 Most Cited Cases
(Formerly 170Bk442, 106k379)

In decree determining respective titles of United States and state in river beds, provision preserving United States' right to protect navigability of navigable waters of United States may be properly included.

****439 *66** The Attorney General and Mr. Charles M. Blackmar, of Kansas City, Mo., for the United States.

***69** Messrs. P. T. Farnsworth, Jr., and Waldemar Van Cott, both of Salt Lake City, Utah, for the State of Utah.

***71** Mr. Chief Justice HUGHES delivered the opinion of the Court.

The United States brought this suit to quiet its title to certain portions of the beds of the Green, Colorado, and San Juan rivers within the state of Utah, as follows:

The Green river, from a point where the river crosses the line between townships 23 and 24 south, range 17 east, Salt Lake base and meridian (approximately he mouth of the San Rafael river) down to the confluence of the Green river with the Colorado river, 95 miles.

The Colorado river from the mouth of Castle creek (about 14 miles above the town of Moab) to the boundary line between Utah and Arizona, 296 miles (including the portion of the Colorado river above the mouth of the Green river which had formerly been known as the Grand river).

The San Juan river from the mouth of Chinle creek (5 miles below the town of Bluff) to its confluence with the Colorado river, 133 miles.

The complaint alleges that by the Guadalupe-Hidalgo Treaty of February 2, 1848, [FN1] the United States acquired ***72** from the Republic of Mexico the title to all the lands riparian to these rivers, together with the river beds, within the state of Utah, and that the United States remains the owner of these lands, with certain stated exceptions of lands granted by it; that the Green, Colorado, and San Juan rivers throughout their entire length within the state of Utah are not, and never have been, navigable, and that they have not been used, nor are they susceptible of being used, in their natural and ordinary condition as permanent highways or channels for useful commerce within the state of Utah or between states or with any foreign nation; that the United States, as proprietor, has executed and delivered numerous prospecting permits covering portions of the river beds in question, giving to the permittees the exclusive right of prospecting for petroleum, oil, and gas minerals, and that the permittees have entered upon development work; that the state of Utah claims title adverse to the United States in these river beds, asserting that the rivers always have been and are navigable, and that title to the river beds vested in the state when it was admitted to the Union; and that Utah, without the consent or authority of the United States, has executed and delivered numerous oil and gas leases covering portions of these river beds and purporting to give exclusive rights and privileges. The United States asks that the claim of Utah to any right, title, or interest in the river beds in question be adjudged to be null and void, that it be determined

that the United States has full and exclusive title thereto, and that injunction issue accordingly.

FN1 9 Stat. 922.

By its answer, Utah denies ownership by the United States of the river beds described in the complaint and sets up title in the state, alleging the navigability of the rivers.

The Court referred the case to Charles Warren as special master to take the evidence and to report it with his findings of fact, conclusions of law, and recommendations for decree. Hearings have been had before the master, voluminous evidence has been received, and the master ***73** has filed his report. The report gives a comprehensive statement of the facts adduced with respect to the topography of the rivers, their history, ****440** impediments to navigation,and the use, and susceptibility to use, of the rivers as highways of commerce.

A distinction in descriptive terms should be noted. When Utah became a state, the Grand river, rising in Colorado and flowing through that state and within Utah to the junction with the Green river, was designated on all government maps and reports as separate from the Colorado river, and the name Colorado river was applied only to the river formed by the confluence of the Green river and the Grand river. The Congress, by the Act of July 25, 1921, [FN2] provided that the river theretofore known as the Grand river, from its source in Colorado to the point where it joined the Green river in Utah and formed the Colorado river, should thereafter be designated as the Colorado river. Considering that this act had no retroactive effect, and as it expressly provided that the change in name should not affect the rights of Colorado and Utah, the master has followed in his report the earlier designations and thus has dealt with four rivers, the beds of which are in question, instead of three; that is, the Green river, the Grand river, the Colorado river (below the junction of the Green and Grand) and the San Juan river.

FN2 42 Stat. 146.

The master has made his findings as to navigability as of January 4, 1896, the date of the admission of Utah to the Union. [FN3] The master finds that at that time the following streams in question were navigable waters of Utah: The Green river, from a point where the river crossed the township line between townships 23 and 24 south, range 17 east, Salt Lake base and meridian down to its confluence with the Grand river (about 95 miles); the Grand river, from the mouth of Castle creek down to the confluence of the Grand river with the Green ***74** river (about 79 miles); and the Colorado river, from Mile 176 above Lees Ferry south to the Utah-Arizona boundary (about 150 miles); and that the following streams were nonnavigable waters of Utah: The Colorado river, south from the confluence of the Green and the Grand rivers down to the end of Cataract Canyon at Mile 176 above Lees Ferry (about 40 miles); and the San Juan river from the mouth of Chinle creek at Mile 133 above the confluence of the San Juan river and the Colorado river down to the mouth of San Juan river.

FN3 29 Stat. 876.

On these findings, the master has concluded that the title to the beds of the rivers, where the rivers were found to be navigable as above stated, was in the state of Utah, and, where the rivers were found to be nonnavigable, was in the United States. Accordingly, the master has recommended that the Court enter a decree dismissing the complaint so far as it relates to the bed of the Green river to that portion of the bed of the Colorado river which in 1896 constituted the Grand river, and to that portion of the bed of the Colorado river from Mile 176 above Lees Ferry south to the Utah-Arizona boundary; and that the Court decree that the title to the bed of the Colorado river, from the confluence of the Green river with the Grand river down to the end of Cataract Canyon at Mile 176 above Lees Ferry, and to the bed of the San Juan river, was vested in the United States on January 4, 1896 (except so far as theretofore granted by the United States), and that Utah be enjoined from asserting title or interest therein.

Both parties have filed exceptions to the master's report.

Neither party excepts to the finding and conclusion with respect to the nonnavigability of the San Juan river, or of the Colorado river from the first rapid or cataract at Mile 212.15 above Lees Ferry down to the end of Cataract Canyon at Mile 176 above Lees Ferry.

The United States has a large number of exceptions to the findings and conclusions of the masteras to the navigability ***75** of the Green river, and of the Grand river down to its junction with the Green river, and of the Colorado river from Mile 176 above Lees Ferry to the Utah-Arizona boundary.

Utah excepts to the findings and conclusion of the master as to the nonnavigability of the Colorado river from the confluence of the Green river and the Grand river at Mile 216.5 above Lees Ferry down to the first rapid or cataract at Mile 212.15 above Lees Ferry.

[1][2][3][4] The controversy is with respect to certain facts, and the sufficiency of the basis of fact for a finding of navigability, rather than in relation to the general principles of law that are applicable. In accordance with the constitutional principle of the equality of states, the title to the beds of rivers within Utah passed to that state when it was admitted to the Union, if the rivers were then navigable; and, if they were not then navigable, the title to the river beds remained in the United States. [FN4] The question of navigability ****441** is thus determinative of the controversy, and that is a federal question. This is so, although it is undisputed that none of the portions of the rivers under consideration constitute navigable waters of the United States, that is, they are not navigable in interstate or foreign commerce, and the question is whether they are navigable waters of the State of Utah. [FN5] State laws [FN6] cannot affect titles vested in the United States. [FN7]

FN4 Shively v. Bowlby, 152 U. S. 1, 26, 27, 14 S. Ct. 548, 38 L. Ed. 331; Scott v. Lattig, 227 U. S. 229, 242, 243, 33 S. Ct. 242, 57 L. Ed. 490, 44 L. R. A. (N. S.) 107; Donnelly v. United States, 228 U. S. 243, 260, 33 S. Ct. 449, 57 L. Ed. 820, Ann. Cas. 1913E, 710; Oklahoma v. Texas, 258 U. S. 574, 583, 42 S. Ct. 406, 66 L. Ed. 771; United States v. Holt State Bank, 270 U. S. 49, 55, 46 S. Ct. 197, 70 L. Ed. 465; Massachusetts v. New York, 271 U. S. 65, 89, 46 S. Ct. 357, 70 L. Ed. 838.

FN5 See The Daniel Ball, 10 Wall. 557, 563, 19 L. Ed. 999; The Montello, 11 Wall. 411, 415, 20 L. Ed. 191.

FN6 In 1927, the Utah Legislature passed an act declaring 'the Colorado River in Utah and the Green River in Utah' to be navigable streams. Laws of Utah, 1927, c. 9, p. 8.

FN7 Brewer-Elliott Oil & Gas Company v. United States, 260 U. S. 77, 87, 43 S. Ct. 60, 67 L. Ed. 140; United States v. Holt State Bank, 270 U. S. 49, 55, 56, 46 S. Ct. 197, 70 L. Ed. 465.

***76** The test of navigability has frequently been stated by this Court. In The Daniel Ball, 10 Wall. 557, 563, 19 L. Ed. 999, the Court said: 'Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.' In The Montello, 20 Wall. 430, 441, 442, 22 L. Ed. 391, it was pointed out that 'the true test of the navigability of a stream does not depend on the mode by which commerce is, or may be, conducted, nor the difficulties attending navigation,' and that 'it would be a narrow rule to hold that in this country, unless a river was capable of being navigated by steam or sail vessels, it could not be treated as a public highway.' The principles thus laid down have recently been restated in United States v. Holt State Bank, 270 U. S. 49, 56, 46 S. Ct. 197, 199, 70 L. Ed. 465, where the Court said:

> 'The rule long since approved by this court in applying the Constitution and laws of the United States is that streams or lakes which are navigable in fact must be regarded as navigable in law; that they are navigable in fact when they are used, or are susceptible of being used, in their natural and ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water; and further that navigability does not depend on the particular mode in which such use is or may be had-whether by steamboats, sailing vessels or flatboats-nor on an absence of occasional difficulties in navigation, but on the fact, if it be a fact, that the stream in its natural and ordinary condition affords a channel for useful commerce.' [FN8]

FN8 See, also, Packer v. Bird, 137 U. S. 661, 667, 11 S. Ct. 210, 34 L. Ed. 819; St. Anthony Falls Water Power Co. v. Board of Water Commissioners, 168 U. S. 349, 359,

18 S. Ct. 157, 42 L. Ed. 497; United States v. Rio Grande Dam & Irrigation Co., 174 U. S. 690, 698, 19 S. Ct. 770, 43 L. Ed. 1136; Leovy v. United States, 177 U. S. 621, 627, 20 S. Ct. 797, 44 L. Ed. 914; Donnelly v. United States, 228 U. S. 243, 260, 33 S. Ct. 449, 57 L. Ed. 820, Ann. Cas. 1913E, 710; Id., 228 U. S. 708, 709, 33 S. Ct. 1024, 57 L. Ed. 1035; United States v. Cress, 243 U. S. 316, 321, 37 S. Ct. 380, 61 L. Ed. 746; Economy Light & Power Co. v. United States, 256 U. S. 113, 122, 123, 41 S. Ct. 409, 65 L. Ed. 847; Oklahoma v. Texas, supra; Brewer-Elliott Oil & Gas Co. v. United States, supra.

*77 In the present instance, the controversy relates only to the sections of the rivers which are described in the complaint, and the master has limited his findings and conclusions as to navigability accordingly. The propriety of this course, in view of the physical characteristics of the streams, is apparent. Even where the navigability of a river, speaking generally, is a matter of common knowledge, and hence one of which judicial notice may be taken, it may yet be a question, to be determined upon evidence, how far navigability extends. [FN9] The question here is not with respect to a short interruption of navigability in a stream otherwise navigable, [FN10] or of a negligible part, which boats may use, of a stream otherwise nonnavigable. We are concerned with long reaches with particular characteristics of navigability or nonnavigability, which the master's report fully describes.

FN9 United States v. Rio Grande Dam & Irrigation Co., 174 U. S. 690, 698, 19 S. Ct. 770, 43 L. Ed. 1136.

FN10 St. Anthony Falls Water Power Co. v. St. Paul Water Commissioners, supra; Economy Light & Power Co. v. United States, supra.

The Green river has its source in the mountains of Western Wyoming and has a total length of about 700 miles. After passing through a series of canyons, the rock walls of which are of great height, it enters the Green River valley in which the town of Green River, Utah, is situated, about 117 miles above the river's mouth. The drop in elevation between the town of Green River, Wyo., and Green River, Utah, is from 6,067 to 4,046 feet-2,021 feet in 387 miles causing many difficult and dangerous rapids. For the first 23 miles below the town of Green River, Utah, to the point where the San Rafael river enters from the west, the country is more or less open. From *78 the mouth of the San Rafael river (approximately the beginning of the section to which the controversy relates) to the junction of the Green and Grand rivers, there is a very gradual slope, there being a drop of 111 feet in the 94 miles. In this section the river flows through Labyrinth and Stillwater Canyons, the rock walls of which in many places rise almost vertically **442 from the water's edge, and in other places are over a thousand feet apart, with heights of 600 to 1,300 feet. The average width of the river is from 500 to 700 feet. In four or five places there are bottom lands along the side in the canyons. The course of the river is tortuous; the distance (in this section) in a straight line being less than one-half that by the river. The government maintains gauging stations to measure the depth, the velocity, and the amount of discharge of water. On the Green river the gauge was located at or near the town of Green River, Utah. From these measurements the master finds that the depth of the Green river ranged from between 1 1/2 and 3 feet for 53 days in the year to between 7 and 12 feet for 60 days, and that for 312 days in the year there was a depth of 3 feet or over. For 290 days in the year there was a discharge of over 2,000 cubic feet per second, and, for 149 days, of over 4,200 cubic feet per second.

The Grand river rises in North-Central Colorado and flows to its junction with the Green river in Utah, approximately about 423 miles. Its course is through a succession of long, narrow, fertile valleys, alternating with deep canyons, with walls, in places, of over 2,000 feet in height. There are many difficult and dangerous rapids. The total drop from Grand Junction, Colo., to Castle Creek, Utah (where the section in controversy begins), is from 4,552 feet in elevation to 3,993 feet, a drop of 559 feet in 94 miles. From Castle Creek to the town of Moab, 14 miles, the slope averages 3.5 feet per mile, and there are slight rapids or riffles and rocks in the stream. At *79 Moab there is an open valley, leaving which the Grand river flows 65 1/2 miles largely through rock canyons having walls 600 to 2,100 feet in height. The course of the Grand river in this section is slightly more tortuous than that of the Green river; the width of the river averages about 500 feet and the slope below Moab is only a little over 1 foot per mile. The government's gauge was located at Cisco, about 17

miles above Castle Creek. From readings at that point, the master finds that the depths of the river vary from 2.9 to 3 feet for 16 days in the year to over 7 feet for 61 days, and that for 349 days in the year there is a depth of 3 feet or over. There is a discharge of over 2,000 cubic feet per second for 351 days in the year, and for 169 days of over 4,200 cubic feet per second.

The master finds that on the Grand river, in the 79 miles between Castle Creek and the junction with the Green river, there is a stretch of about three miles out of the first 14 miles between Castle Creek and Moab Bridge in which there are three small rapids, and that, in this stretch, the river is less susceptible of practical navigation for commercial purposes than in the remainder of the river. But the master finds that, even in this 3-mile stretch, the river is susceptible of being used for the transportation of lumber rafts, and that there has been in the past considerable use of the river for that purpose.

The Colorado river, that is, treating the river as beginning at the junction of the Green and Grand rivers, flows southwesterly and finally reaches the Gulf of California. The distance from the confluence of the Green and Grand rivers in Utah to the Utah-Arizona boundary is about 189 miles; the boundary being about 27 miles above the point known as Lees Ferry in Arizona. The table of distances gives the junction of the Green and the Grand rivers as being 216.5 miles above Lees Ferry. The master finds that the Colorado river is nonnavigable from this junction down to the end of Cataract Canyon at Mile ***80** 176 above Lees Ferry. The state of Utah contests the finding of the master with respect to the first 4.35 miles of this stretch of the river; that is, to a point 212.15 miles above Lees Ferry (a question to which we shall return in dealing with Utah's exceptions), where it is said that the first rapid or cataract of Cataract Canyon begins. But there is no controversy as to the nonnavigability of the stream from this point through Cataract Canyon down to Mile 176 above Lees Ferry. Through this canyon, with rock walls from 1,500 to 2,700 feet in height, the river has a rapid descent or slope of about 399 feet, a drop of 11 feet per mile, with a long series of high and dangerous rapids.

The master's finding of navigability relates to the section of the river from Cataract Canyon to the Utah-Arizona boundary. At the end of Cataract Canyon (the end of the portion of it known as Dark Canyon), the country becomes more open, the river somewhat wider, and the canyon walls not over 600 feet in height, this stretch being known as Glen Canyon. Two rivers enter from the west, the Fremont and the Escalante, and one from the east, the San Juan. As the Colorado river approaches the Utah-Arizona boundary, the canyon walls increase in height and average 1,300 to 1,600 feet. There are various points at which bottom lands are cultivated in the river beds. The width of the river averages from 600 to 700 feet. Its slope through this section is gentle, being less than 2 feet per mile. As to the 90 miles of Glen Canyon, that is, from Mile 176 above Lees Ferry to the mouth of the San Juan river, the master states that there are no gauging station figures of any discharge, flow, and depth which are applicable, but the master finds that, as the waters of the Green and the Grand rivers join and form the Colorado river, there must be a discharge of water in the Glen Canyon stretch equal to the combined discharge of the other two rivers, and hence at ***81** all times ****443** sufficient water for navigation so far as discharge alone is concerned. As to depth, the master finds that the Colorado river in this stretch should have a depth at least equal to that of the Green or the Grand river. Between the mouth of the San Juan river and the Utah-Arizona boundary, figures were obtained from the Lees Ferry gauging station from which it appears that the average depths range from between 3 and 4 feet for 17 days in the year to over 8 feet for 124 days in the year, and that the discharge varies from less than 4,000 cubic feet per second for 13 days in the year to over 6,000 feet per second for 352 days in the year.

[5] The question thus comes to the use, and the susceptibility to use, for commerce of the sections of these rivers which the master has found to be navigable.

The United States, in support of its exceptions, stresses the absence of historical data showing the early navigation of these waters by Indians, fur traders, and early explorers, that is, uses of the sort to which this Court has had occasion to refer in considering the navigability of certain other streams. [FN11] The master has made an elaborate review of the history of the rivers from the year 1540 to 1869, and reaches the conclusion that neither 'the limited historical facts put in evidence by the Government or the more comprehensive investigation into the history of these regions' tends to support the contention that the nonuse of these rivers in this historical period 'is weighty evidence that they were non-navigable in 1896 in fact and in law.' The master points out that the nonsettlement of Eastern Utah in these years, the fact that none of the trails to Western Utah or to

California were usable to advantage in connection with these rivers, and many other facts, are to be considered in connection with that of nonuse.

FN11 E. g., The Montello, supra; Economy Light & Power Co. v. United States, supra.

***82** Coming to the later period, that is, since 1869, the master has set forth with much detail the actual navigation of the rivers with full description of the size and character of boats, and the circumstances of use. It appears that navigation began in 1869 with the expedition of Major John W. Powell down the Green and the Colorado rivers, and this was followed by his second trip in 1871. It is said that there were no further attempts at navigation for 17 years. There was a survey by Robert Brewster Stanton in 1889, and in the succeeding years there were a large number of enterprises, with boats of various sorts, including rowboats, flatboats, steamboats, motorboats, barges and scows, some being used for exploration, some for pleasure, some to carry passengers and supplies, and others in connection with prospecting, surveying, and mining operations. Much of this evidence as to actual navigation relates to the period after 1896, but the evidence was properly received and is reviewed by the master as being relevant upon the issue of the susceptibility of the rivers to use as highways of commerce at the time Utah was admitted to the Union.

[6][7] The question of that susceptibility in the ordinary condition of the rivers, rather than of the mere manner or extent of actual use, is the crucial question. The government insists that the uses of the rivers have been more of a private nature than of a public, commercial sort. But, assuming this to be the fact, it cannot be regarded as controlling when the rivers are shown to be capable of commercial use. The extent of existing commerce is not the test. The evidence of the actual use of streams, and especially of extensive and continued use for commercial purposes may be most persuasive, but, where conditions of exploration and settlement explain the infrequency or limited nature of such use, the susceptibility to use as a highway of commerce may still be satisfactorily proved. As the Court said, in Packer v. Bird, 137 U. S. 661, 667, 11 S. Ct. 210, 211, 34 L. Ed. 819: 'It ***83** is, indeed, the susceptibility to use as highways of commerce which gives sanction to the public right of control over navigation upon them, and consequently to the exclusion of private ownership, either of the waters or the soils under them.' In Economy Light & Power Company v. United States, 256 U. S. 113, 122, 123, 41 S. Ct. 409, 412, 65 L. Ed. 847, the Court quoted with approval the statement in The Montello, supra, that 'the capability of use by the public for purposes of transportation and commerce affords the true criterion of the navigability of a river, rather than the extent and manner of that use.'

[8][9] It is true that the region through which the rivers flow is sparsely settled. The towns of Green River and Moab are small, and otherwise the county in the vicinity of the streams has but few inhabitants. In view of past conditions, the government urges that the consideration of future commerce is too speculative to be entertained. Rather is it true that, as the title of a state depends upon the issue, the possibilities of growth and future profitable use are not to be ignored. Utah, with its equality of right as a state of the Union, is not to be denied title to the beds of such of its rivers as were navigable in fact at the time of the admission of the state either because the location of the rivers and the circumstances of the exploration and settlement of the country through which they flowed had made recourse to navigation a late adventure or because ****444** commercial utilization on a large scale awaits future demands. The question remains one of fact as to the capacity of the rivers in their ordinary condition to meet the needs of commerce as these may arise in connection with the growth of the population, the multiplication of activities, and the development of natural resources. And this capacity may be shown by physical characteristics and experimentation as well as by the uses to which the streams have been put.

***84** The controversy as to navigability is largely with respect to impediments to navigation in the portions of the rivers found by the master to be navigable, and as to these impediments there is much testimony and a sharp conflict in inferences and argument. The government describes these impediments as being logs and debris, ice, floods, rapids, and riffles in certain parts, rapid velocities with sudden changes in the water level, sand and sediment which, combined with the tortuous course of the rivers, produce a succession of shifting sand bars, shallow depths, and instability of channel.

The master states that, while there is testimony that in floods and periods of high water these rivers carry a considerable quantity of logs and driftwood, the evidence as to actual trips made by witnesses discloses little danger thereby incurred except in the case of paddle-wheel boats. The master's finding,

which the evidence supports, is that this condition does not constitute a serious obstacle to navigation. With respect to ice, it is sufficient to say, as the master finds, that ice periods on these rivers do not prevail in every winter, and that they are shorter than on most of the rivers in the Northern and Northeastern States of the country. As to floods, it appears that there are months of extreme high water caused by the melting of snows in the mountains and also local floods of short duration caused by rainstorms. From the testimony of the witnesses who have actually boated on these rivers, the master is unable to find that this element of variation in flow, or of rapidity of variation, has constituted any marked impediment to the operation of boats except possibly in one or two instances. In relation to rapids, riffles, rapid water, and velocity of current, the master uses the classifications of an engineer presented by the government, and finds that in the portions of the Green river involved in this suit there are no rapids, riffles, or rapid water, and that the slope of the bed is only a little over *85 one foot per mile; that there is a stretch on the Grand river (above Moab Bridge) where there are three small rapids, already mentioned, and also 2 1/2 miles of rapid water, but that this is a stretch of only six miles in all, and is not characteristic of the whole section of the Grand river here in controversy. It appears that, neither the current nor the velocity of the Green and Grand rivers impede navigation to any great extent except in the days of extreme or sudden flood, and that motorboats of proper construction, power, and draft can navigate upstream without trouble, so far as current or velocity alone is concerned. The slope of the section of the Colorado river which the master has found to be navigable is for the most part slight, as already stated; there are four drops in elevation which may be called small rapids, but it appears that these do not ordinarily make necessary any portage of boat or cargo.

[10][11] The principal impediment to navigation is found is shifting sandbars. As the rivers carry large amounts of fine silt, sandbars of various types are formed. The master's report deals with this matter at length. Referring to the Green and the Grand rivers, the master states that the most constant type of sandbar forms on the sides of the rivers on the convex curves or inside of the bends; that changes in discharge and in velocity, and floods caused by sudden heavy rains, may affect the size, shape, and height of these side sandbars, but, in general, after the spring high water has receded, these sandbars have constant and fixed locations. There is a second type of bar which forms at the mouth of tributary streams, creeks, or washes, usually at times of sudden floods caused by heavy summer rains, and these generally are of short duration. A third type consists of what is termed 'crossing bars' which are formed below the places where the rivers cross from one side to the other in following the curves or bends; wherever these crossing bars occur, there *86 is generally more or less difficulty in ascertaining the course of the channel, as the stream may divide into several channels, or it may distribute itself over the full length of the bar so as greatly to lessen the depth of the water from that prevailing in the well-defined channels which follow the bends. There are frequent and sudden variations in these bars resulting in changes in the course of the channel. The bed of the Colorado river above the mouth of the San Juan is found to be more gravelly than that of the Green and Grand rivers. There are, however, long high side bars of sand and gravel on which placer mining has been done and also a few sandbars or bottoms which have been cultivated. Crossing bars, occur, but not as frequently as on the Green and Grand rivers, and they cause less trouble. After the recession of the water at the end of the high-water season, the channel remains more or less stable during the rest of the year, although there are temporary changes. In general, the channel is less shifting than on the Green and Grand rivers, and the river is less tortuous.

**445 Recognizing the difficulties which are thus created, the masteris plainly right in his conclusion that the mere fact of the presence of such sandbars causing impediments to navigation does not make a river nonnavigable. It is sufficient to refer to the well-known conditions on the Missouri river and the Mississippi river. The presence of sandbars must be taken in connection with other factors making for navigability. In The Montello, supra, the Court said: 'Indeed, there are but few of our fresh-water rivers which did not originally present serious obstructions to an uninterrupted navigation. In some cases, like the Fox River, they may be so great while they last as to prevent the use of the best instrumentalities for carrying on commerce, but the vital and essential point is whether the natural navigation of the river is such that it affords a channel for useful commerce. If this be so the river is navigable in fact, although its navigation may be encompassed with difficulties *87 by reason of natural barriers, such as rapids and sandbars.'

[12] The government invites a comparison with the conditions found to exist on the Rio Grande river in New Mexico, and the Red river and the Arkansas river, above the mouth of the Grand river, in

Oklahoma, which were held to be nonnavigable, but the comparison does not aid the government's contention. Each determination as to navigability must stand on its own facts. In each of the cases to which the government refers, it was found that the use of the stream for purposes of transportation was exceptional, being practicable only in times of temporary highwater. [FN12] In the present instance, with respect to each of the sections of the rivers found to be navigable, the master has determined upon adequate evidence that 'its susceptibility of use as a highway for commerce was not confined to exceptional conditions or short periods of temporary high water, but that during at least nine months of each year the river ordinarily was susceptible of such use as a highway for commerce.'

FN12 In the case of the Rio Grande in New Mexico, the Court said (United States v. Rio Grande Dam & Irrigation Co., 174 U. S. 690, 699, 19 S. Ct. 770, 773, 43 L. Ed. 1136): 'Its use for any purposes of transportation has been and is exceptional, and only in times of temporary high water. The ordinary flow of water is insufficient. It is not like the Fox river, which was considered in The Montello, in which was an abundant flow of water and a general capacity for navigation along its entire length, and, although it was obstructed at certain places by rapids and rocks, yet these difficulties could be overcome by canals and locks, and when so overcome would leave the stream, in its ordinary condition, susceptible of use for general navigation purposes.' In Oklahoma v. Texas, 258 U. S. 574, 587, 42 S. Ct. 406, 411, 66 L. Ed. 771, the Court, describing the Red river in the western part of Oklahoma, said that 'only for short intervals, when the rainfall is running off, are the volume and depth of the water such that even very small boats could be operated therein. * * * The rises usually last from 1 to 7 days and in the aggregate seldom cover as much as 40 days in the year'; and, in relation to the eastern part of the river, it was found (Id., page 591 of 258 U. S., 42 S. Ct. 406, 413) that 'its characteristics are such that its use for transportation has been and must be exceptional, and confined to the irregular and short periods of temporary highwater.' In Brewer-Elliott Oil & Gas Co. v. United States, 260 U. S. 77, 86, 43 S. Ct. 60, 67 L. Ed. 140, the Court accepted the findings of the two courts below as to the nonnavigability of the Arkansas river above the mouth of the Grand river in Oklahoma, and the District Court, to whose findings the Circuit Court of Appeals referred, had said that 'The use of that portion of the river for transportation boats has been exceptional and necessarily on high water, was found impractical, and was abandoned. The rafting of logs or freight has been attended with difficulties precluding utility. There was no practical susceptibility to use as a highway of trade or travel.' Id. (D. C.) 249 F. 609, 623; Id. (C. C. A.) 270 F. 100, 103.

***88** [13] The government invokes an Executive Order of May 17, 1884, withdrawing lands from sale and settlement in order to provide a reservation for Indian purposes in Utah, in which the boundary of the reservation wad described as running 'up and along the middle of the channel' of the Colorado and San Juan rivers. This is said to have included the Colorado river from the Utah-Arizona boundary to the mouth of the San Juan river. This Executive Order was revoked by another Executive Order of November 19, 1892, so far as it affected lands west of the 110th degree of west longitude and within the Territory of Utah, thus excluding the lands in question along the Colorado river. The earlier Executive Order did not constitute a grant such as that which was under consideration in Brewer-Elliott Oil & Gas Company v. United States, 260 U. S. 77, 80, 85, 43 S. Ct. 60, 67 L. Ed. 140, and it does not appear that the question of the navigability of the rivers was considered when that order was made. The government also refers to proceedings since Utah became a state, with respect to governmental investigations, operations under placer claims, and withdrawals for power and reservoir sites. It is not necessary to review these transactions in detail, as nothing that has been done alters the essential facts with respect to the navigability of the streams, and the United States could ***89** not, without the consent of Utah, divest that state of title to the beds of the rivers which the state had acquired. Nor has Utah taken any action which could be deemed to estop the state from asserting title.

[14] We conclude that the findings of the master, so far as they relate to the sections of the Green, the Grand, and the Colorado rivers, found by him to be navigable, are justified by the evidence and that the title to the beds of these sections of the rivers vested

in Utah when that state was admitted to the Union. ****446** The exceptions of the government are overruled.

[15] The state of Utah excepts to the finding of the master as to nonnavigability so far as it relates to the first 4.35 miles of the stretch of the Colorado river south from the confluence of the Green river with the Grand river. In the master's report, this short stretch is included, without separate or particular characterization, in the section of the Colorado river found to be nonnavigable through Cataract Canyon to Mile 176 above Lees Ferry. Utah contends that the portion of the Colorado river immediately below the junction of the Green and the Grand rivers, at Mile 216.5 above Lees Ferry, does not differ in its characteristics, with respect to navigability, from these streams as they reach the point of confluence, save that there is more water and a slightly increased gradient, and that no difficulties in navigation appear until the first rapid in Cataract Canyon is reached at Mile 212.15 above Lees Ferry. In the classification made by the government engineer with respect to rapids and rapid water, to which reference has been made, 4.2 miles of this stretch (to Mile 212.3 above Lees Ferry) are described as quiet water, and the government has not called our attention to any facts which would substantially differentiate this portion of the Colorado river, immediately below the confluence of the Green and Grand rivers, from those parts of these rivers found by the master to be navigable. ***90** On the assumption that there is not basis for such a differentiation as to navigability in fact, the exception of Utah in this respect should be sustained. In this view, however, the exact point at which navigability may be deemed to end, in the approach to Cataract Canyon, should be determined precisely. This determination may be left, for the present, to the agreement of the parties, and, if they are unable to agree, they may submit their views in connection with the settlement of the decree.

[16][17] Utah also excepts to the recommendation of the master that the decree contain a proviso that the United States 'shall in no wise be prevented from taking any such action in relation to said rivers or any of them as may be necessary to protect and preserve the navigability of any navigable waters of the United States.' While a statement to that effect is not necessary, as the United States would have this authority in any event, the provision is not inappropriate in a decree determining the right, title, or interest of the United States and of Utah, respectively, in relation to the beds of the rivers in question, and its inclusion may avoid misapprehension of the effect of the decree. This exception and the remaining exception of Utah, which does not require separate examination, are overruled.

Decree will be entered dismissing the complaint of the United States so far as it relates to the beds of the portions of the Green, Grand, and Colorado rivers found to be navigable, as above stated, and adjudging that title to such beds was vested in Utah on January 4, 1896, except so far as the United States may theretofore have made grants thereof; and also adjudging that, on that date (except as to lands theretofore granted), title to the beds of the portion of the Colorado river and of the San Juan river, where there rivers are found to be nonnavigable, was vested in the United States. The decree shall also contain the proviso above mentioned. Each party will ***91** pay its own costs, one-half of the expenses incurred by the master, and one-half of the amount to be fixed by the Court as his compensation.

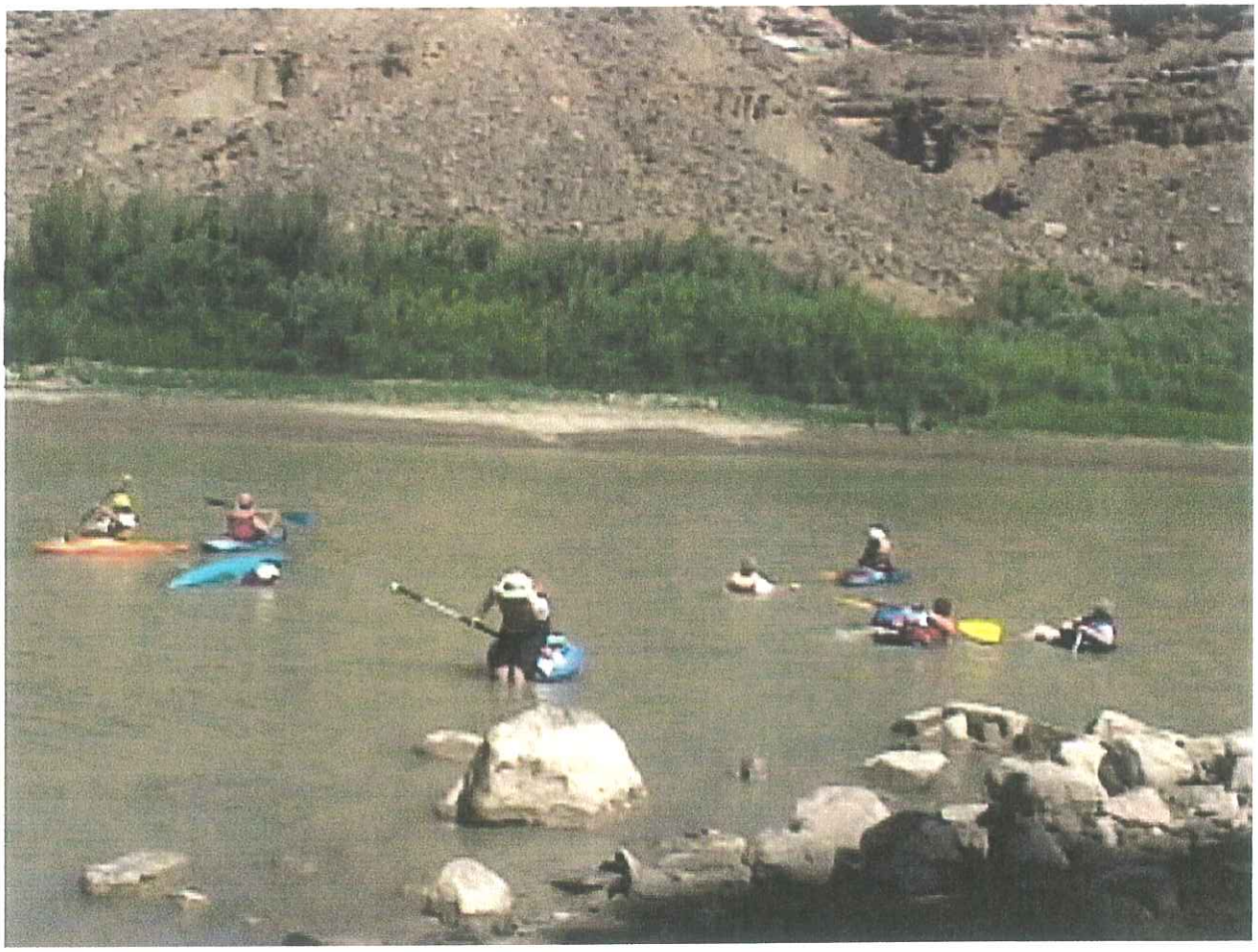
The government will prepare a form of decree in accordance with this decision, and furnish a copy to the state of Utah within 15 days; and, within 10 days after such submission, the draft decree, together with suggestions on behalf of the state of Utah, if any, will be submitted to the Court. [FN1]

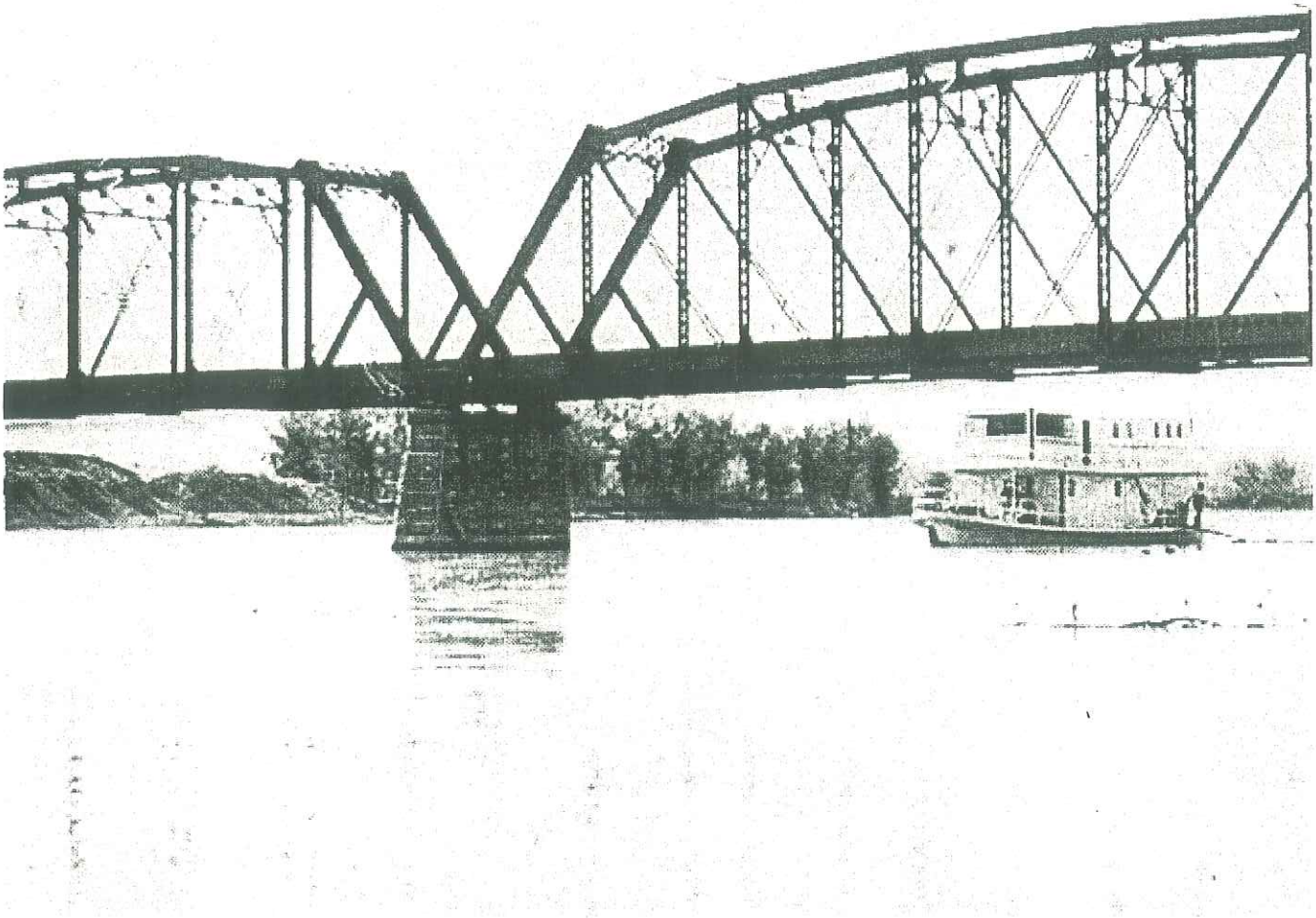
FN1 For decree, see 283 U. S. 801, 51 S. Ct. 497, 75 L. Ed. --.

51 S.Ct. 438, 283 U.S. 64, 75 L.Ed. 844

END OF DOCUMENT

ADDITIONAL INFORMATION





Water Resources

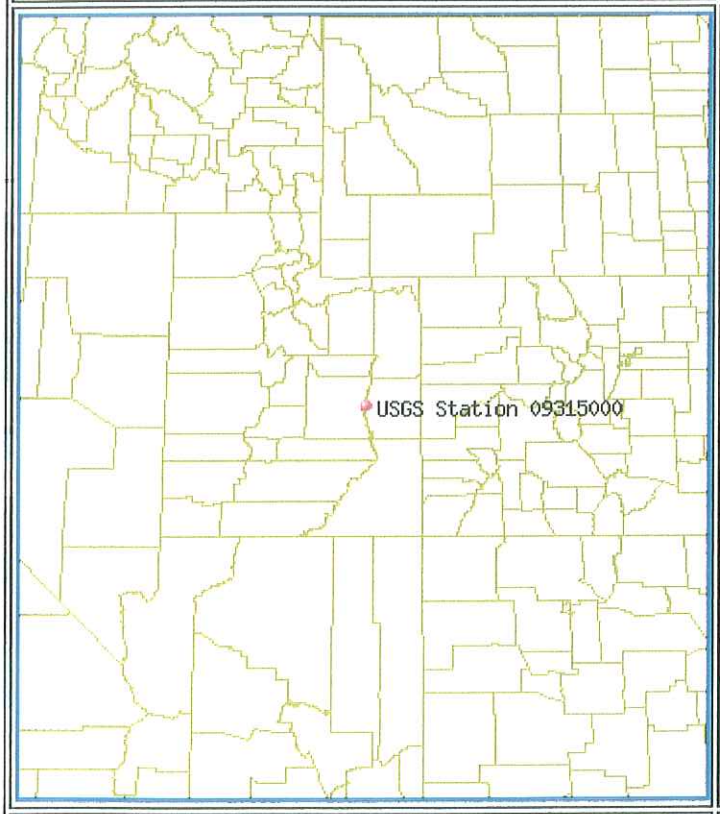
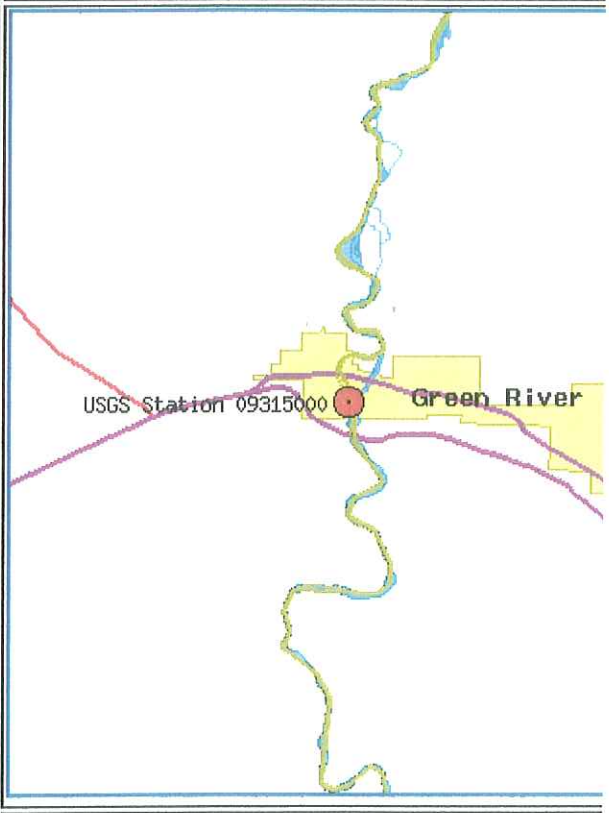
Data Category: Site Information | Geographic Area: Utah | GO

Site Map for Utah

USGS 09315000 GREEN RIVER AT GREEN RIVER, UT

Available data for this site: Station site map | GO

Emery County, Utah
Hydrologic Unit Code 14060008
Latitude 38°59'10", Longitude 110°09'02" NAD27
Drainage area 44,850.00 square miles
Gage datum 4,040.18 feet above sea level NGVD29

Location of the site in Utah.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov
Return to top of page

NWIS Site Inventory for Utah: Site Map

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Utah | GO

Calendar Year Streamflow Statistics for Utah

USGS 09315000 GREEN RIVER AT GREEN RIVER, UT

Available data for this site: Surface-water: Annual streamflow statistics | GO

Emery County, Utah
Hydrologic Unit Code 14060008
Latitude 38°59'10", Longitude 110°09'02" NAD27
Drainage area 44,850.00 square miles
Gage datum 4,040.18 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1895	6,012	1927	7,741	1952	9,245	1977	3,375
1896	5,582	1928	7,632	1953	4,604	1978	5,427
1897	8,265	1929	9,021	1954	3,643	1979	6,035
1898	4,921	1930	6,222	1955	3,856	1980	6,024
1906	8,809	1931	2,930	1956	5,538	1981	3,454
1907	12,190	1932	6,775	1957	8,021	1982	6,753
1908	5,812	1933	4,758	1958	5,818	1983	11,060
1909	11,990	1934	1,676	1959	3,983	1984	10,850
1910	6,422	1935	3,999	1960	3,945	1985	7,641
1911	5,810	1936	5,887	1961	3,129	1986	9,875
1912	8,567	1937	5,760	1962	7,735	1987	4,863
1913	7,417	1938	6,823	1963	2,177	1988	4,162
1914	9,760	1939	4,385	1964	4,466	1989	2,881
1915	5,031	1940	3,338	1965	7,198	1990	2,655
1916	7,995	1941	6,365	1966	4,097	1991	3,510
1917	11,600	1942	6,384	1967	5,839	1992	2,996
1918	7,029	1943	5,931	1968	6,322	1993	5,255
1919	4,182	1944	6,084	1969	6,937	1994	3,388
1920	8,378	1945	5,884	1970	5,503	1995	6,581
1921	9,885	1946	4,860	1971	5,966	1996	6,133

1922	8,612	**1947**	7,628	**1972**	5,760	**1997**	8,987
1923	8,979	**1948**	5,411	**1973**	7,173	**1998**	7,976
1924	4,901	**1949**	7,084	**1974**	6,091	**1999**	7,191
1925	6,061	**1950**	7,564	**1975**	6,820	**2000**	4,035
1926	5,625	**1951**	6,544	**1976**	5,325		

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov
Return to top of page

Surface Water data for Utah: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ut/nwis/annual/calendar_year?

Retrieved on 2003-03-06 09:20:53 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Utah
Privacy Statement || Disclaimer || Accessibility
0.75 0.69

USGS

Water Resources

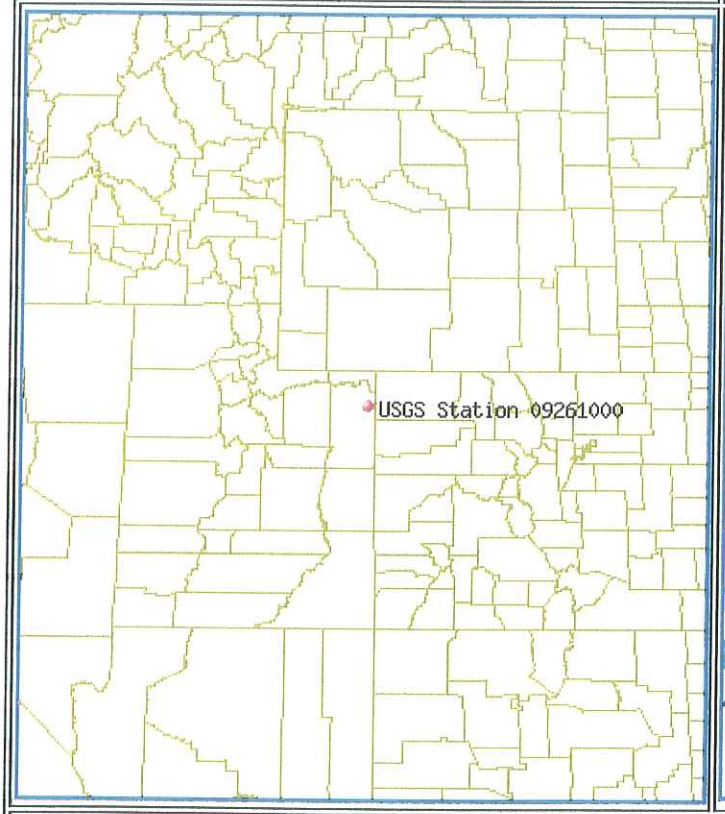
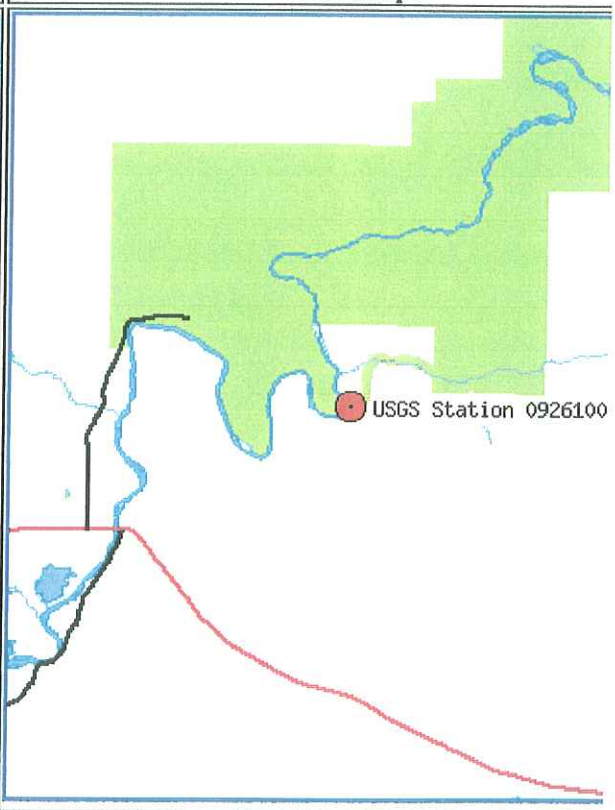
Data Category: Site Information | Geographic Area: Utah | GO

Site Map for Utah

USGS 09261000 GREEN RIVER NEAR JENSEN, UT

Available data for this site: Station site map | GO

Uintah County, Utah
Hydrologic Unit Code 14060001
Latitude 40°24'34", Longitude 109°14'05" NAD27
Drainage area 29,660.00 square miles
Contributing drainage area 25,400.0 square miles
Gage datum 4,758.00 feet above sea level NGVD29

Location of the site in Utah.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Utah | GO

Calendar Year Streamflow Statistics for Utah

USGS 09261000 GREEN RIVER NEAR JENSEN, UT

Available data for this site: Surface-water: Annual streamflow statistics | GO

Uintah County, Utah
Hydrologic Unit Code 14060001
Latitude 40°24'34", Longitude 109°14'05" NAD27
Drainage area 29,660.00 square miles
Contributing drainage area 25,400.0 square miles
Gage datum 4,758.00 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1947	5,646	1989	2,283	1995	4,805
1948	4,027	1990	2,277	1996	5,014
1949	4,885	1991	2,862	1997	6,643
1986	7,094	1992	2,453	1998	5,543
1987	3,391	1993	4,224	1999	5,554
1988	3,096	1994	2,933	2000	3,341

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Utah: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ut/nwis/annual/calendar_year?

Retrieved on 2003-03-06 09:19:29 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Utah
Privacy Statement || Disclaimer || Accessibility
0.66 0.63

Water Resources

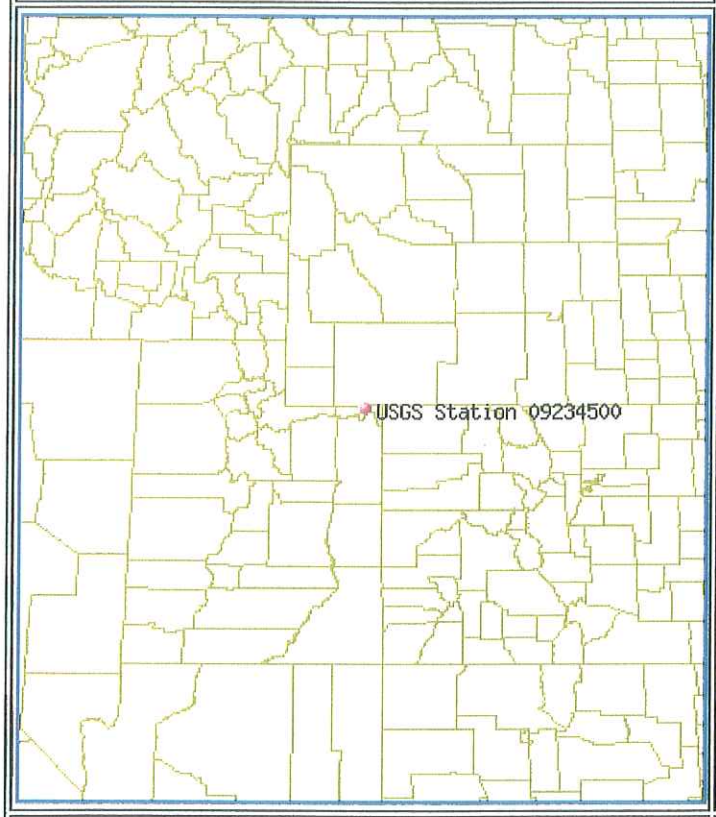
Data Category: Site Information | Geographic Area: Utah | GO

Site Map for Utah

USGS 09234500 GREEN RIVER NEAR GREENDALE, UT

Available data for this site: Station site map | GO

Daggett County, Utah
Hydrologic Unit Code 14040106
Latitude 40°54'30", Longitude 109°25'20" NAD27
Drainage area 19,350.00 square miles
Contributing drainage area 15,090.0 square miles
Gage datum 5,594.48 feet above sea level NGVD29

Location of the site in Utah.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Utah | GO

Calendar Year Streamflow Statistics for Utah

USGS 09234500 GREEN RIVER NEAR GREENDALE, UT

Available data for this site: Surface-water: Annual streamflow statistics | GO

Daggett County, Utah
Hydrologic Unit Code 14040106
Latitude 40°54'30", Longitude 109°25'20" NAD27
Drainage area 19,350.00 square miles
Contributing drainage area 15,090.0 square miles
Gage datum 5,594.48 feet above sea level NGVD29

Output formats

HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1951	3,217	1964	1,733	1977	2,255	1989	1,119
1952	2,943	1965	1,981	1978	1,520	1990	1,046
1953	1,763	1966	1,641	1979	1,901	1991	1,370
1954	1,719	1967	2,492	1980	1,569	1992	1,378
1955	1,407	1968	2,329	1981	1,412	1993	1,612
1956	2,597	1969	2,746	1982	2,232	1994	1,695
1957	2,773	1970	1,503	1983	4,189	1995	1,900
1958	1,811	1971	1,807	1984	3,477	1996	2,493
1959	1,641	1972	2,869	1985	2,391	1997	3,165
1960	1,339	1973	2,668	1986	3,817	1998	2,659
1961	1,077	1974	1,986	1987	1,928	1999	3,191
1962	2,791	1975	2,423	1988	1,385	2000	1,653
1963	235	1976	2,793				

Questions about data gs-w-ut_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ut_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Utah: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ut/nwis/annual/calendar_year?

Retrieved on 2003-03-06 09:18:10 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Utah

Ichauwaynochaway Creek—Georgia

Reported Decision: Givens v. Ichauway, Inc., 268 Ga. 710, 493 S. E. 2d 148 (Ga. 1997)

Reach at Issue: Unknown

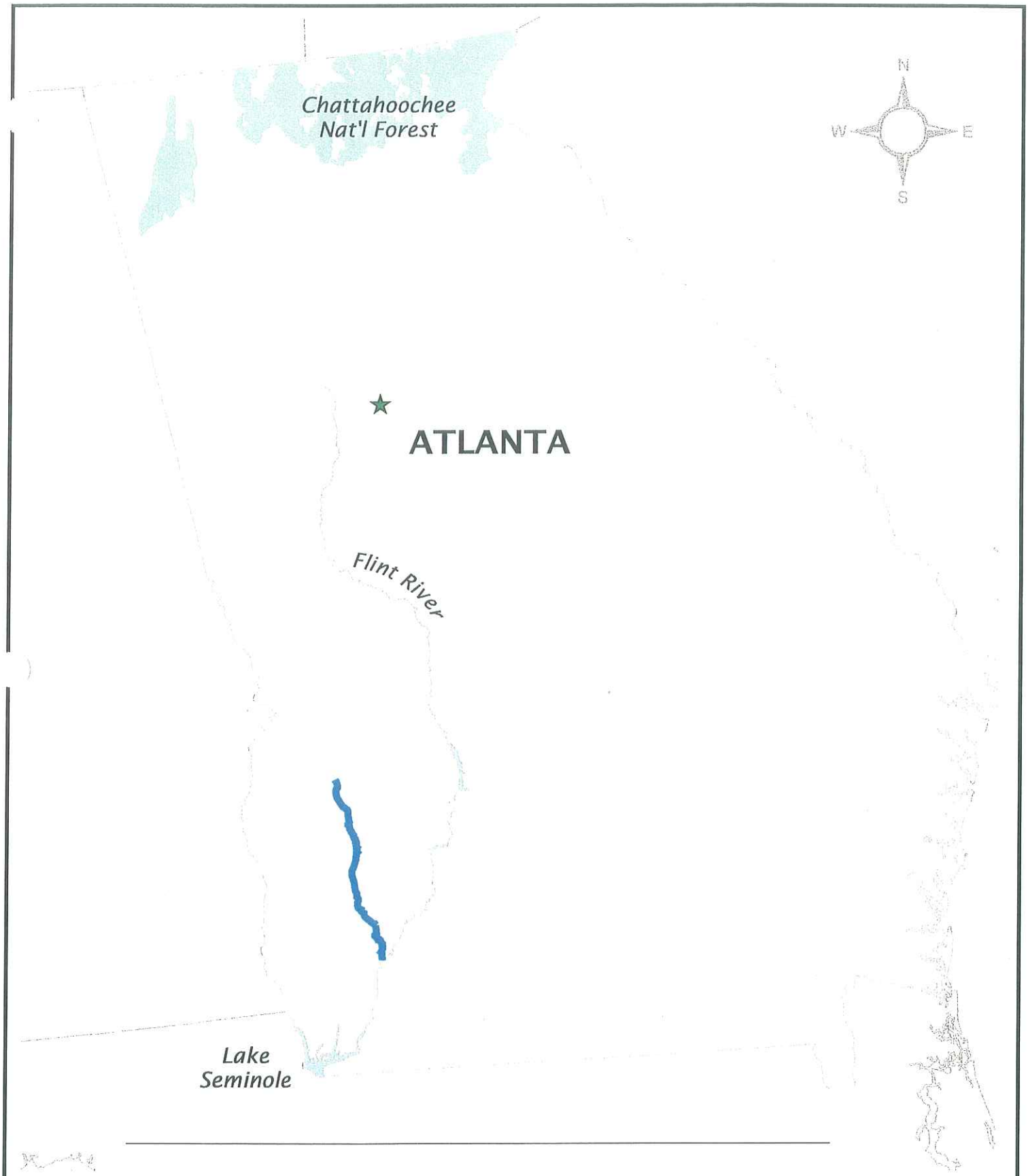
Judicial Determination: Non-navigable

Facts Reported in Decision:

"At one point on the stream a dam was installed some years ago to generate electricity. Although it is no longer used for that purpose, the dam remains and blocks the passage of boats." 493 S.E.2d at 150.

"In an attempt to show the creek is navigable, Givens floated through Ichauway's leasehold on a Styrofoam and wood raft that was four feet wide, sixteen feet long, and drew one foot of water. He loaded the raft with a goat, a bale of cotton, and two passengers, disassembling the raft and portaging around the dam. He argues the goat, cotton, and passengers were freight and his trip showed the creek was capable of use for transporting freight under OCGA § 44-8-5(a), despite the presence of the dam. OCGA § 44-8-5(a), however, requires that to be deemed navigable, a stream must support freight traffic 'in the regular course of trade.' Givens does not claim craft such as his are currently used in the regular course of trade but does contend the raft is representative of craft that were so used in the nineteenth century." 493 S.E.2d at 150-51.

"Not only was no admissible evidence presented to show historical navigation on the stream, none shows the stream to be navigable under current commercial standards. Unrebutted expert testimony showed that the smallest barge normally in use for commercial transport on the Flint River (into which the creek flows) is 245 feet long, 35 feet wide, and draws seven and one-half feet of water. Givens testified such a barge could be floated down the creek approximately thirty days of the year, but for the presence of the dam. However, his deposition discloses that he had no experience in commercial water transport, there is no foundation for his opinion, and he is not competent to testify as to these matters." 493 S.E.2d at 151.



Ichauwaynochaway Creek
Georgia

REPORTED DECISION

C

Supreme Court of Georgia.

GIVENS
v.
ICHAUWAY, INC.

No. S97A1074.

Nov. 24, 1997.

Tenant through whose leasehold creek flowed brought action against creek user to enjoin user from trespassing on creek. The Superior Court, Baker County, Willard H. Chason, J., granted summary judgment for tenant, and user appealed. The Supreme Court, Hines, J., held that: (1) user failed to present admissible evidence that creek was ever navigable under statutory definition; (2) nothing in case law imposed servitude of common passage on stream; (3) for public to acquire easement of passage on creek based on statute providing for implied dedication requires some acceptance by appropriate public authorities; (4) user failed to establish private easement arising by prescription; and (5) there was no evidence that tenant acted with malice or without probable cause in securing user's arrest, as required to support claim of malicious prosecution.

Affirmed.

Fletcher, P.J., filed dissenting opinion in which Hunstein, J., joined.

West Headnotes

[1] **Judgment** 181(15.1)
228k181(15.1) Most Cited Cases

Nothing precludes summary judgment in case involving injunction, even though it may be more efficient to await bench trial.

[2] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Creek user failed to present admissible evidence that creek was ever navigable under statutory definition, so as to entitle user to float down creek where it ran through leasehold, even though user was able to float through leasehold on styrofoam and wood raft that was four feet wide, sixteen feet long, and drew one foot of water, was loaded with goat, bale of cotton, and two passengers, and was disassembled and portaged around dam; no admissible evidence showed historical navigation on creek, or that creek was navigable under current commercial standards. O.C.G.A. § § 44-8-3, 44-8-5(a, b).

[3] **Evidence** 317(10)
157k317(10) Most Cited Cases

Plaintiff's testimony that creek was navigable under nineteenth century standards was inadmissible hearsay based upon statements of others and upon documents that were not introduced.

[4] **Evidence** 474(15)
157k474(15) Most Cited Cases

Plaintiff who lacked any experience in commercial water transport was not competent to testify as to his opinion that barge which was 245 feet long, 35 feet wide, and drew seven and one-half feet of water could be floated down creek approximately 30 days of year, nor was there foundation for his testimony.

[5] **Appeal and Error** 863
30k863 Most Cited Cases

In determining whether there were genuine issues of material fact as to creek's navigability, appellate court reviewing grant of summary judgment could not look to legislative actions that were not raised before trial court or even cited to appellate court on appeal.

[6] **Appeal and Error** 863
30k863 Most Cited Cases

When reviewing order on motion for summary judgment, appellate court will review only evidence presented to trial court before its ruling on motion; additional evidence will not be admitted on appeal.

[7] **Waters and Water Courses** 40
405k40 Most Cited Cases

Nothing in case law imposed servitude of common passage on stream that was not navigable as defined by statute; nineteenth century statements of what constituted navigability under federal law did not show that codifiers of Code of 1863 misstated State law when they defined navigable streams and delineated rights of persons in those streams. O.C.G.A. § § 44-8-2, 44-8-5(a).

[8] **Statutes** 147
361k147 Most Cited Cases

Code of 1863 was intended to codify then existing law, including that derived from common law and decisions of State Supreme Court, and it is understood to do so unless the contrary manifestly appears from words employed.

[9] **Statutes** 231
361k231 Most Cited Cases

Code of 1863 is presumed to be correct statement of law in state prior to its enactment, and burden is on one who would argue otherwise to prove such contention.

[10] **Navigable Waters** 1(2)
270k1(2) Most Cited Cases

Statute defining "navigable" stream applied, even though chain of title to land surrounding stream at issue was allegedly traceable to state grant that pre-dated 1863 passage of statute's predecessor. O.C.G.A. § 44-8-5(a).

[11] **Indians** 16.5
209k16.5 Most Cited Cases

Indian treaty section granting navigation rights to United States as to lands retained by Indians did not apply to land ceded to United States.

[12] **Waters and Water Courses** 40
405k40 Most Cited Cases

For public to acquire easement of passage on creek based on statute providing for implied dedication to public requires some acceptance by appropriate public authorities. O.C.G.A. § 44-5-230.

[13] **Waters and Water Courses** 40
405k40 Most Cited Cases

Plaintiff creek user'sdeposition and affidavits of other users failed to show that any notice of adverse claim was given to tenant through whose leasehold creek flowed, or to any predecessor in title, as required to establish private easement to boat on creek arising by prescription; use of stream without such notice established nothing more than revocable license.

[14] **Malicious Prosecution** 64(2)
249k64(2) Most Cited Cases

Record was devoid of any evidence showing that tenant through whose leasehold creek flowed acted with malice or without probable cause in securing creek user's arrest for traveling on creek, as required to support claim of malicious prosecution.

****150 *721** Kermit S. Dorough, Jr., Divine, Dorough & Sizemore, Albany, for Carroll Givens.

James C. Brim, Jr., Robert C. Richardson, Jr., Camilla, for Ichauway, Inc.

Michael Brian Terry, Paul Howard Schwartz, Bondurant, Mixson & Elmore, Julie Virginia Mayfield, Kilpatrick Stockton, LLP, Daniel I. MacIntyre, Wilson, Strickland & Benson, P.C., Atlanta, for Amicus Appellant.

Michael G. Gray, Walker, Hulbert, Gray & Byrd, Perry, Virginia Ware Killorin, Edward W. Killorin, Killorin & Killorin, Atlanta, for Amicus Appellee.

***710** HINES, Justice.

Ichauway, Inc., d/b/a Joseph W. Jones Ecological Research Center ("Ichauway"), sued to enjoin Givens from trespassing on real property Ichauway leases, specifically Ichauwaynochaway Creek, which flows through Ichauway's leasehold. Ichauway leases the land on both sides of the creek for fourteen miles of its length and conducts ecological research on the stream. At one point on the stream a dam was installed some years ago to generate electricity. Although it is no longer used for that purpose, the dam remains and blocks the passage of boats.

Givens appeals the grant of summary judgment to Ichauway. He contends that he has the right to float down the creek through the property.

[1][2] ***711** 1. Although it may be more efficient to await a bench trial in a case involving an injunction rather than pursue summary judgment, there is nothing precluding summary judgment in a case involving an injunction, see *Georgia Canoeing Assn. v. Henry*, 263 Ga. 77, 78-79, 428 S.E.2d 336 (1993), and the court's order granting summary judgment is before this Court for review. Nor is there anything inherent to the issue of navigability of a stream that precludes summary judgment on that issue, when the evidence so requires. Ichauway's motion for summary judgment rested on evidence the stream was not navigable and the question here is whether

Givens has presented any admissible evidence showing there is a genuine issue of material fact as to the stream's navigability. See *Lau's Corp. v. Haskins*, 261 Ga. 491, 405 S.E.2d 474 (1991); *Wilson v. Nichols*, 253 Ga. 84, 86(3), 316 S.E.2d 752 (1984).

Ichauway holds a lease to the land on both sides of the creek and therefore has the right to exclude others from the creek unless the stream is navigable or some servitude exists. See OCGA § § 44-8-3, 44-8-5(b); *Parker v. Durham*, 258 Ga. 140, 365 S.E.2d 411 (1988); *Bosworth v. Nelson*, 172 Ga. 612, 158 S.E. 306 (1931); *Bosworth v. Nelson*, 170 Ga. 279, 152 S.E. 575 (1930). To be considered navigable, a stream must be "capable of transporting boats loaded with freight in the regular course of trade either for the whole or a part of the year. The mere rafting of timber or the transporting of wood in small boats shall not make a stream navigable." OCGA § 44-8-5(a). [FN1]

> FN1. We do not address the question of whether this creek is subject to a federal navigational servitude. See *United States v. Harrell*, 926 F.2d 1036, 1040-1044 (11th Cir.1991). Givens did not raise the issue below and the court did not rule on it, *Contestabile v. Business Dev. Corp. of Ga.*, 259 Ga. 783, 784(3), 387 S.E.2d 137 (1990), nor has Givens argued before this Court that such a servitude applies.

In an attempt to show the creek is navigable, Givens floated through Ichauway's leasehold on a styrofoam and wood raft that was four feet wide, sixteen feet long, and drew one foot of water. He loaded the raft with a goat, a bale of cotton, and two passengers, disassembling the raft and portaging around the dam. He argues the goat, cotton, and passengers were freight and his trip showed the creek was capable of use for transporting freight under OCGA § 44-8-5(a), despite the ****151** presence of the dam. OCGA § 44-8-5(a), however, requires that to be deemed navigable, a stream must support freight traffic "in the regular course of trade." Givens does not claim craft such as his are currently used in the regular course of trade but does contend the raft is representative of craft that were so used in the nineteenth century. He argues this shows the creek was formerly navigable under the definition, and that once a stream is susceptible of navigation that status is not lost. He also relies upon this argument ***712** to maintain that the creek can be deemed navigable despite the presence of the dam which undisputedly prevents the free passage of boats through the creek.

[3] Irrespective of whether a stream once regarded as navigable is forever so regarded, the record does not show that this creek was ever navigable under the statutory definition. Although Givens testified that it was navigable under nineteenth century standards, his deposition shows this testimony was inadmissible hearsay based upon the statements of others and upon documents that were not introduced. See *Lance v. Elliott*, 202 Ga.App. 164, 167, 413 S.E.2d 486 (1991); *Gunnin v. Swat, Inc.*, 195 Ga.App. 344, 345, 393 S.E.2d 700 (1990). He testified that whether any commerce had actually occurred on the stream was "[n]ot to my knowledge, no sir. Others, yes. That's just hearing old-timers talk." The testimony of these unnamed individuals was never introduced. Givens also testified that a book on the history of the area spoke of commercial traffic on the stream, but that book was not introduced. Nor was any admissible evidence presented to show that Givens' raft replicated the dimensions or manner of any craft used in the regular course of commerce in the past.

[4] Not only was no admissible evidence presented to show historical navigation on the stream, none shows the stream to be navigable under current commercial standards. Unrebutted expert testimony showed that the smallest barge normally in use for commercial transport on the Flint River (into which the creek flows) is 245 feet long, 35 feet wide, and draws seven and one-half feet of water. Givens testified such a barge could be floated down the creek approximately thirty days of the year, but for the presence of the dam. However, his deposition discloses that he had no experience in commercial water transport, there is no foundation for his opinion, and he is not competent to testify as to these matters. See *Tony v. Pollard*, 248 Ga. 86, 88-89(2), 281 S.E.2d 557 (1981). [FN2]

> FN2. Expert testimony was that such a vessel could not navigate the creek because of shoals and turns too tight for its length.

[5][6] This Court cannot, as the dissent would do, look to the appointment of commissioners to investigate the creek's navigability in 1831, see 1831 Ga.Laws 264, and cannot look to the appropriation of funds "to the navigation" of the creek in 1836, see 1836 Ga.Laws 31, as evidence supporting a ruling

that summary judgment was improper. When reviewing orders on motions for summary judgment, "[a]ppellate courts will review only evidence presented to the trial court before its ruling on the motion. Additional evidence will not be admitted on appeal." *713*Meade v. Heimanson,* 239 Ga. 177, 180, 236 S.E.2d 357 (1977). These legislative actions were not raised before the court below, nor even cited to this Court on appeal, and add nothing to our review of whether there was evidence showing this creek to be navigable.

As there was no admissible evidence showing navigability, the court correctly granted summary judgment on this question.

[7] 2. Givens also suggests that there is a public right of common passage on the creek, relying on the following language from *Young v. Harrison,* 6 Ga. 130, 141 (1849):

> Rivers are of three kinds: 1st. Such as are wholly and absolutely private property. 2d. Such as are private property subject to the servitude of the public interest, by a passage upon them. The distinguishing test between the two is, whether they are susceptible or not of use for a common passage. 3d. Rivers where the tide ebbs and flows, which are called arms of the sea. [Cit.]

**152 It is contended that *Young* either grants or recognizes a common law public right of passage other than the statutory right established by OCGA § § 44-8-2 and 44-8-5.

[8][9] The Code of 1863 was intended to codify then existing law, including that derived from the common law and the decisions of this Court, see *Georgia Power Co. v. Watts,* 184 Ga. 135, 138(1), 190 S.E. 654 (1937), and it is understood to do so "unless the contrary manifestly appears from the words employed." *Clark v. Newsome,* 180 Ga. 97, 100, 178 S.E. 386 (1935). That Code contained the definition of a navigable stream, see OCGA § 44-8- 5(a) (Code of 1863, § 2208), as well as the principle that the beds of nonnavigable streams belong to the owner of the adjacent land, see OCGA § 44-8-2 (Code of 1863, § 2207). It also declared that the owner of a nonnavigable stream has the right to exclusive possession of it. See OCGA § 44-8-3 (Code of 1863, § 2210). Thus, under that Code, no servitude of public passage is imposed upon a stream unless it is navigable under the Code. The Code of 1863 is presumed to be a correct statement of the law in this state prior to its enactment, and the burden is on one who would argue otherwise to prove such contention. *Mechanics' Bank v. Heard,* 37 Ga. 401, 413 (1867).

This state adopted the common law of England as it existed on May 14, 1776. See *Crowder v. Department of State Parks,* 228 Ga. 436, 439-440(3), 185 S.E.2d 908 (1971). In English common law, only those streams where the tide ebbed and flowed could be considered navigable and subject to the servitude of a right of common passage. See *The Daniel Ball,* 77 U.S. (10 Wall) 557, 560, 19 L.Ed. 999 (1870); *Boardman v. Scott,* 102 Ga. 404, 406, 30 S.E. 982 (1897). It is uncontested that this *714 stream is not tidal. Therefore, any right of passage the public has on this stream, in which both banks are in the hands of one private party, arises from the statutory law of Georgia or the common law of Georgia.

Neither Givens nor the dissent rebuts the presumption that the Code of 1863 correctly stated existing law. Nineteenth century statements of what constituted navigability under *federal* law do not show that the codifiers of 1863 misstated the law of *Georgia* when they defined navigable streams and delineated the rights of persons in those streams. *Young* was decided prior to 1863, and the only reasonable conclusion is that the Code of 1863 included the second kind of stream recognized in *Young,* supra at 141, when the Code of 1863 set forth the definition of a navigable stream. Thus, the servitude *Young* recognized on a stream "susceptible ... of use for a common passage" is identical to the servitude imposed on a navigable stream as defined in OCGA § 44-8-5(a). There is nothing in *Young* that imposes a servitude of common passage on a stream that is not navigable as defined in OCGA § 44-8- 5(a).

[10][11] Citing *Florida Gravel Co. v. Capital City Sand, etc., Co.,* 170 Ga. 855, 858, 154 S.E. 255 (1930), Givens also contends OCGA § 44- 8-5(a) does not apply to this stream because the chain of title to this land is traceable to a state grant that predates the 1863 passage of the statute's predecessor. [FN3] *Florida Gravel* stated that § 3632 of the Civil Code of 1910 would not be applied to grants of land prior to the 1863 adoption of § 3632. That Code section is now found at OCGA § 44-8-5(b) and addresses the property rights of landowners adjacent to navigable streams. The definition of navigability in OCGA § 44-8-5(a) was not addressed in *Florida Gravel,* and the opinion does not impact the application of the definition of navigability. See *Parker v. Durham,* 258 Ga. 140, 365 S.E.2d 411 (1988), which did not apply OCGA § 44-8-5(b) to

property rights because of a pre- 1863 grant but did apply OCGA § 44-8-5(a) as to the definition of navigability.

FN3. Givens also raises an 1814 treaty between the United States and the Creek Indian Nation that ceded the land at issue to the United States. He contends the treaty shows the United States reserved navigation rights over all waters. However, navigation rights were granted to the United States as to lands retained by the Creek Nation and that portion of the treaty does not apply to the land at issue here.

[12] 3. Givens contends the public has acquired an easement of passage on the ****153** creek by boating on it for more than twenty years, relying upon *Seaboard Air Line Ry. v. Sikes,* 4 Ga.App. 7, 60 S.E. 868 (1908). The public servitude described in *Seaboard* is based upon OCGA § 44-5-230 (former Civil Code of 1895, § 3591), as an implied dedication to the public. *Seaboard,* at 10(3), 60 S.E. 868. Dedication under that Code section requires some acceptance by the appropriate public authorities, ***715** *Chatham Motorcycle Club, Inc. v. Blount,* 214 Ga. 770, 773(1), 107 S.E.2d 806 (1959), and Givens points to nothing in the record to show such acceptance.

[13] Nor does the record support any private easement to boat on the creek arising by prescription. Givens' deposition and affidavits of other users of the creek fail to show that any notice of an adverse claim was given to Ichauway or any predecessor in title. Such notice is required to show prescription. *Eileen B. White & Assoc., Inc. v. Gunnells,* 263 Ga. 360, 361, 434 S.E.2d 477 (1993). Use of the stream without such notice establishes nothing more than a revocable license. *Id.* at 362, 434 S.E.2d 477.

[14] 4. Summary judgment to Ichauway was also warranted on Givens' counterclaims for denial of his right to enjoy a public easement and malicious prosecution. Givens failed to show any right to travel on the creek, and the record is devoid of any evidence showing that Ichauway acted with malice or without probable cause in securing his arrest for doing so. See *Wal-Mart Stores, Inc. v. Blackford,* 264 Ga. 612, 613, 449 S.E.2d 293 (1994).

Judgment affirmed.

All the Justices concur, except FLETCHER, P.J., and HUNSTEIN, J., who dissent.

FLETCHER, Presiding Justice, dissenting.

This case is not about the ownership of the creek bed or the rights of property owners adjacent to the creek. The issue in this case is whether the public has a statutory or common law right of passage on the Ichauwaynochaway Creek because it is, or was, capable of navigation. The majority opinion misconstrues the statutory definition of navigable stream under state law and ignores the public's right to use interstate waterways under the commerce clause of the United States Constitution. Because the record presents disputed issues of material fact, I would reverse and, on remand, would direct the trial court to consider whether the Ichauwaynochaway Creek is a navigable water under federal or state law.

1. Until today, this court has never approved the grant of summary judgment on the issue of the navigability of a river or other body of water. In *Georgia Canoeing Association v. Henry,* [FN4] we reversed the grant of summary judgment that enjoined the public from passing through Henry's property on Armuchee Creek. Citing previous cases, we explained that summary judgment was generally inappropriate in equitable matters and that parties should proceed to a bench trial where the trial court can resolve disputed issues of material fact. [FN5]

FN4. 263 Ga. 77, 428 S.E.2d 336 (1993).

FN5. See *Beaulieu of America v. L.T. Dennard & Co.,* 253 Ga. 21, 22, 315 S.E.2d 889 (1984); *King v. Ingram,* 250 Ga. 887, 888, 302 S.E.2d 105 (1983).

***716** That ruling was consistent with the two other cases in which this court has considered the question of a river's navigability at the interlocutory injunction stage. In *Parker v. Durham,* [FN6] this court reversed the trial court's grant of summary judgment enjoining the public from traveling on the Hughes Old River by boat because the record showed questions of fact on the navigability of the river where it joins the Altamaha River in Long County. Likewise, we found conflicting evidence in *Maddox*

v. Threatt [FN7] on whether the Chattahoochee River between **154 Morgan Falls Dam and Holcomb Bridge was a navigable river. A review of the record in that case shows that the adjoining property owner contended that the Chattahoochee was not capable of holding craft other than a shallow-draft canoe or flatboat due to shoals, rocks, and shallow water; the state contradicted that evidence by asserting that the relevant portion of the river could bear small freight-laden craft with a three-foot draft and eight-foot beam.

FN6. 258 Ga. 140, 142, 365 S.E.2d 411 (1988). The property owner offered evidence showing that land formed a barrier between the two bodies of water at low tide; the fishermen offered evidence that boats could pass between the two rivers even at low tide.

FN7. 225 Ga. 730, 731, 171 S.E.2d 284 (1969).

This case is in the same procedural posture as the *Georgia Canoeing* case in its second appearance before this court. [FN8] After the trial court here granted an interlocutory injunction, the property owner moved for summary judgment on its request for a permanent injunction, which the trial court granted. Since the trial court failed to consolidate the hearing on the interlocutory injunction with the trial on the request for a permanent injunction, this case should be reversed and remanded for a hearing.

FN8. See *Georgia Canoeing*, 263 Ga. at 77-78, 428 S.E.2d 336; see also *Georgia Canoeing Ass'n v. Henry*, 267 Ga. 814, 482 S.E.2d 298 (1997) (affirming the permanent injunction against public use entered after a bench trial); *Georgia Canoeing Ass'n. v. Henry*, 261 Ga. XXIX, 414 S.E.2d 490 (1992) (affirming grant of interlocutory injunction without an opinion).

2. OCGA § 44-8-5 provides the description of navigability for waters under this state's law. The statute defines the term "navigable stream" as "a stream which is capable of transporting boats loaded with freight in the regular course of trade either for the whole or a part of the year. The mere rafting of timber or the transporting of wood in small boats shall not make a stream navigable."

The legislature first adopted this definition of navigable streams as part of the Code of 1863. [FN9] In appointing persons to prepare the original code, the General Assembly instructed them to develop a code that embraced the existing law, whether derived from common law, State Constitution, state statutes, Supreme Court decisions, or English statutes. [FN10] Since the codifiers had no authority to originate new *717 matter, the presumption is that the legislature did not intend to change the law. [FN11] Thus, it is instructive to consider the common law at the time the Code of 1863 was approved to assist in interpreting the statute.

FN9. The Code of the State of Georgia § 2208 (1863).

FN10. 1858 Ga.Laws 95.

FN11. See *Rogers v. Carmichael*, 184 Ga. 496, 504, 192 S.E. 39 (1937).

At English common law, a navigable stream was defined as a river or stream in which the tide ebbed and flowed. [FN12] In response to different conditions in this country, the courts expanded the term to include freshwater rivers and lakes. In 1849, this court described three kinds of rivers:

FN12. Black's Law Dictionary 926 (5th ed. 1979); see *Boardman v. Scott*, 102 Ga. 404, 406, 30 S.E. 982 (1897).

> 1st. Such as are wholly and absolutely private property. 2d. Such as are private property, subject to the servitude of the public interest, by a passage upon them. The distinguishing test between these two is, whether they are susceptible or not of use for a common passage. 3d. Rivers where the tide ebbs and flows, which are called arms of the sea. [FN13]

FN13. *Young v. Harrison*, 6 Ga. 130, 141 (1849).

In defining the rights of the public on the second class of rivers, the United States Supreme Court held in *The Daniel Ball* [FN14] case that rivers are navigable in law if they are navigable in fact. "And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water." [FN15]

FN14. 77 U.S. (10 Wall.) 557, 19 L.Ed. 999 (1870).

FN15. *Id.* at 563.

In defining commerce on water, the courts do not limit the term solely to the carrying of merchandise, but also apply it to the carrying of passengers [FN16] and the rafting of logs and ****155** timber. [FN17] The presence of artificial obstructions, such as dams or bridges, does not prevent the stream from being navigable in law if it would be navigable in fact in its natural state. [FN18] Once a stream is found to be navigable, it remains so. [FN19] Thus, if a stream is, or was, naturally of sufficient size to float boats, vessels, rafts, or logs, whether propelled by animal power, ***718** wind, or steam, the river is navigable water and the public has the right to use the stream. [FN20]

FN16. See *id.* at 564.

FN17. See Joseph K. Angell, A Treatise on the Law of Watercourses 695-97 (7th ed. J.C. Perkins ed. 1877).

FN18. *Economy Light & Power Co. v. United States*, 256 U.S. 113, 118, 41 S.Ct. 409, 411, 65 L.Ed. 847 (1921).

FN19. *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 408-09, 61 S.Ct. 291, 299-300, 85 L.Ed.2d 243 (1940) (absence of use because of the coming of the railroad, improved highways, or other changed conditions does not affect the navigability of rivers in the constitutional sense); *Economy Light Co.*, 256 U.S. at 123-24, 41 S.Ct. at 412-13.

FN20. Angell, supra note 15, at 695.

3. In interpreting statutes, the cardinal rule of construction is to follow the legislature's intent. Statutes adopted in derogation of the common law must be strictly construed. [FN21] "Unless the contrary manifestly appears from the words employed, the language of a Code section should be understood as intending to state the existing law, and not to change it." [FN22]

FN21. *Johnson v. State*, 114 Ga. 790, 791, 40 S.E. 807 (1902).

FN22. *Lamar v. McLaren*, 107 Ga. 591, 599, 34 S.E. 116 (1899).

Comparing the common law as developed in this country with the statute adopted in Georgia, it appears that the statute generally follows the common law on navigable rivers in the first sentence. That sentence defines a "navigable stream" as one that is capable of transporting boats loaded with freight in the regular course of trade for at least part of the year. On the other hand, the statute appears to have adopted a more restrictive definition than the common law in the second sentence, which eliminates the rafting of timber or flotage of logs as sufficient evidence to prove navigability. [FN23] Construing the two sentences together, the proper standard in determining the navigability of a stream under Georgia law is whether the stream has been used, or is capable of being used, to transport boats loaded with freight other than timber or logs.

FN23. See *Georgia Canoeing*, 267 Ga. at 815 n. 4, 482 S.E.2d 298.

In applying this standard, courts may consider the historical use of the river. [FN24] That is, it is the river's capacity for commercial traffic as understood by lawmakers at the time they adopted the definition of navigable streams that applies. [FN25] If we were to adopt the property owner's position that the modern standard of commercial navigation controls, it would be difficult to find any river or stream that is

navigable in the State of Georgia. [FN26]

FN24. See, e.g., *Appalachian Elec. Power Co.*, 311 U.S. at 411-17, 61 S.Ct. at 301-04; *United States v. Utah*, 283 U.S. 64, 83, 51 S.Ct. 438, 443-44, 75 L.Ed. 844 (1931); *Economy Light, etc., Co.*, 256 U.S. at 117-18, 41 S.Ct. at 410-11; *The Montello*, 87 U.S. (20 Wall.) 430, 440- 41, 22 L.Ed. 391 (1874).

FN25. See 1985 Ga. Att'y Gen'l Op. U85-8.

FN26. Cf. *The Montello*, 87 U.S. at 441 (in relying on "Durham boats" propelled by animal power, noted that it "would be a narrow rule to hold that in this country, unless a river was capable of being navigated by steam or sail vessels, it could not be treated as a public highway.")

This standard is consistent with the few cases in which our appellate courts have determined whether a particular stream or creek is navigable under OCGA § 44-8-5. [FN27] In the first reported case, ***719** we found that Knoxboro Creek, a tidewater stream flowing into the Savannah River, was navigable where it provided transportation for flat-boats and their cargoes from a rice plantation ****156** to the City of Savannah. [FN28] Subsequently, the Court of Appeals found that the Canoochee River was not navigable because it was not capable of floating any boat loaded with freight or passengers at any time and was not capable of rafting logs or timber unless its waters were swollen by rain. [FN29] Finally, without any discussion of the facts, this court affirmed trial court judgments concluding that part of the Ogeechee River and the Armuchee Creek were not navigable streams under the statute. [FN30]

FN27. See also *Rauers v. Persons*, 144 Ga. 23, 86 S.E. 244 (1915) (affirming conclusion that McQueen's Inlet on St. Catherine's Island is a navigable tidewater as defined in OCGA § 44-8-7), overruled on other grounds in *State v. Ashmore*, 236 Ga. 401, 413-14, 224 S.E.2d 334 (1976); *Johnson v. State*, 114 Ga. at 791, 792 (holding that term "navigable stream" does not apply to a bay, estuary, or arm of the sea).

FN28. See *Charleston & Savannah Ry. v. Johnson*, 73 Ga. 306 (1884) (record showed the stream was seventy-five to two hundred feet wide, fourteen feet deep where the bridge crossed it, and had an ebb and flow of three-and-one-half feet).

FN29. See *Seaboard Air Line Ry. v. Sikes*, 4 Ga.App. 7, 9, 60 S.E. 868 (1908).

FN30. See *Brantley v. Lee*, 139 Ga. 600, 77 S.E. 788 (1913) (Ogeechee River dividing Screven and Bulloch Counties); *Georgia Canoeing*, 267 Ga. at 814, 482 S.E.2d 298 (Armuchee Creek in northwest Georgia).

In this case, the trial court erroneously concluded as a matter of law that the Ichauwaynochaway Creek was not a navigable stream as defined by the state statute. It based this conclusion of law on its factual findings that a dam crosses the creek, a big tree lies across the creek immediately below the dam, the creek has rock shoals within two feet of the surface, and the size of boats that travel on the creek is limited. It failed to consider the cases applying the common law on navigable streams and then failed to construe the evidence in the light most favorable to Givens, instead resolving issues of fact in favor of Ichauway, Inc. The majority opinion compounds the error by its reliance on irrelevant expert testimony concerning the inability of a present-day commercial barge to travel the creek and its summary dismissal of all evidence supporting the creek's capacity for freight traffic at the time the legislature first adopted the statute. None of the factors on which the trial court and the majority rely precludes a stream from being considered navigable under the state statute.

Construing the evidence in the light most favorable to Givens, as this court must do on summary judgment, the record raises a disputed issue of material fact concerning the navigability of the creek. The evidence shows that the Ichauwaynochaway Creek is 75- to 200-feet wide; the creek through Ichauway's property was used in the past to transport agricultural products south to the Flint River; the creek can still carry boats loaded with freight commonly used in the regular course of trade in the nineteenth century, as illustrated by the raft used in

the Goat Float; and the power dam is an artificial obstruction that was built this century. Further, a review of state *720 statutes supports Given's contention that the Ichauwaynochaway Creek has borne commercial traffic in the past. As part of legislative efforts to protect and improve navigation in the state's rivers and creeks, the Georgia General Assembly in 1831 appointed three commissioners to examine the navigation of the Ichauwaynochaway Creek, described by citizens as "navigable for a considerable distance in Baker County," [FN31] and appropriated $1,500 in 1837 for the creek's navigation. [FN32] Based on this evidence, I would reverse the grant of summary judgment and instruct the trial court to hear further evidence on the navigability of the creek under state law based on its past and present capacity for water trade.

FN31. 1831 Ga.Laws 264.

FN32. 1836 Ga.Laws 31.

4. Finally, the trial court erred in considering navigability solely under state law. The question of navigability is a federal question. [FN33] A river is a navigable water of the United States when it forms by itself, or in connection with other waters, a continuous highway over which commerce may be carried with other state and countries. [FN34] The waters of the Ichauwaynochaway Creek flow into the Flint River, which joins the Chattahoochee River in the southwest corner of the state to form the Apalachicola River. The Apalachicola flows south across northwest **157 Florida to the Gulf of Mexico. [FN35] Therefore, the Ichauwaynochaway goes all the way to the gulf and is part of interstate commerce.

FN33. *Utah v. United States*, 403 U.S. 9, 10, 91 S.Ct. 1775, 1776, 29 L.Ed.2d 279 (1971).

FN34. *The Daniel Ball*, 77 U.S. at 563.

FN35. U.S. Army Corps of Engineers, Water Resources Development in Georgia 1993, p. 25 (1993).

Because the creek is part of interstate commerce, federal law applies. [FN36] The federal test of navigability is whether a river is used, or susceptible of being used, in its ordinary condition to transport commerce. [FN37] On remand, the trial court should first consider whether the creek is navigable in fact under federal law before considering whether it is a navigable stream under state law.

FN36. See 78 Am.Jur.2d, Waters, § § 61, 72 (1975); cf. *Blalock v. Brown*, 78 Ga.App. 537, 51 S.E.2d 610 (1949) (since under the commerce clause Congress may require the recording of the purchase and operation of vessels on a navigable stream traversing two states, by analogy Congress would have the same right to legislate the recording of airplanes with a federal agency).

FN37. *United States v. Harrell*, 926 F.2d 1036, 1039 (11th Cir.1991) (citing *United States v. Appalachian Elec. Power Co.*, 311 U.S. 377, 406 & n. 19, 61 S.Ct. 291, 298 & n. 19, 85 L.Ed. 243 (1940)).

I am authorized to state that Justice HUNSTEIN joins in this dissent.

493 S.E.2d 148, 268 Ga. 710, 97 FCDR 4238

END OF DOCUMENT

Lewis Creek—Alabama

Reported Decision: United States v. Harrell, 926 F.2d 1036 (11th Cir. 1991)

Reach at Issue: Unknown

Judicial Determination: Non-navigable

Facts Reported in Decision:

"The Tombigbee River is a major artery of commerce, determined to be navigable by the United States Corps of Engineers for more than one hundred years Lewis Creek, the subject of this action, is a tributary of the Tombigbee River located in southern Alabama about forty miles north of Mobile." 926 F.2d at 1038

"The district court, in making findings of fact, determined that Lewis Creek, as it flows through the defendants' land, is a 'small, narrow, shallow, obstructed, partially dry creek that is incapable of any type of waterborne commerce.' The creek, the court found, only becomes capable of use for such commerce 'when the flood waters of the Tombigbee River break out of their banks on the main course of the river and back up across the intervening lands of others into the non-navigable bed of Lewis Creek." 926 F.2d at 1039.

Lewis Creek - Alabama

REPORTED DECISION

C

United States Court of Appeals,
Eleventh Circuit.

The UNITED STATES of America and The United States Corps of Engineers, Walter

M. Gollatte, Lewis Perry Howard, Tony Howard, Andy Parnell, and Kirk Samples, Plaintiffs-Appellants,

v.

C.E. HARRELL, Jr., Sidney M. Harrell, Defendants-Appellees.

No. 89-7432.

March 15, 1991.

Private fishermen brought action seeking determination that tributary of river determined to be navigable by Corps of Engineers was navigable waterway to which fishermen had right of access. The United States District Court for the Southern District of Alabama, No. 85-1403, Charles R. Butler, Jr., J., determined that tributary was not navigable waterway. Appeal was taken. The Court of Appeals, Clark, Circuit Judge, held that: (1) tributary was not navigable in fact; (2) tributary was not subject to navigational servitude of United States as result of river floodwaters; and (3) there was no right of private access to tributary under Alabama law.

Affirmed.

West Headnotes

[1] **Federal Courts** 776
170Bk776 Most Cited Cases

[1] **Federal Courts** 855.1
170Bk855.1 Most Cited Cases
(Formerly 170Bk855)

In determining whether tributary of navigable river was also navigable waterway of United States within meaning of Rivers and Harbors Act, Court of Appeals would review district court's findings under clearly erroneous standard and application of law under de novo review. 33 U.S.C.A. § 403.

[2] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence supported district court's findings of fact that tributary of navigable river as it flowed through private land was only capable of use for waterborne commerce during flood and, thus, that tributary was not navigable in fact; tributary was impassable under ordinary conditions prevailing throughout year, only when unpredictable, infrequent and temporary flooding occurred during parts of winter months did tributary become passable, and tributary had not been used as avenue for commerce. 33 U.S.C.A. § 403.

[3] **Navigable Waters** 36(3)
270k36(3) Most Cited Cases

Evidence failed to establish that tributary of navigable river was below "ordinary high water mark," for purposes of determining whether tributary was within "bed" of river and subject to Government's navigational servitude; navigation on tributary during flooding of river was not possible more than 25% of any year, even then, was temporary and unpredictable, waters of river did not occupy low land bottom land area abutting tributary long enough to destroy all terrestrial plant life and render land valueless for agricultural purposes, and river bottom of tributary was covered with grasses, trees and other terrestrial vegetation. 33 U.S.C.A. § 403.

[4] **Navigable Waters** 36(3)
270k36(3) Most Cited Cases
Flats.

Debris and litter left from temporary and unpredictable floodwaters, unlike that left from ordinary high water, was not evidence of ordinary high water mark of navigable river, for purposes of determining whether tributary was subject to Government's navigable servitude. 33 U.S.C.A. § 403.

[5] **Navigable Waters** 36(3)
270k36(3) Most Cited Cases

Government's navigational servitude for navigable river would not extend laterally over entire area covered by ordinary high waters of nonnavigable tributary and areas adjacent to low water channel that revert to swamp area or dry condition as waters receded. 33 U.S.C.A. § 403.

[6] **Waters and Water Courses** 96
405k96 Most Cited Cases

Under Alabama law, there was no right of public

access to nonnavigable tributary of river during periods when river flooded its banks; state did not own nonnavigable waters, and public had no right of access. Ala.Code 1975, § 9-11-80(a).

***1037** Eugene A. Seidel, Asst. U.S. Atty., Mobile, Ala., for plaintiffs- appellants.

Thomas R. Boller, Mobile, Ala., for Gollatte, et al.

John A. Bryson, U.S. Dept. of Justice, Lands Div., Appellate Section, Washington, D.C., for the U.S.

Halron W. Turner, Edward Turner, Chatom, Ala., and Louis E. Braswell, Mobile, Ala., for defendants-appellees.

J.P. Courtney, III, Lyons, Pipes & Cook, P.C., Marion A. Quina, Jr. and Neil C. Johnston, Mobile, Ala., for amicus, Alabama Wildlife, etc.

Appeal from the United States District Court for the Southern District of Alabama.

Before HATCHETT and CLARK, Circuit Judges, and MORGAN, Senior Circuit Judge.

CLARK, Circuit Judge:

Appellants challenge the district court's determination that Lewis Creek is not a navigable waterway of the United States. Because we agree with the district court that Lewis Creek is not navigable in fact and is not subject to the navigational servitude of the Tombigbee River, we affirm. In so concluding, we concur in the reasoning applied by the district court in reaching its decision.

***1038** I. Facts

The Tombigbee River is a major artery of commerce, determined to be navigable by the United States Corps of Engineers for more than one hundred years. Lewis Creek, the subject of this action, is a tributary of the Tombigbee River located in southern Alabama about forty miles north of Mobile. The creek rises to the west of the Tombigbee, and as it winds eastwardly toward the river, it enters the defendants Harrells' property just west of the Southern Railroad trestle. Further downstream, Lewis Creek entersHarrell's Landing, a small pool of water, branches out into a number of unidentifiable fingers, meanders through a swamp, and empties into Three Rivers Lake, which flows about a mile before joining the Tombigbee. The stretch of Lewis Creek at issue here runs from the railroad trestle to the point at which the creek empties into Three Rivers Lake.

Eastern Washington County, in which the defendants' property is located, abuts the Tombigbee River and consists primarily of hardwood riverbottom lands. During the wet season, lasting generally from the latter part of December until late March, the Tombigbee River periodically overflows it banks and floods the bottomland. The hardwood forests in this bottomland contain commercially valuable stands of tupelo gum, cypress, wild pecan, willow, hickory and various types of oak. All of these species of trees are terrestrial, rather than aquatic; however, they will grow on land subject to intermittent flooding. With the exception of some cypress and tupelo stands, however, they will not grow in soil that is permanently or heavily flooded. During the dry seasons, the Harrells also have used the bottomlands for hunting dear and turkey, for growing and harvesting timber, and in previous years, for grazing cattle and hogs.

Private plaintiffs in this action are individuals who have commercially fished in Lewis Creek at times of high water, gaining access either by boating up the creek from the Tombigbee or with the permission of riparian owners. The defendants are riparian owners on both sides of Lewis Creek who claim the stretch of creek that runs through their property is private and who have sought to exclude plaintiffs from using this stretch of Lewis Creek for fishing.

On October 8, 1982, the Circuit Court of Washington County, Alabama determined and entered judgment that Lewis Creek was a non-navigable stream. The court enjoined appellants Walter W. Gollatte and Lewis Perry Howard from the use of Lewis Creek.

Subsequently, the United States and the United States Army Corps of Engineers, realigned plaintiffs, were consulted by the plaintiffs and, after inspection of the area, advised plaintiffs in a letter dated July 30, 1984 that because this stretch of Lewis Creek was "below the ordinary high water mark of the Tombigbee River," this reach of Lewis Creek "is a navigable water of the United States up to the Southern Railroad bridge at Toinette, Washington County." The private plaintiffs brought this action in the district court for the Southern District of Alabama, again seeking a declaration that Lewis Creek is a navigable waterway to which they have a right of public access.

II. Discussion

[1] In determining whether Lewis Creek is a navigable waterway of the United States within the meaning of section 10 of the Rivers and Harbors Act, 33 U.S.C. § 403, [FN1] and whether appellants have a resulting***1039** right of access, we consider, first, whether Lewis Creek is navigable in fact; second, whether Lewis Creek, as a result of the Tombigbee floodwaters, is subject to the navigational servitude of the United States; and, finally, whether appellants have a right of public access to Lewis Creek under Alabama law. We review the district court's findings of fact under a clearly erroneous standard of review; its application of law to those facts is subject to de novo review. [FN2]

FN1. 33 U.S.C. § 403 provides: The creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is prohibited; and it shall not be lawful to build or commence the building of any wharf, pier, dolphin, boom, weir, breakwater, bulkhead, jetty, or other structures in any port, roadstead, haven, harbor, canal, navigable river, or other water of the United States, outside established harbor lines, or where no harbor lines have been established, except on plans recommended by the Chief of Engineers and authorized by the Secretary of the Army; and it shall not be lawful to excavate or fill, or in any manner to alter or modify the course, location, condition, or capacity of, any port, roadstead, haven, harbor, canal, lake, harbor of refuge, or inclosure within the limits of any breakwater, or of the channel of any navigable water of the United States, unless the work has been recommended by the Chief of Engineers and authorized by the Secretary of the Army prior to beginning the same.

FN2. *United States v. Wilson*, 894 F.2d 1245, 1254 (11th Cir.), *cert. denied sub nom. Levine v. United States*, 497 U.S. 1029, 110 S.Ct. 3284, 111 L.Ed.2d 792 (1990).

A. *Navigability in Fact.*

[2] The district court, in making findings of fact, determined that Lewis Creek, as it flows through the defendants' land, is a "small, narrow, shallow, obstructed, partially dry creek that is incapable of any type of waterborne commerce." The creek, the court found, only becomes capable of use for such commerce "when the flood waters of the Tombigbee River break out of their banks on the main course of the river and back up across the intervening lands of others into the non-navigable bed of Lewis Creek." [FN3] The parties agree that absent the effect of the Tombigbee floodwaters on Lewis Creek, the creek itself is not a navigable waterway of the United States.

FN3. District Court, at 5-6.

In *United States v. Appalachian Electric Power Company*, the Supreme Court held that a river is "navigable in fact" when it is used or susceptible of being used in its ordinary condition to transport commerce. [FN4] The court further held that "[w]hen once found to be navigable, a waterway remains so." [FN5] Navigable in fact, as the Court had previously held, means navigable in law. [FN6] The Corps of Engineers' regulations promulgated pursuant to the Rivers and Harbors Act incorporate the *Appalachian Electric* definition, defining navigable waters of the United States as "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce." [FN7]

FN4. 311 U.S. 377, 406 & n. 19, 61 S.Ct. 291, 298 & n. 19, 85 L.Ed.2d 243 (1940).

FN5. *Id.* at 408, 61 S.Ct. at 299.

FN6. *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563, 19 L.Ed. 999 (1870).

FN7. 33 C.F.R. § 329.4. In defining "navigable waters of the United States," the Corps' regulations further provide,
[a] waterbody which was navigable in its natural or improved state, or which was susceptible of reasonable improvement (as discussed in § 329.8(b) of this Part) retains its character as "navigable in law" even though it is not presently used for commerce, or is presently incapable of use because of changed conditions or the

presence of obstructions. 33 C.F.R. § 329.9(a). And, "[n]avigability also may be found in a waterbody's susceptibility for use in its ordinary condition or by reasonable improvement to transport interstate commerce." *Id.* at § 329.9(b). Plaintiffs offered no proof regarding the susceptibility of Lewis Creek, with reasonable improvements, to becoming navigable.

The district court, in concluding that Lewis Creek was not now and had not previously been navigable in fact, found that the original course of Lewis Creek as it exited the Harrells' Landing pool to the North was never used and was never susceptible for use in transporting commerce. The court also considered the effect of a dam which at one time had been constructed to divert the waters that flowed down the original course of the creek into a man-made ditch. The ditch had been channeled by the Cochran Lumber Company with the intention of creating a water flow capable of carrying timber from its mill. The court found that this ditch, sometimes referred to as Lewis Creek, proved to be as unsuccessful as the original creek itself for transporting logs and, thus, was not capable then or now of supporting commerce. The ditch, the court noted, is no more than several feet wide, is dammed up by beavers ***1040** in numerous places, and has fallen trees and logs throughout its course.

It is clear that a stream, to be navigable, need not be open to navigation "at all seasons of the year, or at all stages of the water." [FN8] However, as the district court correctly reasoned, "susceptibility of use as a highway for commerce should not be confined to 'exceptional conditions or short periods of temporary high water.' " [FN9]

FN8. *Economy Light and Power Co. v. United States*, 256 U.S. 113, 122, 41 S.Ct. 409, 412, 65 L.Ed. 847 (1921).

FN9. District Court, at 12 (quoting *United States v. Utah*, 283 U.S. 64, 87, 51 S.Ct. 438, 445, 75 L.Ed. 844 (1931)).

Because we hold that the district court's findings of fact are not clearly erroneous, we conclude that Lewis Creek is not, and never has been, navigable in fact. Lewis Creek currently is impassable under ordinary conditions prevailing throughout the year. Only when unpredictable, infrequent, and temporary flooding of the Tombigbee River occurs during parts of the winter months does Lewis Creek become passable; in some years, these floods do not occur at all. As to past usage, we hold that the district court correctly determined that Lewis Creek had not been used as an avenue of commerce. The court thoroughly reviewed evidence of prior usage, including use by the Cochran Lumber Company of the manmade ditch channeled to float timber down the creek. [FN10] As the court noted, this attempt to make Lewis Creek navigable also

FN10. District Court, at 14-15.

proved unsuccessful and ultimately was abandoned because even with the construction by Cochran Lumber Company of a lock or dam ... there never was an adequate enough supply of water to float the lumber down the Creek, except in times of unusually high water, which did not occur with sufficient regularity to justify using the Creek as a means to transport timber in any form. [FN11]

FN11. District Court, at 15.

Moreover, as the Supreme Court has held, "[t]he mere fact that logs, poles, and rafts are floated down a stream occasionally and in times of high water does not make it a navigable river." [FN12] Therefore, we hold that Lewis Creek is not navigable in fact.

FN12. *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 698, 19 S.Ct. 770, 773, 43 L.Ed. 1136 (1899).

B. *Navigational Servitude.*

As noted previously, the parties agree that absent the effect of the Tombigbee floodwaters on Lewis Creek, the creek itself is not a navigable waterway of the United States. Moreover, as we held above, even considering the effect of the Tombigbee floodwaters on Lewis Creek, the creek is not navigable in fact and, therefore, not navigable in law. However, a separate question, considered below, is whether the navigational servitude of the Tombigbee River, as a navigable waterway of the United States, extends to Lewis Creek, thereby creating a possible right of public access to the creek.

The question of navigability, as the district court correctly noted, is a federal question and has been defined by decisions of the federal courts. [FN13] Accordingly, section 329.3 of the Corps of Engineers' regulations states that the precise definitions of "navigable waters of the United States" are dependent on judicial interpretation. [FN14]

FN13. *Utah v. United States,* 403 U.S. 9, 10, 91 S.Ct. 1775, 1776, 29 L.Ed.2d 279 (1971).

FN14. 33 C.F.R. § 329.3.

The Supreme Court, in *United States v. Rands,* held that "[t]he navigational servitude of the United States does not extend beyond the high-water mark." [FN15] According to the Army Corps of Engineers' regulations, federal regulatory jurisdiction over rivers and lakes, *i.e.,* the navigational servitude of the United States, extends

FN15. 389 U.S. 121, 123, 88 S.Ct. 265, 267, 19 L.Ed.2d 329 (1967).

> laterally to the entire water surface and bed of a navigable waterbody, *which includes all the land and waters below the ordinary high water mark.* Jurisdiction thus extends to the edge (as determined ***1041** above) of all such waterbodies, even though portions of the waterbody may be extremely shallow, or obstructed by shoals, vegetation or other barriers. [FN16]

FN16. *Id.* at § 329.11(a).

It also is clear that the government's navigational servitude *cannot* extend *over* the bed of an inland body of water. [FN17] Nor does a river's ordinary high water mark encompass the river's peak flow or flood stages. [FN18] In fact, this restriction was explicitly stated in a prior version of the regulations, [FN19] but has since been omitted. As discussed below, we explicitly reject any attempt by appellants to extend the government's navigational servitude beyond the Tombigbee's navigable river "bed," as that term has been defined by the federal courts.

FN17. *Goose Creek Hunting Club, Inc. v. United States,* 518 F.2d 579, 583, 207 Ct.Cl. 323 (1975); *see also Swanson v. United States,* 789 F.2d 1368, 1371 (9th Cir.1986).

FN18. *Oklahoma v. Texas,* 260 U.S. 606, 632, 43 S.Ct. 221, 224, 67 L.Ed. 428 (1923).

FN19. *See* 33 C.F.R. § 209.260(j)(i) (1977).

[3] The navigable waters of the United States are public property. As one court of appeals recently noted,

> [t]he nation's navigable waters have always been considered "public property" and since the early days of the nation have been under the exclusive control of the federal government under the Commerce Clause. *Gilman v. Philadelphia,* 70 U.S. (3 Wall.) 713, 724-25, 18 L.Ed. 96 (1866); *Gibbons v. Ogden,* 22 U.S. (9 Wheat.) 1, 6 L.Ed. 23 (1864). [FN20]

FN20. *Owen v. United States,* 851 F.2d 1404 (Fed.Cir.1988).

Because the navigational servitude of the United States encompasses "the entire stream and the stream bed below ordinary high-water mark," [FN21] the location of the "bed" of the Tombigbee River, and specifically the river's "ordinary high water mark" are crucial to our determination whether appellants have a right of public access to Lewis Creek. If the navigational servitude of the Tombigbee River, as a "navigable waterbody," [FN22] encompasses Lewis Creek, Lewis Creek is public property and appellants may, subject to state law, have a right of public access. Thus, the location of the Tombigbee River's "ordinary high water mark" is the focus of our inquiry here.

FN21. *Rands,* 389 U.S. at 123, 88 S.Ct. at 267.

FN22. 33 C.F.R. § 329.11(a).

Section 329.11(a)(1) of the regulations defines the ordinary high water mark" of non-tidal rivers as

> the line on the shore established by the fluctuations of water and indicated by physical characteristics

such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas. [FN23]

FN23. 33 C.F.R. § 329.11(a)(1).

The meaning of "ordinary high water mark," however, must be read within the definitional limits set forth by the federal courts. The Supreme Court has held that the "bed" of a navigable river does not include land covered by the "extraordinary freshets of the winter or spring, or the extreme droughts of the summer or autumn." [FN24] Neither does the bed of the river include the "lateral valleys which have the characteristics of relatively fast land, and usually are covered by upland grasses and vegetation, although temporarily overflowed in exceptional instances when the river is at flood." [FN25] Other expressions of the concept of "ordinary high water mark" have been summarized by the court in *United States v. Cameron:*

FN24. *United States v. Chicago, Milwaukee, St. Paul & Pacific Railroad,* 312 U.S. 592, 596, 61 S.Ct. 772, 775, 85 L.Ed. 1064 (1941) (quoting *Alabama v. Georgia,* 64 U.S. (23 How.) 505, 515, 16 L.Ed. 556 (1860)); *see also United States v. Claridge,* 416 F.2d 933, 934 (9th Cir.1970) (ordinary high water mark does not extend to peak flow or flood stage so as to include overflow on flood plain).

FN25. *Oklahoma v. Texas,* 260 U.S. 606, 632, 43 S.Ct. 221, 224, 67 L.Ed. 428 (1923).

***1042** The ordinary high water line has, for example, been defined as the line where the water stands sufficiently long to destroy vegetation below it. *Goose Creek Hunting Club, Inc. v. United States,* 518 F.2d 579, 583, 207 Ct.Cl. 323 (1975); *Kelley's Creek and Northwestern R.R. v. United States,* 100 Ct.Cl. 396, 406 (1943).
It has also been said to be the line which diverts [sic] upland from the river bed, the river bed being the "land upon which the action of the water has been so constant as to destroy vegetation." *United States v. Chicago B & Q R. Co.,* 90 F.2d 161, 170 (7th Cir.1937). Another Court has defined the mark as "a natural physical characteristic placed upon the lands by the action of the river." *U.S. v. Claridge,* 279 F.Supp. 87 (D.Ariz.1966), *aff'd,* 416 F.2d 933 (9th Cir.), *cert. denied,* 397 U.S. 961, 90 S.Ct. 994, 25 L.Ed.2d 253 (1969). The Court in *Harrison v. Fite,* 148 F. 781 (8th Cir.1906), defined the ordinary high water line as the line below which the soil is so usually covered by water that it is wrested from vegetation and its value for agricultural purposes destroyed. The Third Circuit similarly defined the term as the line below which the waters have so visibly asserted their dominion that terrestrial plant life ceases to grow and, therefore, the value for agricultural purposes is destroyed. *See Borough of Ford City v. United States,* 345 F.2d 645, 648 (3d Cir.), *cert. denied,* 382 U.S. 902, 86 S.Ct. 236, 15 L.Ed.2d 156 (1965). [FN26]

FN26. 466 F.Supp. 1099, 1111 (M.D.Fla.1978).

The district court found that the Tombigbee floods and their duration and extent "are unpredictable except that they generally occur, if they do at all, during the winter, or wet months, December through March." [FN27] These floods may last as briefly as a few days before receding and returning to within the banks and bed of the Tombigbee. When flooding occurs, "the Tombigbee flood waters back up through these adjacent riverbottom lands, and depending on their volume and duration, can flood the area around Lewis Creek, approximately three miles from the banks of the Tombigbee." [FN28] Navigation on Lewis Creek during this flooding, even by small outboard motor boats, however, is not possible more than 25% of any year and, even then, is temporary and unpredictable. Moreover, the court noted that "the evidence is uncontroverted that the waters of the Tombigbee River have not occupied the lowland bottomland area abutting Lewis Creek long enough to destroy all terrestrial plant life and render the land valueless for agricultural purposes." [FN29] The riverbottom of Lewis Creek "is covered with grasses, trees and other terrestrial vegetation." [FN30] The land in the immediately surrounding area is used for raising cattle and hogs, for harvesting timber, and for hunting.

FN27. District Court, at 7.

FN28. District Court, at 7.

FN29. District Court, at 20.

FN30. *Id.*

[4] Because we hold that these findings of fact by the district court are not clearly erroneous, appellants' challenge must fall. On the application of law to those facts, we hold that, under the circumstances of this case, the district court properly considered the effect of the high waters of the Tombigbee upon surrounding vegetation in determining the location of the "ordinary high water mark." Flood marks resulting, as the district court found, from temporary and unpredictable flood waters occurring during the "ordinary freshets of the winter or spring" [FN31] are insufficient to establish the ordinary high water mark. In reaching this conclusion, we acknowledge that the ordinary high water mark of non-tidal rivers is not the elevation *reached* by flood waters; rather, it is "the line to which *high* water *ordinarily* reaches." [FN32] Thus, what courts have been interested in is evidence, ***1043** such as a change in terrestrial vegetation, indicating the relatively permanent elevation of the water. [FN33] Debris and litter left from temporary and unpredictable floodwaters, unlike that left from ordinary high water, is not evidence of the river's ordinary high water mark.

FN31. *Chicago, Milwaukee, St. Paul & Pacific R.R.*, 312 U.S. at 596, 61 S.Ct. at 775 (quoting *Alabama v. Georgia*, 64 U.S. at 515).

FN32. *State v. Sorenson*, 222 Iowa 1248, 271 N.W. 234, 326 (1937) (quoting *Cedar Rapids v. Marshall*, 199 Iowa 1262, 203 N.W. 932, 933 (1925)).

FN33. *See, e.g., Howard v. Ingersoll*, 54 U.S. (13 How.) 381, 14 L.Ed. 189 (1851); *Borough of Ford City v. United States*, 345 F.2d 645 (3d Cir.), *cert. denied*, 382 U.S. 902, 86 S.Ct. 236, 15 L.Ed.2d 156 (1965); *Harrison v. Fite*, 148 F. 781 (8th Cir.1906); *Zunamon (Simon), Chicago Mill & Lumber Co.*, 227 Ct.Cl. 605 (1981); *Kelley's Creek & Northwestern Ry. Co. v. United States*, 100 Ct.Cl. 396 (1943).

[5] The government, in its briefs, argues that, pursuant to the regulations, specifically section 329.11(a), the government's navigational servitude extends

> laterally over the entire area covered by the ordinary high waters of the stream, including tributaries that might not otherwise be considered navigable and areas *adjacent to the low water channel that revert to a swampy or even a dry condition as the waters recede.* [FN34]

FN34. Brief for the United States and the United States Corps of Engineers, at 27 (emphasis added).

We reject any attempt by the Corps to extend so liberally the reach of its regulations and of its regulatory jurisdiction. The definition of "ordinary high water mark" advanced by appellants would extend the regulatory jurisdiction of the United States to farmland and hardwood forests in these bottomlands simply because the Tombigbee River periodically floods its banks during the winter and spring wet months. To argue that the government's jurisdiction should extend laterally as much as three miles on either side of the Tombigbee river is ludicrous. Appellants' definition, as the district court noted, "would recognize no horizontal limits to the "bed" of a navigable river in those areas where the banks are relatively low and flat...." [FN35] As one federal court of appeals recently noted,

FN35. District Court, at 20.

> There must ... be horizontal limits to the 'bed' of a river; otherwise, the navigational servitude would extend indefinitely in all directions and swallow up any claim for 'just compensation' under the Fifth Amendment for damages occurring anywhere below the elevation of the high-water mark. [FN36]

FN36. *Owen v. United States*, 851 F.2d 1404, 1410 (Fed.Cir.1988). In that case, the Corp of Engineers argued that it was within its authority as owner of the dominant navigational servitude to intentionally redirect the course of the Tombigbee River to undercut an adjoining landowner's property, resulting in the landowner's farm collapsing into the river due to lack of lateral

support. The court of appeals held that the navigational servitude did not extend to existing fast lands.

And, while the government emphasizes the necessity of their exercise of jurisdiction over properties adjacent to navigable rivers, [FN37] it is clear, as amicus Coastal Land Trust notes, that the Corps does have substantial regulatory power in these areas under section 404 of the Clean Water Act. [FN38]

FN37. The Corps notes that "[a]lthough the Corps' present concern is with the extent of its authority under the Rivers and Harbors Act, whether the public has access to this area will determine whether the Corps can initiate projects affecting the area without having to pay compensation under the Fifth Amendment." Brief for the United States and the United States Corps of Engineers, at 42.

FN38. 33 U.S.C. § 1344. For example, the regulations defining "waters of the United States" under the Clean Water Act specifically provide that such areas include "non-navigable" intrastate waters whose use or misuse could affect interstate commerce." 40 Fed.Reg. 31320 (1975).

Finally, appellants argue that the July 30, 1984 letter from the Corps of Engineers to Appellant Gollatte, as a determination of navigability, is entitled to "substantial weight" pursuant to 33 C.F.R. § 329.14. [FN39] However, as the district court noted, this letter "falls far short of a determination of navigability required by ***1044**33 C.F.R. § 329.14." [FN40] We agree and, on this basis, reject any suggestion that this letter is entitled to substantial weight.

FN39. Section 329.14(a) provides in pertinent part: "Although conclusive determinations of navigability can be made only by federal Courts, those made by federal agencies are nevertheless accorded substantial weight by the courts."

FN40. District Court, at 8. 33 C.F.R. § 329.14(b) sets out in detail the procedure to be followed in making a determination whether a waterbody is navigable.

Because appellants have failed to meet their burden of proof in establishing that Lewis Creek is below the "ordinary high water mark," we conclude that the district court correctly determined that Lewis Creek is not within the "bed" of the Tombigbee River. On this basis, we hold that Lewis Creek is not subject to the government's navigational servitude.

C. *Alabama Law Regarding Right of Public Access.*

[6] Having determined that Lewis Creek is not navigable in fact and is not subject to the navigational servitude of the United States, we are left only with the question whether appellants, nevertheless, have a right of public access to Lewis Creek during periods when the Tombigbee floods its banks.

Appellants rely on Section 9-11-80(a) of the Alabama code to argue that even if Lewis Creek is not navigable, the law of Alabama grants the public a right of access to the waters of Lewis Creek. That section provides that "[a]ll waters of this state are hereby declared to be public waters if such waters are natural bodies of waters ... and if these waters traverse, bound, flow upon or through or touch lands title to which is held by more than one person, firm, or corporation." [FN41]

FN41. Ala.Code § 9-11-80(a).

While, it is clear that Alabama law controls the question of access in this case, [FN42] it also is clear that section 9-11-80(a) applies only to navigable waters. The Alabama Supreme Court, in *Hood v. Murphy*, [FN43] held that the State does not own the "bed and bottom" of non-navigable streams; thus, notwithstanding section 9-11-80(a), the public has "no right of fishery in the waters as they go through such land." [FN44] Simply stated, the state does not own non-navigable waters, and the public has no right of access. Thus, because Lewis Creek is non-navigable, appellants have no right of access.

FN42. See, District Court, at 22-23.

FN43. 231 Ala. 408, 165 So. 219 (1936).

FN44. *Id.* at 408, 165 So. at 220.

III. Conclusion

For the foregoing reasons, we AFFIRM the decision of the district court.

926 F.2d 1036

END OF DOCUMENT

Little River—Arkansas

Reported Decision: Harrison v. Fite, 148 F. 781 (8th Cir. 1906)

Reach at Issue: Stretch near Big Lake

Judicial Determination: Non-navigable

Facts Reported in Decision:

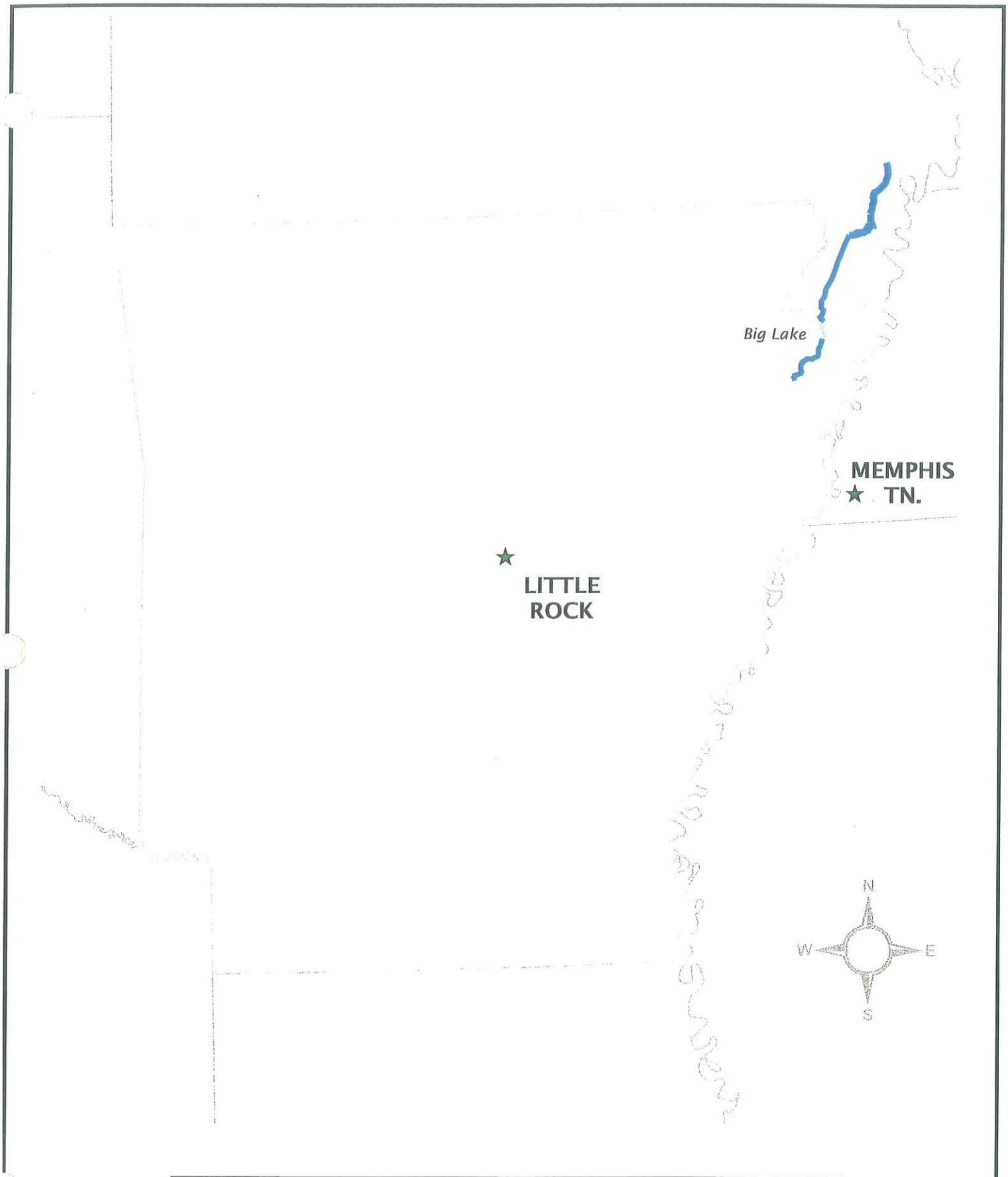
"It is claimed by them that Big Lake is a part of Little river and contains various navigable channels over which steamboats can be operated at all seasons of the year; that Little river is itself a navigable stream; and that they have full right to go upon all parts of it, including Big Lake, in their hunting and fishing pursuits. On the other hand, the complainants claim that Little river is unnavigable. . . ." 148 F. at 782.

"It is quite certain that Little river, which enters at the north and has outlets at the south, pursues a well-defined channel along the western margin of the lake basin, and that the bed of the lake, so called, is marked by many stumps and fallen trees of the kinds that are indigenous only to the uplands. When the survey of this section of the country was made by the national government in 1834, the surveyor's lines meandered the outer margin of the lake." 148 F. at 783.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Rivervale, AR	2,892	1948-1976



Little River - Arkansas

REPORTED DECISION

C

Circuit Court of Appeals, Eighth Circuit.

HARRISON et al.
v.
FITE et al.

No. 2,250.

October 22, 1906.

Appeal from the Circuit Court of the United States for the Eastern District of Arkansas.

West Headnotes

Navigable Waters 1(1)
270k1(1) Most Cited Cases

It does not follow that, because a stream or body of water was once navigable, it has continued and remains so; and whenever, from any natural or other cause its practical utility as a means of transportation has been permanently destroyed, it should cease to be classed among those waters that are charged with a public use.

Navigable Waters 1(3)
270k1(3) Most Cited Cases

To meet the test of navigability as understood in the American law, a water course must have a useful capacity as a public highway of transportation. A theoretical or potential navigability, or one that is temporary, precarious, and unprofitable, is not sufficient to impress upon it a public servitude.

Navigable Waters 1(6)
270k1(6) Most Cited Cases

A finding affirmed that Big Lake, in northeastern Arkansas, is not a part of Little river, but that the river flows along its western boundary in a defined channel, and that the lake is not a navigable body of water; also that the river, whatever it may once have been, is not now navigable in a legal sense, and that the lands of riparian owners on the eastern side of the lake extend across it to the thread of the stream.

Navigable Waters 1(7)
270k1(7) Most Cited Cases

The action of the government surveyor in meandering a body of water or in surveying its bed is to be considered as evidence upon the question of its navigability or unnavigability; but it is not conclusive.

Navigable Waters 36(1)
270k36(1) Most Cited Cases

In Arkansas a riparian owner takes title to high-water mark, or the limit of the bed of a navigable stream; the title to the bed being in the state for the use of the public.

Navigable Waters 36(3)
270k36(3) Most Cited Cases

The bed of a navigable stream is that soil so usually covered by water that it is wrested from vegetation, and does not extend to or include that upon which grasses, shrubs, and trees grow, though covered by the great annual rises.

Navigable Waters 37(7)
270k37(7) Most Cited Cases

Waters and Water Courses 111
405k111 Most Cited Cases

The question whether the title to the soil under the waters of a lake or stream, whether navigable or not, passes to the grantee of the shore land, is determined by the law of the state in which the land lies.

Navigable Waters 44(3)
270k44(3) Most Cited Cases

In Arkansas a riparian owner takes all accretions, whether the water course be navigable or not.

Waters and Water Courses 89
405k89 Most Cited Cases

The title of each riparian owner along a nonnavigable stream extends to the thread of the stream.

Waters and Water Courses 93
405k93 Most Cited Cases

In Arkansas a riparian owner takes all accretions, although the water course is not navigable.

Waters and Water Courses 111

405k111 Most Cited Cases

If the United States has disposed of lands bordering upon a meandered unnavigable water course or lake by a patent containing no reservations, and there is nothing else indicating an intention to withhold title to the lands within the meander lines, it has nothing left to convey, and whether the title to the bed of the waters is in the state or passes to the grantee in the patent is determined by the local law.

Federal Courts 862
170Bk862 Most Cited Cases
(Formerly 30k1009(1))

The trial court's findings in a suit in equity will not be disturbed, except for obvious error in the application of the law or serious or important mistake in the consideration of the evidence.

Evidence 10(5)
157k10(5) Most Cited Cases

The courts take judicial notice of the navigable character of important rivers and inland lakes, but as to those of insignificant capacity and doubtful utility the question is one of fact, to be determined on evidence, and the burden of proof rests upon the party who asserts the existence of the public servitude.

***782** This was a suit by Fite and Acklen, officers and trustees of a voluntary association known as the 'Big Lake Shooting Club,' for an injunction restraining the defendants, Harrison and 36 others, most of whom were averred to be market hunters and fishermen, from trespassing upon the property of the club and killing wild fowl thereon for shipment and sale. The property in controversy is a part of the bed of what is known as 'Big Lake' and 'Little River,' located in the northeastern corner of the state of Arkansas and extending as far north as the Missouri line. It is not disputed that the complainants, as trustees for their club, hold title to strips of land 10 feet in width adjacent to and abutting upon the meander line of Big Lake as shown by the government survey made about the year 1834. But it is denied by the defendants that the rights of the riparian owners extend further than the meander line. It is claimed by them that Big Lake is a part of Little River and contains various navigable channels over which steamboats can be operated at all seasons of the year; that Little river is itself a navigable stream; and that they have full right to go upon all parts of it, including Big Lake, in their hunting and fishing pursuits. On the other hand, the complainants claim that Little river is unnavigable, and is a distinct stream running along the western margin of the surveyed area of the lake, and that the remainder of the land in controversy is a lake only in name, being nothing more, even in times of high water, than an unnavigable morass or swamp, wholly useless for purposes of navigation, and that it long since became by accretion a part, in fact and title, of the surveyed lands along the eastern meander line; also that as the owners on both sides of Little river their title extends to the thread of that unnavigable stream. Upon final hearing the Circuit Court sustained the theory of the complainants and entered a decree perpetually enjoining the defendants from trespassing upon the property in dispute. The defendants appealed.

As it appears from the maps, the surveyed area of Big Lake embraces many thousand acres. It lies in the basin of the St. Francis river, and well-authenticated accounts say that the sinking of the earth's surface resulting in the ***783** formation of the lake was caused by the New Madrid earthquakes of 1811 and 1812. It is quite certain that Little river, which enters at the north and has outlets at the south, pursues a well-defined channel along the western margin of the lake basin, and that the bed of the lake, so called, is marked by many stumps and fallen trees of kinds that are indigenous only to the uplands. When the survey of this section of the country was made by the national government in 1834, the surveyor's lines meandered the outer margin of the lake. The deeds to the complainants covering the strips of land along the meander lines also purported to convey to them as accretions the lands within the lines to the thread of the stream known as 'Little River.' The controlling questions in the case are: Is Little River a distinct stream running along the western margin of the lake basin, and is it navigable or unnavigable? Where are the thread of the stream and the eastern line of its bed? Is Big Lake a part of Little river, and is it navigable, or is it in such condition that it should be said to have become through accretion or reliction a part of the surveyed lands along the eastern meander line? A solution of these questions determines the rights of the contending parties.

Ulysses S. Bratton and Harry H. Myers, for appellants.

John I. Moore and J. F. Gautney (W. J. Driver and A. G. Little, on the brief), for appellees.

Before SANBORN, HOOK, and ADAMS, Circuit Judges.

HOOK, Circuit Judge, after stating the case as above, delivered the opinion of the court.

The shores of navigable waters and the soils under them were not granted by the Constitution to the United States, but were reserved to the states respectively; and the new states upon their admission to the Union have the same rights in respect thereof as the original states. As to lands bounded on unnavigable waters the United States assumes the position of a private owner subject to the general law of the state so far as its conveyances are concerned. In either case the question whether the title to the soil under the waters passes to the grantee of the shore land is determined by the law of the state where the land lies. Hardin v. Shedd, 190 U.S. 508, 519, 23 Sup.Ct. 685, 47 L.Ed. 1156, and cases there referred to.

In Arkansas a riparian owner takes all accretions, whether the water course be navigable or not. Warren v. Chambers, 25 Ark. 120, 91 Am.Dec.538, 4 Am.Rep. 23. His title extends to the thread of an unnavigable stream. In the case of a navigable stream the title to the bed is in the state, for the use of the public, and the riparian proprietor owns only to high-water mark or the limit of the bed. The bed of the river is that soil so usually covered by water that it is wrested from vegetation and its value for agricultural purposes is destroyed. It is the land upon which the waters have visibly asserted their dominion, and does not extend to or include that upon which grasses, shrubs, and trees grow, though covered by the great annual rises. Railway Co. v. Ramsey, 53 Ark. 314, 13 S.W. 931, 8 L.R.A. 559, 22 Am.St.Rep. 195, following Howard v. Ingersoll, 13 How. 381, 14 L.Ed. 189. See, also Houghton v. Railroad, 47 Iowa, 370.

To meet the test of navigability as understood in the American law a water course should be susceptible of use for purposes of commerce or possess a capacity for valuable floatage in the transportation to market of the products of the country through which it runs. It ***784** should be of practical usefulness to the public as a public highway in its natural state and without the aid of artificial means. A theoretical or potential navigability, or one that is temporary, precarious, and unprofitable, is not sufficient. While the navigable quality of a water course need not be continuous, yet it should continue long enough to be useful and valuable in transportation; and the fluctuations should come regularly with the seasons, so that the period of navigability may be depended upon. Mere depth of water, without profitable utility, will not render a water course navigable in the legal sense, so as to subject it to public servitude, nor will the fact that it is sufficient for pleasure boating or to enable hunters or fishermen to float their skiffs or canoes. To be navigable a water course must have a useful capacity as a public highway of transportation. Toledo Liberal Shooting Co. v. Erie Shooting Club, 33 C.C.A. 233, 90 Fed. 680; Moore v. Sanborne, 2 Mich. 520, 524, 59 Am.Dec. 209; Morgan v. King, 35 N.Y. 454, 458, 91 Am.Dec. 58; Brown v. Chadbourne, 31 Me. 9, 1 Am.Rep. 641; Griffith v. Holman, 23 Wash. 347, 63 Pac. 239; Wethersfield v. Humphrey, 20 Conn. 218; Rowe v. Granite Bridge, 38 Mass. 344; Gaston v. Mace, 33 W.Va. 14, 10 S.E. 60, 5 L.R.A. 392, 25 Am.St.Rep. 848; Neaderhouser v. State, 28 Ind. 257; Rhodes v. Otis, 33 Ala. 578, 73 Am.Dec. 439; Railroad v. Brooks, 39 Ark. 403, 43 Am.Rep. 277.

It does not follow that, because a stream or body of water was once navigable, it has since continued and remains so. Changes may occur, especially in small and unimportant waters, from natural causes, such as the gradual attrition of the banks and the filling up of the bed with deposits of the soil, the abandonment of use followed by the encroachment of vegetation, and the selection by the water of other and more natural and convenient channels of escape, that work a destruction of capacity and utility as a means of transportation; and, when this result may fairly be said to be permanent, a stream or lake in such condition should cease to be classed among those waters that are charged with a public use.

The action of the government surveyors in meandering a body of water or in surveying its bed is to be considered as evidence upon the question of its navigability or unnavigability at the time; but it is not conclusive. The surveyors are invested with no power to foreclose inquiry into the true character of the water. If the United States has disposed of lands bordering upon a meandered unnavigable water course or lake, by a patent containing no reservations, and there is nothing else indicating an intention to withhold title to the lands within the meander lines (Niles v. Cedar Point Club, 175 U.S. 300, 20 Sup.Ct. 124, 44 L.Ed. 171) it has nothing left to convey; and whether the title to the bed of the waters is in the state or passes to the grantee in the patent is determined by the local law. (Lamprey v. Minnesota, 52 Minn. 181, 53 N.W. 1139, 18 L.R.A. 670, 38

Am.St.Rep. 541.)

It is the settled doctrine of this court that the finding of a chancellor upon conflicting evidence will be deemed to be presumptively correct, and will not be disturbed on appeal, unless an obvious error has occurred in the application of the law or a serious mistake has been made ***785** in the consideration of the evidence. Thallmann v. Thomas, 49 C.C.A. 317, 111 Fed. 277. Courts take judicial notice of the navigable character of our important rivers and inland lakes-- those that are so within our common knowledge; but there are many of such insignificant capacity and doubtful utility that the question, being one of fact, is to be determined by the evidence produced, and in such case the burden of proof rests upon him who asserts the existence of the public servitude.

The record before us is very voluminous, consisting, as it does, of more than 900 pages. Many witnesses testified upon each side, and there is much conflict in their testimony, more especially concerning the character of the water, whether navigable or no, and whether there is a defined eastern shore line of Little river, from which Big Lake swells to the eastward as an unnavigable swamp. But, applying the foregoing principles of law to the facts of this case, and bearing in mind the conclusions reached by the trial court and their influence in the determination by this court of disputed questions of fact in a suit in equity, our opinion is that the decree should be affirmed. Whatever may have once been the capacity and utility of the body of water known as 'Big Lake' as a highway of commerce or in the flotage of the products of the fields and forests along its banks, the conditions that are to be considered are those of recent years and the present. The capacity of a lake or stream for navigation may be permanently lost from natural causes. Its annual influx of waters may be greatly lessened by works lawfully carried on by the government in the improvement of other natural highways of commerce. Accretion and reliction may work such a complete change that the bed of what was once a navigable body of water may be rapidly approaching that condition which makes it available for the plow. It is a matter of common knowledge that with the construction of levees and drains, and the confining and deepening of the channels of great navigable streams, large areas of land are being rescued from the waters and made useful for grazing and the pursuits of agriculture. Small and unimportant streams and lakes, that partake of the character of swamps during the greater part of the year, may permanently lose whatever occasional navigable capacity they once possessed by the discontinuance of the attention of the government and its improvement of other more capacious and more useful highways of commerce. Through the gradual deposits of silt, the increase of vegetation, and the lessening of the annual volume of water, probably due in large measure to the levee improvements in the valley of the Mississippi, there has been, according to the observation of witnesses, a continuous and progressive upgrowth of the bed of the Big Lake basin; and it is confidently asserted by some that it would soon be available for farming purposes if the outlets of Little river, through which the waters of the lake are discharged at its southern end, were cleared of obstructions. For some years prior to the trial of this case Big Lake has possessed none of the characteristics of real commercial usefulness as a navigable thoroughfare. The sunken basin into which the waters in Little river overflow rises so gradually to the eastward that there are no landing places on the eastern shore. The photographs taken from different points of view and the testimony of the witnesses ***786** show it to be largely a tangled jungle, choked with willows, aquatic growth, and dead trees and stumps. Navigability, in the sense in which the term is used in the law, is not established by proof that during the rainy season the waters rise so that boats of small draft may go here and there by 'riding down the willows,' or that there are here and there inlets of deeper water that penetrate the tangled growth. These inlets cannot in any true sense be termed useful highways of commerce. They are for the most part tortuous, lacking continuity, and, so to speak, end nowhere. Navigation of them, except with canoes, skiffs, and dugouts, is fraught with hidden dangers, even in the times of highest water; and the use that may be and is made of them is not that which is contemplated by the law for the creation of a public easement.

During the greater part of the year the bed of the lake appears to view, excepting where the deeper depressions allow the waters to stand in scattered pools. There are then seen extensive fields of grass between the higher wooded portions, upon which horses and cattle are pastured and hogs are run for several months in the year. Vehicles are driven over the dry bed, and roads thereon are worked by the citizens. Near the south end a highway is marked upon the maps as crossing the lake. Dead trees and stumps still show the effects of a fire that ravaged the lake basin more than 30 years ago. In recent years efforts at navigation by those means that would have a tendency to show a navigable character and

capacity of the water have generally met with disaster. The evidence fully justifies the finding that that part of the area indicated upon the maps and exhibits as being the bed of Big Lake, which extends from the eastern meandered line westward to the east line of Little river, has, by process of accretion and the reliction of the waters, become a part of the patented lands along the eastern margin.

Webster v. Harris, 111 Tenn. 668, 69 S.W. 782, 59 L.R.A. 324, involved the navigability of Reelfoot Lake in Tennessee, near the Mississippi river. The basin of this lake was doubtless created by the same convulsion of nature that resulted in the sunken lands of Missouri and Arkansas. The physical characteristics of Reelfoot Lake are similar to those shown in the record before us. There is the same aspect of desolation, of dead trees, logs, stumps, snags, and other obstructions. But the depth of the irregular open areas between the higher points of land at ordinary low water exceeds that of Big Lake at flood, and the court held that, though Reelfoot Lake was not navigable in the legal sense, nevertheless, as it possessed capacity for valuable floatage, and for rafts, flatboats, and perhaps small vessels of light draft, it was navigable 'in the common acceptation of the term,' and that therefore the title to the bed thereof was in the riparian owners, subject to the easement of the public for commercial intercourse and transportation, though, if it had been navigable in the legal sense, the title to the bed would have been in the state for the use of the public. This distinction in respect of the kinds of navigability and the resultant effect upon the title to the soil under the waters do not obtain in Arkansas.

*787 Little river has a well-defined bed, largely free from vegetation and obstruction, running along the western margin of Big Lake basin. There is no controversy about the western line of its bed, and the evidence fairly establishes that the eastern line thereof is defined and marked by higher points of land lying to the eastward, by the stumps and fallen trees of varieties indigenous only to the uplands, and by willows and aquatic growth. We also approve of the conclusion of the trial court that Little river is not navigable in any real and substantial sense. Witnesses testified that in times of high water there has been no successful navigation of it in recent years, except with a gasoline launch drawing but a few inches of water, and with canoes, skiffs, and dugouts of the hunters and fishermen; that it is not being used to float the products of the fields and forests to market, and cannot be profitably and successfully used for that purpose. And, if practical adaptability and usefulness are the tests, the finding of the court under the evidence was right. The line of division between the lands on the east and those on the west established by the decree was the center line of Little river, which was described with reference to natural monuments as definitely as was practicable.

The decree is affirmed.

END OF DOCUMENT

ADDITIONAL INFORMATION

Water Resources

Data Category: Site Information | Geographic Area: Arkansas | GO

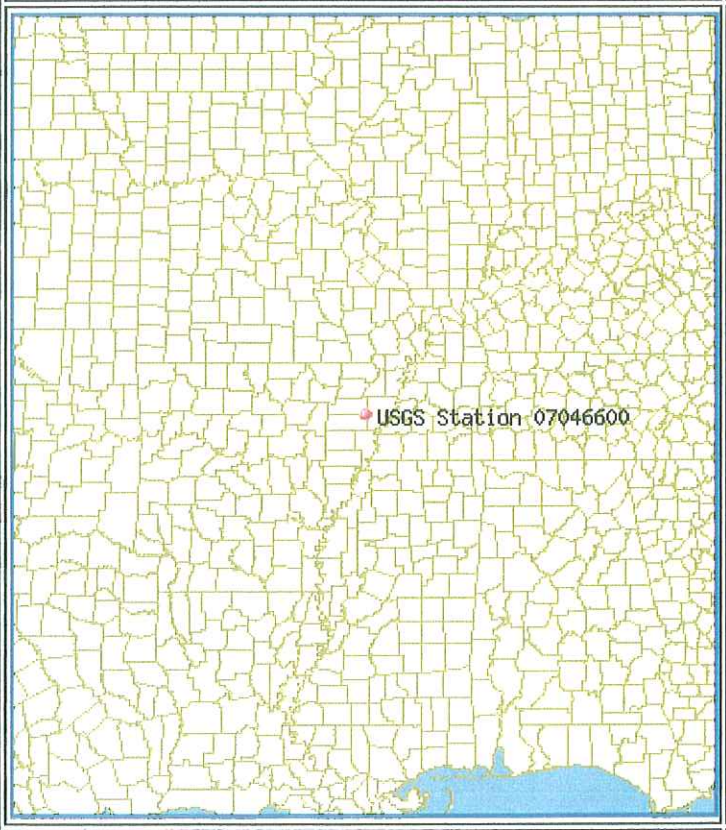
Site Map for Arkansas

USGS 07046600 Right Hand Chute of Little River at Rivervale, AR

Available data for this site: Station site map | GO

Poinsett County, Arkansas
Hydrologic Unit Code 08020204
Latitude 35°40'20", Longitude 90°20'12" NAD27
Drainage area 2,106.00 square miles
Gage datum 213.15 feet above sea level NGVD29

Location of the site in Arkansas.



Site map.

ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ar_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ar_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Arkansas: Site Map

Water Resources

Data Category: Surface Water | Geographic Area: Arkansas | GO

Calendar Year Streamflow Statistics for Arkansas

USGS 07046600 Right Hand Chute of Little River at Rivervale, AR

Available data for this site: Surface-water: Annual streamflow statistics | GO

Poinsett County, Arkansas
Hydrologic Unit Code 08020204
Latitude 35°40'20", Longitude 90°20'12" NAD27
Drainage area 2,106.00 square miles
Gage datum 213.15 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1948	2,425	1958	3,458	1968	2,842
1949	4,714	1959	1,615	1969	3,065
1950	6,071	1960	1,533	1970	3,657
1951	3,754	1961	3,133	1971	2,010
1952	3,132	1962	3,132	1972	3,060
1953	1,712	1963	1,043	1973	5,171
1954	872	1964	2,142	1974	2,923
1955	1,436	1965	2,508	1975	3,640
1956	1,395	1966	2,995	1976	2,348
1957	5,547	1967	2,527		

Questions about data gs-w-ar_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ar_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Arkansas: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ar/nwis/annual/calendar_year?

Retrieved on 2003-03-11 10:52:31 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Arkansas
Privacy Statement || Disclaimer || Accessibility
0.68 0.66

Little Missouri River—North Dakota

Reported Decision: North Dakota v. United States, 770 F. Supp. 506 (D.N.D. 1991), aff'd, 972 F.2d 235 (8th Cir. 1992)

Reach at Issue: Entire length

Judicial Determination: Non-navigable

Facts Reported in Decision:

"In May 1980, Eber Bly contracted with the Northern Pacific Railroad to deliver between 50,000 and 100,000 ties to its crossing on the Little Missouri River where Medora, North Dakota, is presently located. The ties were to be used to construct a section of railroad between Bismarck, North Dakota, and the Yellowstone River. Bly apparently planned to cut ties in the pine stands of southeastern Montana and float them down the Little Missouri River to the railroad crossing at Medora. . . . Bly cut between 90,000 and 100,000 ties. However, none of the ties reached the railroad crossing in 1880. . . . Few, if any, ties arrived in 1881. . . . In June, 1882, the Bismarck Tribune reported: 'Chances are now that a large number of ties that Messrs. Bly and Roberts have had ready to float down the Little Missouri to the railroad during the past two years, will reach their destination. That stream is very high at present, and still booming.' . . . The newspaper later reported that about 47,000 ties arrived that year. . . . The court notes that the reliability of this figure is questionable. . . . Although the newspaper indicated that all of Bly's ties arrived in 1883, the United States' expert, Mr. Muhn, testified that he believed only 25,000 ties arrived total–19,000 in 1882 and 6,000 in 1883. . . . There is no evidence that anyone again attempted such a commercial enterprise on the Little Missouri River." 770 F. Supp. at 509-10.

"The evidence demonstrates that tie-driving on the Little Missouri is not merely 'occasional,' it was an unique, isolated venture. Furthermore, the evidence demonstrates that the ties which eventually reached the railroad crossing arrived only because of periods of high water. . . . Thus, the evidence of Bly's tie drive does not establish that the river afforded a channel for useful commerce." 770 F. Supp. at 510.

"North Dakota has presented evidence of the existence of ferries at two points on the Little Missouri River. North Dakota contends that the existence of ferries can prove navigability. The court finds the evidence of ferries on the Little Missouri River does not support a finding of navigability. . . . Cable ferries are ferries which are attached to a cable that is strung across the river from two relatively high points, towers, or posts. . . . The ferries were used only to provide crossings on the river; they were not used to transport persons up or down the river." 770 F. Supp. at 511.

"The remainder of North Dakota's evidence consists primarily of isolated trips on the river from the 1880s to 1920s, modern day canoe trips on the river, and statistical analysis of the river's 'boatability.'. . . The evidence of isolated trips on the river in the

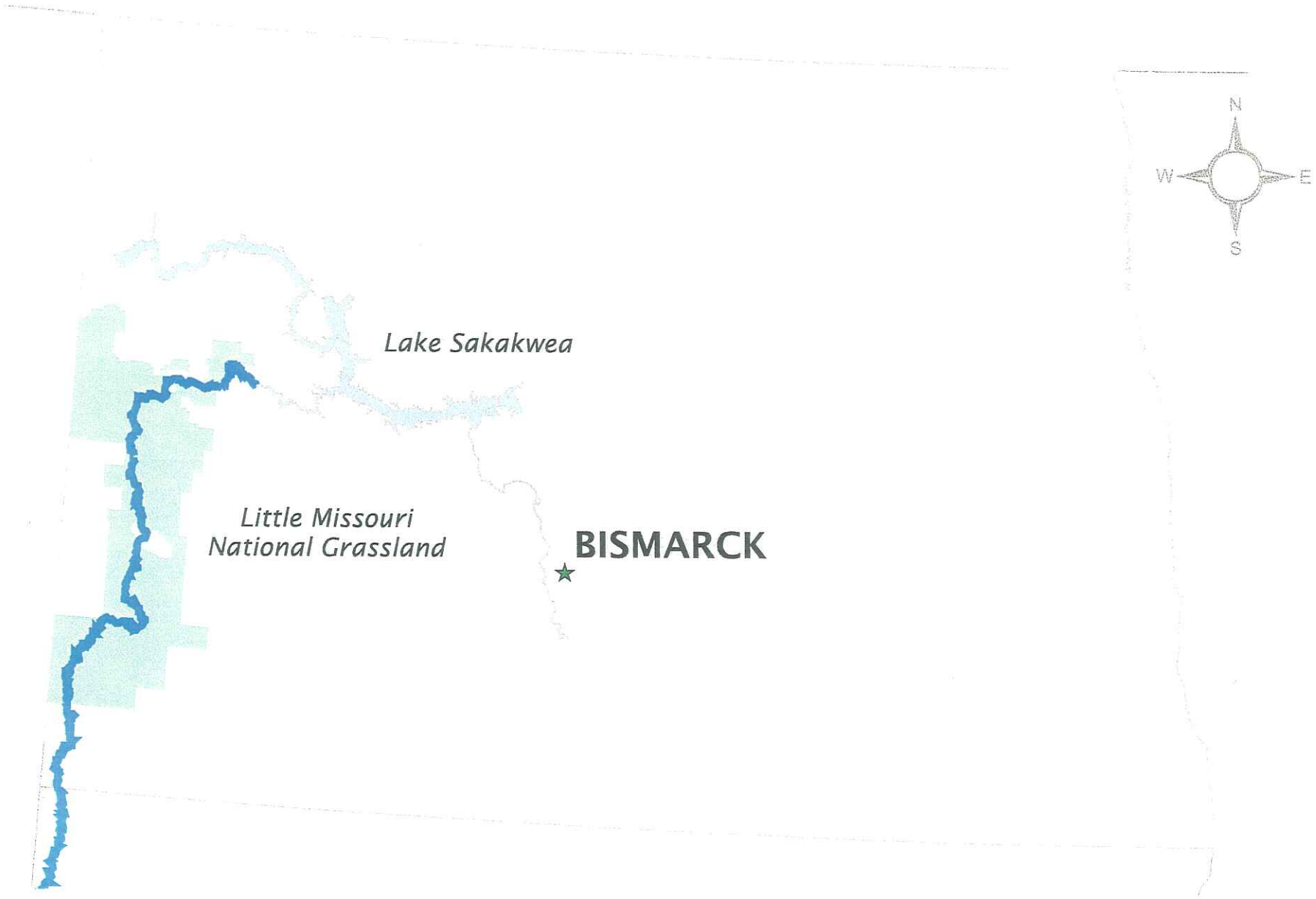
1880s to 1920s demonstrates that the river was used only occasionally and in times of high water. . . . North Dakota contends the absence of canoe trips in more recent times demonstrates that the river is susceptible to use for commercial purposes by craft with similarly shallow drafts near the time of statehood. The court finds this evidence to demonstrate that the river may be susceptible to canoe travel occasionally and in times of high water–generally, in April and May. This modern evidence of 'susceptibility' must be considered in relation to the contemporary evidence of use and susceptibility at the time of statehood. The contemporary evidence indicates that the river was neither used nor susceptible to use as a highway for useful commerce." 770 F. Supp. at 512.

"North Dakota also has presented a statistical analysis of the Little Missouri River's 'boatability.'. . . The Court is not persuaded that this analysis is a reliable indicator of the river's navigability at the time of statehood." 770 F. Supp. at 512.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Watford City, ND	555	1935-1999
Medora, ND	464	1904-1974
Marmath, ND	319	1939-1999



Little Missouri River - North Dakota

REPORTED DECISION

▷

United States District Court,
D. North Dakota,
Southwestern Division.

STATE OF NORTH DAKOTA, ex rel. BOARD OF UNIVERSITY AND SCHOOL LANDS, Plaintiff,
v.
UNITED STATES of America, Defendant.

No. A1-88-122.

June 28, 1991.

North Dakota brought action to quiet title against United States for all portions of Little Missouri riverbed to which United States claimed fee ownership. The District Court, Benson, Senior District Judge, held that evidence of isolated railroad tie drive, use of ferries to cross river, and alleged use of bullboats by Indians on river did not prove that river was navigable at time North Dakota became state as necessary for North Dakota to own riverbed.

Complaint dismissed.

West Headnotes

[1] **Federal Courts** 430
170Bk430 Most Cited Cases

[1] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In title dispute between state and United States, question of whether river is navigable is federal question to be decided by federal test.

[2] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

River is "navigable" in law and in fact if, at time of statehood, river was used or susceptible of being used in its natural and ordinary condition as a highway for useful commerce in customary modes of trade and travel on water; vital point is whether natural navigation of river was such that it afforded channel for useful commerce.

[3] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

For purposes of determining whether river was navigable at time of statehood in order to determine whether title of riverbed rests with state or with United States, evidence of a railroad "tie drive" was not equivalent to evidence of navigability; evidence showed that tie drive on Little Missouri River was not "occasional," it was unique and isolated. Submerged Lands Act, § § 2 et seq., 3, 43 U.S.C.A. § § 1301 et seq., 1311.

[4] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence of ferries on Little Missouri River at time North Dakota became a state did not show that river was navigable at time of statehood as necessary for right to riverbed to remain in state and not United States; evidence showed that, although ferries operated on water, they were functional equivalent of bridges and were not used to transport persons up or down river. Submerged Lands Act, § § 2 et seq., 3, 43 U.S.C.A. § § 1301 et seq., 1311.

[5] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence from single researcher that Indians had used "bullboats" on Little Missouri River was not evidence that river was used as highway for useful commerce, particularly where use was dependent on level of water after autumn rains and practice was abandoned. Submerged Lands Act, § § 2 et seq., 3, 43 U.S.C.A. § § 1301 et seq., 1311.

[6] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

[6] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

North Dakota did not prove that river was navigable at time it became state as necessary for North Dakota to be entitled to ownership of riverbed against United States; evidence of single railroad tie drive, use of ferries to cross river, and Indians' alleged use of bullboats at one time on river did not show navigability. Submerged Lands Act, § § 2 et seq., 3, 43 U.S.C.A. § § 1301 et seq., 1311.

[7] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

[7] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

Evidence of isolated trips on Little Missouri River

before North Dakota became state showed only that river was used occasionally and in times of high water and was not showing of navigability necessary for North Dakota to retain right to riverbed against United States.

[8] **Evidence** 150
157k150 Most Cited Cases

[8] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

Statistical analysis of Little Missouri River's "boatability" was not reliable indicator of river's navigability at time of statehood for purposes of determining whether ownership of riverbed passed to North Dakota rather than remaining with United States.

***507** Charles M. Carvell, Bismarck, N.D., for plaintiff.

Cameron W. Hayden, Asst. U.S. Atty., Bismarck, N.D., K. Jack Haugrud, Michael W. Reed, U.S. Dept. of Justice, General Litigation Section, Washington, D.C., for defendant.

MEMORANDUM OPINION

BENSON, Senior District Judge.

This case was brought on for trial before the court to resolve one issue: whether the Little Missouri River was navigable when North Dakota was admitted to the union and thus became a state in 1889.

Under the Equal Footing Doctrine, title to the beds of those rivers which were navigable at the time of statehood passes to the state upon its admission to the union. Title to the beds of rivers that were not navigable at the time of statehood remains in the United States. *See* United States v. Utah, 283 U.S. 64, 75, 51 S.Ct. 438, 440-41, 75 L.Ed. 844 (1931); *see also* Submerged Lands Act, 43 U.S.C. § 1311 (confirming States' title to and ownership of the lands beneath navigable waters within their boundaries).

North Dakota contends that the Little Missouri River was navigable at the time of statehood. Accordingly, North Dakota claims that it is entitled to ownership of the riverbed. The United States contends that the river was not navigable at the time of statehood and that it retains title to all portions of the riverbed along which it is a riparian owner.

I. Procedural History

This case had its genesis in 1978 when North Dakota brought suit to enjoin the United States from leasing portions of the Little Missouri River bed for oil and gas development and from exercising other privileges of ownership over the riverbed. At the trial of that action, [FN1] North Dakota introduced documentary evidence in support of its claim that the river was navigable at the time of statehood and that the State upon its admission to the union thereby acquired title to the riverbed.

FN1. *See* *Block v. North Dakota ex rel. Board of Univ. & School Lands*, 461 U.S. 273, 278-79 & nn. 5-6, 103 S.Ct. 1811, 1815 & nn. 5-6, 75 L.Ed.2d 840 (1983) (discussing the trial).

The United States denied the river was navigable, but presented no evidence on that issue. Instead, the United States presented evidence in support of its assertion that the State's action was barred by the Quiet Title Act's twelve- year statute of limitations. The United States District Court for the District of North Dakota held that the statute of limitations did not apply to quiet title actions brought by states. The court further held that the river was navigable at the time of statehood and granted North Dakota the requested relief. *North Dakota ex rel. Board of Univ. & School Lands v. Andrus*, 506 F.Supp. 619 (D.N.D.1981) (Van Sickle, J.), *aff'd*, 671 F.2d 271 (8th Cir.1982).

On certiorari, the United States Supreme Court reversed and remanded, holding that the Quiet Title Act provides the exclusive means to challenge the United States' title to real property and that the statute of limitations in the Quiet Title Act does apply to the states. *Block v. North Dakota ex rel. Board of Univ. & School Lands*, 461 U.S. 273, 103 S.Ct. 1811, 75 L.Ed.2d 840 (1983). [FN2]

FN2. The Supreme Court did not address the issue of the river's navigability.

On remand [FN3] the district court received additional evidence on the statute of limitations issue. The court held that the statute ***508** of limitations barred the State's action only as to specific tracts for which the State had actual or constructive notice of the United States' claims. With respect to the remaining tracts, the court quieted title to the riverbed

in North Dakota.

FN3. *See North Dakota ex rel. Board of Univ. & School Lands v. Block*, 789 F.2d 1308, 1311-12 (8th Cir.1986) (discussing the district court proceeding.

The court of appeals reversed, holding that the notice to the State was sufficient for the entire riverbed and that the statute of limitations therefore barred the action in its entirety. The case was remanded to the district court with directions to dismiss the complaint. *North Dakota ex rel. Board of Univ. & School Lands v. Block*, 789 F.2d 1308, 1312-14 (8th Cir.1986).

North Dakota commenced the action now before the court after Congress amended the Quiet Title Act to allow states to sue the federal government without regard to the twelve-year statute of limitations under some circumstances. Pub.L. No. 99-598, 100 Stat. 3351 (1986) (relevant amendment codified at 28 U.S.C. § 2409a(g)).

In this action, North Dakota seeks to quiet title against the United States for all portions of the riverbed to which the United States claims fee ownership. [FN4]

FN4. The lands at issue are described in paragraph 12 of the First Amended Complaint:
12. In particular, the State of North Dakota claims fee simple title to the bed of the Little Missouri River up to the ordinary high water mark as the river runs through the federally owned properties of the Little Missouri National Grasslands, the Theodore Roosevelt National Park, the Theodore Roosevelt Wilderness and as the river runs through any other federally owned lands, including lands managed by the Bureau of Land Management. Excluded from this lawsuit is that portion of the riverbed downstream from the southwest boundary of the Fort Berthold Indian Reservation, which begins at about the west line of Lot 10 of Section 34, Township 148 North, Range 95 West, Dunn County, North Dakota.

The court notes that in its answer, the United States asserted that the State's action was barred by the statute of limitations. However, prior to trial, the United States informed the court that it did not intend to pursue that affirmative defense. [FN5] Thus, the only issue before the court is whether the Little Missouri River was navigable at the time of statehood. [FN6]

FN5. The United States also informed the court that it did not intend to pursue the other affirmative defenses asserted in its answer: failure to state a claim upon which relief can be granted; failure to join indispensable parties; and lack of subject matter jurisdiction.
The court has nevertheless independently examined the basis of its jurisdiction over the subject matter of this lawsuit. The court is satisfied that it has jurisdiction over this quiet title action pursuant to 28 U.S.C. § § 2409a, 1346(f).

FN6. The district and circuit courts' earlier holdings on the issue of navigability have no relevance in the present action. As the court of appeals concluded, the trial court was without jurisdiction to inquire into the merits and "[e]ntered in the absence of jurisdiction, the entire judgment must be reversed." *North Dakota ex rel. Board of Univ. & School Lands v. Block*, 789 F.2d 1308, 1314 (8th Cir.1986).

II. Discussion

[1] In a title dispute between a state and the United States, the question of whether a river is navigable is a federal question which is to be decided by a federal test. *United States v. Oregon*, 295 U.S. 1, 14, 55 S.Ct. 610, 615, 79 L.Ed. 1267 (1935). The federal test for determining navigability in title adjudications is derived from *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 19 L.Ed. 999 (1870), in which the Supreme Court stated:

> Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

Id. at 563. The Court later refined the test, stating:

> [N]avigability does not depend on the particular mode in which such use is or may be had--whether

by steamboats, sailing vessels, or flatboats--nor on an absence of occasional difficulties in navigation, but on the fact, if it be a fact, that the stream in its natural and ordinary condition affords a channel for useful commerce.

***509** *United States v. Holt State Bank,* 270 U.S. 49, 56, 46 S.Ct. 197, 199, 70 L.Ed. 465 (1926).

[2] Thus, a river is navigable in law and in fact if, at the time of statehood, it (1) was used or susceptible of being used (2) in its natural and ordinary condition (3) as a highway for useful commerce (4) in the customary modes of trade and travel on water. "[T]he vital and essential point is whether the natural navigation of the river is such that it affords a channel for useful commerce." *United States v. Utah,* 283 U.S. 64, 86, 51 S.Ct. 438, 445, 75 L.Ed. 844 (1931).

North Dakota bears the burden of proving that the Little Missouri River was navigable at the time of statehood. *See Iowa-Wisconsin Bridge Co. v. United States,* 84 F.Supp. 852, 867 (1949), *cert. denied,* 339 U.S. 982, 70 S.Ct. 1020, 94 L.Ed. 1386 (1950). The task before the court is to determine whether North Dakota has met its burden of proof. In reaching its determination, the court has had the benefit of the trial transcript, the trial exhibits, and the parties' post-trial briefs.

North Dakota has primarily attempted to meet its burden by presenting historical accounts of Eber Bly's tie drive on the river; ferry use on the river; and use of the river by the Mandan and Hidatsa Indian tribes. It also relies upon evidence of modern day canoe travel on the river and statistical evidence of the river's "boatability."

Bly's Tie Drive

[3] North Dakota has presented evidence of a tie drive conducted by Eber Bly in the 1880s. It contends that this evidence alone is sufficient to prove navigability. The court disagrees and finds that the evidence of the tie drive is not a sufficient basis for a finding of navigability.

In May 1880, Eber Bly contracted with the Northern Pacific Railroad to deliver between 50,000 and 100,000 ties to its crossing on the Little Missouri River where Medora, North Dakota, is presently located. [FN7] The ties were to be used to construct a section of railroad between Bismarck, North Dakota, and the Yellowstone River. Bly apparently planned to cut ties in the pine stands of southeastern Montana and float them down the Little Missouri River to the railroad crossing at Medora. *See* Ex. D-94a(xii).

FN7. Bly's contract, dated May 18, 1880, provided in part: I will as your agent make and deliver at the Rail Road Crossing on the Little Missouri River during the year 1880 Fifty to one Hundred Thousand Pine Cross Ties

. . . . .

[I]n case the water is so low that I am unable to drive the ties down the stream during the year 1880 the same may be delivered in the year 1881 and paid for in the same manner as if they had been delivered in the year 1880 but I will if possible deliver them this year.
Ex. D-94a(viii).

Bly cut between 90,000 and 100,000 ties. However, none of the ties reached the railroad crossing in 1880. The Northern Pacific's annual report, dated August 24, 1880, reported: "The cross-ties and the piles were cut; the piles put in the river, and the ties ready on the bank, but up to this writing the river has remained all the season too low to float them. The piles have been worked down about 50 miles, where they remain, and the prospect for getting them down in time to be of service, is very remote." *Id.*

Few, if any, ties arrived in 1881. The Northern Pacific records reveal that as of July 21, 1881, "The cross-ties (about 90,000 in number) cut on the Little Missouri have failed to come down. A large amount of pile timber was also cut up the same stream, none of which has been received." Ex. D-94a(xiv).

The United States contends that in the summer of 1881, Bly established another camp called Logging Camp Ranch which was only forty-five "river" miles south of the railroad crossing at Medora. The evidence shows that Bly hauled some of his ties overland to the Logging Camp Ranch where he dumped them into the Little Missouri ***510** River to float up to the railroad crossing.

In June 1882, the *Bismarck Tribune* reported: "The chances are now that the large number of ties that Messrs. Bly and Roberts have had ready to float down to the Little Missouri to the railroad during the

past two years, will reach their destination. That stream is very high at present, and still booming." Ex. D-94d (excerpt from the *Bismarck Tribune,* June 16, 1882, at 8). The newspaper later reported that about 47,000 ties arrived that year. Ex. D-94d (excerpt from the *Bismarck Tribune,* Aug. 11, 1882, at 7). The court notes that the reliability of this figure is questionable. The *Bismarck Tribune* had reported earlier that Bly cut four hundred thousand ties--a report for which the court finds no factual support in the record. *See* Ex. D-94d (excerpt from the *Bismarck Tribune,* June 16, 1882, at 7).

Finally, in May 1883, the *Bismarck Tribune* reported:

> E.H. Bly last evening received the cheering information that at last all his ties were safely corralled in the boom at the Little Missouri. He has been three years getting those ties down the river and he is tie-rd of the business as a matter of course. The contract has, under the circumstances, been a losing one, and at times he has had over $60,000 tied up and a gang of forty men waiting all summer for providence to provide rain and swell the river sufficiently to make the run. The Little Missouri was higher yesterday at the crossing of the North Pacific than it has ever been known before.

Ex. D-94d (excerpt from the *Bismarck Tribune,* May 25, 1883, at 8). Although the newspaper indicated that all of Bly's ties arrived in 1883, the United States' expert, Mr. Muhn testified that he believed only 25,000 ties arrived in total--19,000 in 1882 and 6,000 in 1883. Mr. Muhn derived those figures from a Northern Pacific Railroad memorandum/payment voucher which was attached to Bly's contract. T. 469-474; Ex. D-114.

Upon Bly's passing, the newspaper recalled that Bly's tie drive "resulted disastrously from a financial standpoint, owing to the low stage of water and unconfined banks of the river, which rendered it impracticable to carry out the venture." Ex. D-94d (excerpt from the *Bismarck Tribune,* Sept. 16, 1901, at 3). There is no evidence that anyone again attempted such a commercial enterprise on the Little Missouri River.

The Supreme Court has stated: "The mere fact that logs, poles and rafts are floated down a stream *occasionally and in times of high water* does not make it a navigable river." *United States v. Rio Grande Dam & Irrigation Co.,* 174 U.S. 690, 698, 19 S.Ct. 770, 773, 43 L.Ed. 1136 (1899) (emphasis added). The court concludes that the historical record of Bly's effort to float ties down the Little Missouri supports the contention of the United States that it was not a navigable river. The evidence demonstrates that tie-driving on the Little Missouri was not merely "occasional," it was an unique, isolated venture. [FN8] Furthermore, the evidence demonstrates that the ties which eventually reached the railroad crossing arrived only because of periods of high water. In 1882, when ties arrived, the newspaper reported that the river was "very high ... and still booming." When additional ties arrived in 1883, the newspaper reported that the Little Missouri was "higher ... at the crossing ... than it has ever been known before." Thus, the evidence of Bly's tie drive does not establish that the river afforded a channel for useful commerce. [FN9]

FN8. The evidence presented here is readily distinguishable from that which formed the basis of the Ninth Circuit Court of Appeals' finding of navigability in *Oregon v. Riverfront Protection Ass'n,* 672 F.2d 792 (9th Cir.1982). In that case, the court found that the log drives were not dependent on high water and were not "occasional." *Id.* at 795. The court noted: "Most drives on the McKenzie were held in April, May, and early June over a period of seventeen years. Thousands of logs and millions of board feet of timber were driven down the river. Such use of the McKenzie was not occasional." *Id.*

FN9. *Cf. United States v. Utah,* 283 U.S. 64, 86-88 & n. 12, 51 S.Ct. 438, 444-445 & n. 12, 75 L.Ed. 844 (1931) ("The use of that portion of the river for transportation boats has been exceptional and necessarily on high water, was found impractical, and was abandoned. The rafting of logs or freight has been attended with difficulties precluding utility. There was no practical susceptibility to use as a highway of trade or travel." (quoting *United States v. Brewer-Elliott Oil & Gas Co.,* 249 F. 609, 623 (W.D.Okl.1918), *aff'd,* 270 F. 100 (8th Cir.1920))).

***511** *Ferries on the River*

[4] North Dakota has presented evidence of the existence of ferries at two points on the Little Missouri River. North Dakota contends that the

existence of ferries can prove navigability. The court finds the evidence of ferries on the Little Missouri River does not support a finding of navigability.

North Dakota has established the existence of cable ferries at Watford City and Marmarth in the early 1900s. [FN10] Cable ferries are ferries which are attached to a cable that is strung across a river from two relatively high points, towers, or posts. T. at 201. The ferries functioned as bridges where funds were not available to construct traditional bridges [FN11] and were rendered unnecessary after bridges were built. T. at 260-261. The ferries were used only to provide crossings on the river; they were not used to transport persons up or down the river. T. at 260.

FN10. The ferry at Marmarth was operational for only a few months in 1915 before it was sunk by high water. T. at 260.

FN11. Ex. P-19 (excerpt from the *Watford Guide,* Aug. 28, 1924):
All waterways intersecting with North Dakota state highways can be crossed at the intersection, according to information given out today by the State Highway Commission in answer to a query as to whether or not the Little Missouri River could be crossed on State Route Number 25 between Killdeer and Watford City.
While it has not been possible for the Highway Commission, with its limited funds, to construct bridges over every stream and river, ferry boats are in operation on every state road intersection with a river or stream which has not been bridged. This in substance was the reply given to the query concerning the route over Number 25. The road runs from Killdeer to Watford City, the crossing over the Little Missouri being effected by a river power ferry. Similar ferries take the place of bridges at all other crossings for which the commission cannot furnish funds with which to erect bridges.

The ferries on the Little Missouri served the sole purpose of providing passage across the river. Although the ferries operated on the water, they were the functional equivalents of bridges. The existence of a bridge on a river may establish that the bed of the river is covered at times by water too deep or too wide at a given point to be crossed by foot, by horse, or by automobile; however, it does not establish that the river is a channel for useful commerce. On the contrary, the existence of a bridge, or a ferry, establishes that the river is an obstruction to commerce which must be overcome. Clearly, those persons who used the ferries to cross the river would have had less difficulty making their trips had the river not existed. The river was not a channel for useful commerce.

Upon the foregoing analysis and in the absence of persuasive caselaw to the contrary, the court concludes that the use of ferries on the Little Missouri River does not support a finding of navigability.

Use by the Mandan and Hidatsa Indians

[5][6] North Dakota has presented evidence that the Mandan and Hidatsa Indians used the Little Missouri River. North Dakota contends that this evidence alone is sufficient to prove navigability. Upon careful consideration of the record evidence, the court concludes that this evidence does not provide a basis for a finding of navigability.

North Dakota has introduced into evidence the works of Dr. Alfred Bowers, an anthropologist, which indicate that in the 1700s, prior to the introduction of the horse, the Mandan and Hidatsa Indians who lived along the Missouri River travelled overland to the Little Missouri River region to hunt in the fall. Bowers indicates that they returned to their villages on the Missouri River in the late fall or spring by floating down the Little Missouri River in craft known as "bullboats," which apparently have a draft of only four to eight ***512** inches. [FN12] The Indians apparently depended on autumnrains or the spring rise in order to make their trips. Bowers notes that the bullboats could not be used every fall "for frequently after a dry summer the stream was nearly dry." Ex. D-941 at 166.

FN12. Bullboats were saucer-shaped craft, approximately four to six feet in diameter, which were made by stretching large animal skins over pole frames.

The United States' expert, Mr. Muhn, testified that he had reviewed the works of numerous individuals who had contact with the Mandan and Hidatsa in the 18th and 19th centuries. Although some of these individuals documented use of bullboats on

neighboring rivers, none other than Dr. Bowers mentioned bullboat use on the Little Missouri River. *See* T. at 413-431; Ex. D-93 at 5-8. [FN13] Only Dr. Bowers, who did his work in the 1940s and 1950s, indicated that the Indians used bullboats on the Little Missouri River. Thus, the court concludes this evidence is entitled to little weight. Furthermore, even if considered, this evidence does not support a finding of navigability. There is no evidence that the river was used as a highway for useful commerce. The river did not provide a reliable means of transportation for the Mandan and Hidatsa and bullboat use on the Little Missouri River was largely abandoned after introduction of the horse. North Dakota contends that Dr. Bowers is substantiated by Meriwether Lewis who, in April of 1805, wrote that although the Little Missouri River's "navigation is extreemly [sic] difficult, owing to it's [sic] rapidity, shoals and sand bars it may however be navigated with small canoes a considerable distance." Ex. 56. Lewis' observation is not particularly significant, however, because the basis for his observation is unknown and his observation was apparently made in the spring during a time of high water. Furthermore, Lewis also wrote on another occasion that the river was *not* navigable based upon the account of Baptiste LePage, who had journeyed forty-five days down the Little Missouri River in a "canoe" and had concluded that the river was not navigable.

FN13. Mr. Muhn prepared exhibit D-93, an historical examination of the Little Missouri River.

Other Uses of the River

The remainder of North Dakota's evidence consists primarily of isolated trips on the river from the 1880s to 1920s, modern day canoe trips on the river, and statistical analysis of the river's "boatability."

[7] The evidence of isolated trips on the river from the 1880s to 1920s demonstrates that the river was used only occasionally and in times of high water. This evidence does not provide a sufficient basis for a finding of navigability.

> It is not ... every small creek in which a fishing skiff or gunning canoe can be made to float at high water which is deemed navigable, but, in order to give it the character of a navigable stream, it must be generally and commonly useful to some purpose of trade or agriculture.

The Montello, 87 U.S. (20 Wall.) 430, 442, 22 L.Ed. 391 (1874) (citation omitted).

North Dakota contends the evidence of canoe trips in more recent times demonstrates that the river was susceptible to use for commercial purposes by craft with similarly shallow drafts near the time of statehood. The court finds this evidence demonstrates that the river may be susceptible to canoe travel occasionally and in times of high water--generally, in April and May. This modern evidence of "susceptibility" must be considered in relation to the contemporary evidence of use and susceptibility at the time statehood. The contemporary evidence indicates that the river was neither used nor susceptible to use as a highway for useful commerce.

[8] North Dakota has also presented a statistical analysis of the Little Missouri River's "boatability." Ex. 77. The court is not persuaded that this analysis is a reliable indicator of the river's navigability at the time of statehood.

III. Conclusion of Law

Upon the record evidence and applicable law, the court concludes that North Dakota ***513** has failed to prove by a preponderance of the evidence that the Little Missouri River was a navigable river when North Dakota was admitted to the union and became a state in 1889.

IV. ORDER FOR JUDGMENT

IT IS ORDERED that judgment be entered for the dismissal of plaintiff's first amended complaint with prejudice.

770 F.Supp. 506

END OF DOCUMENT

H

United States Court of Appeals,
Eighth Circuit.

STATE OF NORTH DAKOTA, ex rel. BOARD OF UNIVERSITY AND SCHOOL LANDS, Appellant,
v.
UNITED STATES of America, Appellee.

No. 91-2725.

Submitted May 14, 1992.
Decided Aug. 10, 1992.

State of North Dakota brought action against United States, seeking to quiet title for portions of riverbed of Little Missouri River, to which United States claimed fee ownership. The United States District Court, District of North Dakota, 770 F.Supp. 506, Paul Benson, Senior District Judge, entered final order in favor of United States, and North Dakota appealed. The Court of Appeals, McMillian, Circuit Judge, held that evidence supported finding that river was not navigable at time of North Dakota's statehood, as required for North Dakota to have title.

Affirmed.

West Headnotes

[1] **Federal Courts** 430
170Bk430 Most Cited Cases

[1] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In title dispute between state and United States, question of whether river was navigable at time of statehood is one of federal law. Submerged Lands Act, § 3(a), 43 U.S.C.A. § 1311(a).

[2] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

In order to prove that river was navigable at time of statehood, as required for state to have title to riverbed, state was required to prove that river was used or was susceptible of being used as highway of useful commerce in its natural and ordinary condition and by customary modes of trade and travel at time of statehood. Submerged Lands Act, § 3(a), 43 U.S.C.A. § 1311(a).

[3] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence supported finding that Little Missouri River was not navigable at time of North Dakota's statehood, as required for North Dakota to have title to riverbed as against United States, despite evidence of tie drive, use of river by Indian tribes, ferry use on river, journals of explorers, and present day recreational canoe use; tie drive was isolated venture partially successful only because of unusually high water, any Indian use involved boats designed for shallow rivers, ferries were used only to provide transportation across river, explorers' journals were found inconclusive, and modern day use was found to be unreliable indicator. Submerged Lands Act, § 3(a), 43 U.S.C.A. § 1311(a).

***236** Charles Carvell, Bismarck, N.D., for appellant.

John T. Stahr, Washington, D.C., for appellee.

Before McMILLIAN, JOHN R. GIBSON and MAGILL, Circuit Judges.

McMILLIAN, Circuit Judge.

The State of North Dakota (North Dakota or State) appeals from a final order entered in the United States District Court [FN1] for the District of North Dakota holding that the United States has title to the riverbeds of the Little Missouri River (Little Missouri or River), because the State failed to prove by a preponderance of the evidence that the River was navigable when North Dakota became a state in 1889, as required under the "equal footing" doctrine in order for the State to have title. *North Dakota ex rel. Bd. of Univ. & School Lands v. United States*, 770 F.Supp. 506 (D.N.D.1991) (memorandum opinion). For reversal, the State argues that the district court erred in finding that the Little Missouri River was not navigable in 1889. For the reasons discussed below, we affirm the order of the district court.

FN1. The Honorable Paul Benson, Senior United States District Judge for the District of North Dakota.

I. PROCEDURAL HISTORY

In 1978, the State brought an action in federal district court to determine title to certain portions of the riverbed of the Little Missouri River in North Dakota where it runs through federally-owned lands. *North Dakota ex rel. Bd. of Univ. & School Lands v. Andrus*, 506 F.Supp. 619 (D.N.D.1981) (*Andrus I*), *aff'd*, 671 F.2d 271 (8th Cir.1982) (*Andrus II*), *rev'd sub nom. Block v. North Dakota ex rel. Bd. of Univ. & School Lands*, 461 U.S. 273, 103 S.Ct. 1811, 75 L.Ed.2d 840 (1983) (*Andrus III*). The State sought to enjoin the United States from leasing portions of the riverbed for oil and gas development and from exercising other privileges of ownership. The State asserted title pursuant to the "equal footing" doctrine and the Submerged Land Act of 1953, which provide that title to the riverbeds of those rivers which were navigable at the time of statehood vests with the state upon its admission to the union. Title to the riverbeds of rivers that were not navigable at the time of statehood remains in the United States. 43 U.S.C. § 1311(a); *see United States v. Utah*, 283 U.S. 64, 51 S.Ct. 438, 75 L.Ed. 844 (1931). The State introduced documentary evidence in support of its claim that the River was navigable at the time of statehood and the State, upon its admission to the union, thereby acquired title to the River. *See Andrus III*, 461 U.S. at 278-79 & nn. 5-6, 103 S.Ct. at 1815 & nn. 5-6 (discussing the trial).

The United States denied the River was navigable, but introduced no evidence to support that position. Instead, the United States argued that the State's claim was barred by the Quiet Title Act's twelve-year statute of limitations. The district court held that the statute of limitations did not apply to quiet title actions brought by states. *Andrus I*, 506 F.Supp. at 625. The district court ruled on the merits that the River was navigable at the time of statehood ***237** and granted North Dakota the requested relief. *Id.* at 623.

On appeal this court agreed that the Quiet Title Act did not apply to the states. *Andrus II*, 671 F.2d at 274. We reviewed the State's evidence of navigability and affirmed the district court's decision that the Little Missouri River was navigable. *Id.* at 278.

The Supreme Court reversed and remanded, holding that states are subject to the Quiet Title Act's statute of limitations. *Andrus III*, 461 U.S. at 290, 103 S.Ct. at 1821-22. The Supreme Court did not address the issue of the River's navigability.

On remand the district court received additional evidence on the statute of limitations issue. The district court held that the statute of limitations barred the State's action only as to specific portions of the riverbed for which the State had actual or constructive notice of the United States' claims. With respect to the other areas, the district court quieted title to North Dakota. *See North Dakota ex rel. Bd. of Univ. & School Lands v. Block*, 789 F.2d 1308, 1311-12 (8th Cir.1986) (*Block*) (discussing the district court proceeding).

On appeal, this court reversed, holding that "the facts as found by the district court lead ineluctably to the conclusion that North Dakota was put on notice of the United States' claim of ownership interest in all of the riverbed" and that the statute of limitations therefore barred the entire action. *Id.* at 1312. The case was remanded to the district court with instructions to dismiss the complaint. *Id.* at 1314.

Congress amended the Quiet Title Act in 1986, exempting states, for certain purposes, from the statute of limitations of the Act. [FN2] The State then filed the present action, again seeking to quiet title against the United States for all portions of the riverbed to which the United States claims fee ownership. A bench trial was held from October 15 to October 18, 1990. The district court was not bound by the factual findings made in *Andrus I*. [FN3] On the merits, the district court held that the State failed to prove by a preponderance of the evidence that the Little Missouri was a navigable river when North Dakota became a state in 1889. [FN4] 770 F.Supp. at 512-13. North Dakota then filed this timely appeal.

FN2. This court on remand noted that its decision "may require North Dakota to adopt a different line of attack." *North Dakota ex rel. Bd. of Univ. & School Lands v. Block*, 789 F.2d 1308, 1314 (8th Cir.1986). North Dakota apparently heeded this court's advice and led an initiative to amend the Quiet Title Act.

FN3. Because North Dakota's suit was time-barred by the statute of limitations of the Quiet Title Act, "the courts below had no jurisdiction to inquire into the merits." *Block v. North Dakota ex rel. Bd. of Univ. & School Lands*, 461 U.S. 273, 292, 103 S.Ct. 1811, 1822-23, 75 L.Ed.2d 840 (1983).

FN4. The district court judge who heard this action was not the same judge who presided over the earlier action.

II. DISCUSSION

The sole issue on appeal is whether the district court's finding that the Little Missouri was not navigable in 1889 when North Dakota became a state is clearly erroneous. If the River was navigable at that time, North Dakota obtained title to the riverbed. If the River was not navigable, the United States retains title to the riverbed. [FN5]

FN5. The district court's findings of fact will not be reversed unless clearly erroneous. *Rogers v. Masem*, 788 F.2d 1288, 1292 (8th Cir.1985). "Where there are two permissible views of the evidence, the factfinder's choice between them cannot be clearly erroneous." *Anderson v. City of Bessemer City*, 470 U.S. 564, 574, 105 S.Ct. 1504, 1511-12, 84 L.Ed.2d 518 (1984).

[1] In a title dispute between a state and the United States, the question of whether a river was navigable at the time of statehood is one of federal law. *United States v. Oregon*, 295 U.S. 1, 15, 55 S.Ct. 610, 616, 79 L.Ed. 1267 (1935). The original case establishing the federal standard, *The Daniel Ball*, 77 U.S. (10 Wall.) 557, 563, 19 L.Ed. 999 (1871), provides that:

> Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in *238 fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

The Supreme Court later refined the test:

> [N]avigability does not depend on the particular mode in which such use is or may be had--whether by steamboats, sailing vessels or flatboats--nor on an absence of occasional difficulties in navigation, but on the fact, if it be fact, that the stream in its natural and ordinary condition affords a channel for useful commerce.

United States v. Holt State Bank, 270 U.S. 49, 56, 46 S.Ct. 197, 199, 70 L.Ed. 465 (1926) (*Holt Bank*).

[2] At trial, the State had the burden of proving by a preponderance of the evidence that the Little Missouri River was navigable at the time of statehood. *Iowa-Wisconsin Bridge Co. v. United States*, 84 F.Supp. 852, 867, 114 Ct.Cl. 464 (1949), *cert. denied*, 339 U.S. 982, 70 S.Ct. 1020, 94 L.Ed. 1386 (1950). Thus, based on the above standards, the State was required to prove that the River (1) was used or was susceptible of being used, (2) as a highway of useful commerce, (3) in its natural and ordinary condition, and (4) by the customary modes of trade and travel at the time of statehood. *Holt Bank*, 270 U.S. at 56, 46 S.Ct. at 199.

[3] North Dakota attempted to meet its burden of proof primarily by presenting historical evidence of: a tie drive [FN6] that took place on the River in the early 1880s; use of the River by the Mandan and Hidatsa Indian tribes; ferry use on the River; and the Lewis and Clark journals. The State also relied on present day recreational canoe use of the River to prove navigability.

FN6. A tie drive is a means of transporting logs from one location to another by floating them down a river.

A. *Eber Bly's Tie Drive*

The State presented evidence of a tie drive that took place in the early 1880s in support of its claim that the river was navigable in 1889. In May of 1880 a Bismarck businessman, Eber Bly, contracted with the Northern Pacific Railroad to deliver about 50,000 to 100,000 railroad ties to the railroad's Little Missouri River crossing, which was at the future location of the town of Medora. He promised to deliver the ties in 1880 and 1881. The ties were to be used to build a segment of the railroad between the Little Missouri and the Yellowstone River in Montana. Bly planned to fulfill the contract by cutting pine trees in southeastern Montana and floating them down the Little Missouri to the railroad crossing, a distance of about 270 miles.

Bly cut ties in the summer of 1880 and by July or August had some in the River, but the River was too low to move them downstream. No ties were delivered in 1880. In 1881, the ties also were not delivered, possibly because of an Indian scare. On June 16, 1882, the *Bismarck Tribune* (*Tribune*) reported that "the ties are coming down" and on July

14th that the "ties were coming down all right." On August 11, 1882, the *Tribune* reported that Bly was loading about 47,000 ties and that the "second run is about 100 miles up, and will not get down until next spring." The following spring, on May 25, 1883, the *Tribune* wrote that "all" Bly's ties had arrived.

The district court found that Eber Bly had so much trouble transporting the ties on the River in 1880 and 1881 that he had to resort to hauling ties overland. 770 F.Supp. at 509-10. Having entered into a contract to float ties down the River and having no success for two years, Bly evidently decided it was easier to haul eight-foot railroad ties 100 miles overland, than float them down the Little Missouri. The district court found that even after dragging the ties overland to an area closer to Medora, the ties only made it down that section of the River with the benefit of high waters. *Id.* at 510. In June 1882 the *Tribune* reported that the chances were good that the ties would reach the crossing ***239** because the "stream is very high at present and still booming." In May 1883 the *Tribune* wrote that the last of the ties had arrived and the River "was higher yesterday at the crossing of the North Pacific than it has ever been known before." The Supreme Court has stated: "The mere fact that logs, poles and rafts are floated down a stream occasionally and in times of high water does not make it a navigable river." *United States v. Rio Grande Dam & Irrigation Co.*, 174 U.S. 690, 698, 19 S.Ct. 770, 773, 43 L.Ed. 1136 (1899). Thus, even though the ties did ultimately travel down the River, because they floated in times of high water, the tie drive does not prove the legal navigability of the River.

The *Tribune* also reported in May 1883 that Bly's contract with the Missouri Pacific Railroad had "been a losing one" for Bly. The State presented no historical evidence of any other similar attempts at commercial uses of the Little Missouri after Bly's undertaking. The district court concluded that Bly's failed efforts to conduct a tie drive supported the contention of the United States that the Little Missouri was not a highway of useful commerce at the time of statehood. 770 F.Supp. at 510. The district court held that the tie drive did not rise to the level of "occasional" usage, rather it was a unique and isolated venture. *Id.* at 510. There is ample evidence to support the finding of the district court that the Bly tie drive was an isolated venture that was only partially successful because of unusually high water.

B. *Use by the Mandan and Hidatsa Indian Tribes*

The State also presented historical evidence of Indian use of the River in the 1700s to demonstrate the River's navigability at statehood. The State relied on the written works of Dr. Alfred Bowers, an anthropologist who studied the Mandan and Hidatsa Indian tribes in the 1940s. According to Dr. Bowers' book, *A History of the Mandan and Hidatsa,* the Mandan and Hidatsa travelled on the Little Missouri River in bullboats. Bullboats were typically saucer-shaped craft, constructed of willow branch frames to which animal skins are attached. The boat was designed for the shallow rivers of the northern plains and needed as little as four inches of water upon which to travel. According to Dr. Bowers, in the 1700s Mandan and Hidatsa hunting parties would travel in late summer or fall to their winter camps along the Little Missouri. In the spring they would return on the River, floating their lodge equipment, surplus meat, and hides in bullboats.

The district court found that although other individuals who had contact with the Mandan and Hidatsa tribes in the 18th and 19th centuries had documented use of bullboats on neighboring rivers, only Dr. Bowers mentioned bullboat use on the Little Missouri River. 770 F.Supp. at 511-12. Because Dr. Bowers was the only expert to mention this use of the River, the district court concluded that the evidence was entitled to little weight. Furthermore, the district court found that even if this evidence were undisputed, it does not support a finding of navigability, because it does not prove that the River was used as a highway for useful commerce. *Id.* at 512.

C. *Ferries on the River*

At trial, North Dakota established the existence of cable ferries on the River at Watford City and Marmath, North Dakota, in the early 1900s. These ferries were attached to cables strung across the River from two relatively high points, towers, or posts. The ferries functioned much like bridges where funds were not available to construct traditional bridges. The ferries were used only to provide transportation across the River; they were not used for transportation up or down the River. The district court found the ferry service irrelevant to the issue of navigability because the fact that a cable ferry could cross at one point did not show the susceptibility of the River for upstream or downstream commercial use. *Id.* at 511.

D. *Lewis and Clark Journals*

The State presented evidence that, in 1804-1805, Lewis and Clark wintered with *240 Indians living on the Missouri River, not far south from the mouth of the Little Missouri. During the winter, Meriwether Lewis gathered information about the area's rivers from the Indians and recorded the information in a journal, which the State introduced into evidence. In the spring of 1805 Lewis wrote in his journal that although the Little Missouri River's navigation was extremely difficult, "it may however be navigated with small canoes a considerable distance."

The district court indicated that the basis for Lewis' observation is unknown and his observation was made in the spring during a time of high water. Moreover, on a different occasion Lewis wrote that the River was not navigable based upon the account of Baptiste LePage, an explorer, who had journeyed forty-five days down the River in a "canoe" and had concluded that the River was not navigable. Thus, the district court found the Lewis and Clark journals to be inconclusive. *Id.* at 512.

E. *Modern Day Canoe Use*

The State presented evidence of modern day recreational canoe use on some portions of the Little Missouri to demonstrate the River's susceptibility to commerce at statehood. According to the State's evidence, the draft of canoes is similar to that of watercraft historically used on waterways for commerce. The State contended that if canoes can travel the River today, commercial watercraft could have done so in the late 1880s. The State also introduced into evidence a study that examined riverflow gauge readings at either Marmarth or Watford, North Dakota, on the days that selected canoe trips occurred to prove that because there was canoeing, the River was "boatable" at the indicated flow readings.

The United States presented evidence at trial that the River today is not the same for purposes of useful commerce as it was at statehood. John Bluemle, a geologist with the North Dakota Geological Survey, testified that the "channel of flowing water may shift in its course from day-to-day within the riverbed." Bluemle found that the "pattern of creation and destruction takes place from day to day and from week to week" and even from "hour to hour." The district court found that modern day canoe use and modern day "boatability" data are not reliable indicators of the River's navigability at statehood. *Id.* at 512.

III. CONCLUSION

We have carefully reviewed the record and conclude that the record supports the district court's rejection of the Bly tie drive, the use of the bullboats, the river ferries, the Lewis and Clark journals, and the modern canoe use as evidence that the River was navigable at the time of statehood. We hold that the district court's ultimate finding that the Little Missouri River was not navigable at the time of North Dakota's statehood is not clearly erroneous.

Accordingly, we affirm the district court's order holding that the United States has title to the riverbed.

972 F.2d 235, 23 Envtl. L. Rep. 20,432

END OF DOCUMENT

ADDITIONAL INFORMATION

Water Resources

Data Category: Site Information | Geographic Area: North Dakota | GO

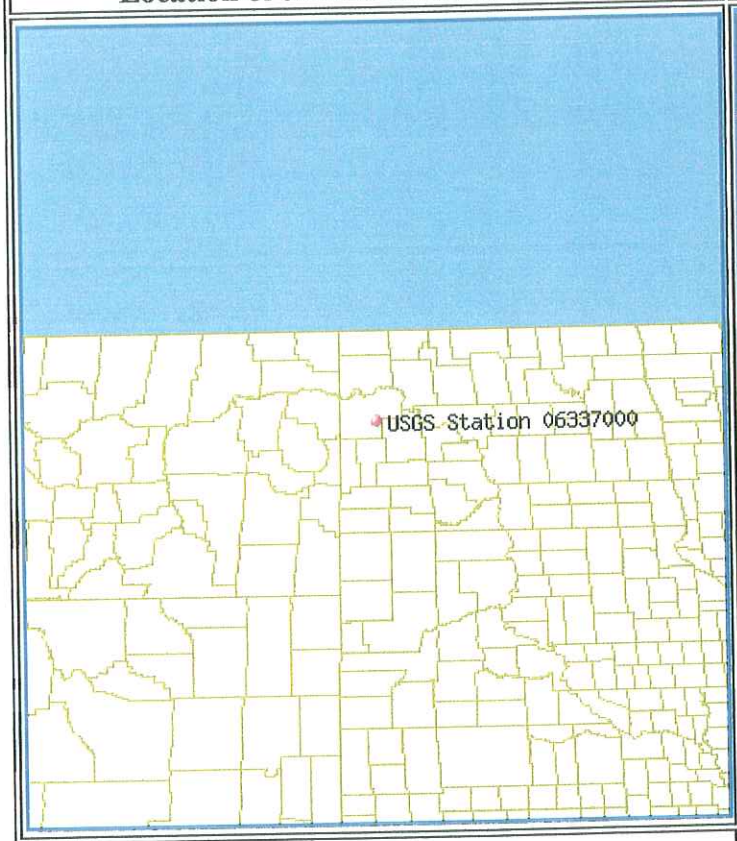
Site Map for North Dakota

USGS 06337000 LITTLE MISSOURI RIVER NR WATFORD CITY, ND

Available data for this site: Station site map | GO

Mckenzie County, North Dakota
Hydrologic Unit Code 10110205
Latitude 47°35'45", Longitude 103°15'45" NAD27
Drainage area 8,310 square miles
Contributing drainage area 8,310 square miles
Gage datum 1,929.03 feet above sea level NGVD29

Location of the site in North Dakota.



Site map.

ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-nd_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-nd_NWISWeb_Maintainer@usgs.gov

Return to top of page

Water Resources

Data Category: Surface Water | Geographic Area: North Dakota | GO

Calendar Year Streamflow Statistics for North Dakota

USGS 06337000 LITTLE MISSOURI RIVER NR WATFORD CITY, ND

Available data for this site: Surface-water: Annual streamflow statistics | GO

Mckenzie County, North Dakota
Hydrologic Unit Code 10110205
Latitude 47°35'45", Longitude 103°15'45" NAD27
Drainage area 8,310 square miles
Contributing drainage area 8,310 square miles
Gage datum 1,929.03 feet above sea level NGVD29

Output formats

HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1935	267	1952	1,158	1968	242	1984	412
1936	300	1953	385	1969	867	1985	203
1937	591	1954	350	1970	448	1986	912
1938	550	1955	397	1971	1,867	1987	320
1939	469	1956	183	1972	1,361	1988	33.1
1940	307	1957	279	1973	459	1989	207
1941	590	1958	224	1974	297	1990	168
1942	526	1959	450	1975	894	1991	152
1943	852	1960	456	1976	428	1992	63.1
1944	1,345	1961	85.6	1977	315	1993	604
1945	590	1962	603	1978	1,426	1994	557
1946	423	1963	566	1979	571	1995	696
1947	1,361	1964	320	1980	91.5	1996	937
1948	635	1965	740	1981	72.6	1997	868
1949	855	1966	288	1982	972	1998	345
1950	1,001	1967	863	1983	397	1999	547
1951	352						

Water Resources

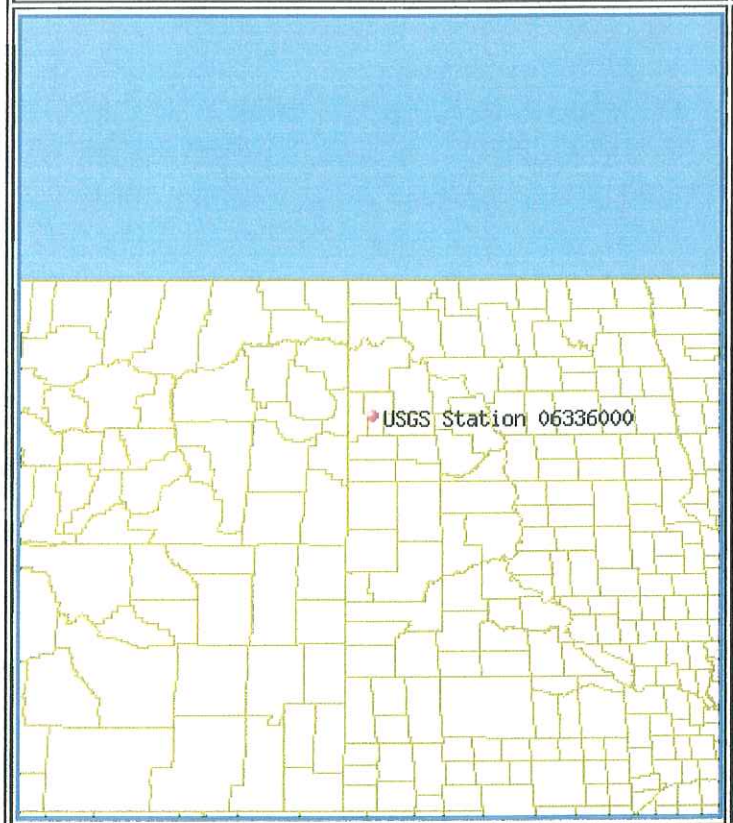
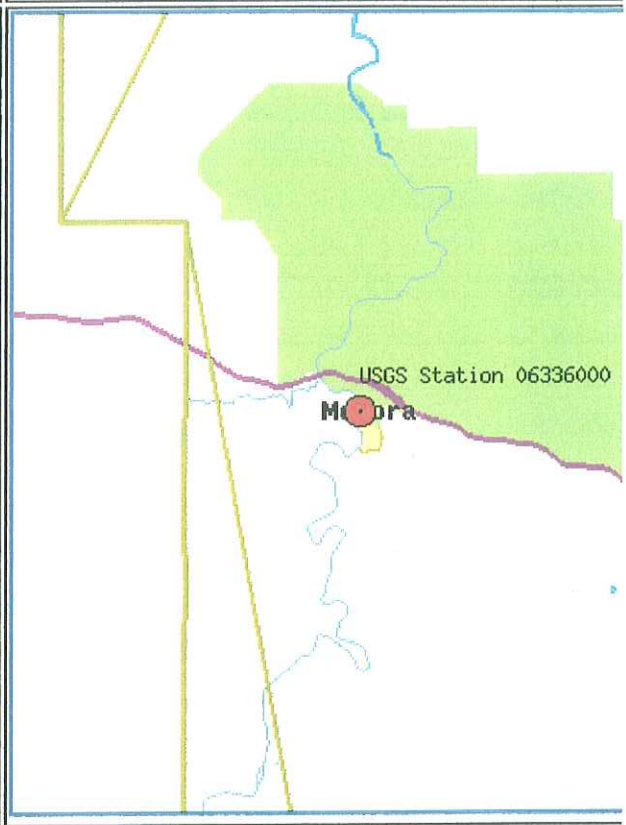
Data Category: Site Information | Geographic Area: North Dakota | GO

Site Map for North Dakota

USGS 06336000 LITTLE MISSOURI RIVER AT MEDORA, ND

Available data for this site: Station site map | GO

Billings County, North Dakota
Hydrologic Unit Code 10110203
Latitude 46°55'10", Longitude 103°31'40" NAD27
Drainage area 6,190.00 square miles
Gage datum 2,246.75 feet above sea level NGVD29

Location of the site in North Dakota.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-nd_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-nd_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for North Dakota: Site Map

Water Resources

Data Category: Surface Water | Geographic Area: North Dakota | GO

Calendar Year Streamflow Statistics for North Dakota

USGS 06336000 LITTLE MISSOURI RIVER AT MEDORA, ND

Available data for this site: Surface-water: Annual streamflow statistics | GO

Billings County, North Dakota
Hydrologic Unit Code 10110203
Latitude 46°55'10", Longitude 103°31'40" NAD27
Drainage area 6,190.00 square miles
Gage datum 2,246.75 feet above sea level NGVD29

Output formats

HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1904	295	1947	857	1957	169	1966	180
1905	699	1948	458	1958	144	1967	708
1906	579	1949	601	1959	270	1968	132
1907	895	1950	835	1960	282	1969	696
1929	1,340	1951	169	1961	56.9	1970	343
1930	359	1952	877	1962	470	1971	1,222
1931	140	1953	280	1963	482	1972	904
1932	481	1954	151	1964	227	1973	322
1933	510	1955	262	1965	534	1974	191
1946	368	1956	134				

Water Resources

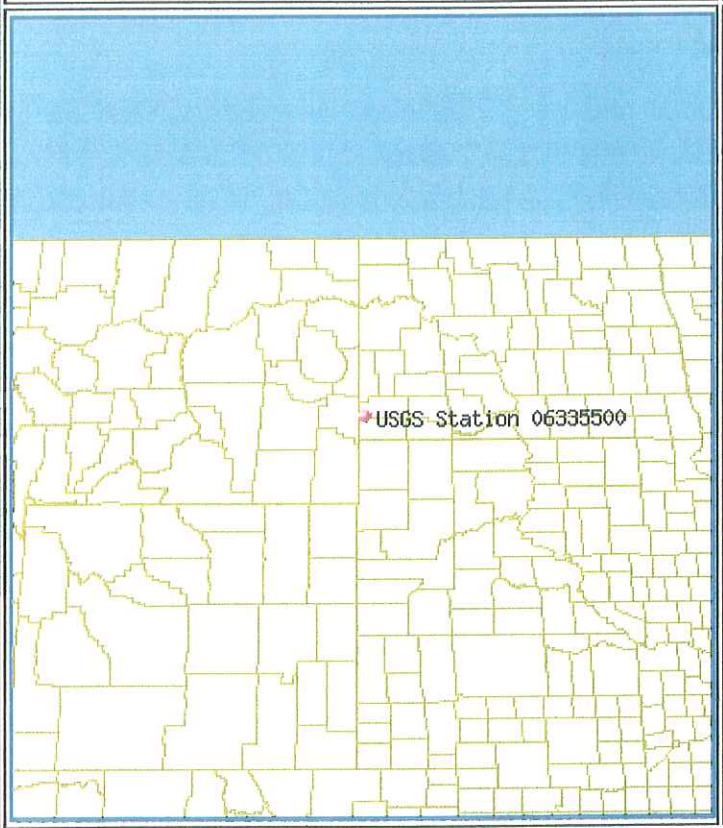
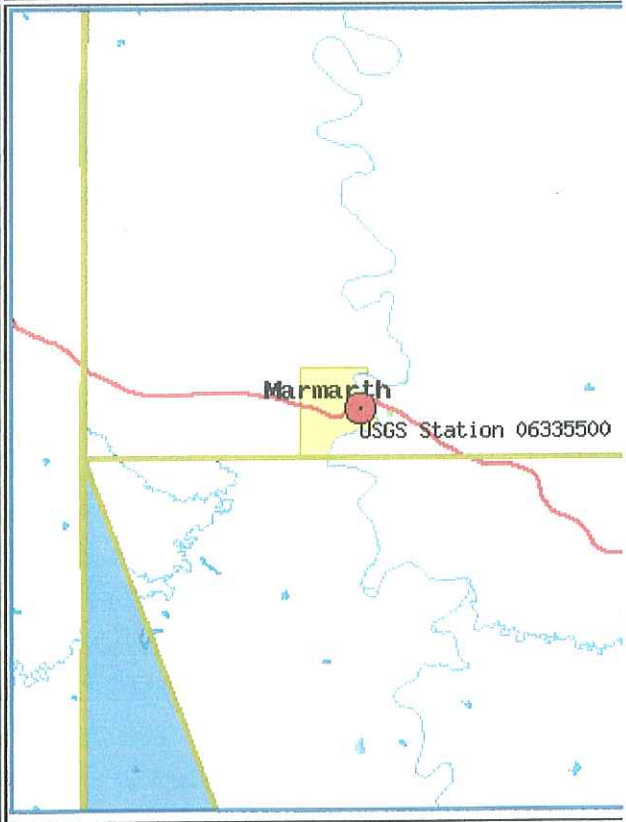
Data Category: Site Information | Geographic Area: North Dakota | GO

Site Map for North Dakota

USGS 06335500 LITTLE MISSOURI RIVER AT MARMARTH, ND

Available data for this site: Station site map | GO

Slope County, North Dakota
Hydrologic Unit Code 10110203
Latitude 46°17'44", Longitude 103°55'06" NAD27
Drainage area 4,640.00 square miles
Gage datum 2,686.32 feet above sea level NGVD29

Location of the site in North Dakota.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-nd_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-nd_NWISWeb_Maintainer@usgs.gov
NWIS Site Inventory for North Dakota: Site Map

Return to top of page

Water Resources

Data Category: Surface Water | Geographic Area: North Dakota | GO

Calendar Year Streamflow Statistics for North Dakota

USGS 06335500 LITTLE MISSOURI RIVER AT MARMARTH, ND

Available data for this site: Surface-water: Annual streamflow statistics | GO

Slope County, North Dakota
Hydrologic Unit Code 10110203
Latitude 46°17'44", Longitude 103°55'06" NAD27
Drainage area 4,640.00 square miles
Gage datum 2,686.32 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1939	216	1955	155	1970	250	1985	158
1940	190	1956	108	1971	831	1986	553
1941	399	1957	106	1972	595	1987	131
1942	254	1958	102	1973	250	1988	17.9
1943	440	1959	179	1974	136	1989	104
1944	989	1960	236	1975	582	1990	108
1945	274	1961	23.1	1976	253	1991	61.6
1946	339	1962	480	1977	203	1992	29.1
1947	598	1963	443	1978	878	1993	439
1948	308	1964	176	1979	295	1994	397
1949	435	1965	406	1980	26.4	1995	460
1950	615	1966	117	1981	33.2	1996	610
1951	122	1967	583	1982	488	1997	453
1952	659	1968	122	1983	224	1998	233
1953	266	1969	540	1984	294	1999	371
1954	84.6						

McKenzie River—Oregon

Reported Decision: Oregon v. Riverfront Protection Ass'n, 672 F.2d 792 (9th Cir. 1982)

Reach at Issue: From mile 37 to confluence with Willamette River

Judicial Determination: Navigable

Facts Reported in Decision:

"During the high-water period of November through March, the river was too swift, deep, and dangerous for log driving. During the low-water period from July through October bars, rapids, boulders, and shoals usually prevented log drives. . . . Most drives on the McKenzie were held in April, May, and early June over a period of seventeen years. Thousands of logs and millions of board feet of timber were driven down the river." 672 F.2d at 795.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Vida, OR	4,066	1925-2000
Leaburg, OR	2,771	1990-2000
Walterville, OR	3,060	1990-2000

McKenzie River - Oregon

REPORTED DECISION

United States Court of Appeals,
Ninth Circuit.

STATE OF OREGON, By and Through the DIVISION OF STATE LANDS, Plaintiff-Appellant,
v.
RIVERFRONT PROTECTION ASSOCIATION, an unincorporated association; Henry Salot, Sarah G. Salot, Carl Wilson, Rose Wilson, John E. Jaqua and Rosemond R. Jaqua, Defendants-Appellees.

No. 81-3035.

Argued and Submitted Feb. 3, 1982.
Decided March 26, 1982.

The state of Oregon filed an action seeking a declaratory judgment that when the state was admitted to the Union, a disputed stretch of a river was navigable. The United States District Court for the District of Oregon, Michael R. Hogan, Magistrate, held that the river was not navigable, and thus, that the title to the riverbed did not vest in the state. State appealed. The Court of Appeals, Sneed, Circuit Judge, held that the river was navigable when the state of Oregon was admitted to the Union, and, therefore, the title to the riverbed was vested in state of Oregon at that time.

Reversed and remanded.

West Headnotes

[1] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

Upon admission of state to Union, title to land underlying navigable waters within state passes from United States to state as incident to transfer to state of local sovereignty, and, therefore, title to submerged and submersible lands within state vests in state subject only to paramount powers of United States to control such waters for purposes of navigation in interstate and foreign commerce.

[2] **Navigable Waters** 2
270k2 Most Cited Cases

[2] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

Title to submerged and submersible lands within state vests in state subject only to paramount power of United States to control such waters for purposes of navigation in interstate and foreign commerce even if waters in question are wholly within borders of state and are not part of navigable interstate or international waterway.

[3] **Waters and Water Courses** 89
405k89 Most Cited Cases

If waters are not navigable, title of United States to land underlying them remains unaffected by creation of new state.

[4] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

Whether waters within state are navigable or nonnavigable is federal question.

[5] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

River is "navigable" under federal law when it is used or susceptible of use in ordinary condition as highway for commerce over which trade and travel are or may be conducted in customary modes of trade and travel on water.

[6] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Difficulty of transportation on river did not preclude finding of navigability where there was evidence that thousands of logs and millions of board feet of timber were driven down river.

[7] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

Seasonal nature of log drives on river did not destroy its navigable character.

[8] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

For purposes of determining whether river was navigable in its ordinary, unimproved condition at time state was admitted to Union, crude dams by which river was temporarily deepened for log driving could not be deemed to have altered natural condition

of river.

[9] **Navigable Waters** 36(1)
270k36(1) Most Cited Cases

River was used in its ordinary condition as highway for useful commerce in 1859 when Oregon was admitted to Union, and, therefore, title to riverbed vested at that time in state of Oregon.

[10] **Declaratory Judgment** 392.1
118Ak392.1 Most Cited Cases
(Formerly 118Ak392)

Issue of whether title to riverbed vested in persons owning real property riparian to river, and thus whether they were to be compensated if divested of title, would not be considered where trial court did not address issue in action by state of Oregon seeking declaratory judgment that when state was admitted to Union, disputed portion of river was navigable so that title to riverbed vested in state.

***793** Peter S. Herman, Senior Asst. Atty. Gen., Salem, Or., argued, for plaintiff-appellant; William F. Gary, Deputy Sol. Gen., Salem, Or., on brief.

Donald J. Morgan, Wood, Tatum, Mosser, Brooke & Holden, Portland, Or., for defendants-appellees.

Appeal from the United States District Court for the District of Oregon.

Before SNEED, ANDERSON, and REINHARDT, Circuit Judges.

SNEED, Circuit Judge:

This appeal poses the question whether the McKenzie River between river mile 37 and its confluence with the Willamette River was navigable under federal law on February 14, 1859 when the State of Oregon was admitted to the Union. If it was so navigable title to the riverbed vested at that time in the State of Oregon. The district court held that it was not so navigable. We hold that the McKenzie River between river mile 37 and its confluence with the Willamette River was navigable and reverse.

I.
BACKGROUND

To determine ownership of the riverbed underlying the reach of the McKenzie now in dispute, the appellant, State of Oregon, sought a declaratory judgment that when the State of Oregon was admitted to the Union, the disputed reach of the McKenzie River was navigable. The appellee, Riverfront Protective Association, is an unincorporated association composed primarily of ***794** persons owning real property riparian to the McKenzie River. Many ofthese landowners hold title derived from federal land patents. They threaten to engage in acts that would interfere with plaintiff's ownership of the land.

The parties stipulated to a magistrate's trial with the case to be submitted on the pretrial order and briefs. On December 5, 1980, the magistrate issued his findings of fact and conclusions of law as those of the district court. See 28 U.S.C.A. s 636(c) (1981). Thus, the court determined that the McKenzie River was not navigable in 1859, nor was it commercially usable in its ordinary condition. Clerk's Record 28, p. 19. Thereafter, the court entered judgment ordering that plaintiff take nothing and dismissing plaintiff's action on the merits. Clerk's Record 29.

The facts are not in dispute. On questions of law, our review is not limited by a duty to defer to the decision of the district court. East Oakland- Fruitvale Planning Council v. Rumsfeld, 471 F.2d 524, 529 (9th Cir. 1972). Jurisdiction in the district court was based on 28 U.S.C.A. s 1331 (1981).

II.
ANALYSIS
A. Title to the Riverbed

[1][2][3] Upon the admission of a state to the Union, title to lands underlying navigable waters within the state passes from the United States to the state as incident to the transfer to the state of local sovereignty. Therefore, title to the submerged and submersible lands within the state vests in the state subject only to the paramount power of the United States to control such waters for purposes of navigation in interstate and foreign commerce. United States v. Oregon, 295 U.S. 1, 14, 55 S.Ct. 610, 615, 79 L.Ed. 1267 (1935). This is so even though the waters in question are wholly within the borders of the state and are not part of a navigable interstate or international waterway. Id.; Utah v. United States, 403 U.S. 9, 10, 91 S.Ct. 1775, 29 L.Ed.2d 279 (1971). If the waters are not navigable the title of the United States to land underlying them remains unaffected by the creation of a new state.

See United States v. Utah, 283 U.S. 64, 75, 51 S.Ct. 438, 440, 75 L.Ed. 844 (1931); Oklahoma v. Texas, 258 U.S. 574, 583, 42 S.Ct. 406, 410, 66 L.Ed. 771 (1922). As pointed out above, at least some of the defendants-appellees in this case hold titles descended from federal title.

[4] Thus, ownership of the riverbed on February 14, 1859 substantially affects its present ownership. Whether the waters within the state are navigable or non-navigable is a federal question. United States v. Oregon, 295 U.S. 1, 14, 55 S.Ct. 610, 615, 79 L.Ed. 1267 (1935); United States v. Holt State Bank, 270 U.S. 49, 46 S.Ct. 197, 70 L.Ed. 465 (1926); Brewer-Elliot Oil & Gas Co. v. United States, 260 U.S. 77, 43 S.Ct. 60, 67 L.Ed. 140 (1922).

B. Navigability

[5] A river is navigable under federal law when it is used or susceptible of use in its ordinary condition as a highway for commerce over which trade and travel are or may be conducted in the customary modes of trade and travel on water. The Daniel Ball, 77 U.S. (10 Wall.) 557, 563, 19 L.Ed. 999 (1870). The Daniel Ball sounded in admiralty, but the Supreme Court has adopted thesame definition in "navigability for title" cases. See, e.g., Utah v. United States, 403 U.S. 9, 91 S.Ct. 1775, 29 L.Ed.2d 279 (1971); United States v. Oregon, 295 U.S. 1, 55 S.Ct. 610, 79 L.Ed. 1267 (1935).

In a case decided five weeks after the magistrate's opinion here, we held evidence of transportation of logs by river sufficient, when joined with the other facts of the case, to support a finding of navigability for purposes of federal regulatory jurisdiction under 16 U.S.C. s 796(8) (1976).[FN1] ***795**Puget Sound Power & Light Co. v. FERC, 644 F.2d 785, 788-89 (9th Cir.), cert. denied, --- U.S. ----, 102 S.Ct. 596, 70 L.Ed.2d 588 (1981) (shingle bolts).

> FN1. Navigability for title to riverbeds differs in three important respects from navigability for federal regulatory jurisdiction over power plants under the Commerce Clause. The former must exist at the time the State is admitted into the Union. Also it must exist in the river's ordinary condition, see United States v. Utah, 283 U.S. 64, 75-76, 51 S.Ct. 438, 440-41, 75 L.Ed. 844 (1931); it cannot occur as a result of reasonable improvements. This is not the case in federal power plant licensing. See United States v. Appalachian Electric Power Co., 311 U.S. 377, 61 S.Ct. 291, 85 L.Ed. 243 (1940). Finally, to support federal regulatory jurisdiction over power plants the river must by statute be, or have been, "suitable for use for the transportation of persons or property in interstate or foreign commerce." 16 U.S.C. s 796(8) (1976). No such "in interstate or foreign commerce" requirement exists when the issue is navigability for title.

[6] We recognized in that case that use of the river need not be without difficulty, extensive, or long and continuous. Id. Like the logs transported down the McKenzie, the shingle bolts in Puget Sound "required nearly constant handling by the drivers to break up jams, free those bolts that were lodged on the banks and shallow areas, and direct them down the main channel of the river." Id.

Transportation on the McKenzie may have been somewhat more difficult. In Puget Sound drivers found the work "not difficult," 644 F.2d at 788, whereas on the McKenzie it took substantial logging crews an average of from thirty to fifty days to complete a log drive down the 32-mile reach at issue. Unfavorable circumstances could increase this time to over ninety days. Intractable log jams had to be broken up with dynamite. Too much rain caused uncontrollable flooding; too little exposed gravel bars, boulders, and shoals. Crews might spend three or four days moving logs across a single gravel bar. But notwithstanding such difficulties, thousands of logs and millions of board feet of timber were driven down the river. Significantly, the evidence shows that the logs floated on the McKenzie were much larger than the shingle bolts floated on the White River in Puget Sound and, apparently, the entire volume of traffic also was larger.

[7] Nor does the seasonal nature of log drives on the McKenzie destroy its navigable character. While it is true that the Supreme Court has observed that "The mere fact that logs ... are floated down a stream occasionally and in times of high water does not make it a navigable river," United States v. Rio Grande Dam & Irrigation Co., 174 U.S. 690, 698, 19 S.Ct. 770, 773, 43 L.Ed. 1136 (1899) (italics added), navigation on the McKenzie did not depend on high water. In fact, the river was never used during high water. Cf. 644 F.2d at 788 (White River) (same). During the high-water period of November through March, the river was too swift, deep, and dangerous

for logdriving. During the low-water period from July through October, bars, rapids, boulders, and shoals usually prevented log drives. Furthermore, the log drives were not "occasional." Most drives on the McKenzie were held in April, May, and early June over a period of seventeen years. Thousands of logs and millions of board feet of timber were driven down the river. Such use of the McKenzie was not "occasional."

[8][9] Because the parties stipulated that evidence from the late 1800's and early 1900's would be deemed evidence of the river's natural condition on February 14, 1859, only the question of whether the river was navigable in its ordinary, unimproved condition is at issue. The magistrate's findings of fact show that the McKenzie was sometimes temporarily deepened for logdriving by construction of "wing dams." ***796** However, these crude dams cannot reasonably be deemed to have altered the natural condition of the river. The same is true of all the other artificial aids to logdriving-log booms, peaveys, [FN2] "dogs,"[FN3] two-horse teams, and dynamite-with which log drivers on the McKenzie plied their laborious trade. These rough means facilitated the transport of logs on the McKenzie, but they did not improve the river. Certainly they bear little resemblance to the planned civil engineering projects considered to be reasonable improvements in United States v. Appalachian Electric Power Co., 311 U.S. 377, 417-18, 61 S.Ct. 291, 303-04, 85 L.Ed. 1143 (1940) (improvements for keelboat and steamboat use). Thus, the McKenzie was used in its ordinary condition as a highway for useful commerce.

FN2. A peavey is a long-handled tool with a stout, sharp spike and hook at one end.

FN3. A "dog" is a bent spike for driving into logs that have become wedged between boulders or stranded on gravel bars. The dog holds firm under pressure, but releases when struck a quick blow. By using dogs, stranded logs could be pulled free by two-horse teams and released into the current at the critical moment.

C. Oregon law

[10] Appellees also assert that, even assuming title vested in the State of Oregon on February 14, 1859, subsequent disposition of title to the riverbed is a question of state law and under that law title to the McKenzie riverbed vests in them as riparians. Due process, they insist, requires that they be compensated if divested of title.

We need not address these issues. Although appellees' due process claim was argued in the trial briefs, the trial court did not address the issue. It is outside the scope of the issues as defined in the pretrial order, which was not amended, and we decline to reach it here. Although the previously unsettled question of riparian title to beds of navigable rivers under Oregon law appears to have been authoritatively decided in favor of the state, see State Land Board v.Corvallis Sand & Gravel Co., 283 Or. 147, 159, 582 P.2d 1352, 1360 (1978), this is an issue that initially should be addressed by the district court, which has a better position than do we for interpreting Oregon law. See, e.g., Power v. Union Pacific Railroad Co., 655 F.2d 1380 (9th Cir. 1981); Major v. Arizona State Prison, 642 F.2d 311 (9th Cir. 1981); United States v. County of Humboldt, 628 F.2d 549, 551 (9th Cir. 1980). Therefore we remand to the district court to permit the determination in the way it judges most practicable of how Oregon law affects a riparian's title to the riverbed involved in this case.

The judgment of the district court is reversed.

REVERSED AND REMANDED.

672 F.2d 792, 12 Envtl. L. Rep. 20,728

END OF DOCUMENT

ADDITIONAL INFORMATION

McKenzie River Highway, Oregon Photo Card

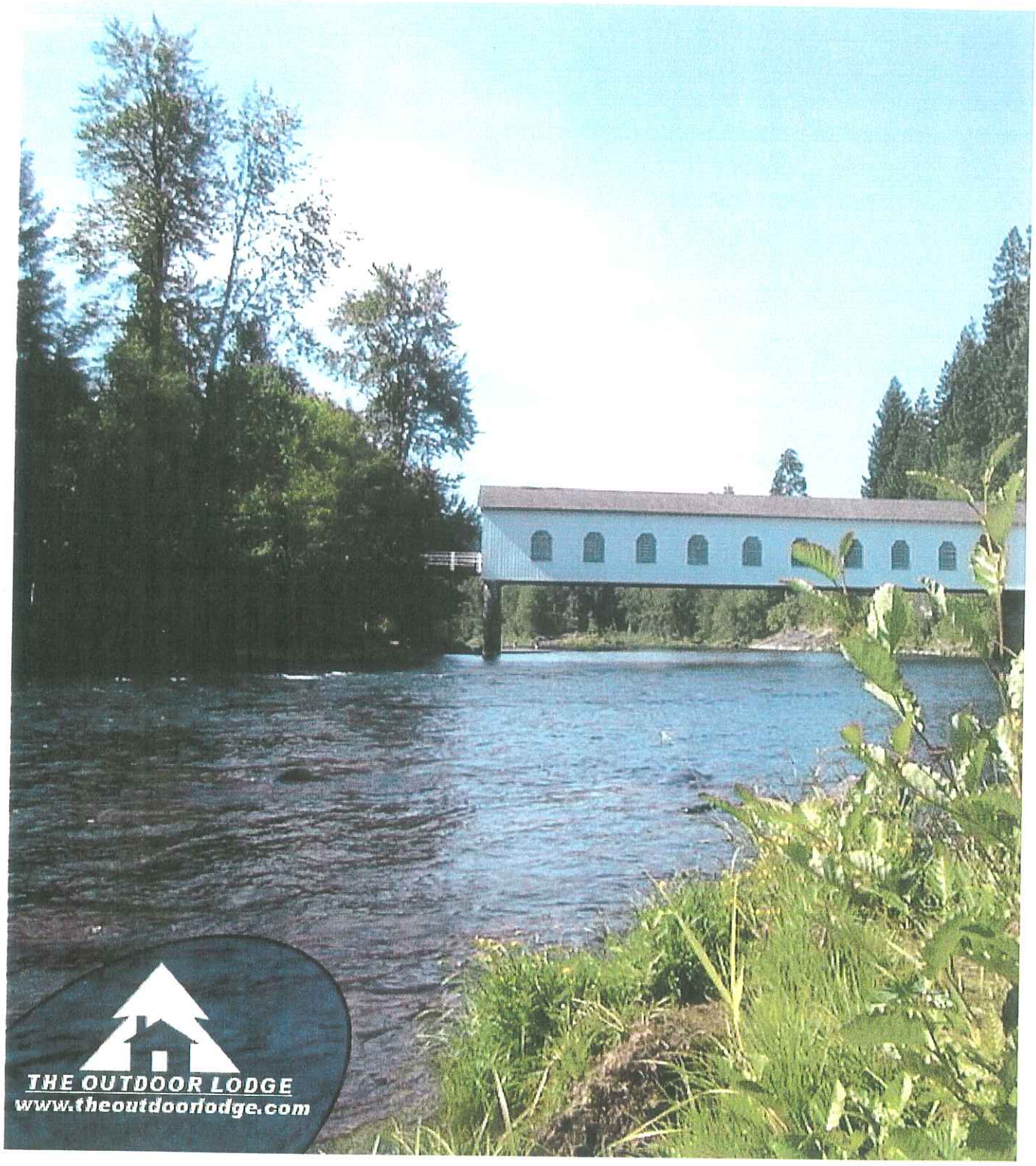
$5.00
LH-9

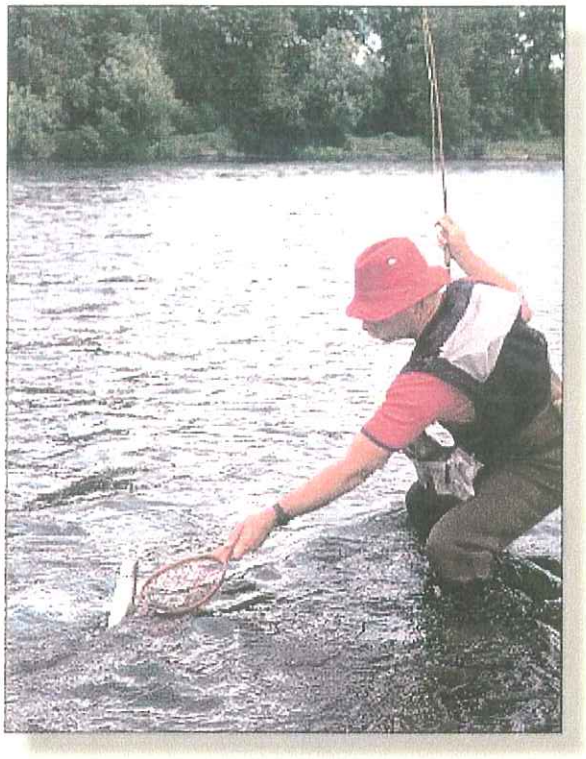
[ORDER] [CHECK OUT]

Large Woody Debris, McKenzie River, Cascade Ranges, Oregon
(A.A. Webb, Oct 2000)

Back to Oregon Images Index

Page Constructed by Ashley Webb - November 18, 2000


THE OUTDOOR LODGE
www.theoutdoorlodge.com



USGS

Water Resources

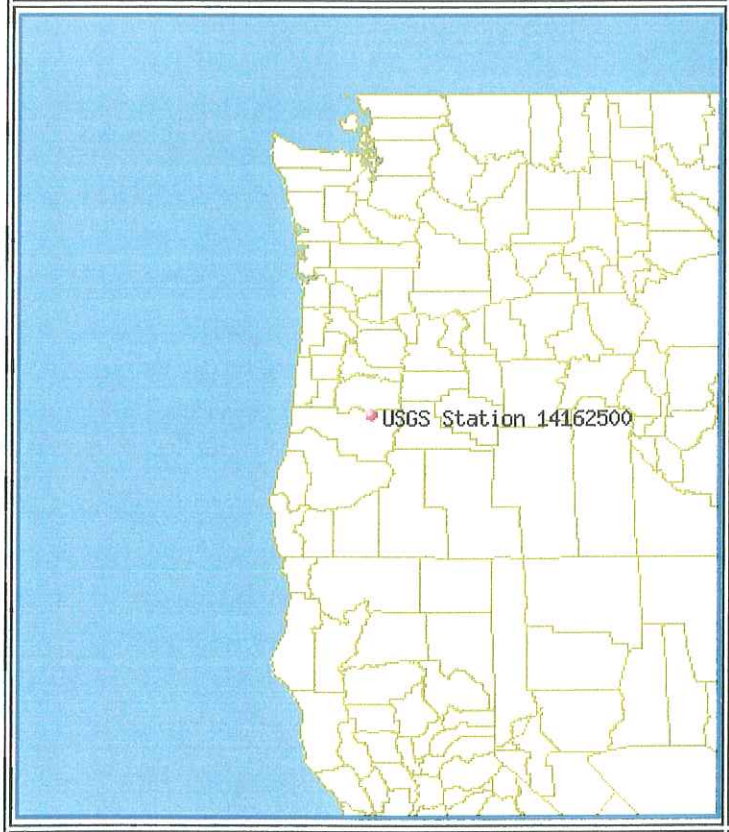
Data Category: Site Information | Geographic Area: Oregon | GO

Site Map for Oregon

USGS 14162500 MCKENZIE RIVER NEAR VIDA, OR

Available data for this site: Station site map | GO

Lane County, Oregon
Hydrologic Unit Code 17090004
Latitude 44°07'30", Longitude 122°28'10" NAD27
Drainage area 930.00 square miles
Gage datum 855.71 feet above sea level NGVD29

Location of the site in Oregon.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-or_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-or_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Oregon: Site Map

Water Resources

Data Category: Surface Water | Geographic Area: Oregon | GO

Calendar Year Streamflow Statistics for Oregon

USGS 14162500 MCKENZIE RIVER NEAR VIDA, OR

Available data for this site: Surface-water: Annual streamflow statistics | GO

Lane County, Oregon
Hydrologic Unit Code 17090004
Latitude 44°07'30", Longitude 122°28'10" NAD27
Drainage area 930.00 square miles
Gage datum 855.71 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1925	4,132	1944	2,387	1963	3,695	1982	4,694
1926	3,168	1945	4,179	1964	4,800	1983	4,628
1927	4,715	1946	4,605	1965	3,920	1984	5,093
1928	3,520	1947	3,970	1966	3,696	1985	3,482
1929	3,136	1948	4,649	1967	3,441	1986	4,274
1930	2,571	1949	4,003	1968	3,822	1987	3,030
1931	2,757	1950	5,856	1969	3,973	1988	3,745
1932	4,255	1951	4,862	1970	4,077	1989	3,651
1933	4,451	1952	3,756	1971	5,242	1990	3,777
1934	3,555	1953	5,694	1972	5,419	1991	3,789
1935	3,199	1954	4,122	1973	3,759	1992	2,752
1936	3,484	1955	5,272	1974	5,057	1993	3,913
1937	4,166	1956	5,336	1975	4,977	1994	3,043
1938	4,016	1957	4,107	1976	3,880	1995	4,892
1939	3,044	1958	4,376	1977	3,610	1996	6,064
1940	2,935	1959	3,492	1978	3,204	1997	4,974
1941	2,891	1960	4,316	1979	3,575	1998	4,397
1942	4,006	1961	4,572	1980	3,701	1999	4,972
1943	4,269	1962	4,102	1981	3,836	2000	3,937

USGS

Water Resources

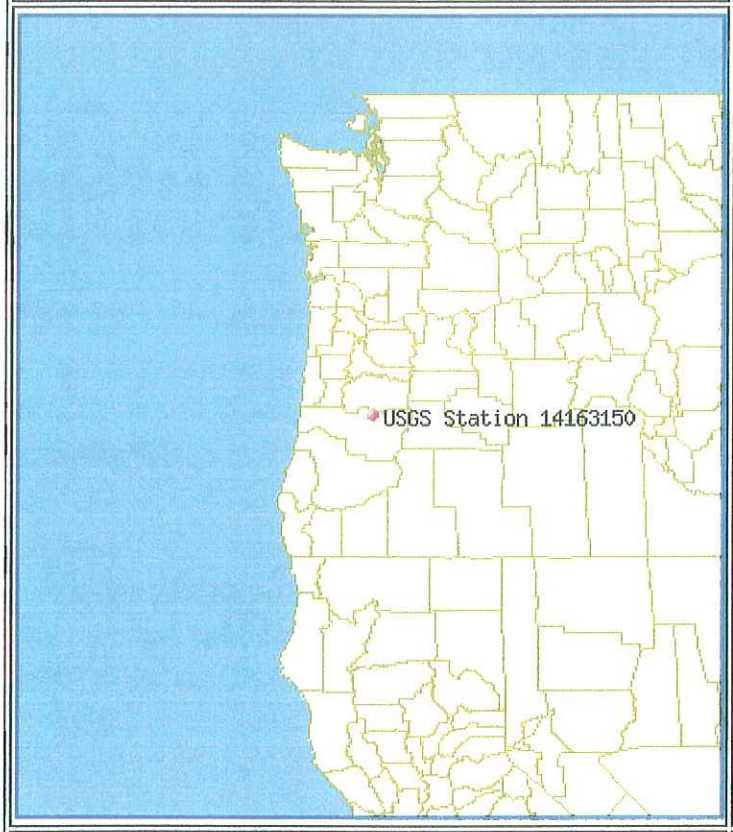
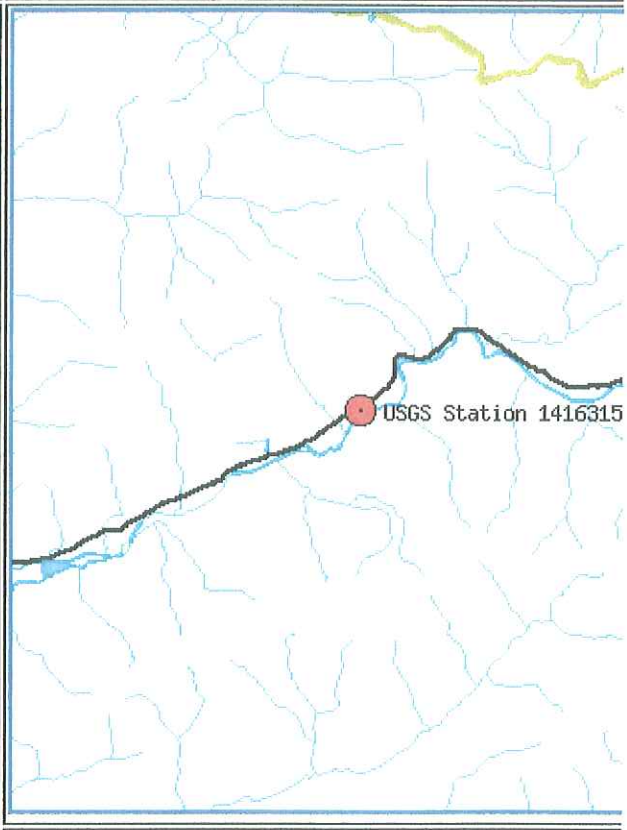
Data Category: Site Information | Geographic Area: Oregon | GO

Site Map for Oregon

USGS 14163150 MCKENZIE RIVER BLW LEABURG DAM, NR LEABURG, OR

Available data for this site: Station site map | GO

Lane County, Oregon
Hydrologic Unit Code 17090004
Latitude 44°07'26", Longitude 122°37'35" NAD27
Drainage area 1,030 square miles

Location of the site in Oregon.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-or_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-or_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Oregon: Site Map
http://waterdata.usgs.gov/or/nwis/nwismap?

Water Resources

Data Category: Surface Water | Geographic Area: Oregon | GO

Calendar Year Streamflow Statistics for Oregon

USGS 14163150 MCKENZIE RIVER BLW LEABURG DAM, NR LEABURG, OR

Available data for this site: Surface-water: Annual streamflow statistics | GO

Lane County, Oregon
Hydrologic Unit Code 17090004
Latitude 44°07'26", Longitude 122°37'35" NAD27
Drainage area 1,030 square miles

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1990	2,149	1994	1,709	1998	2,964
1991	2,366	1995	3,292	1999	3,456
1992	1,547	1996	4,769	2000	2,293
1993	2,614	1997	3,320		

Questions about data gs-w-or_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-or_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Oregon: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/or/nwis/annual/calendar_year?

Retrieved on 2003-03-11 15:15:52 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Oregon
Privacy Statement || Disclaimer || Accessibility
0.75 0.65

Water Resources

Data Category: Site Information | Geographic Area: Oregon | GO

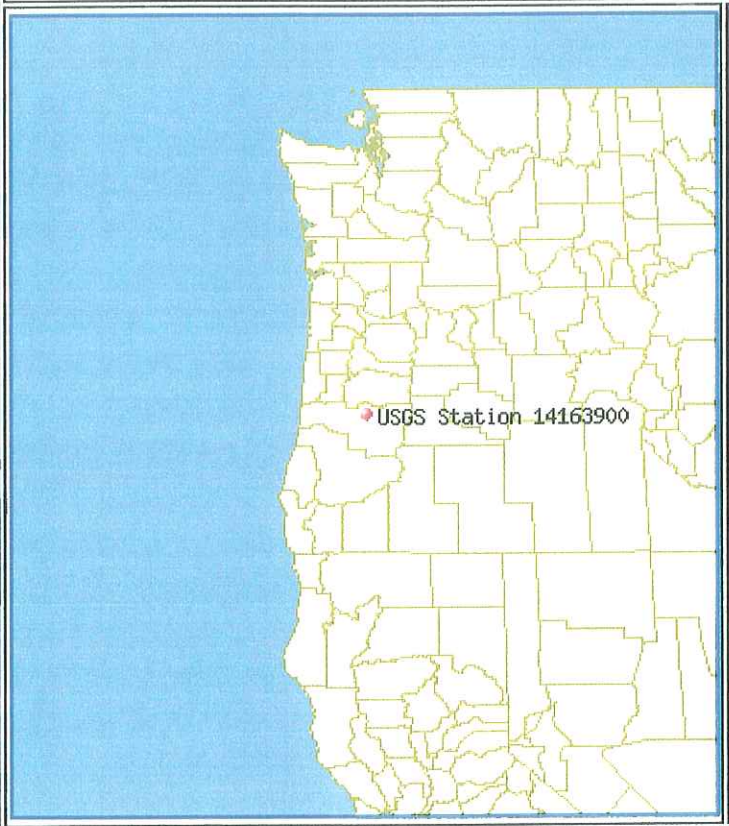
Site Map for Oregon

USGS 14163900 MCKENZIE RIVER NEAR WALTERVILLE, OR

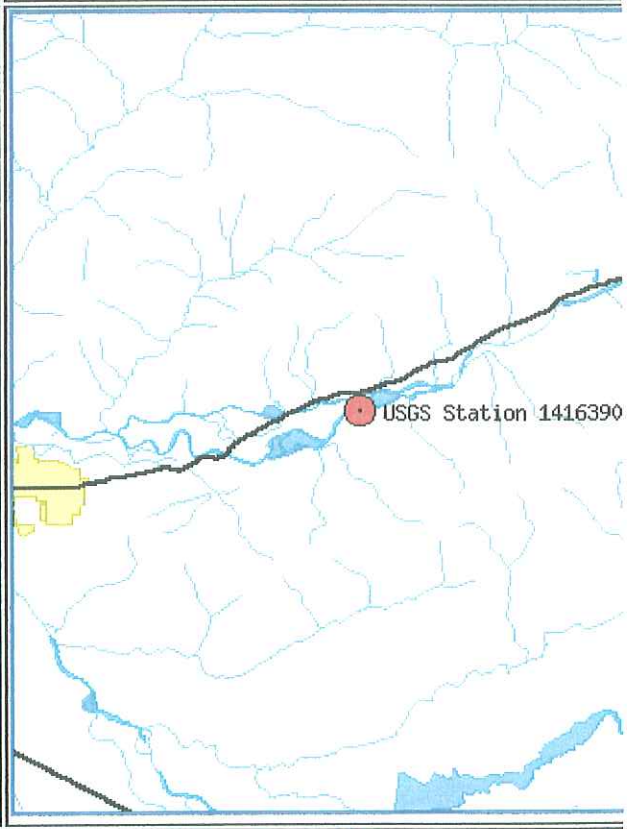
Available data for this site: Station site map | GO

Lane County, Oregon
Hydrologic Unit Code 17090004
Latitude 44°04'12", Longitude 122°46'12" NAD27
Drainage area 1,081 square miles

Location of the site in Oregon.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-or_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-or_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Oregon: Site Map
http://waterdata.usgs.gov/or/nwis/nwismap?

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Oregon | GO

Calendar Year Streamflow Statistics for Oregon

USGS 14163900 MCKENZIE RIVER NEAR WALTERVILLE, OR

Available data for this site: Surface-water: Annual streamflow statistics | GO

Lane County, Oregon
Hydrologic Unit Code 17090004
Latitude 44°04'12", Longitude 122°46'12" NAD27
Drainage area 1,081 square miles

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1990	2,219	1994	1,964	1998	3,403
1991	2,423	1995	3,839	1999	3,779
1992	1,761	1996	5,181	2000	2,544
1993	2,748	1997	3,803		

Questions about data gs-w-or_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-or_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Oregon: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/or/nwis/annual/calendar_year?

Retrieved on 2003-03-11 15:09:21 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Oregon
Privacy Statement || Disclaimer || Accessibility
0.68 0.64

Neosho River—Kansas

Reported Decision: Webb v. Board of Commissioners of Neosho County, 257 P. 966 (Kan. 1927)

Reach at Issue: Stretch in Neosho County

Judicial Determination: Non-navigable

Facts Reported in Decision:

"The Neosho river, where it passes through or by the lands in litigation in Neosho county, Kan., is a meandered stream, and the lands were described in the patents, at least part of them, as lots along said river. . . . In the early days there were used on said river at one or more places ferry boats. This was before the county had been supplied with bridges. . . . The evidence shows that in early days some logs were floated or rafted in parts of the river to a mill or mills located on said stream. . . . Light boats, some run by motor power, have been used on the river for the transfer of passengers for pleasure and to a very limited extent for hire. . . . There was evidence introduced showing that at one time while the river was at ordinary height a boat traversed the river from Oswego, Kan., to Humboldt, Kan. . . . In ordinary times, or ordinary stages of the water in the Neosho river at the points in question, light boats could be transferred, but could not be transported any great distance up or down the river at such ordinary times without being pushed or helped over the riffles. . . . The riffles are very shallow, and many of them in said river as it runs through Neosho county. . . . The river has never been used for the transportation of the products of the country along said river in Neosho county, Kan., such as corn, wheat, oats, hay, cattle, hogs, or other stock. . . . The Neosho river as a water course along Neosho county, Kan., has never been susceptible of use for the purpose of commerce, and has not possessed a capacity for valuable floatage in the transportation to market of the products of the country through which it runs, and has never been of practical usefulness to the public as a highway in its natural state." 257 P. at 966.

"Although the Neosho river is a meandered stream through Neosho county, Kan., at the points where the gravel was taken from the lands in litigation, yet in its capacity for transportation of passengers, goods, and merchandise not being practicable, the Neosho river is not a navigable stream in fact, and the riparian owners along said stream owned the land to the thread or center of the stream." 257 P. at 966.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Parsons, KS	2,764	1922-2000
Iola, KS	1,868	1896-2000

Neosho River - Kansas

REPORTED DECISION

C

Supreme Court of Kansas.

WEBB
v.
BOARD OF COM'RS OF NEOSHO COUNTY.

No. 27335.

July 9, 1927.

Syllabus by the Courtl.

Whether or not the Neosho river in Neosho county is a navigable stream is a question of fact, to be determined from the evidence.

The ownership of land meandered by government survey along a stream not navigable extends to the thread of the stream.

Appeal from District Court, Neosho County; Samuel C. Brown, Judge.

Action by J. C. F. Webb against the Board of County Commissioners of Neosho County. From a judgment for plaintiff, defendant appeals. Affirmed.

Dawson, Harvey and Hopkins, JJ., dissenting.

West Headnotes

Navigable Waters 1(6)
270k1(6) Most Cited Cases

Whether Neosho river in Neosho county is navigable *held* question of fact.

Waters and Water Courses 89
405k89 Most Cited Cases

Ownership of land meandered by government survey along stream not navigable extends to thread of stream.

***966** Hugo T. Wedell, Co. Atty., of Chanute, and R. B. Smith, of Erie (C. M. Brobst, of Chanute, of counsel), for appellant.

T. R. Evans, of Chanute, for appellee.

MARSHALL, J.

The plaintiff sued to recover for gravel taken from the Neosho river to be used on public roads in Neosho county. Judgment was rendered in favor of the plaintiff, and the defendant appeals.

The cause was tried without a jury, and findings of fact and conclusions of law were made as follows:

"The issues submitted to the court in this case pertain to the navigability of the Neosho river. If the court finds under the facts submitted and the law that the Neosho river is a navigable stream, then and in that event the judgment and verdict must be in favor of the defendant, otherwise it would be in favor of the plaintiff.

(1) The Neosho river, where it passes through or by the lands in litigation in Neosho county, Kan., is a meandered stream, and the lands were described in the patents, at least part of them, as lots along said river.

(2) In early days there were used on said river at one or more places ferry boats. This was before the county had been supplied with bridges.

(3) The evidence shows that in early days some logs were floated or rafted in parts of the river to a mill or mills located on said stream.

(4) Light boats, some run by motor power, have been used on the river for the transfer of passengers for pleasure and to a very limited extent for hire.

(5) There was evidence introduced showing that at one time while the river was at ordinary height a boat traversed the river from Oswego, Kan., to Humboldt, Kan.

(6) In ordinary times, or ordinary stages of the water in the Neosho river at the points in question, light boats could be transferred, but could not be transported any great distance up or down the river at such ordinary times without being pushed or helped over the riffles.

(7) The riffles are very shallow, and many of them in said river as it runs through Neosho county.

(8) The Neosho river has never been used for the transportation of the products of the country along said river in Neosho county, Kan., such as corn, wheat, oats, hay, cattle, hogs, or other stock.

(9) The Neosho river as a water course through Neosho county, Kan., has never been susceptible of use for the purpose of commerce, and has not possessed a capacity for valuable floatage in the transportation to market of the products of the country through which it runs, and has never been of practical usefulness to the public as a highway in its natural state.

(10) It is admitted by the defendant that quantities

of gravel were taken from the lands of the plaintiff, but not in the quantity nor value as alleged by him.
(11) The court finds the amount of gravel taken as follows, and of the value of $568.60, at 10 cents per yard.
Conclusions of Law.
(1) Although the Neosho river is a meandered stream through Neosho county, Kan., at the points where the gravel was taken from the lands in litigation, yet in its capacity for transportation of passengers, goods, and merchandise not being practicable, the Neosho river is not a navigable stream in fact, and the riparian owners along said stream own the land to the thread or center of the stream.
2. Judgment will be rendered for the plaintiff in the amount of $568.60, and that the plaintiff recover his costs."

[1] 1. The principal question to be determined in this action concerns the navigability of the Neosho river in Neosho county.

29 Cyc. 289 says:

"Water is navigable in law, although not tidal, where navigable in fact, and is navigable in fact where it is of sufficient capacity to be capable of being used for useful purposes of navigation, that is, for trade and travel in the usual and ordinary modes."

In Kregar v. Fogarty, 78 Kan. 541, 96 P. 845, this court declared that "the fact that a government surveyor meandered the banks of a river is evidence that the river was navigable, but is not conclusive of that fact" (page 541 [96 P. 845]); but that "there is no legal fiction that a stream not navigable in fact is still to be held navigable as a matter of law" (page 547 [96 P. 847]).

In Oklahoma v. Texas, 258 U. S. 574, 586, 42 S. Ct. 406, 411 (66 L. Ed. 771), the Supreme Court of the United States used the following language:

***967** "Navigability in fact is the test of navigability in law, and that whether a river is navigable in fact is to be determined by inquiring whether it is used, or is susceptible of being used, in its natural and ordinary condition as a highway for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water."

[2] 2. Did the plaintiff own the land to the thread of the Neosho river? In Kregar v. Fogarty, 78 Kan. 541, 549, 96 P. 845, 848, this court said:

"Under the common law of this state the title of a riparian owner upon unnavigable waters extends to the thread of the stream."

In Piazzek v. Drainage District, 119 Kan. 119, 237 P. 1059, this court said:

"The terms 'public waters' and 'navigable waters' are ordinarily synonymous. The term 'private waters' is ordinarily used to designate nonnavigable waters. The title to the beds of nonnavigable rivers is in the riparian owners and not in the state."

In Railroad Co. v. Schurmeier (7 Wall.) (74 U. S.) 272, 287, 19 L. Ed. 74, the Supreme Court of the United States said that "proprietors, bordering on streams not navigable, unless restricted by the terms of their grant, hold to the center of the stream." That rule was followed in Kirby v. Potter, 138 Cal. 686, 687, 72 P. 338, and that language was there quoted.

Neither Kregar v. Fogarty nor Piazzek v. Drainage District conflicts with Wood v. Fowler, 26 Kan. 682, 40 Am. Rep. 330; Dana v. Hurst, 86 Kan. 947, 122 P. 1041; State ex rel. v. Akers, 92 Kan. 169, 140 P. 637, Ann. Cas. 1916B, 543, or Winters v. Myers, 92 Kan. 414, 140 P. 1033. What was said in the four last mentioned cases concerned either the Kansas or Arkansas river, both of which were then, or had been, declared navigable streams. The meandering of those streams by government survey was considered as evidence to assist in determining whether or not they were navigable. That fact marks the distinction between Kregar v. Fogarty and Piazzek v. Drainage District and the present action on the one side and Wood v. Fowler, Dana v. Hurst, State ex rel. v. Akers, and Winters v. Myers, on the other side. The contest in Winters v. Myers involved the title to the bed of the Smoky Hill river near Ft. Riley at a place where the river had been meandered in the government survey. The court held that the river was not navigable, and stated that the right of the riparian owner extended to the thread of the stream. The determination of the present controversy is controlled by Kregar v. Fogarty.

The judgment is affirmed.

DAWSON, J. (dissenting).

I hold that the bed of the Neosho river is public property wherever the federal government or the state of Kansas has not parted with the title thereto. And plaintiff in this action did not, and indeed could not,

show title from the state or the United States culminating in himself. The United States surveyors meandered the Neosho river through its entire length in Neosho county, and for a short distance further up stream. It has been said that the meandering of a stream is only prima facie proof of its navigability. It is also prima facie proof that the riparian patentee of the meandered acreage acquired title only to the river bank; and, if he claims beyond that boundary line, he must produce his title thereto. Plaintiff did not do it; he had none to produce; and the Fogarty Case cited and relied on to support the present judgment is not controlling. The excerpt quoted from the Fogarty Case that under the common law the title of a riparian owner to unnavigable waters extends to the thread of the stream is all well enough. Of course, that was the common law. But titles in this state are not usually based on the common law. They are based on federal statutes, federal patents, and conveyances made thereunder in conformity with Kansas statutes. This plaintiff did not seek to found his title on the common law. He founded it upon mesne conveyances from prior grantors whose rights were those conferred by government patents describing the lands in terms of government survey, and which made express reference to the official plat of the survey of said lands in the general land office, a copy of which is on file in the state land office in charge of the state auditor.

These muniments of title did not profess to convey any part of the bed of the Neosho river. Plaintiff's petition asserted title to certain numbered lots (4, 5, and 3) in section 31, town 29, range 21, "beginning at an elm tree where north line of said lot three intersects west bank of Neosho river, thence west 3.23 chains to limestone, thence north to Neosho river, thence southeasterly along Neosho river to place of beginning," and other lands. Assuming that these lots can be ascertained by examination of the record and plats of the official survey in the state land office (although a painstaking attempt to check these lands therewith completely baffles this writer), it cannot be said that a grant of lands in such terms conveyed the adjacent stream bed of the Neosho river to plaintiff and his grantors. Quite the contrary. Wherever the lands described touch the river the language is the "west bank of the Neosho river," "to the Neosho river," and "along Neosho river to place of beginning." So it is immaterial in this situation what conclusion the trial court reached touching the navigability of the river; plaintiff did not show title to a square foot of that river bed. He owns to the bank of the river; no further.

In the noted case of ***968**Hardin v. Jordan, 140 U. S. 371, 380, 11 S. Ct. 808, 811 (35 L. Ed. 428), the Supreme Court said:

"It has frequently been held, both by the federal and state courts, that such meander lines are intended for the purpose of bounding and abutting the lands granted upon the waters whose margins are thus meandered; and that the waters themselves constitute the real boundary"-citing many cases.

In Wood v. Fowler, 26 Kan. 682, 40 Am. Rep. 330, the effect of meandering the Kansas river was the subject of comment:

"The stream having been meandered, the lines of the surveys are bounded by the bank; the patents from the United States passed title only to the bank; Splitlog, as riparian owner, owned only to the bank. The title to the bed of the stream is in the state. Stevens v. Rld. Co., 34 N. J. Law, 532 [3 Am. Rep. 269]; Pollard's Lessee v. Hagan, 3 How. 212 [11 L. Ed. 565]." Pages 688, 689.

In Cushenbery v. Waite-Phillips Co., 119 Kan. 478, 240 P. 400, it was said:

"A surveyor's meandering line along a river bank is not a boundary line of a tract of land; the river bank is itself a boundary line."

In Kansas v. Colorado, 206 U. S. 46, 27 S. Ct. 655, 51 L. Ed. 956, it was said:

"* * * Each state has full jurisdiction over the lands within its borders, including the beds of streams and other waters"-citing many authorities.

In Barney v. Keokuk, 94 U. S. 324, 24 L. Ed. 224, it was said:

"There seems to be no sound reason for adhering to the old rule as to the proprietorship of the beds and shores of such [nontidal] waters. It properly belongs to the states by their inherent sovereignty, and the United States has wisely abstained from extending (if it could extend) its survey and grants beyond the limits of high water."

In Hardin v. Jordan, supra, the Supreme Court said:

"This right of the states to regulate and control the shores of tidewaters, and the land under them, is the same as that which is exercised by the crown in England. In this country the same rule has been extended to our great navigable lakes which are treated as inland seas; and also, in some of the states, to navigable rivers, as the Mississippi, the Missouri, the Ohio, and, in Pennsylvania, to all the permanent rivers of the state; but it depends on the law of each state to what waters and to what extent

this prerogative of the state over the lands under water shall be exercised."

The foregoing may suffice to demonstrate that, if the public has parted with the title to the bed of the Neosho river, it is through no fault of the federal government. And it ought to be self-evident that the title to the bed of the stream is still vested in the state of Kansas, unless in some duly authorized fashion the state has parted with that title and conferred it upon plaintiff or on some prior riparian owner through whom plaintiff claims. This, it is almost superfluous to assert, the state has never done. State ex rel. v. Akers, 92 Kan. 169, 140 P. 637, syl. par. 4, Ann. Cas. 1916B, 543. On the contrary, the state has affirmatively asserted its unqualified title to all such stream beds as that of the Neosho river, where neither the state nor the United States has conveyed an interest therein to some grantee. Laws 1913, c. 259; R. S. 71- 101 et seq. Pertinent provisions of this statute, which, aside from its regulatory features, was merely declaratory of what was the law before its enactment, read:

"71-101. That from and after the taking effect of this act it shall be unlawful for any person, partnership or corporation to take from within or beneath the bed of any navigable river or any other river which is the property of the state of Kansas any sand, oil, gas, gravel or mineral, or any natural product whatsoever from any lands lying in the bed of any such river or any hay, timber or other products belonging to the state, except in accordance with this act."

"71-106. For the purposes of this act the bed and channel of any river in this state or bordering on this state to the middle of the main channel thereof and all islands and sand bars lying therein shall be considered to be the property of the state of Kansas unless this state or the United States has granted or conveyed an adverse legal or equitable interest therein since January 29, 1861, A. D., or unless there still exists a legal adverse interest therein founded upon a valid grant prior thereto: Provided. That nothing in this act shall affect or impair the rights of any riparian landowner or lawful settler upon any island which is state school land."

It will thus be seen that plaintiff has not shown title in himself; that by meandering the Neosho river and by its general policy the federal government refrained from parting with the title to the bed of the river; that there is an entire want of state legislation conferring upon plaintiff and his grantors the title to this stream bed; and that there is an express legislative assertion of title in the public. Plaintiff is therefore bound to fail, without regard to the question of the navigability of the Neosho river.

And briefly as to navigability: It is a common error to assume that the navigability of a stream is to be determined by its capacity to serve as a highway for modern commerce. But Congress had no such notion of navigability when it directed that the surveyor general of the United States should meander all navigable streams. Act of May 18, 1796, c. 29, 1 Stat. at L. 465; and supplementary statutes cited in 2 U. S. Comp. Stat. 1901, under section 2395 (now U. S. Comp. St. § 4803). The sort of navigability of our inland streams contemplated by Congress 131 years ago was what the people ***969** were accustomed to in that early time. If a stream was used or usable for carrying the primitive commerce of explorers, trappers, hunters, woodcutters, and similar pioneers, it was navigable. Morgan v. King, 30 Barb. (N. Y.) 9; Brown v. Chadbourne, 31 Me. 9, 50 Am. Dec. 641; Weise v. Smith, 3 Or. 445, 8 Am. Rep. 621; Willow River Club v. Wade, 100 Wis. 86, 76 N. W. 273, 42 L. R. A. 305. See, also, notes in 3 L. R. A. 406; 4 L. R. A. 33; 5 L. R. A. 392; 41 L. R. A. 371.

In Burroughs v. Whitwam, 59 Mich. 279, 26 N. W. 491, in discussing the navigability of streams as contemplated in the Ordinance of 1787, it was said:

"It was intended to and did apply only to such streams as were then common highways for canoes and batteaux in the commerce between the northwestern wilderness and the settled portions of the United States and foreign countries, and as to such rivers not then in use as would by law be embraced in the definition of 'navigable waters.' " Syl. par. 3.

And the fact that portages had to be made over riffles or around rapids did not render the stream nonnavigable (Broadnax v. Baker, 94 N. C. 675, syl. par. 7, 55 Am. Rep. 633; Matter of Com'rs State Reservation, 37 Hun, 537; Lysander Spooner v. Alexander McConnell and others [Ohio] 1 McLean, 337, 350, Fed. Cas. No. 13245), and there is ample authority holding that, although a stream was only usable for navigation at certain seasons of the year, it was considered navigable if such adaptability for use recurred with reasonable regularity (Bucki v. Cone, 25 Fla. 1, 6 So. 160; Moore v. Sanborne, 2 Mich. 519, 59 Am. Dec. 209; Felger v. Robinson, 3 Or. 455; Monroe Mill Co. v. Menzel, 35 Wash. 487, 77 P. 813, 70 L. R. A. 272, and note, 102 Am. St. Rep. 905, and note; 29 Cyc. 292).

In this view of the law, and accepting the findings of

fact as they stand, the trial court might very well have concluded that the Neosho river was a navigable stream; and the right of Neosho county to take gravel from the stream under authority of R. S. 71-102, necessarily turned on that question. If the trial court had given more generous credence to some of the testimony as to the early use of the river for transportation purposes, it would have been bound to find that the Neosho river was not only navigable, but had been navigated. And here the point ought to be emphasized that the navigability of a stream is not a simple jury question of fact. This court set aside the jury's findings of fact in Dana v. Hurst, 86 Kan. 947, 122 P. 1041, not because they lacked evidential support, but because the navigability of the Arkansas river was a mixed question of law and fact, where the trial court's findings of fact were not controlling. The present case is not of the sort where this court can discharge its full appellate responsibility by a mere citation of the stereotyped rule that the trial court's judgment, based on findings of fact supported by substantial evidence, is conclusive. This point is susceptible of demonstration by reductio ad absurdum. If such a controversy as the present is determinable from such evidence as the litigants' indolence or zeal may get together for presentation to the trial court in any particular case, then it will probably happen that the Neosho river adjacent to plaintiff's farm will be held to be nonnavigable, and in a similar lawsuit, where the quantum of proof adduced by the litigants is different, the same river a mile or two up or down the stream will be declared navigable. Such an absurd situation is bound to happen if the rule of law invoked to decide this lawsuit is followed. It has repeatedly been held that the Kansas and the Arkansas rivers are navigable. Wood v. Fowler, 26 Kan. 282, 40 Am. Rep. 330; Dana v. Hurst, supra. How were the facts ascertained in those cases? By testimony of witnesses? Certainly not. The court took judicial notice of the facts, and the federal Supreme Court said that was quite a proper exercise of judicial power. Wear v. Kansas, 245 U. S. 154, 38 S. Ct. 55, 62 L. Ed. 214, Ann. Cas. 1918B, 586. And it was quite well that the court did so, especially in the case of the Arkansas river, for, if the navigability of that stream had been left to the testimony of witnesses and the findings of the jury, supplemented by a court view of the river itself, the public rights in that stream bed would inevitably have been sacrificed. Touching the Arkansas river, also, scientists have noted that its former volume of water has greatly diminished within living memory. See J. R. Meade's article, "A Dying River," in volume 14, Transactions, Kansas Academy of Science, 111, 112. But the title to the stream bed, never having been conveyed to private ownership, remains in the state for the public benefit. Dana v. Hurst, supra.

Some courts have come to realize that the debatable fact of navigability is a very unsatisfactory determinant of the title to the bed of a stream. In Thompson's Title to Real Property, 127 (Bobbs-Merrill, 1919) it is said:

> "A division of waters into public and private waters has been adopted in some recent decisions, and undoubtedly the tendency is to extend and assert public rights against private ownership in lakes and rivers, without much regard to any test or definition of navigability."

And, since navigation of public streams in Kansas is virtually nonexistent, the further away we get from the times and customs of the historic voyageurs, explorers, and trappers, and their primitive water-borne commerce, the sooner this court abandons all discussion of navigability as a test of title to Kansas river beds the better. The test of navigability is merely an academic stumbling block which needs be gotten rid of. ***970** Let us use the more accurate terms of public streams and private streams. If a riparian owner can show title deraigned from the United States or the state of Kansas, the stream bed is his private property. Piazzek v. Drainage District, 119 Kan. 119, 237 P. 1059. If he cannot-if it cannot be shown that the federal or state government has parted with the title thereto-the stream is a public stream, and the bed of that stream is public property.

Let it be understood that ordinarily the terms "public stream" and "navigable stream" are interchangeable terms. I advocate no change in substantive law. I merely urge the adoption of a more precise and less misleading terminology. Let us say that, where the title to a stream bed has never been conveyed by the state or federal government, this court prefers to designate it as a public stream rather than as a navigable stream, so that every time a question arises touching the navigability of a Kansas stream it will not be necessary to open a judicial kindergarten to teach the history and geography of the American wilderness and the pertinent statutory and other changes in the common law of inland waterways and riparian rights which the new conditions of the wilderness required.

To the suggestion that private property rights might be affected by such a pronouncement, I reply that, no matter what may have been said in private litigation touching the extent of ownership vested in the riparian owners of meandered streams, the public

right therein was never a major issue in any such lawsuit; and certainly the public right could not be foreclosed in any litigation to which the state's responsible representatives were not a party. The Fogarty decision is no obstacle to the solution I suggest. There the question was whether the state's grantee of the right to build a dam might rebuild it after its destruction. That right was properly upheld. And, of course, wherever a riparian owner can show a valid grant from the state to a stream bed, an island, a sand bar, or the right to bridge or dam a public stream, his property right will be protected.

Every important consideration constrains to the conclusion I suggest. But for the important public interests affected by this decision, I would simply ask that my dissent be noted without comment. I pass by the matter of the state's interest in minerals in the beds of public streams which are bound to be affected by the present decision, although the public revenues to be anticipated therefrom are bound to be considerable, and are of growing importance in this age of high taxes. The Neosho river is not only a public stream by the test of public retention of title to its stream bed, but because it is a chronic public problem as well. We know judicially that on five separate occasions within the past year it has been a raging torrent, one to three miles wide, dealing death and destruction along its course. Certainly that situation will not continue to be tolerated; and, when the statesman and the civil engineer get ready to curb this turbulent waterway, I would not add to their perplexities by a judicial declaration that the Neosho river is not a public stream, with the consequence that the state and federal governments must pay tribute to the riparian owners for leave to clear it of obstructions, dike it, or otherwise control it as modern engineering science may suggest. My objections to this decision are not submitted as an exhaustive treatment of this important subject. Press of other tasks would not permit its more thorough preparation. It will serve, however, to show why I decline to share in the responsibility for the judgment the court is about to announce.

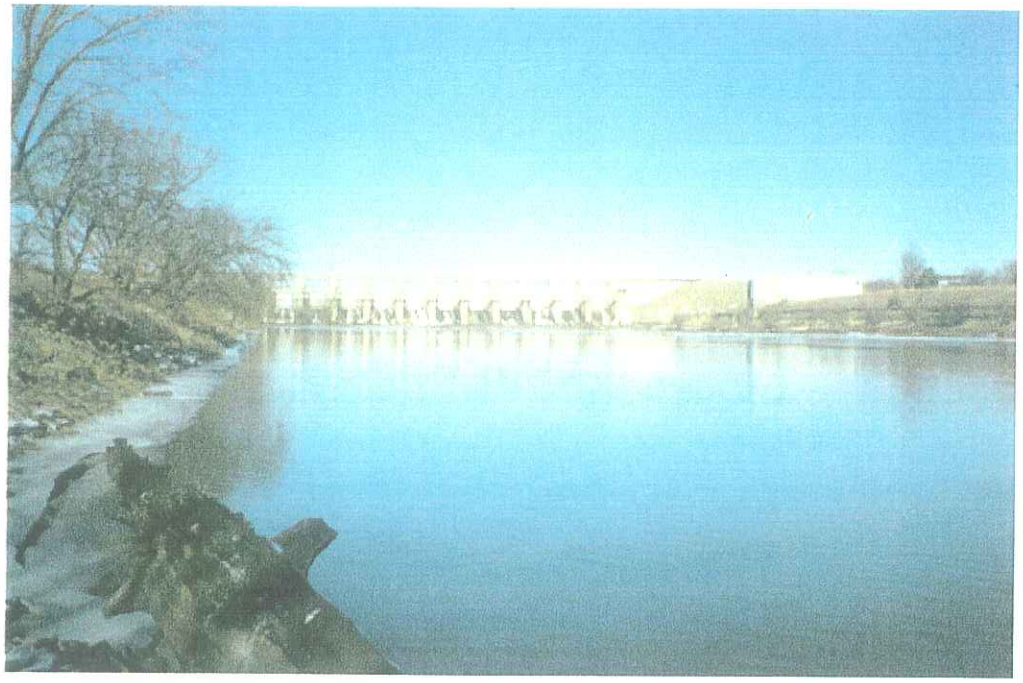
HARVEY AND HOPKINS, JJ., concur in the dissent of DAWSON, J.

257 P. 966, 124 Kan. 38

END OF DOCUMENT

ADDITIONAL INFORMATION


A POINT OF BEAUTY ON THE NEOSHO RIVER, CHANUTE, KANSAS



Water Resources

Data Category: Site Information | Geographic Area: Kansas | GO

Site Map for Kansas

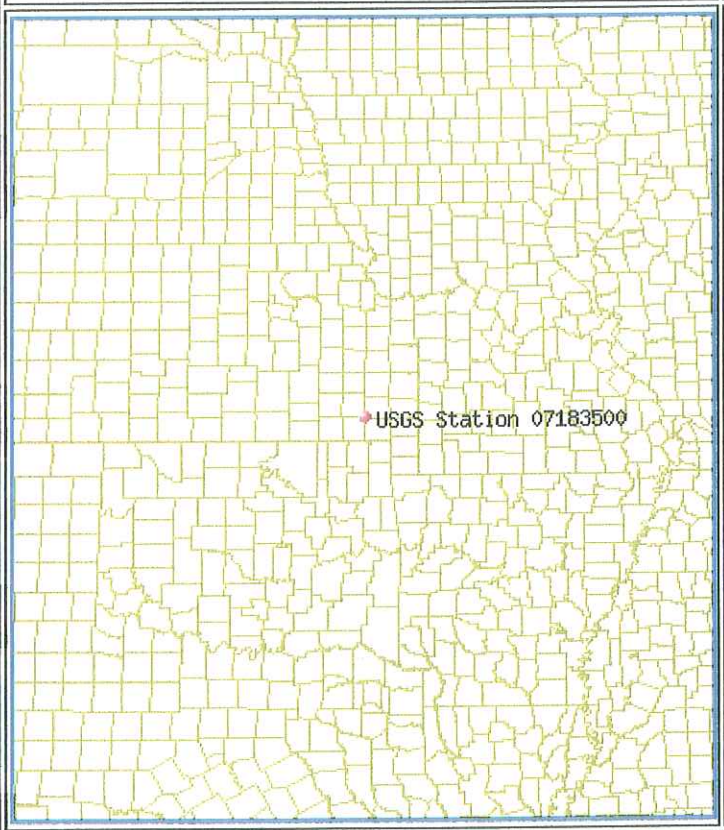
NOTE: During cold periods, gage height and streamflow information may be adversely affected by backwater from ice (or temporary freeze-up of orifice lines).

USGS 07183500 NEOSHO R NR PARSONS, KS

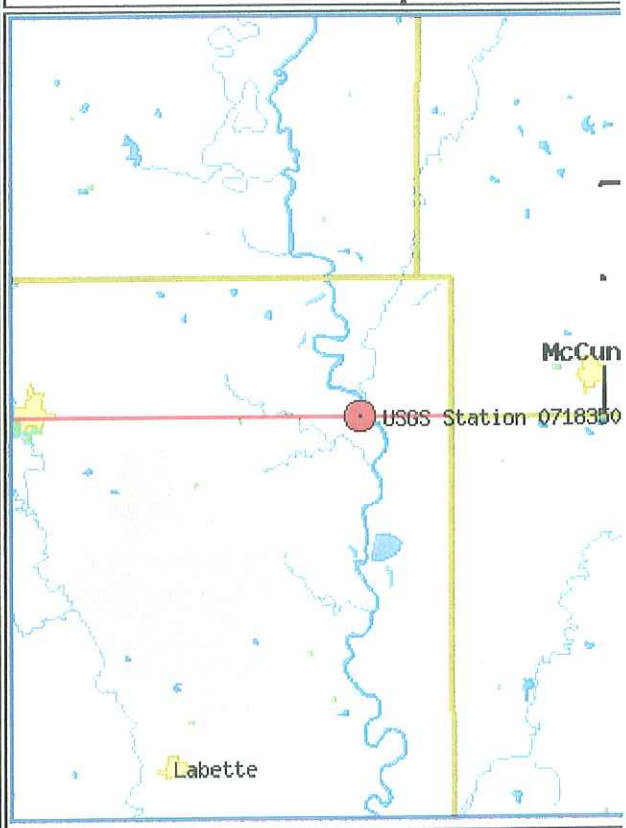
Available data for this site: Station site map | GO

Labette County, Kansas
Hydrologic Unit Code 11070205
Latitude 37°20'24", Longitude 95°06'35" NAD27
Drainage area 4,905.00 square miles
Contributing drainage area 4,905.00 square miles
Gage datum 810.25 feet above sea level NGVD29

Location of the site in Kansas.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Water Resources

Data Category: Surface Water | Geographic Area: Kansas | GO

Calendar Year Streamflow Statistics for Kansas

NOTE: During cold periods, gage height and streamflow information may be adversely affected by backwater from ice (or temporary freeze-up of orifice lines).

USGS 07183500 NEOSHO R NR PARSONS, KS

Available data for this site: Surface-water: Annual streamflow statistics | GO

Labette County, Kansas
Hydrologic Unit Code 11070205
Latitude 37°20'24", Longitude 95°06'35" NAD27
Drainage area 4,905.00 square miles
Contributing drainage area 4,905.00 square miles
Gage datum 810.25 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1922	2,749	1942	3,610	1962	3,141	1982	3,224
1923	2,011	1943	2,829	1963	566	1983	3,632
1924	1,510	1944	5,376	1964	847	1984	3,439
1925	943	1945	4,822	1965	2,664	1985	7,056
1926	2,644	1946	1,486	1966	530	1986	4,798
1927	5,474	1947	2,634	1967	2,653	1987	3,852
1928	3,787	1948	3,353	1968	2,186	1988	1,976
1929	3,318	1949	3,062	1969	4,837	1989	1,492
1930	982	1950	2,581	1970	2,849	1990	3,369
1931	1,084	1951	8,748	1971	3,084	1991	444
1932	1,022	1952	1,494	1972	1,512	1992	4,532
1933	750	1953	161	1973	8,267	1993	7,231
1934	538	1954	509	1974	4,322	1994	2,380
1935	3,393	1955	641	1975	3,037	1995	4,051
1936	372	1956	104	1976	1,083	1996	1,693
1937	1,515	1957	1,933	1977	3,298	1997	2,822
1938	2,721	1958	3,066	1978	1,643	1998	6,200

1939	297	**1959**	2,184	**1979**	2,693	**1999**	3,769
1940	586	**1960**	2,847	**1980**	1,322	**2000**	1,003
1941	5,891	**1961**	6,208	**1981**	1,635		

Questions about data gs-w-ks_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ks_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Kansas: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ks/nwis/annual/calendar_year?

Retrieved on 2003-03-12 08:17:46 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Kansas
Privacy Statement || Disclaimer || Accessibility
0.7 0.69

Water Resources

Data Category: Site Information | Geographic Area: Kansas | GO

Site Map for Kansas

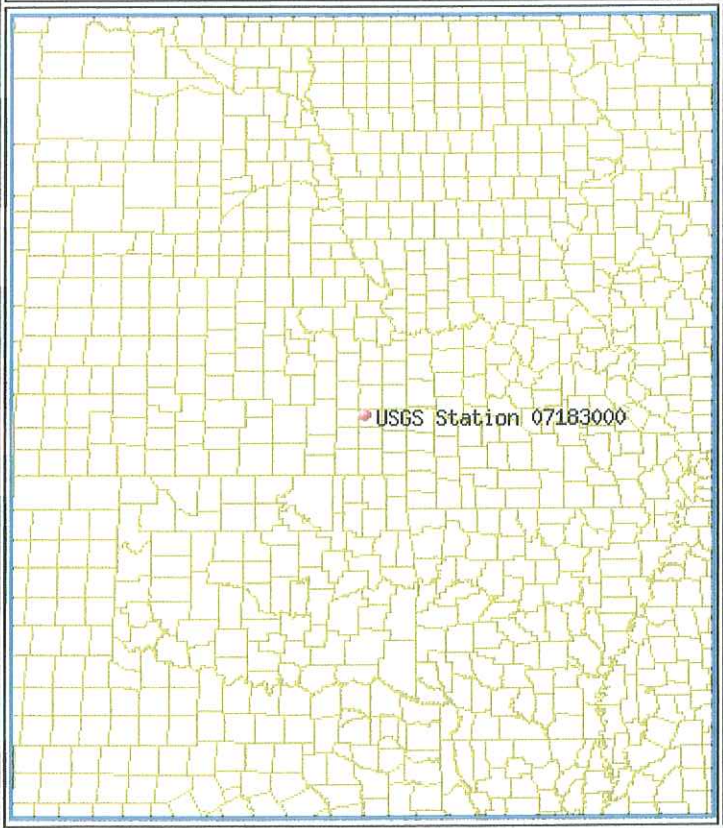
NOTE: During cold periods, gage height and streamflow information may be adversely affected by backwater from ice (or temporary freeze-up of orifice lines).

USGS 07183000 NEOSHO R NR IOLA, KS

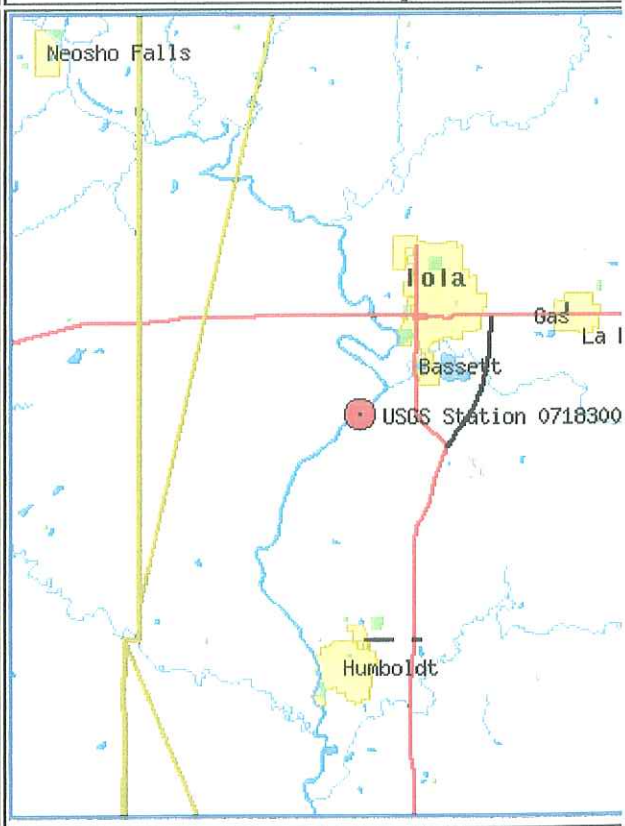
Available data for this site: Station site map | GO

Allen County, Kansas
Hydrologic Unit Code 11070204
Latitude 37°53'27", Longitude 95°25'50" NAD27
Drainage area 3,818.00 square miles
Contributing drainage area 3,818.00 square miles
Gage datum 914.77 feet above sea level NGVD29

Location of the site in Kansas.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Kansas | GO

Calendar Year Streamflow Statistics for Kansas

NOTE: During cold periods, gage height and streamflow information may be adversely affected by backwater from ice (or temporary freeze-up of orifice lines).

USGS 07183000 NEOSHO R NR IOLA, KS

Available data for this site: Surface-water: Annual streamflow statistics | GO

Allen County, Kansas
Hydrologic Unit Code 11070204
Latitude 37°53'27", Longitude 95°25'50" NAD27
Drainage area 3,818.00 square miles
Contributing drainage area 3,818.00 square miles
Gage datum 914.77 feet above sea level NGVD29

Output formats

HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1896	1,156	1935	2,012	1957	1,314	1979	1,893
1899	1,127	1936	214	1958	2,168	1980	1,030
1900	1,605	1937	843	1959	1,601	1981	1,324
1901	1,009	1938	2,115	1960	2,112	1982	2,332
1902	3,444	1939	205	1961	4,210	1983	2,649
1918	409	1940	331	1962	2,500	1984	2,380
1919	1,143	1941	4,413	1963	464	1985	5,131
1920	383	1942	2,415	1964	640	1986	3,011
1921	487	1943	1,653	1965	2,310	1987	2,727
1922	1,743	1944	4,107	1966	443	1988	1,087
1923	1,461	1945	3,565	1967	2,033	1989	988
1924	729	1946	1,101	1968	1,537	1990	1,878
1925	541	1947	1,952	1969	3,726	1991	296
1926	1,820	1948	2,302	1970	1,973	1992	3,002
1927	3,286	1949	2,070	1971	2,309	1993	5,472
1928	2,565	1950	2,121	1972	1,002	1994	1,059
1929	1,991	1951	6,905	1973	6,108	1995	3,040

1930	596	**1952**	1,095	**1974**	2,623	**1996**	1,391
1931	805	**1953**	132	**1975**	2,091	**1997**	2,031
1932	902	**1954**	177	**1976**	704	**1998**	4,940
1933	385	**1955**	311	**1977**	2,184	**1999**	2,858
1934	291	**1956**	95.9	**1978**	1,150	**2000**	636

Questions about data gs-w-ks_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ks_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Kansas: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ks/nwis/annual/calendar_year?

Retrieved on 2003-03-12 08:16:47 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Kansas
Privacy Statement || Disclaimer || Accessibility
0.69 0.65

Red River—Oklahoma and Texas

Reported Decision: Oklahoma v. Texas, 258 U.S. 574 (1922)

Reach at Issue: Along common boundary of the two states

Judicial Determination: Non-navigable

Facts Reported in Decision:

"The Red river rises in the Panhandle of Texas, near the New Mexico boundary, and takes an easterly and southeasterly course to the Mississippi, of which it is a tributary. Its total length is about 1,300 miles. The first 557 miles from its mouth are in Louisiana and Arkansas, the next 539 miles are in Oklahoma along the southern boundary, and the remainder is in the Panhandle of Texas. The receivership area embraces 43 miles of the southerly half of the river bed and lies 409 miles up stream from the eastern boundary of Oklahoma. In that state the river bed between the cut-banks, so-called, has an average width of one-third of the mile, the least width being in the vicinity of the 100th meridian and the greatest in the vicinity of the receivership area." 258 U.S. at 582-83.

"The river has its source in the Staked Plains of Northwestern Texas, and from there until it gets well into Oklahoma is within a region where the rainfall is light, is confined to a relatively short period in each year and quickly finds it way into the river. Because of this, the river in the western half of the state does not have a continuous or dependable volume of water. It is a fall of 3 feet or more per mile and for long intervals the greater part of its extensive bed is dry sand interspersed with irregular ribbons of shallow water and occasional deeper pools. Only for short intervals, when the rainfall is running off, are the volume and depth of the water such that even very small boats could be operated therein. During these rises the water is swift and turbulent and in rare instances overflows the adjacent land. The rises usually last from 1 to 7 days and in the aggregate seldom cover as much as 40 days in a year." 258 U.S. at 587-88.

"We regard it as obvious that in the western half of the state the river is not susceptible of being used in its natural and ordinary condition as a highway for commerce; and there is no evidence that in fact it ever was so used. That section embraces the receivership area." 258 U.S. at 588.

"Of course, the conditions along that part of the river greatly affect the part in the eastern half of the state. But the latter receives additional waters from the Washita and other tributaries and has a practically continuous flow of varying volume, the extreme variation between high and low water being about 30 feet. When the water rises it does so very rapidly, and it falls in the same way. The river bed has a fall of more than 1 foot to the mile and consists of light sand which is easily washed about and is carried down stream in great quantities at every rise of the water. At all times there is an almost continuous succession of shifting and extensive sand bars. Ordinarily the depth of water over the sand bars is from 6 to 18 inches and elsewhere from 3 to 6 feet. There is no permanent or

stable channel. Such as there is shifts irregularly from one side of the bed to the other and not infrequently separates into two or three parts. Boats with a sufficient draft to be of any service can ascend and descend only during periods of high water. These periods are intermittent, of irregular and short duration, and confined to a few months in the year." 258 U.S. at 589.

"While the evidence relating to the part of the river in the eastern half of the state is not so conclusive against navigability as that relating to the western section, we think it establishes that trade and travel neither do nor can move over that part of the river, in its natural and ordinary condition, according to the modes of trade and travel customary on water; in other words, that it is neither used, nor susceptible of being used, in its natural and ordinary condition as a highway for commerce. Its characteristics are such that its use for transportation has been and must be exceptional, and confined to the irregular and short periods of temporary high water. A greater capacity for practical and beneficial use in commerce is essential to establish navigability." 258 U.S. at 591.

"We conclude that no part of the river within Oklahoma is navigable, and therefore that the title to the bed did not pass to the state on its admission into the Union. If the state has a lawful claim to any part of the bed, it is only such as may be incidental to its ownership of riparian lands on the northerly bank. An so of the grantees and licensees of the state." 258 U.S. at 591-92.

"But this section of Red river obviously is not navigable. It is without a continuous or dependable flow, has a relatively level bed of loose sand over which the water is well distributed when there is a substantial volume, and has no channel of any permanence other than that of which this sand bed is the bottom. The mere ribbons of shallow water which in relatively dry seasons find their way over the sand bed, readily and frequently shifting from one side to the other, cannot be regarded as channels in the sense intended." 258 U.S. at 594.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Dennison, TX	5,006	1924-1999
Gainesville, TX	3,568	1937-1999
Arthur City, TX	9,363	1906-1999

Red River
Oklahoma and Texas

REPORTED DECISION

Supreme Court of the United States

STATE OF OKLAHOMA
v.
STATE OF TEXAS (UNITED STATES, Intervener).

No. 20.

Argued Dec. 13 and 14, 1921.
Decided May 1, 1922.

Original suit in equity by the State of Oklahoma against the State of Texas, in which the United States intervened as a party in interest. On hearing as to the proprietary claims to the bed of the Red river and to the proceeds of oil and gas taken from the area in charge of the receivers appointed by the court. Decree ascertaining the ownership of the various portions of the bed directed.

See, also, 258 U. S. 606, 42 Sup. Ct. 314, 66 L. Ed. 786.

West Headnotes

Boundaries 14
59k14 Most Cited Cases

Under Act June 6, 1900, § 6, 31 Stat. 676, reserving grazing lands for Indian tribes in Oklahoma bounded on the south by middle of the main channel of the Red river, and Act June 5, 1906, 34 Stat. 213, directing the allotment and sale of the lands so reserved, the main channel of the Red river, which at the point consists principally of a bed of dry sand, with small streams connecting the pools was not intended to be limited to the principal one of those small streams, but extends from one cut-bank to the other, and the medial line of the channel defined by the cut-banks forms the boundary of the lands.

Indians 13(8)
209k13(8) Most Cited Cases

The trust patents for Indian allotments, which were intended to prevent the allottees from improvidently alienating or incumbering the land, conveyed to the Indians the equitable title and beneficial use to all that would have passed under a full patent.

Mines and Minerals 9
260k9 Most Cited Cases

Rev.St. § 2319, 30 U.S.C.A. § 22, declaring all valuable mineral deposits in lands belonging to the United States to be open to exploration and purchase, when read with due regard for the entire title of the public lands of which it is a part, does not embrace all of the lands owned by the United States, but only such lands as the United States has indicated are held for disposal under the land laws, and it never applies where the United States directs that the disposal be only under other laws.

Mines and Minerals 9
260k9 Most Cited Cases

Under Act May 2, 1890, § § 1, 18, 20, 22, 43 U.S.C.A. § § 1091, 1092, 1094, declaring that lands in Oklahoma should be disposed of under the homestead and townsite laws only, and Act March 3, 1891, § 16, 43 U.S.C.A. § 1098, declaring all lands in Oklahoma to be agricultural and not mineral, the lands owned by the United States within Oklahoma are not subject to entry under the mineral land laws, unless such laws have been extended to the lands, as was done by Act March 2, 1895, 43 U.S.C.A. § 856, and Act June 6, 1900, 31 Stat. 672, 676, 681, each of which related to limited areas.

Navigable Waters 1(1)
270k1(1) Most Cited Cases

The treaty with Spain, fixing the boundary between the two countries as the south bank of the Red River for a portion of its course, and as the south bank of the Arkansas river from a designated meridian to its source, and providing that the navigation of the rivers throughout the extent of the boundary on their respective banks should be common to the respective inhabitants of both nations, did not establish that the Red river was navigable along the portion forming the boundary, since the same provision applied to the Arkansas to its source, and was clearly not intended to declare it navigable.

Navigable Waters 1(1)
270k1(1) Most Cited Cases

The fact that Congress, in permitting the construction of certain bridges across the Red river within Oklahoma, provided there should be no interference with navigation, was manifestly only a precaution, and not intended as an affirmation of the navigability of the river in that locality.

Navigable Waters 1(3)
270k1(3) Most Cited Cases

Navigability in fact is the test of navigability in law, and whether a river is navigable in fact is determined by whether it is used, or susceptible of being used, in its natural and ordinary condition as a highway for commerce over which trade and travel are, or may be, conducted in the customary modes of trade and travel on water.

Navigable Waters 1(7)
270k1(7) Most Cited Cases

The fact that the surveyors of the public lands ran a meander line along the bank of a river, and did not extend the lines across it, has little significance in determining its navigability, since the same thing was done on streams known to be unnavigable, and the surveyors were not clothed with power to settle questions of navigability.

Navigable Waters 1(7)
270k1(7) Most Cited Cases

Evidence that the western part of the Red river along the south boundary of Oklahoma was not navigated by vessels, and could be navigated by vessels of commercial value only at intermittent times of high water, and that the engineers in charge of improvement of its navigation had recommended that such improvements be discontinued because they could not be successful, held to show that the river was not navigable in fact, so that the title to the bed did not pass to the state of Oklahoma.

Navigable Waters 36(1)
270k36(1) Most Cited Cases

Under the constitutional rule of equality among the states, whereby each new state becomes, as was each of the original states, the owner of the soil underlying the navigable waters within its borders, Oklahoma became the owner of the entire bed of the Red river, whose south bank was the boundary between Texas and the United States, if the river was navigable.

Waters and Water Courses 89
405k89 Most Cited Cases

Though the United States, in cases where it owns the bed of a nonnavigable stream, and the adjoining upland, can convey the bed separate from the upland, and its intention in that respect is to be determined from that manifested by the conveyance, it is presumed to have intended, if the intent is not otherwise shown, that the conveyance of the upland should be construed as a conveyance of the bed according to the law of the state in which the land lies, and that rule applies in disposing of the tribal land of Indians under its guardianship.

Waters and Water Courses 89
405k89 Most Cited Cases

Act June 6, 1900, § 6, 31 Stat. 672, 676, and Act June 5, 1906, 34 Stat. 213, and the amendments thereof disposing of the tribal lands belonging to Oklahoma Indians north of the middle of the main channel of the Red river manifested an intention to convey with the riparian uplands the bed of the stream to the middle of the main channel.

Waters and Water Courses 89
405k89 Most Cited Cases

The legislation of Oklahoma, qualifying the common-law rule respecting the rights of riparian proprietor in the natural flow of a stream, does not impliedly abrogate in that state the common-law rule previously adopted therein, relating to the ownership of the bed of a nonnavigable stream.

Waters and Water Courses 89
405k89 Most Cited Cases

Where the banks of the Red river had changed between the survey of the lands and their disposition by the United States, grants by the United States of tracts which had been riparian lands at the time of the survey, but which had become part of the river bed, conveyed the portion of the river bed included in the lines of the tract as surveyed, and the original portions of the river bed fronting thereon to the middle of the main channel.

Waters and Water Courses 89
405k89 Most Cited Cases

Where a change in the bed of a river had made tracts of public land which were not riparian at the time of the survey, riparian lands at the time of their disposition, the conveyance of such lands carried with it the bed of the stream adjoining to the middle of the main channel, unless such land had been otherwise disposed of by conveyance of the tract which was formerly upland, but had since become

part of the bed.

Waters and Water Courses 89
405k89 Most Cited Cases

The state of Oklahoma did not waive its right to portions of the bed of the Red river as riparian owner of lands bordering thereon by relying only upon a claim to the entire bed on the ground that the stream was navigable.

Federal Courts 22
170Bk22 Most Cited Cases
(Formerly 106k264(3))

Where the Supreme Court has original jurisdiction of the suit because it is by one state against another, and by the United States against two states, and has appointed a receiver to take charge of the oil and gas produced from the territory in dispute, it can determine claims by private individuals against the funds in the hands of its receivers as ancillary to the main suit.

Federal Courts 433
170Bk433 Most Cited Cases
(Formerly 106k365(31))

The decision of the Supreme Court of the state of Oklahoma in an action between private parties that it would not set aside a verdict finding that the Red river was a navigable stream because it was based on conflicting evidence can hardly be regarded as persuasive in a suit between the United States and the state to determine ownership of the bed of the stream, which depends upon whether it is navigable.

****408 *577** Messrs. Frank Dale, of Guthrie, Okl., and Jesse B. Roote, of Denver, Colo., for Burke Divide Oil Co. and others.

Mr. T. P. Gore, of Washington, D. C., for Melish Consolidated Placer Oil Mining Ass'n and others.

Messrs. ***578** Henry E. Asp, of Oklahoma City, Okl., George P. Rowell, of Stamford, Conn., and L. H. Boggs, of Washington, D. C., for E. Everett Rowell and others.

Messrs. Solicitor General Berk and W. W. Dyar, of Washington, D. C., for the United States.

Mr. George Trice, of Coalgate, Okl., for D. D. Brunson and others.

Mr. S. P. Freeling, of Oklahoma City, Okl., for State of Oklahoma.

Mr. W. A. Ledbetter, of Oklahoma City, Okl., for A. E. Pearson and others.

Mr. Justice VAN DEVANTER delivered the opinion of the Court.

This suit in equity was brought in this court by the state of Oklahoma against the state of Texas to settle a controversy between them over their common boundary along the course of the Red river and over the title to the southerly half of the river bed. The state of Texas answered the bill, and joined in the prayer that the controversy be decided. Shortly thereafter the United ***579** States, by the court's leave, intervened as a party in interest, and in its bill of intervention set up a claim to the river bed as against both states. Subsequent proceedings resulted in a decree recognizing and declaring that the true state boundary is along the south bank of the river, as claimed by Oklahoma and the United States, and not along the medial line of the stream, as claimed by Texas. 256 U. S. 70, 41 Sup. Ct. 420, and 65 L. Ed. 831, and 256 U. S. 608, 41 Sup. Ct. 539, 65 L. Ed. 1117. The decree directed a further hearing to determine what constitutes the south bank, where along that bank ****409** the boundary is, and the proper mode of locating it on the ground. That hearing was had last week and disclosed that the parties differ widely as to what constitutes the south bank. A decision on the question will be given after it shall have been fully considered. The southerly cut-bank to which we shall refer presently may or may not be the bank along which the boundary extends. On this we intimate no opinion now.

Our present concern is with proprietary claims to the bed of the river and to the proceeds of oil and gas taken from 43 miles of the southerly half.

After we acquired jurisdiction of the suit it developed that the state of Oklahoma was claiming title to the entire river bed from one bank to the other; that the state of Texas was claiming title to the southerly half; that the United States was disputing the claims of both states and asserting full proprietorship of the southerly half and an interest (because of its relation to Indian allottees) in portions of the northerly half; that a part of the bed, particularly of the southerly half, had been but recently discovered to be underlaid with strata

bearing oil and gas and to be of great value by reason thereof; that many persons were proceeding to drill for, extract and appropriate these minerals with uncertain regard for the dispute over the title and for the true ownership; that possession of parts of the bed was being taken and held by intimidation and force; that in suits for injunction the ***580** courts of both states were assuming jurisdiction over the same areas; that armed conflicts between rival aspirants for the oil and gas had been but narrowly averted and still were imminent; that the militia of Texas had been called to support the orders of its courts, and an effort was being made to have the militia of Oklahoma called for a like purpose; that these conflicting assertions of jurisdiction and the measures taken to sustain them were detrimental to the public tranquility, were of general concern and were likely to result in great waste of the oil and gas and in their extraction and appropriation to the irreparable injury of the true owner of the area in dispute, and that unless these minerals were secured and conserved by means of wells drilled and operated in that area there was danger that they would be drawn off through wells in adjacent territory pending the solution of the controversy over the state boundary and the title to the river bed.

In these circumstances, on the motion of the United States, fully supported by the state of Oklahoma and expressly approved by the state of Taxas to the extent of its proprietary claim, we appointed a receiver to take possession of the part of the river bed between the medial line and a line on the south bank temporarily and provisionally designated, and within defined easterly and westerly limits, and to control or conduct all necessary oil and gas operations therein. As to that area there appeared to be urgent need for such action. The order provided in detail for ascertaining and holding the net proceeds of the oil and gas in such way that they could be awarded and paid to whoever ultimately should be found to be the rightful claimants, and also provided for such interventions in the suit as would permit all possible claims to the property and proceeds in the receiver's possession to be freely and appropriately asserted. 252 U. S. 372, 40 Sup. Ct. 353, 64 L. Ed. 619.

***581** Numerous parties have since intervened for the purpose of asserting rights to particular tracts in the receiver's possession and are seeking to have the same and the net proceeds of the oil and gas taken therefrom surrendered to them. Many of these claims conflict one with another and all are in conflict with the claims of one or more of the three principal litigants.

[1] Under the Constitution (article 3, § 2), our original jurisdiction extends to suits by one state against another and to suits by the United States against a state. [FN1] In its first state this was a suit by one state against another. When the United States intervened it became also a suit by the United States against those states. In its enlarged phase it presents in appropriate form the conflicting claims of the two states and the United States to the river bed and calls for their adjudication. The other claims, being for particular tracts and funds in the receiver's possession and exclusively under our control, are brought before us because no other court lawfully can interfere with or disturb that possession or control. It long has been settled that claims to property or funds of which a court has taken possession and control through a receiver or like officer may be dealt with as ancillary to the suit wherein the possession is taken and the control exercised--and this although independent suits to enforce the claims could not be entertained in that court. [FN2]

***582** The decree recognizing and declaring that ****410** the boundary between the two states is along the south bank of the river, and not along its medial line, means that the entire river bed is within the state of Oklahoma and beyond the reach of the laws of the state of Texas, and therefore that the latter state and its grantees and licensees have no proprietary interest in the bed or in the proceeds of oil and gas taken therefrom. Of course, when the exact location of the boundary along the south bank is determined, it may develop that the receiver is holding some land on the southerly side of that line or proceeds arising therefrom, and, if so, the state of Texas and its grantees and licensees will be free to claim the same.

The other claims are all such as may be examined without awaiting an exact location of the boundry. They may be grouped and designated as (a) those of the state of Oklahoma and its grantees and licensees, (b) that of the United States, (c) those of Indian allottees and others based on the ownership of riparian lands on the northerly side of the river, and (d) those based on placer mining locations made in the river bed. The evidence bearing on these claims was taken and reported under an order entered at the last term, 256 U. S. 605, and the pertinent questions of fact and law have been recently presented in both oral and printed arguments.

The Red river rises in the Panhandle of Texas, near the New Mexico boundary, and takes an easterly and southeasterly course to the Mississippi, of which it is

a tributary. Its total length is about 1,300 miles. The first 557 miles from its mouth are in Louisiana and Arkansas, the next 539 miles are in Oklahoma along the southern boundary, and the remainder is in the Panhandle of Texas. The receivership area embraces 43 miles of the southerly half of the river bed and lies 409 miles up stream from the eastern boundary of Oklahoma. In that state the river bed between the cut-banks, so-called, has ***583** an average width of one-third of the mile, the least width being in the vicinity of the 100th meridian and the greatest in the vicinity of the receivership area.

By the treaty of 1803 (8 Stat. 200) with France and that of 1819 (8 Stat. 252) with Spain the United States acquired the full title to the bed of the river within what now constitutes the state of Oklahoma and to the adjacent lands on the north, and it still is their proprietor, save as in the meantime the title to particular areas, or some beneficial interest therein, has passed or been transferred from it to others in virtue of the Constitution or some treaty or law made thereunder. Recognizing that this is so, the claimants, other than the United States, severally have assumed, as they should, the burden of showing that the rights in the river bed which they are asserting were mediately or immediately derived from the United States. Whether they have successfully carried this burden is the matter for decision.

[2] Oklahoma claims complete ownership of the entire bed of the river within that state, and in support of its claim contends that the river throughout its course in the state is navigable, and therefore that on the admission of the state into the Union, on November 16, 1907, the title to the river bed passed from the United States to the state in virtue of the constitutional rule of equality among the states whereby each new state becomes, as was each of the original states, the owner of the soil underlying the navigable waters within its borders. If that section of the river be navigable, its bed undoubtedly became the property of the state under that rule. [FN3] Those who oppose the state's claim recognize that this is so; and the state concedes that its claim is not tenable, if that section of the river be not navigable. So the real question in this connection is whether the river is navigable in Oklahoma.

[3] The state relies on the third article of the treaty of 1819 between the United States and Spain (8 Stat. 252) ***584** as conclusively establishing the navigability of that section of the river. The article says:

'The boundary line between the two countries, west of the Mississippi, shall begin on the Gulph of Mexico, at the mouth of the river Sabine, in the sea, continuing north, along the western bank of that river, ot the 32d degree of latitude; thence, by a line due north, to the degree of latitude where it strikes the Rio Roxo of Nachitoches, or Red river; then following the course of the Rio Roxo westward, to the degree of longitude 100 west from London and 23 from Washington; then, crossing the said Red river, and running thence, by a line due north, to the river Arkansas; thence, following the course of the southern bank of the Arkansas, to its source, in latitude 42 north; and thence, by that parallel of latitude, to the South Sea. The whole being as laid down in Melish's map of the United States, published at Philadelphia, improved to the first of January, 1818. But, if the source of the Arkansas river shall be found to fall north or south of latitude 42 then the line shall run from the said source due south or north, as the case may be, till it meets the said parallel of latitude 42, and thence, along the said parallel, to the South Sea: All the islands in the Sabine, and the said Red and Arkansas rivers, throughout the course thus described, to belong to the United States; but the use of the waters, and the navigation of the Sabine to the sea, and of the said rivers Roxo and Arkansas, throughout the extent of the said boundary, on their respective banks, shall be common to the respective inhabitants of both nations.'

The state's reliance is on the concluding words, but we think it ill-founded. At the ****411** date of the treaty the Red and Arkansas rivers were in a general way known to be navigable in their lower reaches and not navigable in their upper reaches, but how far up the streams navigability extended was not known. Both were of great length, ***585** largely within a region occupied by wild Indians, and measurably unexplored. The words on which the state relies evidently were to apply alike to both streams. The international boundary was to run along the southerly banks of both,--along that of the Red for about 600 miles [FN4] east of the 100th meridian and along that of the Arkansas from the same meridian to the source of that river in the heart of the Rocky Mountains. To attribute to the parties a purpose to impress this entire stretch of the Arkansas with a navigable character, regardless of the actual conditions, is, in our opinion, quite inadmissible. And so of the 600-mile stretch of the Red. The entire article, examined in the light of the circumstances in which the treaty was negotiated, shows, as we think, that what really was intended in this regard was to provide and make sure that the

right to navigate these rivers wherever along the boundary they were navigable in fact, should be common to the respective inhabitants of both nations.

[4] A legal inference of navigability is said to arise from the action of the surveying officers who, when surveying the lands in that region, ran a meander line along the northerly bank and did not extend the township and section lines across the river. But this has little significance. The same thing was done on the Platte and other large western streams known to be unnavigable. Besides, those officers were not clothed with power to settle questions of navigability. [FN5]

[5] A like inference is sought to be drawn from the fact that Congress, in permitting the construction of certain bridges across the river within Oklahoma, provided in substance ***586** that there should be no interference with navigation. [FN6] But it is reasonably manifest that this provision was only precautionary and not intended as an affirmation of navigable capacity in that locality. The river was known to be navigable from its mouth to near the eastern boundary of Oklahoma, and there had been, as will be seen presently, some light navigation above that boundary in the irregular times of temporary high water; so those who were about to construct the bridges at large expense deemed it prudent to secure the permission of Congress, and Congress merely took the perfectly safe course of qualifying its permission as indicated.

[6] We find nothing in any of the matters relied on which takes the river on Oklahoma out of the settled rule in this country that navigability in fact is the test of navigability in law, and that whether a river is navigable in fact is to be determined by inquiring whether it is used, or is susceptible of being used, in its natural and ordinary condition as a highway for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water. [FN7]

The evidence bearing on this question is voluminous and in some respects conflicting. A large part of it deals directly with the physical characteristics of the river, comes from informed sources and is well in point. A small part consists of statements found in early publications, and repeated in some later ones, to the effect that the river is navigable for great distances,--some of them exceeding its entire length. These statements originated ***587** at a time when there were no reliable data on the subject, and were subsequently accepted and repeated without much concern for their accuracy. Of course, they and their repetition must yield to the actual situation as learned in recent years. [FN8] The evidence also discloses an occasional tendency to emphasize the exceptional conditions in times of temporary high water and to disregard the ordinary conditions prevailing throughout the greater part of the year. With this explanatory comment, we turn to the facts which we think the evidence establishes when it is all duly considered.

[7] The river has its source in the Staked Plains of Northwestern Texas, and from there until it gets well into Oklahoma is within a region where the rainfall is light, is confined to a relatively short period in each year and quickly finds its way into the river. Because of this the river in the western half of the state does not have a continuous or dependable volume of water. It has a fall of 3 feet or more per mile and for long intervals the greater part of its extensive bed is dry sand interspersed with irregular ribbons of shallow water and occasional deeper pools. Only for short intervals, when the rainfall is running off, are the volume and depth of the water such that even very small boats could be operated therein. During ****412** these rises the water is swift and turbulent and in rare instances overflows the adjacent land. The rises usually last from 1 to 7 days and in the aggregate seldom cover as much as 40 days in a year.

In 1910 Capt. A. E. Waldron, of the Corps of Engineers, made an examination of this part of the river from the mouth of the Big Wichita eastward to the mouth of the Washita (185 1/2 miles) pursuant to a congressional direction. From his report, [FN9] fairly portraying the normal ***588** condition of that stretch of the stream, we extract the following:

'5. The banks of the river are from onefourth to 1 1/2 miles in width [apart], and from 10 to 30 feet in height, with numerous high, rocky and clayey bluffs. In the bends of the river the banks cave badly except where the rocky and clayey bluffs occur. This caving causes a continual shifting of the river bed, which moves from one side of the valley to the other.

'6. In places the channel is 1,000 feet wide, and has a depth of only about one-third of a foot. At other places, notably in the bends, it narrows down to a width of 30 feet with an increased depth.

'7. The examination of the river was made from a flat bottom bateau drawing 5 1/2 inches when loaded. There was not a single day during the field examination upon which it was not necessary to remove part of the load and drag the boat over sand bars from 300 to 1,000 feet in length. On some

days this would occur very often.

'8. The field work of examination was performed during the period from November 21 to December 19, 1910. During this period the river gauge at Denison, 11 miles below the mouth of the Washita river, ranged between zero and 1 foot. In reference to the gauge readings at the bridge near Denison, it might be well to state that there were only 42 days during the year 1910 on which this gauge read 2 feet or over, and only 81 days on which it read as much as 1 foot or over.

'9. At three places during the trip down the river in the bateau, solid rock bottom was encountered, ranging from 300 to 1,200 feet in length, and having a depth of only fourtenths of a foot of water in the deepest place.'

We regard it as obvious that in the western half of the state the river is not susceptible of being used in its natural and ordinary condition as a highway for commerce; and there is no evidence that in fact it ever was so used. That section embraces the receivership area.

***589** Of course, the conditions along that part of the river greatly affect the part in the eastern half of the state. But the latter receives additional waters from the Washita and other tributaries and has a practically continuous flow of varying volume, the extreme variation between high and low water being about 30 feet. When the water rises it does so very rapidly, and it falls in the same way. The river bed has a fall of more than 1 foot ot the mile and consists of light sand which is easily washed about and is carried down stream in great quantities at every rise of the water. At all times there is an almost continuous succession of shifting and extensive sand bars. Ordinarily the depth of water over the sand bars is from 6 to 18 inches and elsewhere from 3 to 6 feet. There is no permanent or stable channel. Such as there is shifts irregularly from one side of the bed to the other and not infrequently separates into two or three parts. Boats with a sufficient draft to be of any service can ascend and descend only during periods of high water. These periods are intermittent, of irregular and short duration, and confined to a few months in the year.

Lanesport, Ark., which is near the Oklahoma boundary, has been the usual head of navigation; but for several years before railroads were extended into that section boats of light draft carried merchandise up the river to the mouth of the Kiamitia [FN10] and other points in that vicinity and took out cotton and other products on the return trip. This occurred only in periods of high water, and was accomplished under difficulties. In very exceptional instances boats went to the mouth of the Washita, [FN11] where some had to await the high water of the next season before they could return. When the railroads ***590** were constructed this high-water or flood navigation ceased. That was between 1875 and 1880.

According to many witnesses, whose knowledge of this part of the river reaches back for a long period, the depth of the water at ordinary stages has come to be less than it was from 1850 to 1870, when they first knew it. Portions of the banks have been swept away and sand in great quantities has been brought down stream, making the river wider and shallower than at the time of the navigation just mentioned.

Beginning in 1886 Congress made several appropriations looking to the improvement of the river from a point in Arkansas, not far from the Oklahoma boundary, westward to the mouth of the Washita, and about $500,000 was expended on the project. The officer in charge of the work several times recommended that it be discontinued, because not likely to result in any commercial navigation; and in 1916 [FN12] that officer, the division engineer, the Board of Engineers and the Chief of Engineers concurred in recommending that the project be entirely abandoned, their reasons being that the small (high- water) commerce of an earlier period had disappeared; that the characteristics of the river rendered it impracticable to secure ****413** a useful channel except by canalization, the cost of which would be prohibitive; that the expenditures already made were practically useless, and that there was no reason to believe conditions would change in such way as to bring better results in the future. In 1921 [FN13] that recommendation was repeated. No appropriations in furtherance of the project were made after 1916. Any inference of navigable capacity arising from the fact that this project was undertaken is much more than overcome by the actual conditions disclosed in the course of the work.

***591** While the evidence relating to the part of the river in the eastern half of the state is not so conclusive against mavigability as that relating to the western section, we think it establishes that trade and travel neither do nor can move over that part of the river, in its natural and ordinary condition, according to the modes of trade and travel customary on water; in other words, that it is neither used, nor susceptible of being used, in its natural and ordinary condition as a highway for commerce. Its characteristics are such that its use for transportation has been and must be

exceptional, and confined to the irregular and short periods of temporary high water. A greater capacity for practical and beneficial use in commerce is essential to establish navigability. [FN14]

[8] A decision by the Supreme Court of Oklahoma, in Hale v. Record, 44 Okl. 803, 146 Pac. 587, is relied on as adjudging that the river is navigable in fact. The opinion in the case is briefly to the effect that in the trial court the evidence was conflicting, that the conflict was there resolved on the side of navigability, and that this finding had reasonable support in the evidence and therefore could not be disturbed. It was a purely private litigation. The United States was not a party and is not bound. [FN15] There is in the opinion no statement of the evidence, so the decision hardly can be dregarded as persuasive here.

We conclude that no part of the river within Oklahoma is navigable, and therefore that the title to the bed did not pass to the state on its admission into the Union. If the state has a lawful claim to any part of the bed, it is only such as may be incidental to its ownership of riparian ***592** lands on the northerly bank. And so of the grantees and licensees of the state.

The riparian claims pressed on our attention all relate to the river bed between the 98th degree of west longitude and the mouth of the North fork. [FN16] They must be considered in the light of matters which we proceed to state.

By a treaty between the United States and the Kiowa, Comanche and Apache Tribes of Indians, concluded in 1867, the territory north of the 'middle of the main channel' of the Red river and between the Ninety-Eighth meridian and the North fork was set apart as a reservation and permanent home for those tribes. 15 Stat. 581, 589. That reservation was maintained until June 6, 1900, when Congress passed an act (chapter 813, § 6, 31 Stat. 672, 676), directing that it be disposed of (a) by allotting in severalty to each member of the tribes 160 acres, (b) by setting apart 480,000 acres of grazing lands for the common use of the tribes, (c) by reserving four sections in each township for the future state of Oklahoma for school and other public purposes, and (d) by subjecting the remaining lands to particular modes of entry and acquisition under designated land laws. Besides the allotments and grazing reserves, the Indians were to receive stated payments in money. The Indians assailed the validity of the act, but in Lone Wolf v. Hitchock, 187 U. S. 553, 23 Sup. Ct. 216, 47 L. Ed. 299, this court sustained it as a legitimate exertion of the power of Congress over tribal Indians and their property, and the act was carried into effect. Like the treaty reservation, the provisions of the act were in terms limited to the territory north of the 'middle of the main channel' of the river.

One of the grazing reserves created under that act contained 400,000 acres, and the order setting it apart made the 'midchannel' of the river its southern boundary. ***593** That reserve came to be known as the Big Pasture and was maintained until June 5, 1906, when Congress passed an act (chapter 2580, 34 Stat. 213) requiring that it be disposed of (a) by alloting in severalty to each child born into the tribes after the act of 1900, 160 acres, and (b) by subjecting the remaining lands to particular modes of entry and sale and placing the proceeds in the Treasury to the credit of the tribes. Subsequent amendments made some changes, not material here, in the modes of entry and sale, and directed the use of a part of the proceeds in maintaining a hospital which was open to and used by the members of the tribes. The last amendment was made June 30, 1913, c. 4, § 17, 38 Stat. 77, 92.

The lands on the northerly bank of the river between the 98th meridian and the North fork were all disposed of under the act of 1900, or that of 1906 and its amendments--some ****414** as Indian allotments, some through entries or purchases in the designated modes, and some under the grant to Oklahoma for school and other public purposes. The riparian claims are all founded on these disposals. The river bed there is from 1,500 to 6,600 feet wide between what are called the cut-banks.

The receivership area lies immediately south of what was the Big Pasture and has the same easterly and westerly limits.

[9] One of the questions involved in the riparian claims relates to what was intended by the terms 'middle of the main channel' and 'mid-channel' as used in defining the southerly boundary of the treaty reservation and of the Big Pasture. When applied to navigable streams such terms usually refer to the thread of the navigable current, and, if there be several, to the thread of the one best suited and ordinarily used for navigation. [FN17] But this ***594** section of Red river obviously is not navigable. It is without a continuous or dependable flow, has a relatively level bed of loose sand over which the water is well distributed when there is a substantial

volume, and has no channel of any permanence other than that of which this sand bed is the bottom. The mere ribbons of shallow water which in relatively dry seasons find their way over the sand bed, readily and frequently shifting from one side to the other, cannot be regarded as channels in the sense intended. Evidently something less transient and better suited to mark a boundary was in mind. We think it was the channel extending from one cutbank to the other, which carries the water in times of a substantial flow. That was the only real channel and therefore the main channel. So its medial line must be what was designated as the Indian boundary.

Other questions common to all the riparian claims are, whether the disposal of the lands on the northerly bank carried with it any right to the river bed in front of them, and, if so, whether this rights extends to the medial line of the stream or to the Texas boundary along the opposite bank. On these questions the parties are far apart. The state of Oklahoma and the placer mining claimants insist that no right to the river bed passed with the upland; the United States that such a right did pass, but extends only to the medial line, and the several riparian claimants that the right passed and extends to the Texas boundary along the opposite bank.

[10] Where the United States owns the bed of a nonnavigable stream and the upland on one or both sides, it, of course, is free when disposing of the upland to retain all or any part of the river bed; and whether in any particular instance it has done so is essentially a question of what it intended. If by a treaty or statute or the terms of its patent it has shown that it intended to restrict the conveyance to the upland or to that and a part only of the ***595** river bed, that intention will be controlling; [FN18] and, if its intention be not otherwise shown, it will be taken to have assented that its conveyance should be construed and given effect in this particular according to the law of the state in which the land lies. [FN19] Where it is disposing of tribal land of Indians under its guardianship the same rules apply.

[11] What has been said concerning the treaty reservation, the Big Pasture and the acts of 1900 and 1906 shows that the United States intended to dispose of the upland and the northerly half of the river bed, but nothing more. The southerly half of the bed had not been included in the reservation or the Big Pasture, and was not subjected to the operation of the act of 1900 or that of 1906. This shows that the United States intended to retain that part of the bed. It follows that, while the disposals under those acts could extend southward to the medial line, they could not go beyond it.

In executing the acts there was no attempt to dispose of the river bed separately from the upland. The disposals were all according to the legal subdivisions established by the survey of the upland and shown on the official plat. In the patents there was no express inclusion or exclusion of rights in the river bed.

Tested by the common law these conveyances of riparian tracts conferred a title extending not merely to the water line, but to the middle of the stream. Possibly, if the river bed for its entire breadth had been subject to ***596** disposal under the Acts of 1900 and 1906, the title would have extended to the Texas boundary along the other side; but this is a debatable question which need not be considered here, for no disposal under those acts could go beyond the medial line. That limitation inhered in all that was done.

[12] But it is contended that the commonlaw rule, although formerly adopted in Oklahoma [FN20] and recently recognized by the Supreme Court of the state, [FN21] has been impliedly abrogated by the Legislature. The ****415** contention is not sustained by any decision in the state and, in our opinion, is not tenable. It is based on statutes displacing or qualifying the common-law rule respecting the rights of riparian proprietors in the natural flow of the stream, which is a matter quite distinct from the ownership of the bed of the stream. The rule as to either could be displaced without affecting the other.

Out conclusion on the general questions is that the disposal of the lands on the northerly bank carried with it a right to the bed of the river as far as, but not beyond, the medial line.

Particular questions relating to some of the riparian claims and not to others are presented, and we now turn to them.

[13] The Indian allotments were made in 1909 and 1910, but have not been carried to final patents. They are evidenced by trust patents, so-called, wherein the United States engages to hold the land for a period of 25 years 'in trust for sole use and benefit' of the allottee, or of his heirs in the event of his death, and at the end of the trust period to convey the same to him, or to his heirs if he be not then living. The contention is made that no right to the river bed could pass under these ***597** allotments in advance of the issue of the final patent. Even if this were so, it well may be doubted that it would enable strangers to

fasten any claim on or appropriate the bed in front of the allotments. But we think it is not so. The allotments when perfected passed the equitable title and beneficial use to all that would have passed under a full patent. The purpose of the holding in trust by the United States is to prevent allottees from improvidently alienating or incumbering the land, not to cut down or postpone their rights in other respects.

[14] The lands along the north bank were surveyed and platted in 1874 and 1875. Afterwards, and before the disposals in question, portions of the bank were swept away in times of flood. This changed the relation to the river of several surveyed tracts. Some became part of the bed and others nonriparian before became riparian. But most of the tracts on which the riparian claims before us are founded remained unchanged an need not be specially noticed.

Of the tracts changed from riparian upland to river bed, a small number were disposed of as if they still were upland abutting on the river--the disposal occurring while the adjacent land then actually riparian was unallotted and unsold. Evidently the disposal was intended to operate and have effect as if the tracts retained their former relation to the river; and, as nothing stood in the way, we think the title under the disposal reached to the middle of the stream.

[15] Of the tracts which had been nonriparian but became riparian, all were disposed of in ordinary course. Generally the tracts in front of them which came to lie in the river bed were neither allotted nor sold. Where this was so, we think the right to the bed, out to be center line, passed with the tracts which had come to be riparian. But where there was a prior disposal of the tracts in the bed, that right, as just indicated, went with them.

***598** Four legal subdivisions in township 5, south of range 14, west, were sold to Fred Capshaw and transferred by him to A. E. Pearson et al., who are interveners here. Two of these subdivisions, lots 1 and 2 of section 8, were riparian when surveyed, but in the river bed when sold. Another, the N. W. 1/4 of the N. W. 1/4 of the same section, lay immediately back of these lots. The fourth, the N. E. 1/4 of the N. E. 1/4 of section 7, lay to one side of the third. At the time of the survey the fourth was separated from the river by a tract which afterwards came to be largely, if not entirely, in the river bed. This tract was sold to Robert L. Owen before the others were sold to Capshawn. Pearson et al. claim the river bed in front of lots 1 and 2 of section 8 and also in front of the N. E. 1/4 of the N. E. 1/4 of section 7. Their rights are just what Capshaw's were, neither more nor less. We think the bed of the river in front of the two lots in section 8, out to the middle, passed to Capshaw, but that nor part of the bed passed to him with the N. E. 1/4 of the N. E. 1/4 of section 7. All that could passibly have passed with that subdivision had already passed to Owen with the tract which lay in front of it.

[16] The state of Oklahoma in its bill claimed riparian rights in portions of the bed by reason of its ownership of occasional school and other lands on the bank; but in its brief it has endeavored only to sustain the claim based on the asserted navigability of the river. As to the latter it has failed. According to the evidence, it owns riparian lands both within and without what was the Kiowa, Comanche and Apache reservation. As to such lands it is entitled to the same incidents of riparian ownership that any other owner would have. The fact that it has not pressed this right in its brief might be regarded by some as a waiver or renunciation of the right; but this hardly can have been intended. The state's riparian right will therefore be recognized in the decree.

***599** What has been said indicates the disposition which must be made of all the riparian claims. It would serve no purpose to enumerate them here. All will be dealt with in the decree conformably to the views we have expressed.

We come next to the claims founded on placer mining locations. These locations were all made in that part of the southerly ****416** half of the river bed which is in front of what was the Big Pasture. It is objected that some are overlapped by others, and that some were without a supporting mineral discovery. But we put these questions aside and come directly to one which is common to all the locations, namely, whether that part of the bed was subject to location and acquisition under the mining laws. The placer claimants insist that it was, and the United States that it was not. No one doubts that when these locations were made lands valuable for oil, if within areas where the mining laws were operative, could be located and acquired as placer claims.

[17] The claimants rely on section 2319 of the Revised Statutes (Comp. St. § 4614), which declares:

> 'All valuable mineral deposits in lands belonging to the United States, both surveyed and unsurveyed, are hereby declared to be free and open to exploration and purchase, and the lands in which they are found to occupation and purchase, by

citizens of the United States and those who have declared their intention to become such, under regulations prescribed by law, and according to the local customs or rules of miners in the several mining districts, so far as the same are applicable and not inconsistent with the laws of the United States.'

This section is not as comprehensive as its words separately considered suggest. It is part of a chapter relating to mineral lands which in turn is part of a title dealing with the survey and disposal of 'The Public Lands.' To be rightly understood it must be read with due regard ***600** for the entire statute of which it is but a part, and when this is done it is apparent that, while embracing only lands owned by the United States, it does not embrace all that are so owned. Of course, it has no application to the grounds about the Capitol in Washington or to the lands in the National Cemetery at Arlington, no matter what their mineral value; and yet both belong to the United States. And so of the lands in the Yosemite National Park, the Yellowstone National Park, and the military reservations throughout the Western States. Only where the United States has indicated that the lands are held for disposal under the land laws does the section apply; and it never applies where the United States directs that the disposal be only under other laws.

[18] This part of the river bed was for many years in the Indian Territory, to which none of the land laws ever was extended. In 1890 it was made part of the territory of Oklahoma by an act wherein Congress expressly indicated that the lands in that territory should be disposed of under the homestead and town-site laws 'only.' [FN22]

A question arose under that act as to whether the exclusion of the mining laws relieved homestead applicants from offering proof that the land sought to be entered was agricultural and not mineral, such proof being required where the mining laws were in force; and Congress promptly answered that question by saying, in an act of 1891, that 'all lands in Oklahoma are hereby declared to be agricultural lands, and proof of their nonmineral character shall not be required as a condition precedent to final entry.' [FN23] In the many acts which followed wherein lands in Oklahoma were opened to disposal all but two exactly conformed to the policy announced in ***601** the acts of 1890 and 1891. The two exceptional acts were one of 1895 dealing with the Wichita lands [FN24] and the one of 1900, before described, dealing with the Kiowa, Comanche and Apache lands. [FN25] The act of 1895 expressly extended the mining laws over the limited area to which it related, which was remote from the one with which we are here concerned. The act of 1900 expressly extended the mining laws to a part, but not all, of the lands to which it related--that is to say, it extended them to such lands as were to be allotted and opened to settlement, but not to those set apart as grazing reserves. There never was any act subjecting the latter to the operation of the mining laws. On the contrary, the act of 1906 and its amendments show that the Big Pasture and other grazing reserves were to be disposed of only in other modes specially defined.

Thus the general policy in respect of lands in Oklahoma has been that the mining laws should not apply to them, and to this there have been but two exceptions, each confined to a limited area and neither embracing the locality in question. Even the words of the exceptions, 'are hereby extended over' the particular areas, plainly imply that but for them the mining laws would not have applied to those areas. The general policy is also reflected in the act of 1906, providing for Oklahoma's admission into the Union, the eighth section of which distinctly recognized the right of the state to receive mineral lands under the grants to it for school and other purposes [FN26]--a thing not permitted to a state where the mining laws are in force. [FN27]

This is the view which has been uniformly taken and enforced by the officers of the Land Department in the ***602** administration of ****417** these acts. [FN28] Those officers have not recognized or given any effect to these mining claims.

We conclude that this part of the river bed never was subject to location or acquisition under the mining laws--nor, indeed, to acquisition under any of the land laws--and therefore that these locations were of no effect and conferred no rights on the locators or their assigns.

The parties in interest will be accorded 20 days within which to submit a proper form of decree disposing of the several claims now before us in conformity with the views expressed in this opinion.

It is so ordered.

FN1 See United States v. Texas, 143 U. S. 621, 12 Sup. Ct. 488, 36 L. ed. 285; Minnesota v. Hitchcock, 185 U. S. 373, 385-

388, 22 Sup. Ct. 650, 46 L. Ed. 954; United States v. Michigan, 190 U. S. 379, 396, 23 Sup. Ct. 742, 47 L. Ed. 1103; Kansas v. United States, 204 U. S. 331, 342, 27 Sup. Ct. 388, 51 L. Ed. 510.

FN2 See Freeman v. Howe, 24 How. 450, 16 L. Ed. 749; Minnesota Co. v. St. Paul Co., 2 Wall. 609, 632, 17 L. Ed. 886; Stewart v. Dunham, 115 U. S. 61, 64, 5 Sup. Ct. 1163, 29 L. Ed. 329; Phelps v. Oaks, 117 U. S. 236, 6 Sup. Ct. 714, 29 L. Ed. 888; Morgan's Louisiana Co. v. Texas Central Ry. Co., 137 U. S. 171, 201, 11 Sup. Ct. 61, 34 L. Ed. 625; Compton v. Jesup, 68 Fed. 263, 15 , C. C. A. 397; Blake v. Pine Mountain Co., 76 Fed. 624, 22 C. C. A. 430; Central Trust Co. v. Carter, 78 Fed. 225, 233, 24 C. C. A. 73; Sioux City Terminal Co. v. Trust Co., 82 Fed. 124, 128, 27 C. C. A. 73; Daniel Ch. Pl. & Pr. (6 Am. Ed.) pp. * 1743-*1745; Street's Fed. Ed. Pr. § § 1229, 1245, 1246, 1364, et seq.

FN3 Scott v. Lattig, 227 U. S. 229, 242, 243, 33 Sup Ct. 242, 57 L. Ed. 490, 44 L. R. A. (N. S.) 107, and cases cited.

FN4 The actual length of the international boundary along the south bank of the Red river was 587 miles. Of that boundary 48 miles are now in the Arkansas-Texas boundary and 539 miles are in the Texas-Oklahoma boundary.

FN5 Barden v. Northern Pacific R. R. Co., 154 U. S. 288, 320, 14 Sup. Ct. 1030, 38 L. Ed. 992; Gauthier v. Morrison, 232 U. S. 452, 458, 34 Sup. Ct. 384, 58 L. Ed. 680; Harrison v. Fite, 148 Fed. 781, 784, 78 C. C. A. 447.

FN6 Examples of this are found in the Acts of May 15, 1886, c. 332, 24 Stat. 28; Act May 17, 1886, c. 354, 24 Stat. 63, and June 30, 1916, c. 200, 39 Stat. 251.

FN7 The Daniel Ball, 10 Wall. 557, 563, 19 L. Ed. 999; The Montello, 20 Wall. 430, 439, 22 L. Ed. 391; United States v. Rio Grande Co., 174 U. S. 690, 698, 19 Sup. Ct. 770, 43 L. Ed. 1136; United States v. Cress, 243 U. S. 316, 323, 37 Sup. Ct. 380, 61 L. Ed. 746; Economy Light & Power Co. v. United States, 256 U. S. 113, 121, 41 Sup. Ct. 409, 65 L. Ed. 847.

FN8 Missouri v. Kentucky, 11 Wall. 395, 410, 20 L. Ed. 116.

FN9 House Doc. No. 193, 63d Cong. 1st Sess. p. 4.

FN10 The Kiamitia is 83 miles up stream from the eastern boundary of Oklahoma.

FN11 The Washita is 217 miles up stream from the eastern boundary of Oklahoma.

FN12 House Doc. No. 947, 64th Cong. 1st Sess.

FN13 House Doc. No. 87, 67th Cong. 1st Sess.

FN14 United States v. Rio Grande Co., 174 U. S. 690, 698, 699, 19 Sup. Ct. 770, 43 L. Ed. 1136; Leovy v. United States, 177 U. S. 621, 20 Sup. Ct. 797, 44 L. Ed. 914; Toledo Liberal Shooting Co. v. Erie Shooting Club, 90 Fed. 680, 682, 33 C. C. A. 233; Harrison v. Fite, 148 Fed. 781, 784, 78 C. C. A. 447; North American Dredging Co. v. Mintzer, 245 Fed. 297, 300 157 C. C. A. 489.

FN15 Economy Light & Power Co. v. United States, 256 U. S. 113, 123, 41 Sup. Ct. 409, 65 L. Ed. 847.

FN16 The ninety-eighth degree is 380 miles, and the mouth of the North fork 477 miles, up stream from the eastern Oklahoma boundary.

FN17 Iowa v. Illinois, 147 U. S. 1, 13 Sup. Ct. 239, 37 L. Ed. 55.

FN18 Wilcox v. Jackson, 13 Pet. 498, 516, 517, 10 L. Ed. 264; Irvine v. Marshall, 20 How. 558, 15 L. Ed. 994; Gibson v. Chouteau, 13 Wall. 92, 99, 20 L. Ed. 534; Utah Power & Light Co. v. United States, 243 U. S. 389, 404, 37 Sup. Ct. 387, 61 L. Ed. 791; Kean v. Calumet Canal Co., 190 U. S. 452, 460, 23 Sup. Ct. 651, 47 L. Ed. 1134.

FN19 Hardin v. Jordan, 140 U. S. 371, 384, 11 Sup. Ct. 808, 838, 35 L. Ed. 428; Mitchell v. Smale, 140 U. S. 406, 413, 414, 11 Sup. Ct. 819, 840, 35 L. Ed. 442; Grand Rapids & Indiana R. R. Co. v. Butler, 159 U. S. 87, 92, 15 Sup. Ct. 991, 40 L. Ed. 85; Hardin v. Shedd, 190 U. S. 508, 519, 23 Sup. Ct. 685, 47 L. Ed. 1156; Whitaker v. McBride, 197 U. S. 510, 512, 515, 516, 25 Sup. Ct. 530, 49 L. Ed. 857; and see Railroad Co. v. Schurmeier, 7 Wall. 272, 287, et seq., 19 L. Ed. 74.

FN20 Rev. Laws Okl. 1910, § 4642.

FN21 Hale v. Record, 44 Okl. 803, 146 Pac. 587.

FN22 Act May 2, 1890, c. 182, § § 1, 18, 20, 22, 26 Stat. 81 (Comp. St. § § 5020, 5021, 5023).

FN23 Act March 3, 1891, § 16, c. 543, 26 Stat. 989, 1026 (Comp. St. § 5027).

FN24 Act March 2, 1895, c. 188, 28 Stat. 876, 899 (Comp. St. § 4862).

FN25 Act June 6, 1900, c. 813, 31 Stat. 672, 676-681.

FN26 Act June 16, 1906, c. 3335, § 8, 34 Stat. 267.

FN27 United States v. Sweet, 245 U. S. 563, 38 Sup. Ct. 193, 62 L. Ed. 473.

FN28 Acme Cement & Plaster Co., 31 L. D. 125; Instructions, 31 L. D. 154; E. A. Shirley, 35 L. D. 113; Regulations, § 38, 35 L. D. 239; Benjamin F. Robinson, 35 L. D. 421; Lenertz v. Malloy, 36 L. D. 170; Knight Placer Mining Ass'n v. Hardin, 47 L. D. 331.

42 S.Ct. 406, 258 U.S. 574, 66 L.Ed. 771

END OF DOCUMENT

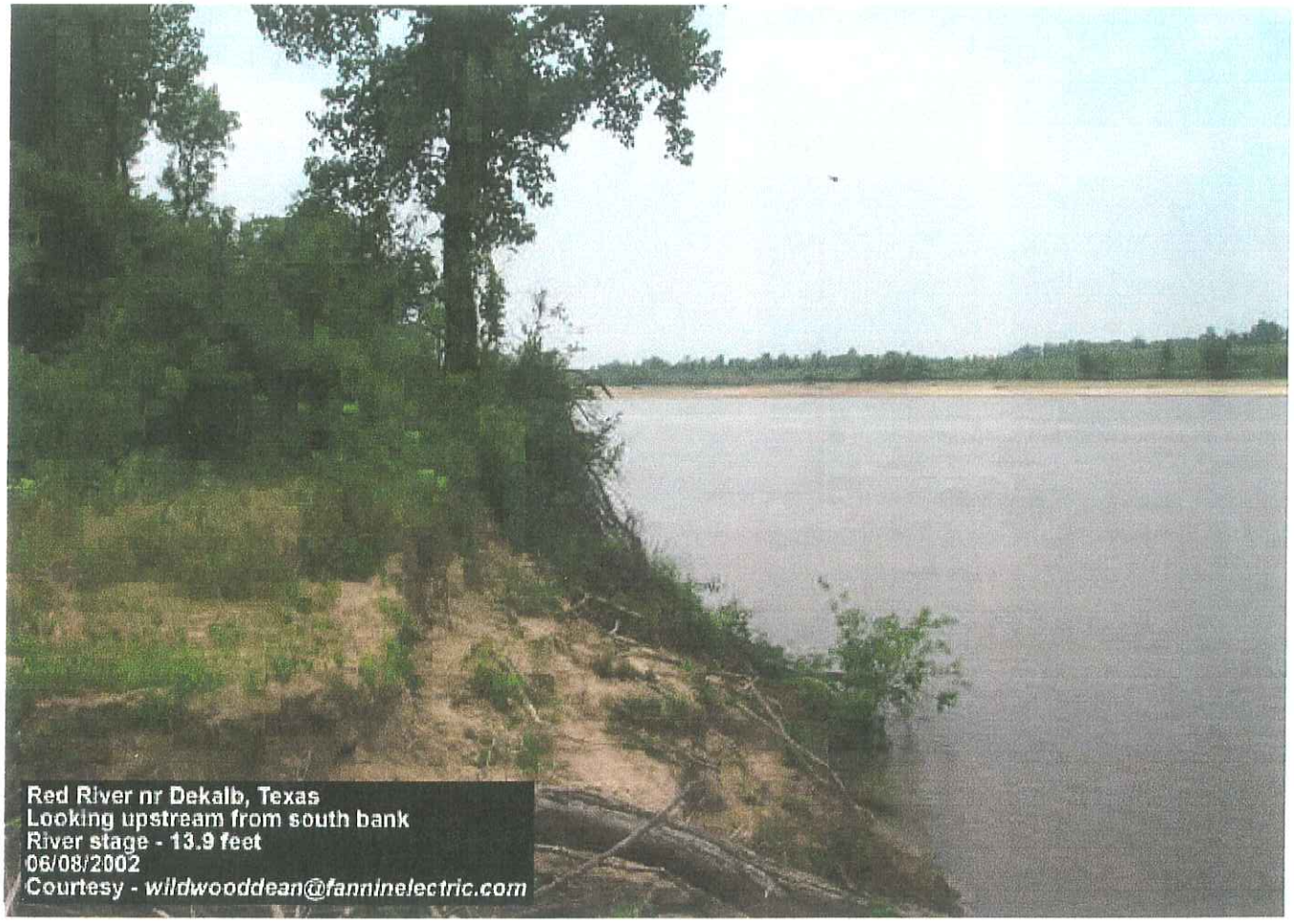
ADDITIONAL INFORMATION

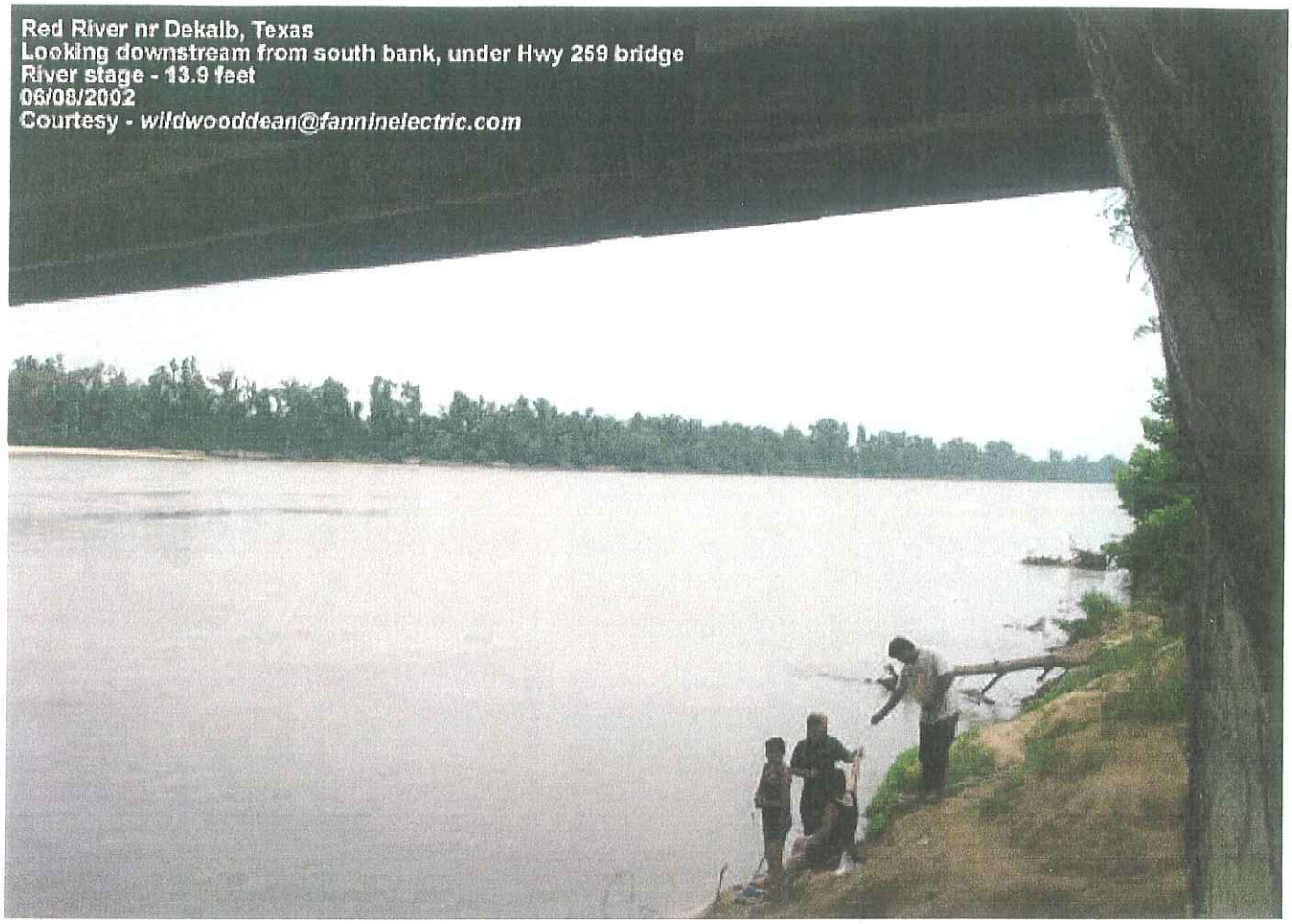
www.nws.noaa.gov

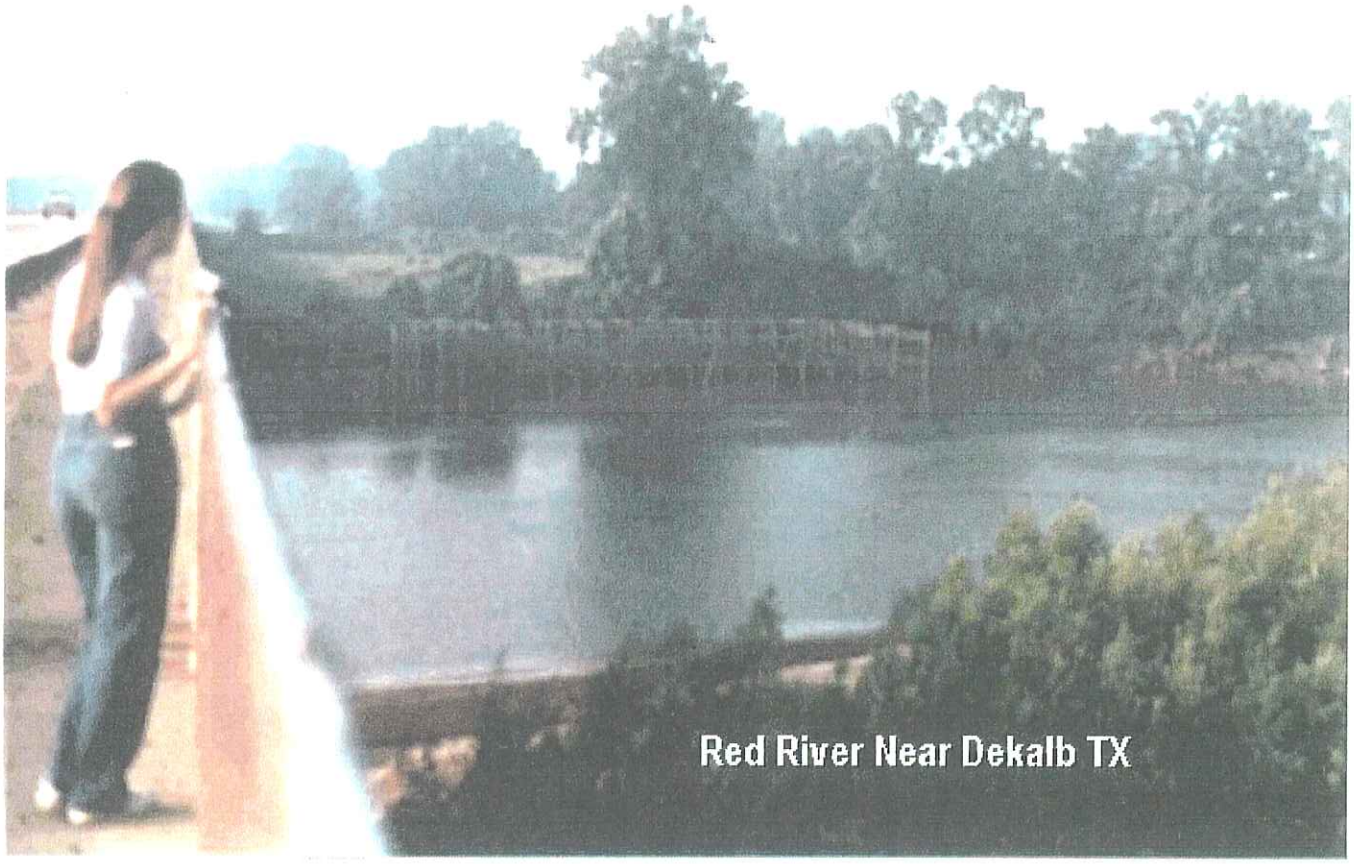
National Weather Service
Arkansas-Red Basin
River Forecast Center

DEKALB 13N - DEKT2
RED RIVER

Latitude:	33° 41' 15" N	Upstream:	ARCT2 HGLO2
Longitude:	94° 41' 39" W	Downstream:	INGA4




Red River nr Dekalb, Texas
Looking downstream from south bank, under Hwy 259 bridge
River stage - 13.9 feet
06/08/2002
Courtesy - wildwooddean@fanninelectric.com

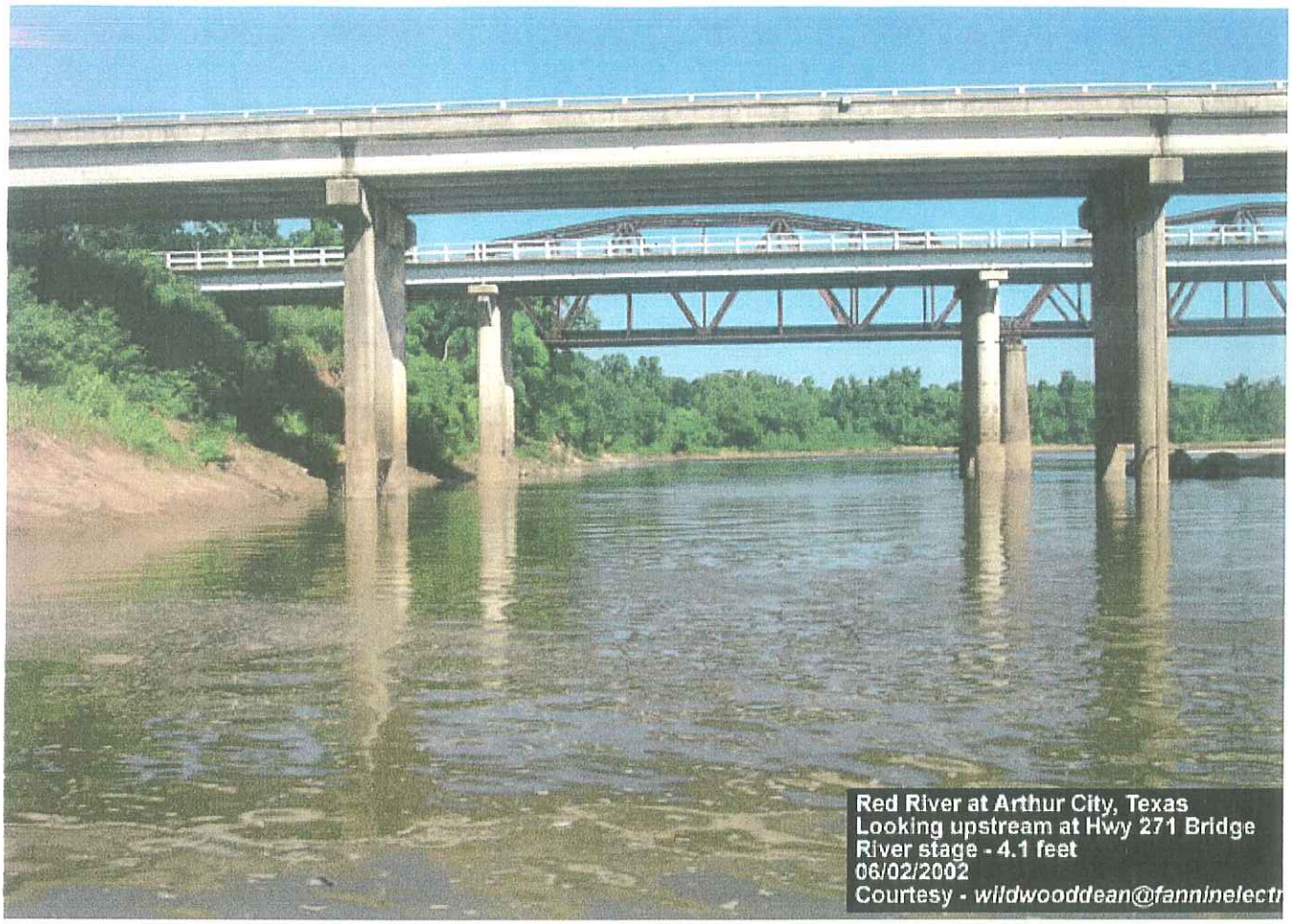


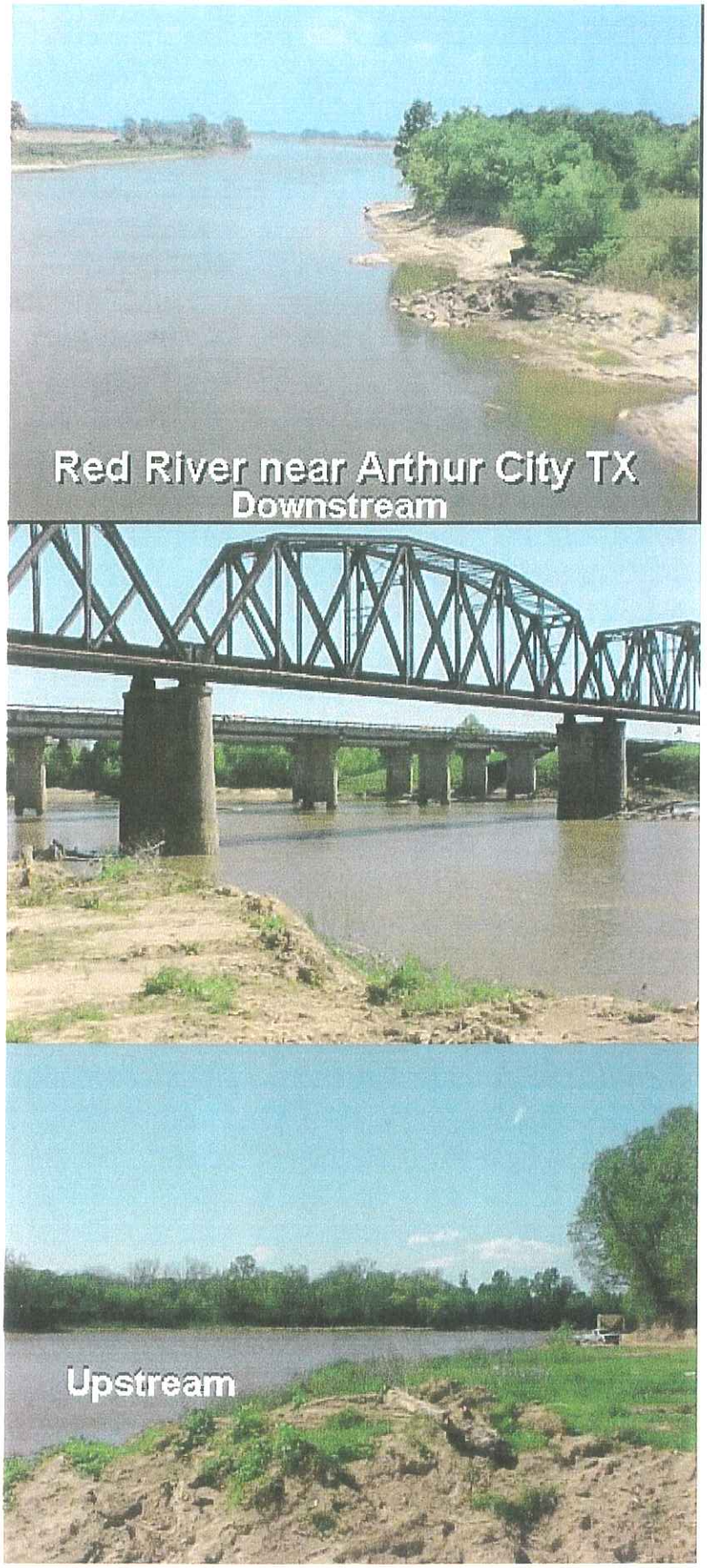
Main Link Categories:
Home, River Forecasts, Observed Precip, Forecast Precip, Archive, General Info, Contact Us

National Weather Service
Arkansas-Red Basin River Forecast Center
Page last modified: August 20, 2002

Disclaimer

Privacy Notice


Red River at Arthur City, Texas
Looking upstream at Hwy 271 Bridge
River stage - 4.1 feet
06/02/2002
Courtesy - wildwooddean@fanninelectr



http://www.srh.noaa.gov/abrfc/rivers/photo_gallery/arct2.jpg

3/24/2003

Water Resources

Data Category: Site Information | Geographic Area: Oklahoma | GO

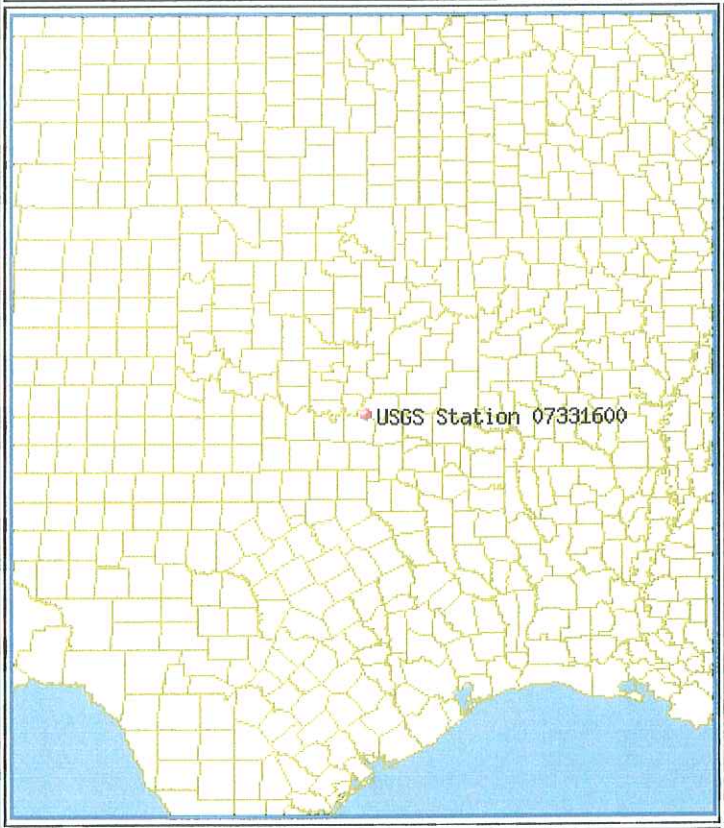
Site Map for Oklahoma

USGS 07331600 Red River at Denison Dam nr Denison, TX

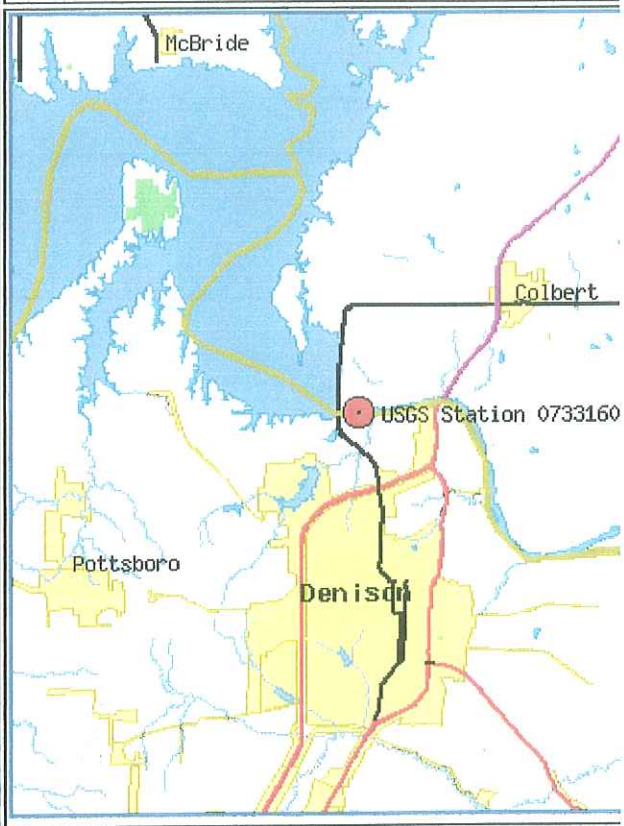
Available data for this site: Station site map | GO

Grayson County, Texas
Hydrologic Unit Code 11140101
Latitude 33°49'08", Longitude 96°33'47" NAD27
Drainage area 39,720 square miles
Gage datum 495 feet above sea level NGVD29

Location of the site in Oklahoma.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov
NWIS Site Inventory for Oklahoma: Site Map

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Oklahoma | GO

Calendar Year Streamflow Statistics for Oklahoma

USGS 07331600 Red River at Denison Dam nr Denison, TX

Available data for this site: Surface-water: Annual streamflow statistics | GO

Grayson County, Texas
Hydrologic Unit Code 11140101
Latitude 33°49'08", Longitude 96°33'47" NAD27
Drainage area 39,720 square miles
Gage datum 495 feet above sea level NGVD29

Output formats
HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1924	2,887	1941	16,130	1960	4,773	1976	2,606
1925	3,935	1942	9,007	1961	3,731	1977	3,840
1926	6,362	1943	5,119	1962	4,602	1978	2,698
1927	6,225	1944	279	1963	2,060	1979	2,970
1928	5,445	1945	9,790	1964	1,485	1980	2,067
1929	4,917	1946	5,223	1965	2,261	1981	5,642
1930	5,311	1947	6,792	1966	3,027	1982	7,834
1931	3,363	1948	3,534	1967	1,978	1983	5,139
1932	6,546	1949	4,105	1968	4,313	1984	2,329
1933	4,509	1950	7,499	1969	5,387	1985	9,870
1934	2,445	1951	6,262	1970	2,471	1986	8,006
1935	8,350	1952	2,297	1971	1,882	1987	12,250
1936	3,971	1953	1,883	1972	2,261	1988	4,985
1937	3,229	1954	3,910	1973	8,524	1997	7,986
1938	6,360	1955	4,320	1974	5,180	1998	8,018
1939	1,429	1956	1,635	1975	7,949	1999	3,404
1940	3,287	1957	12,509				

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Site Information | Geographic Area: Oklahoma | GO

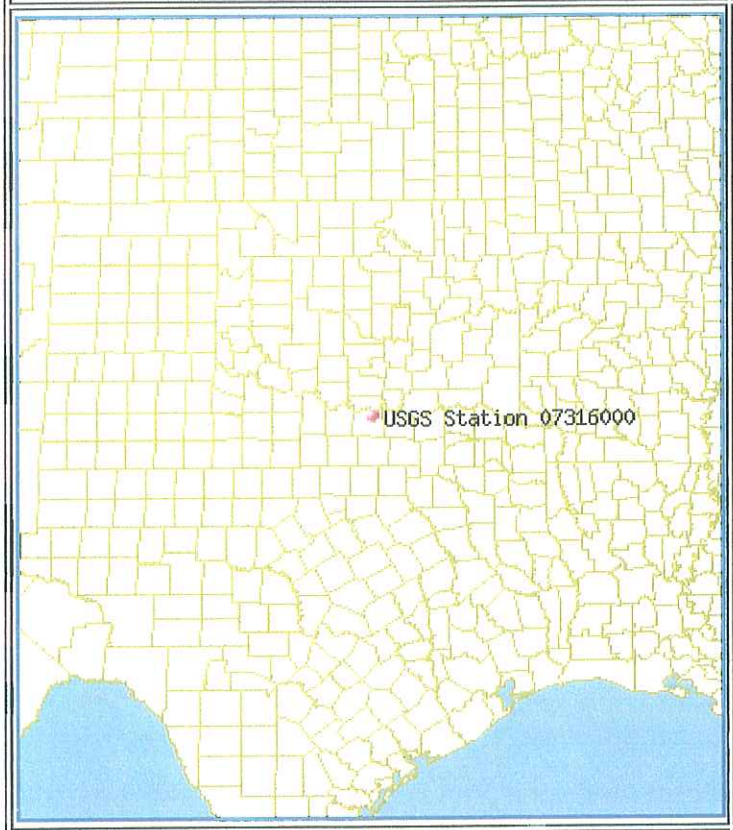
Site Map for Oklahoma

USGS 07316000 Red River near Gainesville, TX

Available data for this site: Station site map | GO

Love County, Oklahoma
Hydrologic Unit Code 11130201
Latitude 33°43'40", Longitude 97°09'35" NAD27
Drainage area 30,782 square miles
Contributing drainage area 24,846 square miles
Gage datum 627.91 feet above sea level NGVD29

Location of the site in Oklahoma.



Site map.

ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Oklahoma | GO

Calendar Year Streamflow Statistics for Oklahoma

USGS 07316000 Red River near Gainesville, TX

Available data for this site: Surface-water: Annual streamflow statistics | GO

Love County, Oklahoma
Hydrologic Unit Code 11130201
Latitude 33°43'40", Longitude 97°09'35" NAD27
Drainage area 30,782 square miles
Contributing drainage area 24,846 square miles
Gage datum 627.91 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1937	2,060	1953	1,593	1969	2,455	1985	6,014
1938	3,810	1954	2,153	1970	1,076	1986	6,772
1939	1,014	1955	4,098	1971	1,182	1987	8,367
1940	1,923	1956	895	1972	1,380	1988	2,449
1941	11,970	1957	7,796	1973	4,081	1989	4,501
1942	5,011	1958	1,517	1974	2,353	1990	7,999
1943	2,522	1959	2,807	1975	4,428	1991	5,195
1944	1,495	1960	2,885	1976	1,409	1992	5,847
1945	4,822	1961	2,116	1977	2,589	1993	5,629
1946	2,267	1962	2,751	1978	1,844	1994	2,371
1947	3,442	1963	814	1979	1,816	1995	8,833
1948	1,399	1964	1,029	1980	1,519	1996	2,811
1949	2,303	1965	1,843	1981	3,262	1997	5,376
1950	4,639	1966	1,665	1982	5,502	1998	3,815
1951	4,111	1967	1,160	1983	3,325	1999	1,834
1952	1,043	1968	2,449	1984	1,387		

USGS

Water Resources

Data Category: Site Information | Geographic Area: Oklahoma | GO

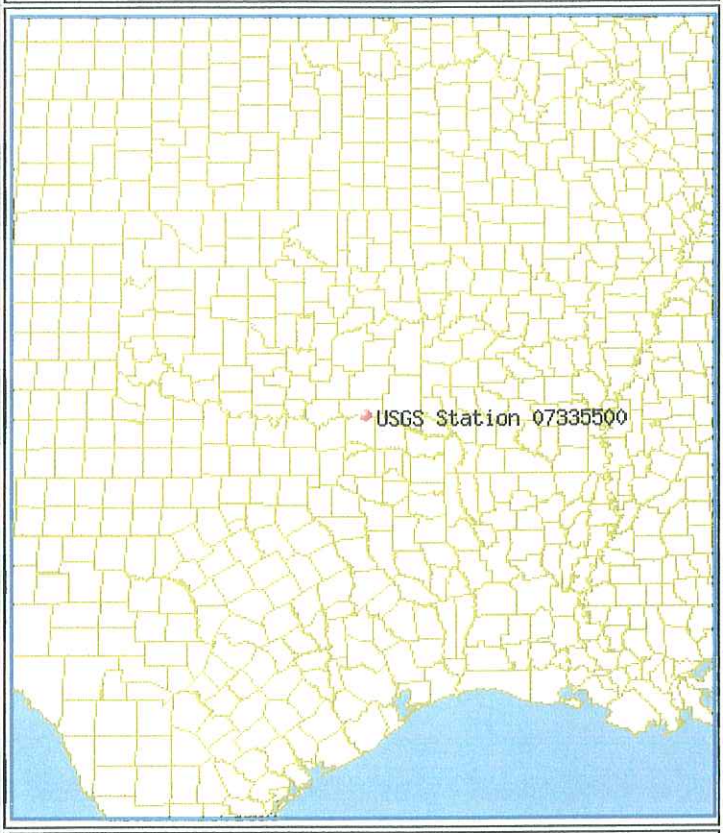
Site Map for Oklahoma

USGS 07335500 Red River at Arthur City, TX

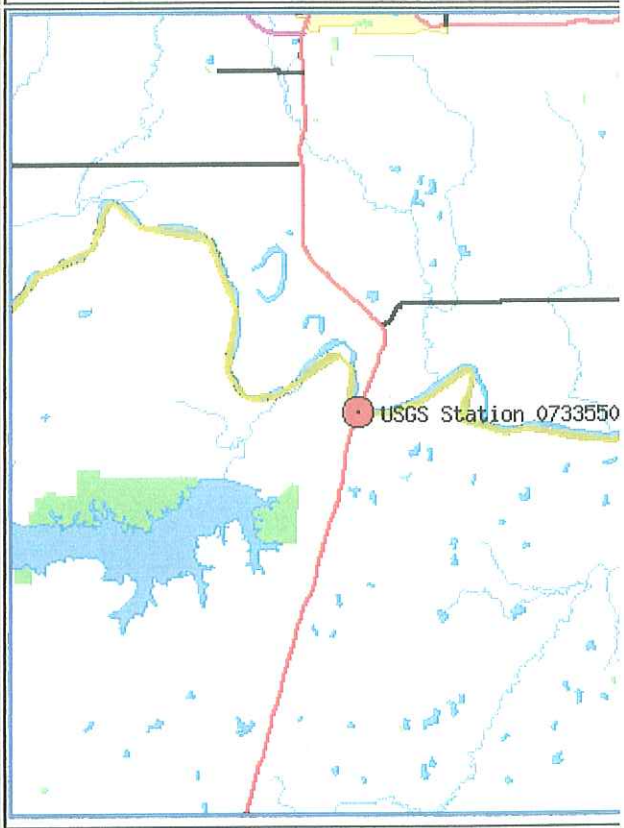
Available data for this site: Station site map | GO

Choctaw County, Oklahoma
Hydrologic Unit Code 11140101
Latitude 33°52'30", Longitude 95°30'06" NAD27
Drainage area 44,531 square miles
Contributing drainage area 38,595 square miles
Gage datum 380.07 feet above sea level NGVD29

Location of the site in Oklahoma.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Oklahoma | GO

Calendar Year Streamflow Statistics for Oklahoma

USGS 07335500 Red River at Arthur City, TX

Available data for this site: Surface-water: Annual streamflow statistics | GO

Choctaw County, Oklahoma
Hydrologic Unit Code 11140101
Latitude 33°52'30", Longitude 95°30'06" NAD27
Drainage area 44,531 square miles
Contributing drainage area 38,595 square miles
Gage datum 380.07 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1906	10,460	1949	7,319	1966	5,171	1983	7,911
1907	8,236	1950	13,410	1967	4,800	1984	5,060
1908	21,780	1951	8,823	1968	10,600	1985	14,470
1909	3,363	1952	4,079	1969	10,890	1986	12,350
1910	2,913	1953	4,775	1970	6,287	1987	16,460
1937	5,708	1954	6,475	1971	5,302	1988	6,647
1938	10,570	1955	6,104	1972	4,173	1989	12,930
1939	2,433	1956	2,222	1973	16,630	1990	23,490
1940	6,303	1957	21,210	1974	9,893	1991	14,779
1941	20,700	1958	6,398	1975	12,040	1992	18,370
1942	14,720	1959	6,100	1976	4,721	1993	17,520
1943	7,753	1960	7,604	1977	6,253	1994	11,590
1944	2,980	1961	6,354	1978	4,238	1995	17,720
1945	19,660	1962	7,708	1979	6,110	1996	9,294
1946	11,740	1963	2,785	1980	3,157	1997	11,530
1947	9,704	1964	3,353	1981	10,330	1998	12,040
1948	6,441	1965	3,881	1982	13,650	1999	5,645

Questions about data gs-w-ok_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ok_NWISWeb_Maintainer@usgs.gov

Return to top of page

Rio Grande—New Mexico

Reported Decision: United States v. Rio Grande Dam & Irr. Co., 174 U.S. 690 (1899)

Reach at Issue: Entire length in New Mexico

Judicial Determination: Non-navigable

Facts Reported in Decision:

"[T]he only matter of fact which the court attempted to determine (and that determination appears to have been based partly upon the affidavits and documents filed and partly upon judicial notice) was that the Rio Grande river was not navigable within the limits of the territory of New Mexico and, so determining, it adjudged and decreed that the complainant's bill was without equity." 19 S. Ct. at 772.

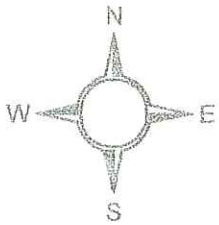
"Obviously, the Rio Grande, within the limits of New Mexico, is not a stream over which, in its ordinary condition, trade and travel can be conducted in the customary modes of trade and travel on water. Its use for any purpose of transportation has been and is exceptional, and only in times of temporary high water. The ordinary flow of water is insufficient. It is not like the Fox river, which was considered in The Montello, in which was an abundant flow of water and a general capacity for navigation along its entire length, and, although it was obstructed at certain places by rapids and rocks, yet these difficulties could be overcome by canals and locks, and when so overcome would leave the stream, in its ordinary condition, susceptible of use for general navigation purposes. We are not, therefore, disposed to question the conclusion reached by the trial court and the supreme court of the territory that the Rio Grande, within the limits of New Mexico, is not navigable" 19 S. Ct. at 773.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Otowi Bridge, NM	1,513	1896-2000
San Felipe, NM	1,428	1927-2000
Albuquerque, NM	1,194	1943-2000

Rio Grande New Mexico



REPORTED DECISION

Supreme Court of the United States.

UNITED STATES
v.
RIO GRANDE DAM & IRRIGATION CO. et al.

No. 215.

May 22, 1899.

Appeal from the Supreme Court of the Territory of New Mexico.

****770 *690** On May 24, 1897, the United States, by their attorney general, filed their bill of complaint in the district court of the Third judicial district of New Mexico against the Rio Grande Dam & Irrigation Company, the purpose of which was to restrain the defendant from constructing a dam across the Rio Grande river in the territory of New Mexico, and appropriating the waters of that stream for the purposes of irrigation. A temporary injunction was issued on the filing of the bill. Thereafter, and on the 19th day of June, 1897, an amended bill was filed, making the Rio Grande Irrigation & Land Company, Limited, an additional defendant, the scope and purpose of the amended bill being similar to that of the original. The amended bill stated that the original defendant was a corporation organized under the laws of the territory of New Mexico, and the new defendant a corporation ***691** organized under the laws of Great Britain. It was averred that the purpose of the original defendant, as set forth in its articles of incorporation and as avowed by it, was to construct dams across the Rio Grande river, in the territory of New Mexico, at such points as might be necessary, and thereby 'to accumulate and impound waters from said river in unlimited quantities in said dams and reservoirs, and distribute the same through said canals, ditches, and pipe lines.' The new defendant was charged to have become interested as lessee of, or contractor with, the original defendant. The bill further set forth that the new defendant 'has attempted to exercise, and has claimed the right to exercise, all the rights, and franchises of the said original defendant, and has given out as its objects, as said agent, lessee, or assignee, as aforesaid, to construct said dams, reseroirs, ditches, and pipe lines, and take and impound the water of said river, and thereby to create the largest artificial lake in the world, and to obtain control of the entire flow of the said Rio Grande, and divert and use the same for the purposes of irrigating large bodies of land, and to supply water for cities and towns, and for domestic and municipal purposes, and for milling and mechanical power'; 'that the Rio Grande receives no addition to its volume of water between the projected dam and the mouth of the Conchos river, about three hundred miles below, and that the said Rio Grande, from the point of said projected dam to the mouth of the Conchos river, throughout almost its entire course from the latter part to its mouth, flows through an exceedingly porous soil, and that the atmosphere of the section of the country through which said river flows, from the point above the dam to the Gulf of Mexico, is so dry that the evaporation proceeds with great rapidity, and that the impounding of the waters will greatly increase the evaporation, and that from these causes but little water, after it is distributed over the surface of the earth, would be returned to the river.' The bill also averred that the Rio ****771** Grande river was navigable, and had been navigated by steamboats from its mouth 350 miles, up to the town of Roma, in the state of Texas; that it ***692** was susceptible of navigation above Roma to a point about 350 miles below El Paso, in Texas; and then, after stating that there were certain rapids or falls which there interfered with navigation, it alleged navigability from El Paso to La Joya, about 100 miles above Elephant Butte, the place at which it was proposed to erect the principal dam, and that it had been used between those points for the floating and transportation of rafts, logs, and poles. The bill further alleged 'that the impounding of the waters of said river by the construction of said dam and reservoir at said point called 'Elephant Butte,' about one hundred and twenty-five miles above the city of El Paso, said point being in the territory of New Mexico, and the diversion of the said waters and the use of the same for the purposes hereinbefore mentioned, will so deplete and prevent the flow of water through the channel of said river below said dam, when so constructed, as to seriously obstruct the navigable capacity of the said river throughout its entire course from said point at Elephant Butte to its mouth.' Then, after denying that any authority had been given by the United States for the construction of said dam, it set forth the treaty stipulations between the United States and the republic of Mexico in reference to the navigability of the Rio Grande, so far as it remained a boundary between the two nations.

To this amended bill the defendants filed their joint and several pleas and answer. The pleas were principally to the effect that the site of the proposed dam was wholly within the territory of New Mexico, and within its arid region; that, in pursuance of

several acts of congress, the secretary of the interior and the officers of the geological survey had located and segregated from the public domain a reservoir site called '38,' on the river just above Elephant Butte, and another called '39,' just below that point; that subsequently, in pursuance of another act of congress, these and all other reservoir sites were thrown open to corporate and private entry; that the original defendant had applied to enter the two sites, '38' and '39'; that it was incorporated under the laws of New Mexico, and had complied with all the laws ***693** of that territory in reference to the construction of reservoirs and dams and the diversion of waters of public streams; that it had duly filed proof of its organization, its maps of survey of reservoir and canals, with the secretary of the interior, and had secured his approval thereof, in accordance with the laws of the United States. The answer admitted incorporation, the purpose to construct a dam and reservoir at Elephant Butte, and then proceeded: 'But in so far as that portion of said bill is concerned which charges that the Rio Grande Irrigation & Land Company, Limited, is seeking to obtain control of the entire flow of said Rio Grande, and to divert and use the same, these defendants state that the entire flow of the Rio Grande during the irrigation season, at the point or points where these defendants are seeking to construct reservoirs upon the same, has long since been diverted and is now owned and beneficially used by parties other than these defendants, in which diversion and appropriation of said waters these defendants have no property rights, and that neither one of the defendants is seeking or has ever sought to appropriate or divert by means of structures above referred to, or contemplated diversion, by means thereof, of any of the waters of said Rio Grande usually flowing in the bed thereof during the time when the same are usually put to beneficial use by those who have heretofore diverted the same; but, on the contrary, these defendants state that it has been their intention, and their sole intention, by means of the structures which they contemplate and which are complained of in said bill, to store, control, divert, and use only such of the waters of said stream as are not legally diverted, appropriated, used, and owned by others, and that these defendants have contemplated, and now contemplate, that any beneficial rights by them acquired in such stream by virtue of such structures will be very largely only so acquired to the excess, storm, and flood waters thereof now unappropriated, useless, and which go to waste.'

The answer also denied that the river was susceptible of navigation, or had been navigated, above Roma, in the state of Texas, or had been used beneficially for the purposes of navigation in the territory of New Mexico, or was susceptible ***694** of being so used; that the contemplated use of the waters would deplete the flow thereof through the channel so as to seriously obstruct the navigability of the river at any point below the proposed dam; that defendants were proposing to construct a dam and reservoir without due process of law, or that the contemplated dam and reservoir would be a violation of our treaties with Mexico. The United States filed a general replication. Defendants moved to dissolve the temporary injunction, while the government moved to have the several pleas set down for argument as to their sufficiency as a defense. Several affidavits and documents were filed by the respective parties. On July 31, 1897, the matters came on for hearing; whereupon the court entered a decree, which recited that the parties appeared by their counsel 'under the rule heretofore made upon the defendant Rio Grando Dam & Irrigation Company to show cause, if any it had, why the injunction heretofore granted, restraining it from maintaining and erecting a dam in the Rio Grande river at a point called Elephant Butte, fully described in the original and amended bills, filed herein and in said order, should not be continued; and the said complainant, the United States of America, having filed an amended bill in said cause, making the Rio ****772** Grande Irrigation & Land Company, Limited, a party thereunder; and the said defendant, in answer to said amended bill, having filed a special plea in bar, and having also answered said amended bill, and also filed a motion to dissolve the injunction and to dismiss the original and amended bills so filed by complainant herein; and the complainant thereupon having filed its motion to set down defendants' pleas for argument as to their sufficiency as defense to said suit as a matter of law; and the court, having heard the arguments of counsel, and having read the affidavits, extracts from geological reports, agricultural reports, reports of engineers and of the secretary of war, histories, and other sources of information, and having had submitted to it an official map of the territory of New Mexico and of the United States of America, showing the source, trend, course, and mouth of the Rio Grande river in New Mexico and throughout the United States, and being ***695** fully advised thereby, doth take judicial notice of the fact, and doth thereby determine that the Rio Grande river is not navigable within the territory of New Mexico, and doth find as a matter of law that said amended bill does not state a case entitling the complainant to the relief asked for in the prayer of said amended bill, and that the same is without equity; and, the complainant having further

declined to amend said bill, the court doth order, adjudge, and decree that the said injunction, heretofore issued herein, be dissolved, and that said cause be, and the same hereby is, dismissed, and that the defendants have and recover their reasonable costs, herein to be taxed against complainant.'

An appeal was taken to the supreme court of the territory, which, on January 5, 1898, affirmed the decree. 51 Pac. 674. From this affirmance the United States appealed to this court.

West Headnotes

Federal Courts 797
170Bk797 Most Cited Cases
(Formerly 30k927(2))

On review of a decree dismissing a bill for want of equity, the allegations of the bill will be taken as true, although denied by the answer.

Evidence 10(5)
157k10(5) Most Cited Cases

The district court of New Mexico cannot take judicial notice that the Rio Grande river is nonnavigable within the territory of New Mexico.

Navigable Waters 1(6)
270k1(6) Most Cited Cases

The Rio Grande river is not a navigable stream within the territory of New Mexico.

Navigable Waters 2
270k2 Most Cited Cases
(Formerly 270k34)

Rev.St.U.S. § 2339, 43 U.S.C.A. § 661, 19 Stat. U.S. 377, 43 U.S.C.A. § 321 et seq., and 26 Stat. U.S. 1101, recognizing and assenting to the appropriation of water for mining and irrigation purposes, under laws of the states, in contravention of the common-law rule as to continuous flow, cannot be construed to confer upon any state the right to appropriate all the waters of streams tributary to a navigable water course, so as to destroy its navigability.

Navigable Waters 22(1)
270k22(1) Most Cited Cases

Since the duty of the United States to its own citizens, to preserve the navigability of the Rio Grande river, is as great as any arising out of a treaty with Mexico, the court, on a bill by the United States to enjoin the erection of a dam in such river, will not consider the question whether the erection of such dam would be a violation of the treaty.

Navigable Waters 22(3)
270k22(3) Most Cited Cases

Act U. S. Sept. 19, 1890, 26 Stat. 454, § 10, prohibiting "the erection of any obstruction, not affirmatively authorized by law, to the navigable capacity of any waters, in respect of which the United States has jurisdiction," prohibits the construction of a dam in a river, at point where it is not navigable, which so retards the flow of water as to affect the navigability of the river at a point where the river was navigable before.

Navigable Waters 26(1)
270k26(1) Most Cited Cases

Whether the appropriation of the upper waters of a navigable stream should be enjoined on application of the attorney general, as authorized by 26 Stat. U.S. 454, § 10, 33 U.S.C.A. § 403a, is a question of fact, dependent on whether such appropriation interferes with the navigability of the stream.

Navigable Waters 26(1)
270k26(1) Most Cited Cases

The City of Georgetown could not maintain an action to enjoin construction of an aqueduct over the Potomac river in absence of averment of special damage.

Navigable Waters 26(1)
270k26(1) Most Cited Cases

The City of Georgetown was not a competent party to represent the interests of its citizens in attempt to enjoin construction of aqueduct over the Potomac river even if citizens of the city as persons in behalf of whom suit was maintained were associated with officers of the city as parties plaintiff.

Atty. Gen. Griggs, for the United States.

J. H. McGowan, for appellees.

Mr. Justice BREWER, after stating the facts in the foregoing language, delivered the opinion of the court.

The first question is as to the scope of the decision of the trial court, and what is therefore presented to us for consideration. Was this a final hearing upon pleadings alone, with all the facts alleged in the answer admitted to be true, or a final hearing upon pleadings and proofs, with the decree in effect finding the truth of those facts? Without stopping to inquire whether the record shows a strict compliance with the technical rules of equity procedure, we think the terms of the final order or decree, as well as the language of the opinion filed by the trial judge, clearly disclose what he decided, and what, therefore, is presented to this court for review. It appears that no depositions were taken. Certain affidavits and documents were filed, matter proper for presentation on an application for the continuance or dissolution of a temporary injunction. The final order or decree enumerates ***696** the different motions, and adds that the court, having heard the arguments of counsel and having read the affidavits, etc., 'doth take judicial notice of the fact, and doth thereby determine, that the Rio Grande river is not navigable within the territory of New Mexico, and doth find, as a matter of law, that said amended bill does not state a case entitling the complainant to the relief asked for in the prayer of said amended bill, and that the same is without equity, and, the complainant having further declined to amend said bill,' the injunction is dissolved and the bill dismissed.

Obviously, the only matter of fact which the court attempted to determine (and that determination appears to have been based partly upon the affidavits and documents filed and partly upon judicial notice) was that the Rio Grande river was not navigable within the limits of the territory of New Mexico, and, so determining, it adjudged and decreed that the complainant's bill was without equity. In other words, finding that the Rio Grande river was not navigable within the limits of the territory of New Mexico, and that the averments of the bill in that respect were not true, it held that, conceding all the other averments of the bill to be true, the plaintiff was not entitled to relief.

The supreme court of the territory, as appears from its opinion, held that the Rio Grande river was not navigable within the limits of the territory of New Mexico; that, therefore, the United States had no jurisdiction over the stream; and that, assuming its nonnavigability within the limits of the territory, the plaintiff was not, under the other facts set forth in the bill, entitled to any relief. Whatever criticisms may be expressed as to the form in which the proceedings were had and the decree entered, these distinctly appear as the matters decided by the trial and supreme courts, and to them, therefore, our inquiry should run.

The trial court assumed to take judicial notice that the Rio Grande was not navigable within the limits of New Mexico. The right to do this was conceded by the counsel for the government, on the hearing below,--a concession which the attorney general, on the argument before us, declined to ***697** continue. The extent to which judicial notice will go is not, in all cases, perfectly clear. There are indisputably certain matters as to which there is a legal imputation of knowledge. In Greenl. Ev. § § 4-6, the author enumerates many of these. Further, he adds, as a general proposition: 'In fine, courts will generally take notice of whatever ought to be generally known within the limits of their jurisdiction.' Brown v. Piper, 91 U. S. 37. While this will undoubtedly be accepted as an accurate statement of the law, it is obvious that there might be, and in fact there is, much difficulty in determining ****773** what ought to be generally known. So that the application of this rule has, as might be expected, led to some conflict in the authorities.

It was said in The Apollon, 9 Wheat. 362-374: 'It has been very justly observed at the bar that the court is bound to take notice of public facts and geographical positions.' In Peyroux v. Howard, 7 Pet. 324, the court held that it was 'authorized judicially to notice the situation of New Orleans, for the purpose of determining whether the tide ebbs and flows as high up the river as that place.' In The Montello, 11 Wall. 411-414, it was observed: 'We are supposed to know judicially the principal features of the geography of our country, and, as a part of it, what streams are public navigable waters of the United States.' But the force of this general statement is qualified by the declaration at the close of the opinion: 'As the decree must be reversed and the cause remanded to the court below for further proceedings, the parties will be able to present, by new allegations and evidence, the precise character of Fox river as a navigable stream, and not leave the matter to be inferred by construction from an imperfect pleading.'

This case came again to this court (20 Wall. 430), and the record there discloses that testimony was introduced on the second hearing, for the purpose of

throwing light on the question of navigability.

In Wood v. Fowler, 26 Kan. 682-687, thesupreme court of that state said: 'Indeed, it would seem absurd to require evidence as to that which every man of common ***698** information must know. To attempt to prove that the Mississippi or the Missouri is a navigable stream would seem an insult to the intelligence of the court. The presumption of general knowledge weakens as we pass to smaller and less known streams; and yet, within the limits of any state, the navigability of its largest rivers ought to be generally known, and the courts may properly assume it to be a matter of general knowledge, and take judicial notice thereof.'

It is reasonable that the courts take judicial notice that certain rivers are navigable and others not, for these are matters of general knowledge. But it is not so clear that it can fairly be said, in respect to a river known to be navigable, that it is, or ought to be, a matter of common knowledge at what particular place between its mouth and its source navigability ceases. And so it may well be doubted whether the courts will take judicial notice of that fact. It would seem that such a matter was one requiring evidence, and to be determined by proof. That the Rio Grande, speaking generally, is a navigable river, is clearly shown by the affidavits. It is also a matter of common knowledge, and therefore the courts may properly take judicial notice of that fact. But how many know how far up the stream navigability extends? Can it be said to be a matter of general knowledge, or one that ought to be generally known? If not, it should be determined by evidence. Examining the affidavits and other evidence introduced in this case, it is clear to us that the Rio Grande is not navigable within the limits of the territory of New Mexico. The mere fact that logs, poles, and rafts are floated down a stream occasionally and in times of high water does not make it a navigable river. It was said in The Montello, 20 Wall. 430, 439, 'that those rivers must be regarded as public navigable rivers in law which are navigable in fact; and they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.' And again (page 442): 'It is not, however, as Chief Justice Shaw said ([Rowe v. Bridge Corp.] 21 Pick. 344), 'every small creek in ***699** which a fishing skiff or gunning canoe can be made to float at high water which is deemed navigable, but, in order to give it the character of a navigable stream, it must be generally and commonly useful to some purpose of trade or agriculture."

Obviously, the Rio Grande, within the limits of New Mexico, is not a stream over which, in its ordinary condition, trade and travel can be conducted in the customary modes of trade and travel on water. Its use for any purposes of transportation has been and is exceptional, and only in times of temporary high water. The ordinary flow of water is insufficient. It is not like the Fox river, which was considered in The Montello, in which was an abundant flow of water and a general capacity for navigation along its entire length, and, although it was obstructed at certain places by rapids and rocks, yet these difficulties could be overcome by canals and locks, and when so overcome would leave the stream, in its ordinary condition, susceptible of use for general navigation purposes. We are not, therefore, disposed to question the conclusion reached by the trial court and the supreme court of the territory, that the Rio Grande, within the limits of New Mexico, is not navigable.

Neither is it necessary to consider the treaty stipulations between this country and Mexico. It is true that the Rio Grande, for several hundred miles above its mouth, forms the boundary between this country and Mexico, and that the seventh article of the treaty between the United States and Mexico, of February 2, 1848 (9 Stat. 928), stipulates that 'the river Gila and the part of the Rio Bravo del Norte lying below the southern boundary of New Mexico being, agreeably to the fifth article, divided in the middle between the two republics, the navigation of the Gila and of the Bravo below said boundary shall be free and common to the vessels and citizens of both countries, and neither shall, without the consent of the other, construct any work that may impede or interrupt, ****774** in whole or in part, the exercise of this right, not even for the purpose of favoring new methods of navigation. * * * The stipulations contained in the present article shall ***700** not impair the territorial rights of either republic within its established limits.' But by the fourth article of the Gadsden treaty of December 30, 1853 (10 Stat. 1034), it was provided that 'the several provisions, stipulations, and restrictions contained in the seventh article of the treaty of Guadalupe Hidalgo shall remain in force only so far as regards the Rio Bravo del Norte, below the initial of the said boundary provided in the first article of this treaty; that is to say, below the intersection of the 31 degree 47' 30" parallel of latitude with the boundary line established by the late treaty dividing said river from its mouth upwards, according to the fifth article of the treaty of

Guadalupe.' And on December 26, 1890, a convention was concluded between the United States and Mexico (26 Stat. 1512), which provided for an international boundary commission, to which was given, by article 5, the power to inquire, upon complaint of the local authorities, whether works were being constructed in the Rio Grande prohibited by any prior treaty stipulations. There is no suggestion in the bill that any action by these commissioners was invoked, although it appears from one of the affidavits that the commission has been duly constituted. Now, it is debated by counsel whether the construction of a dam at the place named in New Mexico, a place wholly within the territorial jurisdiction of the United States, is a violation of any of the treaty stipulations above referred to,--they being, primarily at least, limited to that portion of the river which forms the boundary line between the two nations; and also whether the fact that the Rio Grande is partially within the limits of Mexico would give that nation, under the rules of international law, any right to complain of the total appropriation of its waters for legitimate uses of the people of the United States. Such questions might, under some circumstances, be interesting and important; but here the Rio Grande, so far as it is a navigable stream, lies as much within the territory of the United States as in that of Mexico, it being, where navigable, the boundary between the two nations, and the middle of the channel being the dividing line. Now, the obligations of the United States to preserve, for their own citizens, the ***701** navigability of its navigable waters, is certainly as great as any arising by treaty or international law to other nations or their citizens, and, if the proposed dam and appropriation of the waters of the Rio Grande constitute a breach of treaty obligations or of international duty to Mexico, they also constitute an equal injury and wrong to the people of the United States.

We may, therefore, properly limit our inquiry to the effect of the proposed dam and appropriation of waters upon the navigability of the Rio Grande, and, in case such proposed action tends to destroy such navigability, the extent of the right of the government to interfere. The intended construction of the dam and impounding of the water are charged in the bill and admitted in the answer. The bill further charges that the purpose is to obtain control of the entire flow of the river, and divert and use it for irrigation and supplying waters for municipal and manufacturing uses; that, by reason of the porous soil, the dry atmosphere, and consequent rapid evaporation, but little water thus taken from the river and distributed over the surface of the earth will ever be returned to the river; and that this appropriation of the waters will so deplete and prevent the flow of water through the channel of the river below the dam as to seriously obstruct the navigable capacity of the river throughout its entire course, even to its mouth. The answer, while denying an intent to appropriate all the waters of the Rio Grande, states that the entire flow, during the irrigation season, at the point where defendants propose to construct reservoirs, had long since been diverted, and was owned and beneficially used by parties other than defendants, that they did not seek to disturb such appropriation, but that their sole intention was to appropriate only such waters as had not already been legally appropriated, and that the beneficial rights to be acquired in the stream by virtue of the structures would be very largely only so acquired from the excess, storm, and flood waters now unappropriated, useless, and going to waste. In other words, the bill charges that the defendants, at the places where they proposed to construct their dam, ***702** intend thereby to appropriate all the waters of the Rio Grande, and defendants qualify that charge only so far as they say that most of the flow of the river is already appropriated, and they only propose to take the balance. The bill charges that such appropriation of the entire flow will seriously obstruct the navigability of the river from the place of the dam to the mouth of the stream. The defendants deny this, but as the court found that there was no equity in the bill, and dismissed the suit on that ground, we must, for the purposes of this inquiry, assume that it is true, that defendants are intending to appropriate the entire unappropriated flow of the Rio Grande at the place where they propose to construct their dam, and that such appropriation will seriously affect the navigability of the river where it is now navigable. The right to do this is claimed by defendants and denied by the government, and that, generally speaking, is the question presented for our consideration.

The unquestioned rule of the common law was that every riparian owner was entitled to the continued natural flow of the stream. It is enough, without other citations or quotations, to quote the language of Chancellor Kent (3 Kent, Comm. § 439):

****775** 'Every proprietor of lands on the banks of a river has naturally an equal right to the use of the water which flows in the stream adjacent to his lands, as it was wont to run (currere solebat) without diminution or alteration. No proprietor has a right to use the water, to the prejudice of other proprietors, above or below him, unless he has a prior right to divert it, or a title to some exclusive enjoyment. He

has no property in the water itself, but a simple usufruct while it passes along. 'Aqua currit et debet currere ut currere solevat,' is the language of the law. Though he may use the water while it runs over his land as an incident to the land, he cannot unreasonably detain it, or give it another direction, and he must return it to its ordinary channel when it leaves his estate.'

While this is undoubted, and the rule obtains in those states in the Union which have simply adopted the common law, it is also true that as to every stream within its dominion ***703** a state may change this common-law rule, and permit the appropriation of the flowing waters for such purposes as it deems wise. Whether this power to change the common-law rule, and permit any specific and separate appropriation of the waters of a stream, belongs also to the legislature of a territory, we do not deem it necessary, for the purposes of this case, to inquire. We concede arguendo that it does.

Although this power of changing the common-law rule as to streams within its dominion undoubtedly belongs in each state, yet two limitations must be recognized: First, that, in the absence of specific authority from congress, a state cannot, by its legislation, destroy the right of the United States, as the owner of lands bordering on a stream, to the continued flow of its waters, so far, at least, as may be necessary for the beneficial uses of the government property; second, that it is limited by the superior power of the general government to secure the uninterrupted navigability of all navigable streams within the limits of the United States. In other words, the jurisdiction of the general government over interstate commerce and its natural highways vests in that government the right to take all needed measures to preserve the navigability of the navigable water courses of the country, even against any state action. It is true there have been frequent decisions recognizing the power of the state, in the absence of congressional legislation, to assume control of even navigable waters within its limits, to the extent of creating dams, booms, bridges, and other matters which operate as obstructions to navigability. The power of the state to thus legislate for the interests of its own citizens is conceded, and until in some way congress asserts its superior power, and the necessity of preserving the general interests of the people of all the states, it is assumed that state action, although involving temporarily an obstruction to the free navigability of a stream, is not subject to challenge. A long list of cases to this effect can be found in the reports of this court. See, among others, the following: Willson v. Marsh Co., 2 Pet. 245; Gilman v. City of Philadelphia, 3 Wall. 713; Escanaba & L. M. Transp. Co. v. City of Chicago, 107 U. S. 678, 2 Sup. Ct. 185; Bridge Co. v. Hatch, 125 U. S. 1, 8 Sup. Ct. 811.

***704** All this proceeds upon the thought that the nonaction of congress carries with it an implied assent to the action taken by the state.

Notwithstanding the unquestioned rule of the common law in reference to the right of a lower riparian proprietor to insist upon the continuous flow of the stream as it was, and although there has been in all the Western states an adoption or recognition of the common law, it was early developed in their history that the mining industry in certain states, the reclamation of arid lands in others, compelled a departure from the common-law rule, and justified an appropriation of flowing waters both for mining purposes and for the reclamation of arid lands, and there has come to be recognized in those states, by custom and by state legislation, a different rule,--a rule which permits, under certain circumstances, the appropriation of the waters of a flowing stream for other than domestic purposes. So far as those rules have only a local significance, and affect only questions between citizens of the state, nothing is presented which calls for any consideration by the federal courts. In 1866, congress passed the following act (14 Stat. 253; Rev. St. § 2339):

'Whenever, by priority of possession, rights to the use of water for mining, agricultural, manufacturing or other purposes, have vested, and accrued, and the same are recognized and acknowledged by the local customs, laws and the decisions of courts, the possessors and owners of such vested rights shall be maintained and protected in the same; and the right of way for the construction of ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party committing such injury or damage shall be liable to the party injured for such injury or damage.'

The effect of this statute was to recognize, so far as the United States are concerned, the validity of the local customs, laws, and decisions of courts in respect to the appropriation of water. In respect to this, in Broder v. Water Co., 101 U. S. 274, 276, it was said:

***705** 'It is the established doctrine of this court that

rights of miners, who had taken possession of mines and worked and developed them, and the rights of persons who had constructed canals and ditches to be used in mining operations and for purposes of agricultural irrigation, in the region where such artificial use of the water was an absolute necessity, are rights which the government had, ****776** by its conduct, recognized and encouraged, and was bound to protect, before the passage of the act of 1866. We are of opinion that the section of the act which we have quoted was rather a voluntary recognition of a preexisting right of possession, constituting a valid claim to its continued use, than the establishment of a new one.'

In 1877 an act was passed for the sale of desert lands, which contained in its first section this proviso (19 Stat. 377):

'Provided, however, that the right to the use of water by the persons so conducting the same on or to any tract of desert land of six hundred and forty acres shall depend upon bona fide prior appropriation; and such right shall not exceed the amount of water actually appropriated and necessarily used for the purpose of irrigation and reclamation; and all 'surplus water over and above such actual appropriation and use, together with the water of all lakes, rivers, and other sources of water supply upon the public lands and not navigable, shall remain and be held free for the appropriation and use of the public for irrigation, mining, and manufacturing purposes subject to existing rights.'

On March 3, 1891, an act was passed repealing a prior act in respect to timber culture, the eighteenth section of which provided (26 Stat. 1101):

'That the right of way through the public lands and reservations of the United States is hereby granted to any canal or ditch company formed for the purpose of irrigation and duly organized under the laws of any state or territory which shall have filed, or may hereafter file, with the secretary of the interior a copy of its articles of incorporation, and due proofs of its organization under the same, to the extent of the ground occupied by the water of the reservoir and of the canal and its ***706** laterals, and fifty feet on each side of the marginal limits thereof; also the right to take, from the public lands adjacent to the line of the canal or ditch, material, earth and stone necessary for the construction of such canal or ditch: provided, that no such right of way shall be so located as to interfere with the proper occupation by the government of any such reservation, and all maps of location shall be subject to the approval of the department of the government having jurisdiction of such reservation, and the privilege herein granted shall not be construed to interfere with the control of water for irrigation and other purposes under authority of the respective states or territories.'

Obviously, by these acts, so far as they extended, congress recognized and assented to the appropriation of water in contravention of the common-law rule as to continuous flow. To infer therefrom that congress intended to release its control over the navigable streams of the country, and to grant in aid of mining industries and the reclamation of arid lands the right to appropriate the waters on the sources of navigable streams to such an extent as to destroy their navigability, is to carry those statutes beyond what their fail import permits. This legislation must be interpreted in the light of existing facts,--that all through this mining region in the West were streams, not navigable, whose waters could safely be appropriated for mining and agricultural industries, without serious interference with the navigability of the rivers into which those waters flow. And in reference to all these cases of purely local interest the obvious purpose of congress was to give its assent, so far as the public lands were concerned, to any system, although in contravention to the common-law rule, which permitted the appropriation of those waters for legitimate industries. To hold that congress, by these acts, meant to confer upon any state the right to appropriate all the waters of the tributary streams which unite into a navigable water course, and so destroy the navigability of that water course in derogation of the interests of all the people of the United States, is a construction which cannot be tolerated. It ignores the spirit of the legislation, ***707** and carries the statute to the verge of the letter, and far beyond what, under the circumstances of the case, must be held to have been the intent of congress.

But whatever may be said as to the true intent and scope of these various statutes, we have before us the legislation of 1890. On September 19, 1890, an act was passed containing this provision (26 Stat. 454, § 10):

'That the creation of any obstruction, not affirmatively authorized by law, to the navigable capacity of any waters, in respect to which the United States has jurisdiction, is hereby prohibited. The continuance of any such obstruction, except bridges, piers, docks and wharves, and similar structures erected for business purposes, whether heretofore or

hereafter created, shall constitute an offense, and each week's continuance of any such obstruction shall be deemed a separate offense. Every person and every corporation which shall be guilty of creating or continuing any such unlawful obstruction in this act mentioned, or who shall violate the provisions of the last four preceding sections of this act, shall be deemed guilty of a misdemeanor, and on conviction thereof shall be punished by a fine not exceeding five thousand dollars, or by imprisonment (in the case of a natural person) not exceeding one year, or by both such punishments, in the discretion of the court; the creating or continuing of any unlawful obstruction in this act mentioned may be prevented, and such obstruction may be caused to be removed by the injunction of any circuit court exercising jurisdiction in any district in which such obstruction may be threatened or may exist; and proper proceedings in equity to this end may be instituted under the direction of the attorney general of the United States.'

As this is a later declaration of congress, so far as it modifies any privileges or rights ****777** conferred by prior statutes, it must be held controlling, at least as to any rights attempted to be created since its passage; and all the proceedings of the appellees in this case were subsequent to this act. This act declares that 'the creation of any obstruction, not affirmatively authorized by law to the navigable capacity of any ***708** waters in respect to which the United States has jurisdiction, is hereby prohibited.' Whatever may be said in reference to obstructions existing at the time of the passage of the act, under the authority of state statutes, it is obvious that congress meant that thereafter no state should interfere with the navigability of a stream without the condition of national assent. It did not, of course, disturb any of the provisions of prior statutes in respect to the mere appropriation of water of nonnavigable streams in disregard of the old common- law rule of continuous flow, and its only purpose, as is obvious, was to affirm that as to navigable waters nothing should be done to obstruct their navigability without the assent of the national government. It was an exercise by congress of the power, oftentimes declared by this court to belong to it, of national control over navigable streams; and various sections in this statute, as well as in the act of July 13, 1892 (27 Stat. 88, 110), provide for the mode of asserting that control. It is urged that the true construction of this act limits its applicability to obstructions in the navigable portion of a navigable stream, and that as it appears that, although the Rio Grande may be navigable for a certain distance above its mouth, it is not navigable in the territory of New Mexico, this statute has no applicability. The language is general, and must be given full scope. It is not a prohibition of any obstruction to the navigation, but any obstruction to the navigable capacity, and anything, wherever done or however done, within the limits of the jurisdiction of the United States, which tends to destroy the navigable capacity of one of the navigable waters of the United States, is within the terms of the prohibition. Evidently congress, perceiving that the time had come when the growing interests of commerce required that the navigable waters of the United States should be subjected to the direct control of the national government, and that nothing should be done by any state tending to destroy that navigability without the explicit assent of the national government, enacted the statute in question; and it would be to improperly ignore the scope of this language to limit it to the acts done within the very limits of navigation of a navigable stream.

***709** The creation of any such obstruction may be enjoined, according to the last provision of the section, by proper proceedings in equity, under the direction of the attorney general of the United States, and it was in pursuance of this clause that these proceedings were commenced. Of course, when such proceedings are instituted, it becomes a question of fact whether the act sought to be enjoined is one which fairly and directly tends to obstruct (that is, interfere with or diminish) the navigable capacity of a stream. It does not follow that the courts would be justified in sustaining any proceeding by the attorney general to restrain any appropriation of the upper waters of a navigable stream. The question always is one of fact, whether such appropriation substantially interferes with the navigable capacity within the limits where navigation is a recognized fact. In the course of the argument, this suggestion was made, and it seems to us not unworthy of note, as illustrating this thought. The Hudson river runs within the limits of the state of New York. It is a navigable stream, and a part of the navigable waters of the United States, so far at least as from Albany southward. One of the streams which flows into it, and contributes to the volume of its waters, is the Croton river, a nonnavigable stream. Its waters are taken by the state of New York for domestic uses in the city of New York. Unquestionably, the state of New York has a right to appropriate its waters, and the United States may not question such appropriation, unless thereby the navigability of the Hudson be disturbed. On the other hand, if the state of New York should, even at a place above the limits of navigability, by appropriation for any domestic

purposes, diminish the volume of waters which, flowing into the Hudson, make it a navigable stream, to such an extent as to destroy its navigability, undoubtedly the jurisdiction of the national government would arise, and its power to restrain such appropriation be unquestioned; and, within the purview of this section, it would become the right of the attorney general to institute proceedings to restrain such appropriation.

Without pursuing this inquiry further, we are of the opinion ***710** that there was error in the conclusions of the lower courts; that the decree must be reversed, and the case remanded, with instructions to set aside the decree of dismissal, and to order an inquiry into the question whether the intended acts of the defendants in the construction of a dam and in appropriating the waters of the Rio Grande will substantially diminish the navigability of that stream within the limits of present navigability, and, if so, to enter a decree restraining those acts to the extent that they will so diminish.

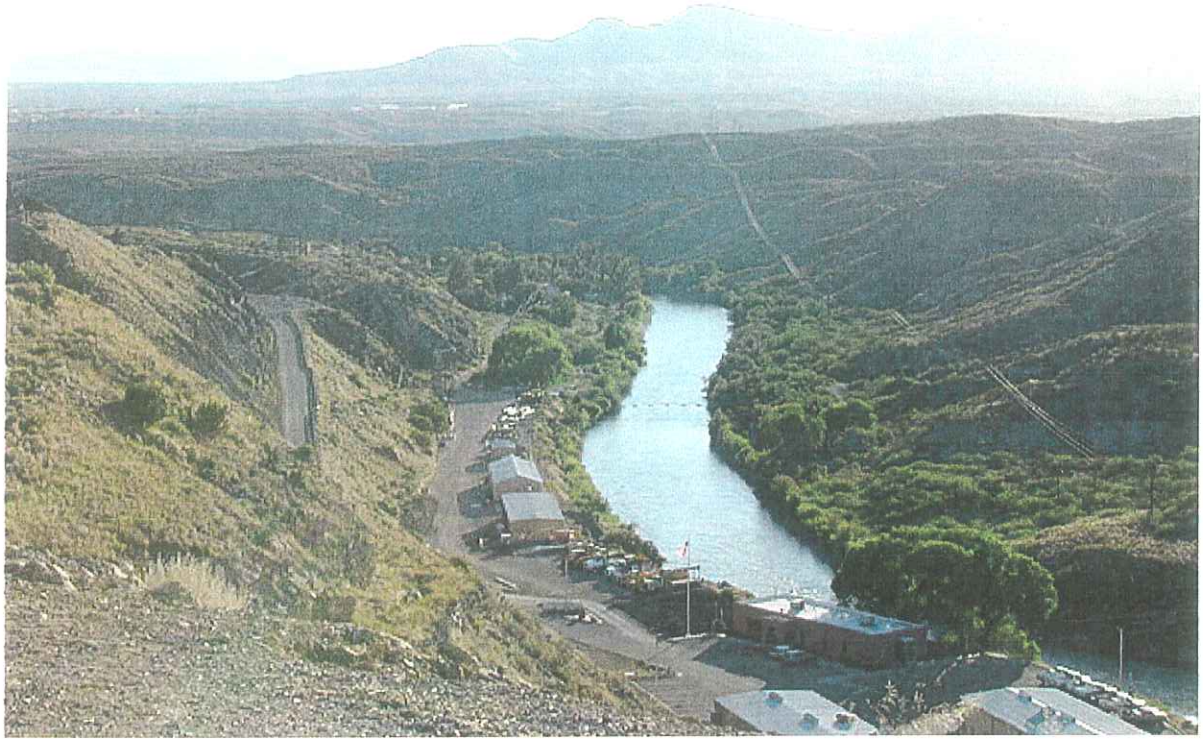
Mr. Justice GRAY and Mr. Justice McKENNA were not present at the argument, and took no part in the decision.

19 S.Ct. 770, 174 U.S. 690, 43 L.Ed. 1136

END OF DOCUMENT

ADDITIONAL INFORMATION


copyright



Water Resources

Data Category: Site Information | Geographic Area: New Mexico | GO

Notice! We are currently experiencing some network issues creating our real-time waterwatch maps. We are working on solving this issue as quickly as possible.

Site Map for New Mexico

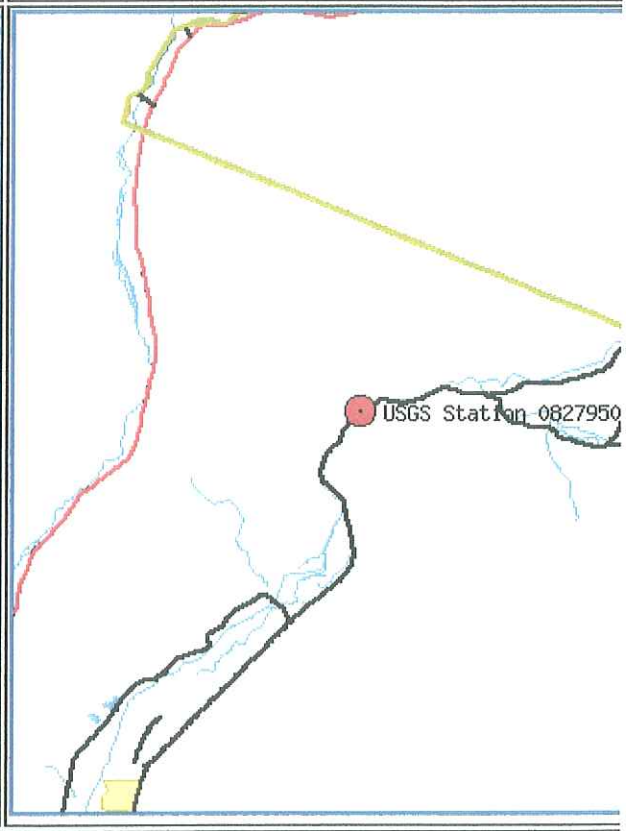
USGS 08279500 RIO GRANDE AT EMBUDO, NM

Available data for this site: Station site map | GO

Rio Arriba County, New Mexico
Hydrologic Unit Code 13020101
Latitude 36°12'20", Longitude 105°57'49" NAD27
Drainage area 10,400.00 square miles
Contributing drainage area 7,460.00 square miles
Gage datum 5,789.14 feet above sea level NGVD29

Location of the site in New Mexico.

Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

USGS

Water Resources

Data Category: Site Information | Geographic Area: New Mexico | GO

Notice! We are currently experiencing some network issues creating our real-time waterwatch maps. We are working on solving this issue as quickly as possible.

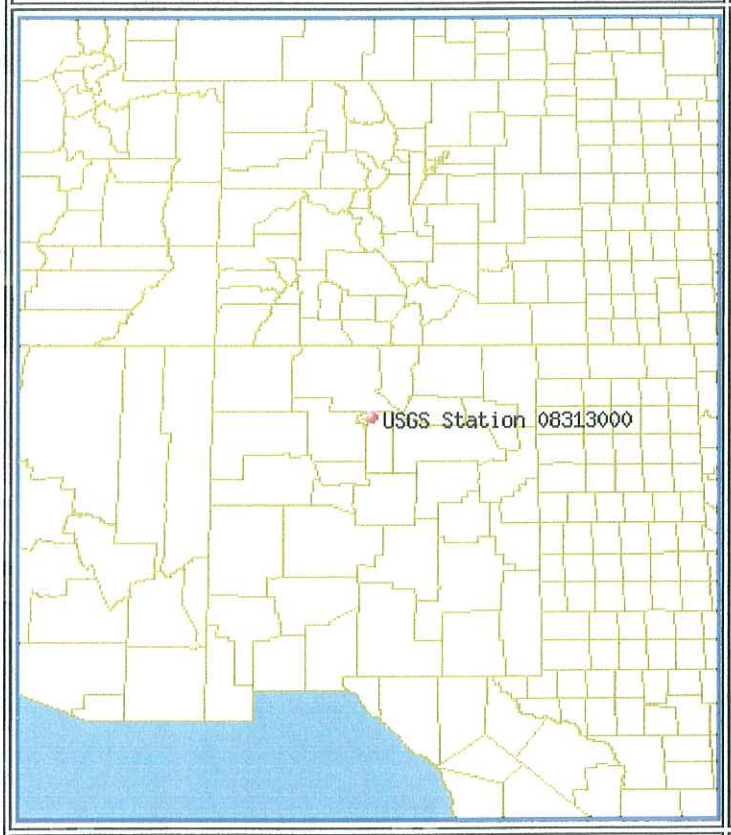
Site Map for New Mexico

USGS 08313000 RIO GRANDE AT OTOWI BRIDGE, NM

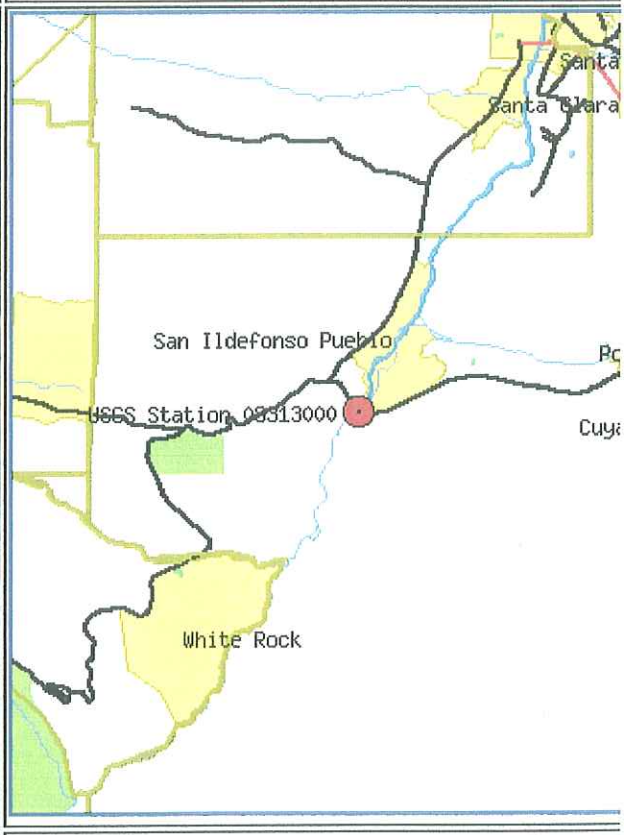
Available data for this site: Station site map | GO

Santa Fe County, New Mexico
Hydrologic Unit Code 13020101
Latitude 35°52'29", Longitude 106°08'30" NAD27
Drainage area 14,300.00 square miles
Contributing drainage area 11,360.00 square miles
Gage datum 5,488.48 feet above sea level NGVD29

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X, 4X, 6X, 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Water Resources

Data Category: Surface Water | Geographic Area: New Mexico | GO

Notice! We are currently experiencing some network issues creating our real-time waterwatch maps. We are working on solving this issue as quickly as possible.

Calendar Year Streamflow Statistics for New Mexico

USGS 08313000 RIO GRANDE AT OTOWI BRIDGE, NM

Available data for this site: Surface-water: Annual streamflow statistics | GO

Santa Fe County, New Mexico
Hydrologic Unit Code 13020101
Latitude 35°52'29", Longitude 106°08'30" NAD27
Drainage area 14,300.00 square miles
Contributing drainage area 11,360.00 square miles
Gage datum 5,488.48 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1896	1,006	1929	1,915	1953	732	1977	599
1897	2,651	1930	1,279	1954	601	1978	1,003
1898	1,499	1931	869	1955	604	1979	2,533
1899	822	1932	2,383	1956	495	1980	1,990
1900	977	1933	1,079	1957	2,022	1981	665
1901	1,183	1934	525	1958	2,083	1982	1,641
1902	586	1935	1,520	1959	586	1983	1,983
1903	2,310	1936	1,476	1960	1,100	1984	1,901
1904	774	1937	2,284	1961	1,086	1985	2,753
1905	2,755	1938	1,837	1962	1,441	1986	2,529
1910	1,751	1939	1,087	1963	588	1987	2,655
1911	2,930	1940	805	1964	542	1988	1,014
1912	2,362	1941	3,580	1965	1,912	1989	1,124
1913	1,049	1942	2,955	1966	1,095	1990	973
1919	2,292	1943	970	1967	783	1991	1,799
1920	2,974	1944	1,796	1968	1,193	1992	1,660
1921	2,184	1945	1,563	1969	1,608	1993	2,046

1922	1,695	1946	738	1970	1,146	1994	1,836
1923	1,985	1947	1,055	1971	799	1995	2,308
1924	2,222	1948	1,692	1972	678	1996	925
1925	1,123	1949	1,833	1973	2,011	1997	1,829
1926	1,709	1950	857	1974	763	1998	1,394
1927	2,307	1951	535	1975	1,727	1999	1,495
1928	1,235	1952	1,940	1976	1,051	2000	1,012

Questions about data gs-w-nm_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-nm_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for New Mexico: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/nm/nwis/annual/calendar_year?

Retrieved on 2003-03-17 16:06:41 EST

USGS

Water Resources

Data Category: Site Information | Geographic Area: New Mexico | GO

Notice! We are currently experiencing some network issues creating our real-time waterwatch maps. We are working on solving this issue as quickly as possible.

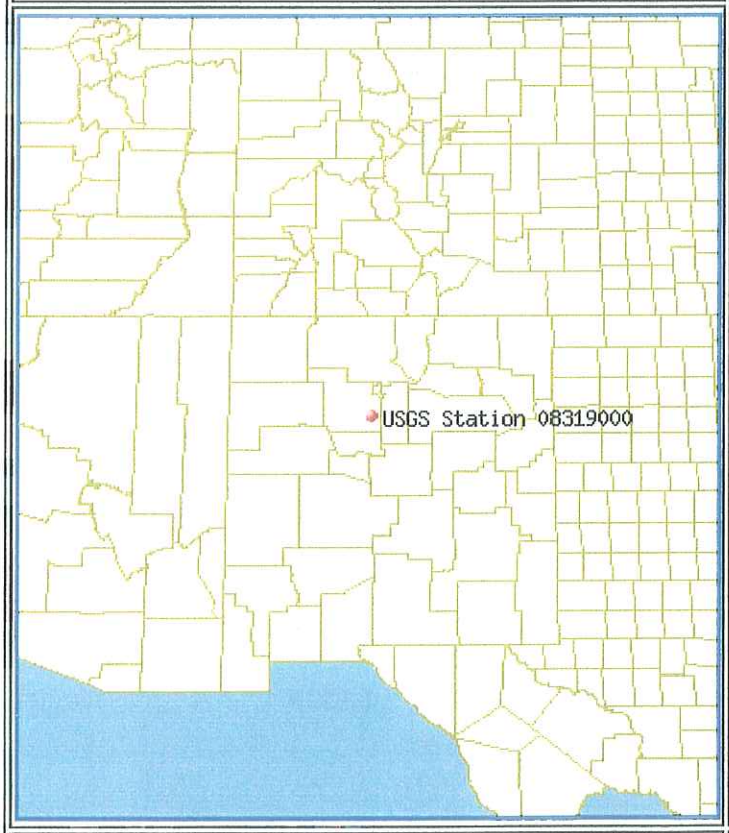
Site Map for New Mexico

USGS 08319000 RIO GRANDE AT SAN FELIPE, NM

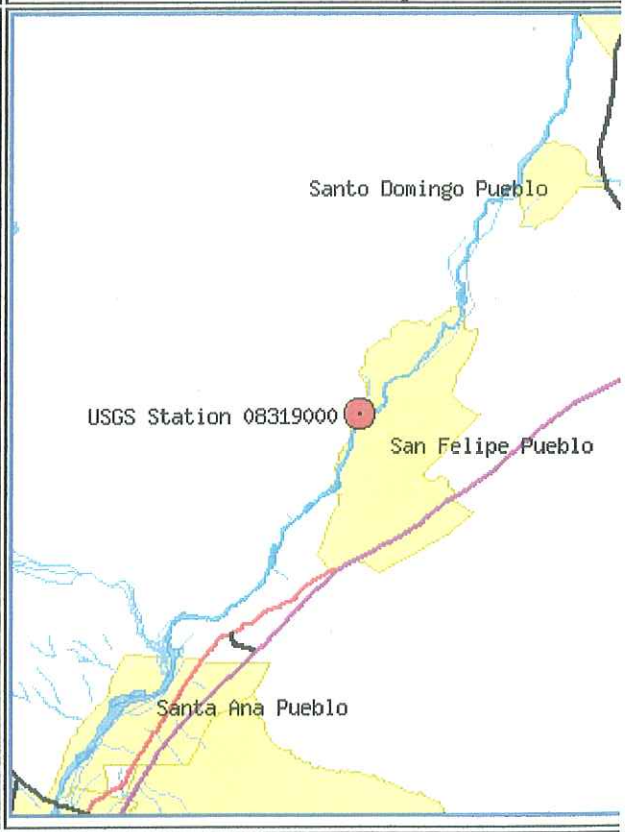
Available data for this site: Station site map | GO

Sandoval County, New Mexico
Hydrologic Unit Code 13020201
Latitude 35°26'39", Longitude 106°26'23" NAD27
Drainage area 16,100.00 square miles
Contributing drainage area 13,160.00 square miles
Gage datum 5,115.73 feet above sea level NGVD29

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 4X 6X 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

USGS

Water Resources

Data Category: Surface Water | Geographic Area: New Mexico | GO

Notice! We are currently experiencing some network issues creating our real-time waterwatch maps. We are working on solving this issue as quickly as possible.

Calendar Year Streamflow Statistics for New Mexico

USGS 08319000 RIO GRANDE AT SAN FELIPE, NM

Available data for this site: Surface-water: Annual streamflow statistics | GO

Sandoval County, New Mexico
Hydrologic Unit Code 13020201
Latitude 35°26'39", Longitude 106°26'23" NAD27
Drainage area 16,100.00 square miles
Contributing drainage area 13,160.00 square miles
Gage datum 5,115.73 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1927	2,527	1947	1,044	1965	1,855	1983	2,024
1928	1,328	1948	1,664	1966	1,089	1984	1,858
1931	887	1949	1,806	1967	813	1985	2,398
1932	2,346	1950	855	1968	1,258	1986	2,718
1933	1,141	1951	488	1969	1,685	1987	2,278
1934	517	1952	1,902	1970	1,204	1988	1,298
1935	1,555	1953	704	1971	822	1989	1,125
1936	1,539	1954	572	1972	669	1990	879
1937	2,493	1955	624	1973	2,044	1991	1,702
1938	1,737	1956	476	1974	740	1992	1,640
1939	1,082	1957	2,016	1975	1,606	1993	1,969
1940	835	1958	2,033	1976	986	1994	1,845
1941	3,902	1959	554	1977	550	1995	2,299
1942	2,938	1960	1,083	1978	930	1996	900
1943	1,035	1961	1,072	1979	2,481	1997	1,804
1944	1,857	1962	1,394	1980	1,936	1998	1,307
1945	1,640	1963	562	1981	621	1999	1,497

1946	745	**1964**	516	**1982**	1,608	**2000**	920

Questions about data gs-w-nm_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-nm_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for New Mexico: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/nm/nwis/annual/calendar_year?

Retrieved on 2003-03-17 16:12:50 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of New Mexico
Privacy Statement || Disclaimer || Accessibility
1.1 0.72

Water Resources

Data Category: Site Information | Geographic Area: New Mexico | GO

Notice! We are currently experiencing some network issues creating our real-time waterwatch maps. We are working on solving this issue as quickly as possible.

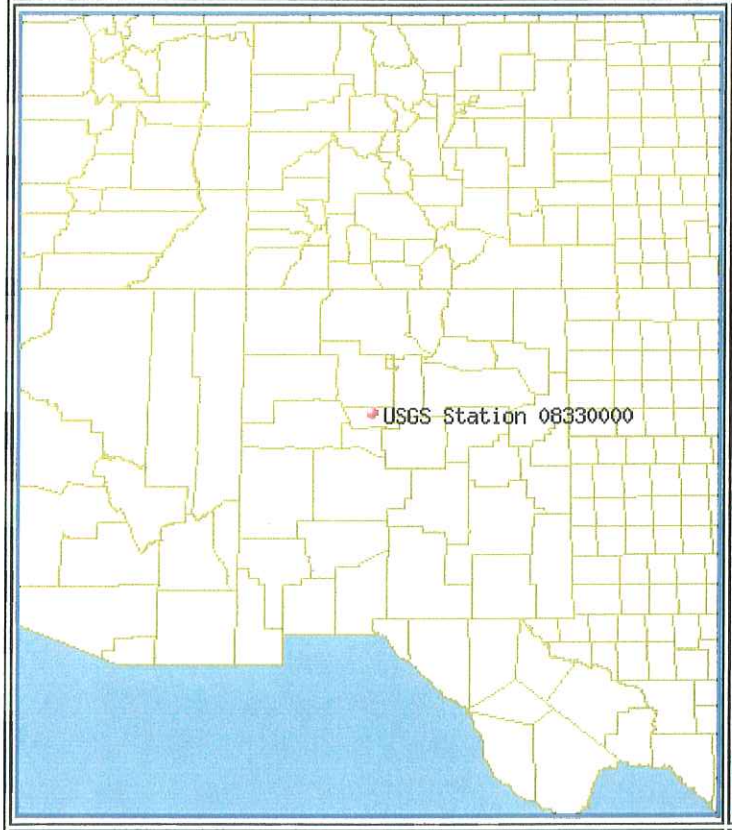
Site Map for New Mexico

USGS 08330000 RIO GRANDE AT ALBUQUERQUE, NM

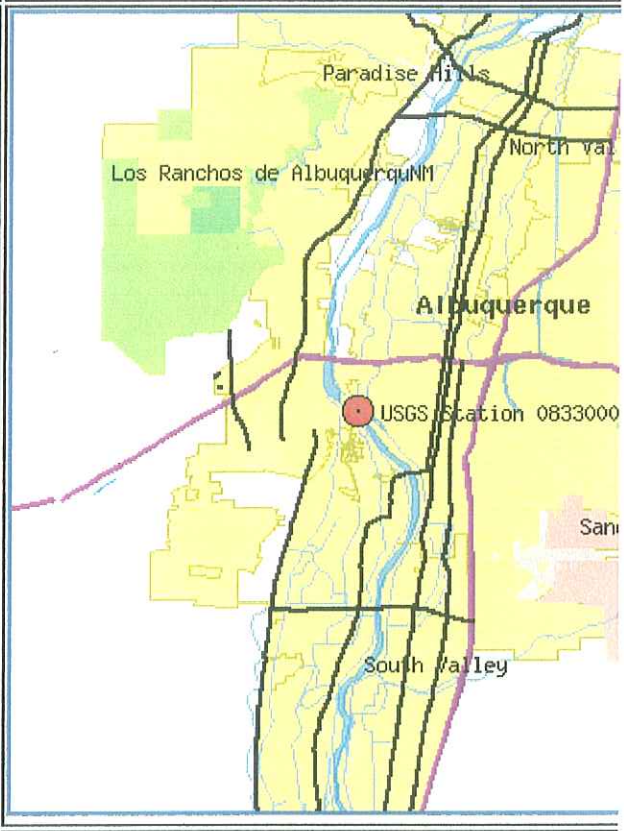
Available data for this site: Station site map | GO

Bernalillo County, New Mexico
Hydrologic Unit Code 13020203
Latitude 35°05'21", Longitude 106°40'47" NAD27
Drainage area 17,440.00 square miles
Contributing drainage area 14,500.00 square miles
Gage datum 4,946.16 feet above sea level NGVD29

Location of the site in New Mexico.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Water Resources

Data Category: Surface Water | Geographic Area: New Mexico | GO

Notice! We are currently experiencing some network issues creating our real-time waterwatch maps. We are working on solving this issue as quickly as possible.

Calendar Year Streamflow Statistics for New Mexico

USGS 08330000 RIO GRANDE AT ALBUQUERQUE, NM

Available data for this site: Surface-water: Annual streamflow statistics | GO

Bernalillo County, New Mexico
Hydrologic Unit Code 13020203
Latitude 35°05'21", Longitude 106°40'47" NAD27
Drainage area 17,440.00 square miles
Contributing drainage area 14,500.00 square miles
Gage datum 4,946.16 feet above sea level NGVD29

Output formats

HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1943	732	1958	2,071	1973	2,024	1987	2,218
1944	1,666	1959	369	1974	564	1988	1,215
1945	1,433	1960	931	1975	1,557	1989	909
1946	524	1961	938	1976	825	1990	695
1947	788	1962	1,252	1977	343	1991	1,603
1948	1,520	1963	404	1978	788	1992	1,474
1949	1,690	1964	292	1979	2,425	1993	1,988
1950	617	1965	1,763	1980	1,908	1994	1,681
1951	321	1966	900	1981	479	1995	2,182
1952	1,786	1967	595	1982	1,487	1996	728
1953	490	1968	1,050	1983	1,847	1997	1,654
1954	364	1969	1,538	1984	1,669	1998	1,185
1955	415	1970	1,015	1985	2,269	1999	1,332
1956	295	1971	679	1986	2,544	2000	773
1957	1,998	1972	476				

Shoal Creek—Kansas

Reported Decision: Kansas v. Hays, 246 Kan. 99, 785 P.2d 1356 (1990)

Reach at Issue: Entire length

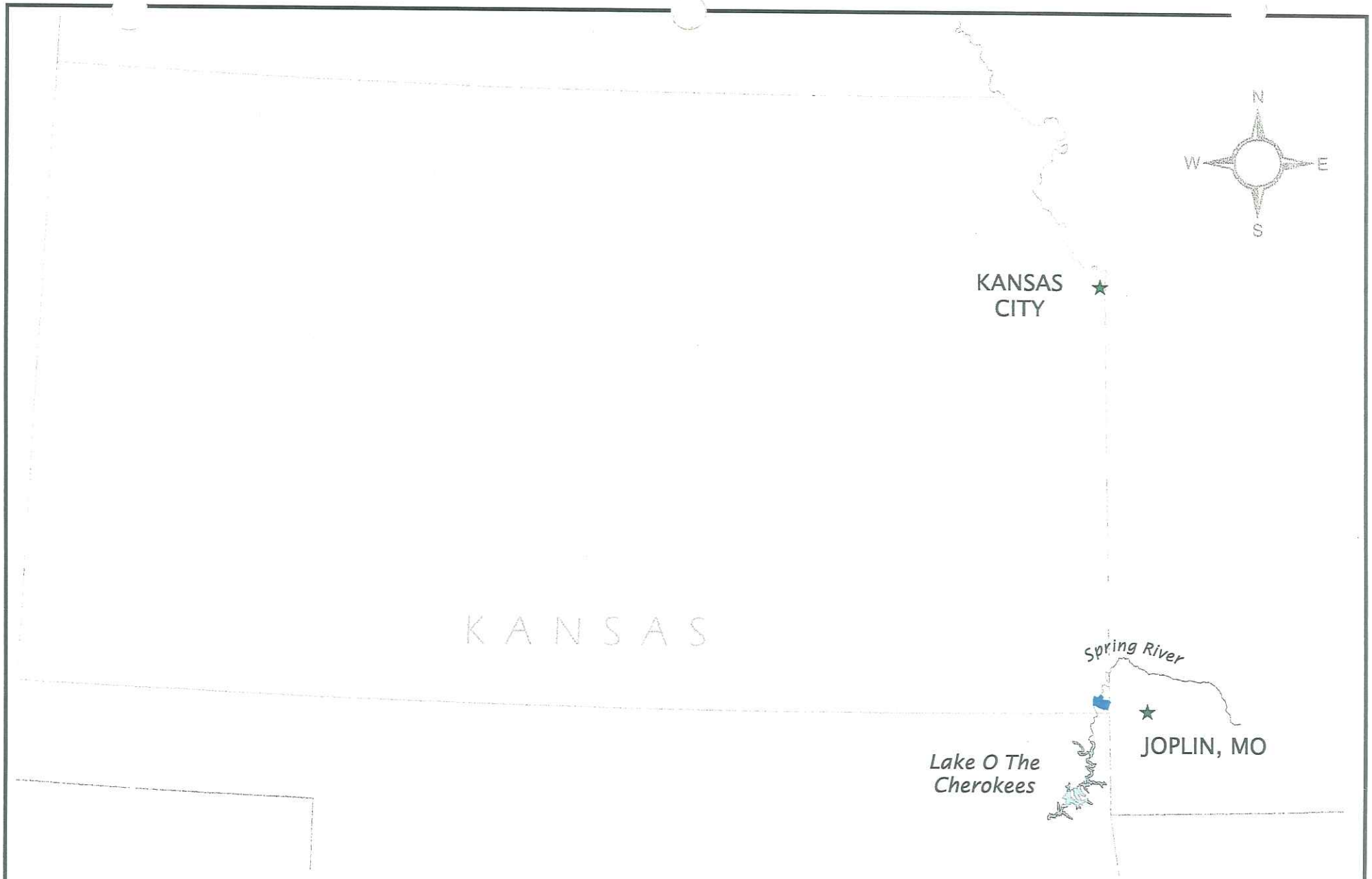
Judicial Determination: Non-navigable

Facts Reported in Decision:

"Only three rivers within the state have been declared navigable: the Kansas, the Arkansas, and the Missouri. . . . Likewise, only three rivers have been declared nonnavigable: the Neosho, the Delaware, and the Smoky Hill." 785 P.2d at 1360.

"Shoal Creek cannot be floated without getting out of the canoe or boat at various locations. . . . John Link, Jr., owner of Ozark Quality Products, Inc., travels Shoal Creek several times a year collecting plants used in his business. . . . There is no evidence that Shoal Creek has ever been used for valuable floatage in transportation to market of the products of the country through which it runs. . . . During times of drought, portions of Shoal Creek are impassable by even a canoe or small boat. . . . Shoal Creek has been used for recreational purposes for more than fifteen years. . . . A canoe rental business exists, known as Holly Haven, which rents canoes to be used on Shoal Creek. The point of entry is near Joplin, Missouri, with the point of exit at Schermerhorn Park, Galena, Kansas, where the business picks up the canoes and their occupants for the return trip to Holly Haven." 785 P.2d at 1360.

"Based on these findings, the district court held that Shoal Creek did not meet the *Webb* standard for navigability." 785 P.2d at 1360.



Shoal Creek - Kansas

REPORTED DECISION

C

Supreme Court of Kansas.

STATE of Kansas, ex rel., Christopher Young MEEK, Appellant,
v.
Jasper R. HAYS and Mrs. Jasper R. Hays, Appellees.

No. 63145.

Jan. 19, 1990.

County attorney filed petition for declaratory judgment seeking to confirm public's right to use, for recreational purposes, creek across which landowner had constructed a fence. The Cherokee District Court, David F. Brewster, J., rendered judgment for landowner, and State appealed. The Supreme Court, Lockett, J., held that: (1) creek was nonnavigable; (2) there was no public prescriptive easement on creek; and (3) public had no right to use of nonnavigable water overlying private lands for recreational purposes without consent of landowner.

Affirmed.

West Headnotes

[1] **Navigable Waters** 39(2)
270k39(2) Most Cited Cases

[1] **Waters and Water Courses** 89
405k89 Most Cited Cases

If a stream is navigable, the riparian landowner's title extends only to the banks; if stream is nonnavigable, riparian landowner's title extends to the middle of the bed of the stream by the same title that he owns the adjoining land.

[2] **Waters and Water Courses** 40
405k40 Most Cited Cases

[2] **Waters and Water Courses** 96
405k96 Most Cited Cases

If a stream is nonnavigable, riparian landowner who owns land adjoining both sides of stream may put fence across stream to prevent trespassers upon their property.

[3] **Navigable Waters** 1(3)
270k1(3) Most Cited Cases

Navigability in fact is test of navigability in law, and whether river is navigable in fact is to be determined by inquiring whether it is used, or is susceptible of being used, in its natural or ordinary condition as a highway of commerce, over which trade and travel are or may be conducted in customary modes of trade and travel.

[4] **Navigable Waters** 1(6)
270k1(6) Most Cited Cases

Though canoe rental business existed on creek, used for recreational purposes for more than 15 years, creek was not "navigable" and thus title to streambed did not pass to State upon entry into union, in light of evidence that creek could not be floated without getting out of canoe or boat at various locations, and was in places impassable, even to small boats during times of drought, and absent evidence that creek had ever been used for commercial purposes.

[5] **Waters and Water Courses** 127
405k127 Most Cited Cases

To establish prescriptive easement in a stream, stream in question must have been used by public with actual or implied knowledge of riparian landowner, adversely under claim or color of right and not merely by owner's permission, and continuously and uninterruptedly, for period required to bar an action for recovery of possession of land or as otherwise prescribed by statute; mere use by traveling public is not enough to establish that use is adverse, there must be some additional action, formal or informal, by public authorities, indicating their intention to treat stream as public one.

[6] **Waters and Water Courses** 127
405k127 Most Cited Cases

There was no public prescriptive easement on nonnavigable stream, absent evidence that public use thereon had become so burdensome that government was required to take action to regulate traffic, keep the peace, invoke sanitary measures, or insure that natural condition of stream was maintained.

[7] **Constitutional Law** 70.3(9.1)
92k70.3(9.1) Most Cited Cases
(Formerly 92k70.3(9))

When legislature refuses to create public trust for recreational purposes in nonnavigable streams, courts should not alter legislature's statement of public

policy by judicial legislation; if nonnavigable waters of state are to be appropriated for recreational use, legislative process is proper method to achieve goal.

[8] **Waters and Water Courses** 40
405k40 Most Cited Cases

Public had no right to use of nonnavigable water overlying private lands for recreational purposes without consent of landowner.

**1357 *99 Syllabus by the Court

1. If a stream is navigable, the riparian landowner's title extends only to the bank. If the stream is nonnavigable, the riparian landowner's title extends to the middle of the bed of the stream by the same title that he owns the adjoining land.

2. Navigability in fact is the test of navigability in law, and whether a river is navigable in fact is to be determined by inquiring whether it is used, or is susceptible of being used, in its natural and ordinary condition as a highway of commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.

3. To establish a prescriptive easement in a stream, the stream in question must have been used by the public with the actual or implied knowledge of the riparian landowner, adversely under claim or color of right and not merely by the owner's permission, and continuously and uninterruptedly, for the period required to bar an action for the recovery of possession of land or as otherwise prescribed by statute. Mere use by the traveling public is not enough to establish that the use is adverse. There must be some additional action, formal or informal, by the public authorities, indicating their intention to treat the stream as a public one.

**1358 4. When the legislature refuses to create a public trust for recreational purposes in nonnavigable streams, courts should not alter the legislature's statement of public policy by judicial legislation. If nonnavigable waters of this state are to be appropriated for recreational use, the legislative process is the proper method to achieve this goal.

Christopher Young Meek, County Atty., pro se., argued the cause, Oliver Kent Lynch, Asst. County Atty., and Robert T. Stephan, Atty. Gen., were with him on the brief for appellant.

J. Scott Thompson, Pittsburg, argued the cause, and Edward W. Dosh, Parsons, was with him on the brief for appellees.

*100 Frank L. Austenfeld, Mission, was on the brief for amici curiae, Kansas Wildlife Federation and Geary County Fish and Game Ass'n.

Michael D. Gibbens, Kansas City, was on the brief for amicus curiae, Kansas Canoe Ass'n.

Alan F. Alderson of Alderson, Alderson & Montgomery, Topeka, was on the brief for amicus curiae, Kansas Livestock Ass'n.

Charles S. Arthur, Manhattan, was on the brief for amicus curiae, Kansas Farm Bureau.

LOCKETT, Justice:

Jasper R. Hays constructed a fence across Shoal Creek, in part to prevent canoeists and others from using that portion of the stream which flows through his land located in southeast Cherokee County. Christopher Y. Meek, the Cherokee County Attorney, filed a petition for declaratory judgment seeking to confirm the public's right to use Shoal Creek for recreational purposes. On June 11, 1988, the district court ordered Hays to remove the fence pending a hearing on the State's petition. On September 22, the district court denied the State's petition and dissolved its temporary restraining order, concluding:

> "1. Shoal Creek is not susceptible of being used in its natural and ordinary condition as a highway for commerce and does not possess a capacity for valuable floatage in transportation to market of the products of the country through which it passes; it is therefore a nonnavigable stream.
> "2. Respondents hold title to the stream bed of Shoal Creek where it passes through their property, and may exercise the same authority and control over the stream, its banks and bed, as the property adjacent to the stream, including the right to erect a barricade, barrier, or fence across the stream."

The State appeals, claiming that (1) Shoal Creek is a navigable stream; (2) the public has acquired the right to use Shoal Creek by prescriptive easement; and (3) the public has the right to use Shoal Creek under the public trust doctrine. In addition to the parties, the following *amici curiae* have briefed the case: The Kansas Wildlife Federation, the Geary County Fish and Game Association, and the Kansas Canoe Association support the State's position; and the Kansas Farm Bureau and the Kansas Livestock Association support the Hays' position.

Navigability

[1][2] If Shoal Creek is a navigable stream, the Hays' ownership ***101** extends only to the banks. *Siler v. Dreyer,* 183 Kan. 419, 421, 327 P.2d 1031 (1958). If the stream is nonnavigable, the Hays own the bed of the stream by the same title that they own the adjoining land. *Dougan v. Shawnee County Comm'rs,* 141 Kan. 554, Syl. ¶ 3, 43 P.2d 223 (1935). If the stream is nonnavigable, the Hays, who own the land adjoining both sides of the stream, may put a fence across the stream to prevent trespassers upon their property. See Att'y Gen. Op. No. 74-137.

[3] In England, streams were considered navigable only in so far as they partook of the sea, and to the extent that their waters were affected by the ebb and flow of the tide, and only so far was the title of the riparian owner limited to the bank; above such point, even though the stream was large enough to be used, and in ****1359** fact was used, for purposes of navigation, the riparian owner owned the soil *ad medium filum aquae* --to the middle thread of the stream. There were three distinct characters of streams recognized: First, those smaller streams, which could not be used for any purpose of navigation, in which the title to the soil was in the riparian owner, and along which the public had no rights of highway or otherwise; second, an intermediate class, in which the riparian owner owned to the middle of the channel, but along whose stream the public had all the rights of a highway; and third, that which was called technically the navigable streams, where the title to the bed of the stream was in the sovereign, and all rights were in the public. The same doctrine of riparian ownership to the center of the stream in rivers unaffected by the ebb and flow of the tide is recognized in some states of the Union; but the better and more generally accepted rule in this country is to apply the term "navigable" to all the streams which are in fact navigable; and in such case to limit the title of the riparian owner to the bank of the stream. This is true in Kansas and most states where the lands have been surveyed and patented under the federal law. *Wood v. Fowler,* 26 Kan. 682, 689 (1882).

To determine navigability, the first question is whether title to the riverbed passed to the State upon admittance into the Union. The critical case on this point is *United States v. Holt Bank,* 270 U.S. 49, 46 S.Ct. 197, 70 L.Ed. 465 (1926), which established that ownership of the beds of navigable streams and lakes is a federal question to be resolved according to principles ***102** of federal law and under federal definitions. *Holt Bank* also established the specific criteria to be used in determining whether particular bodies of water are deemed navigable for purposes of vesting the state with title to the beds. Under this test, bodies of water are navigable and title to the beds under the water are vested in the state if: (1) the bodies of water were used, or were susceptible of being used, as a matter of fact, as highways for commerce; (2) such use for commerce was possible under the natural conditions of the body of water; (3) commerce was or could have been conducted in the customary modes of trade or travel on water; and (4) all of these conditions were satisfied at the time of statehood. 270 U.S. at 55- 56, 46 S.Ct. at 199.

The last navigability case to come before this court was *Webb v. Neosho County Comm'rs,* 124 Kan. 38, 257 P. 966 (1927). There, the landowner sued the Neosho County Commissioners to recover for gravel taken from the Neosho River and used on the public roads in Neosho County. The *Webb* court found the Neosho River was not navigable by applying the following test:

> " 'Navigability in fact is the test of navigability in law, and that whether a river is navigable in fact is to be determined by inquiring whether it is used, or is susceptible of being used, in its natural and ordinary condition as a highway of commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.' " 124 Kan. at 40 [257 P. 966] (quoting *Oklahoma v. Texas,* 258 U.S. 574, 586, 42 S.Ct. 406, 66 L.Ed. 771 [1922]). As Professor Wadley notes, this definition "appears to track the [*Holt Bank*] federal title test in all relevant areas except for the requirement that the criteria be satisfied as of the time of statehood." Wadley, *Recreational Use of Nonnavigable Waterways,* 56 J.K.B.A. 27, 31 (Nov./ Dec.1987).

In its analysis, the *Webb* court first stated that navigability "is a question of fact to be determined from the evidence." 124 Kan. 38, Syl. ¶ 1, 257 P. 966. It then considered the trial court's factual findings:

> " '2. In early days there were used on said river at one or more places ferry boats. This was before the county had been supplied with bridges.
>
> " '3. The evidence shows that in early days some logs were floated or rafted in parts of the river to a mill or mills located on said stream.
>
> ***103** " '4. Light boats, some run by motor power, have been used on the river for ****1360** the transfer of passengers for pleasure and to a very limited extent for hire.
>
> " '5. There was evidence introduced showing that at one time while the river was at ordinary height a

boat traversed the river from Oswego, Kansas, to Humboldt, Kansas [a straight-line distance of approximately 50 miles].
" '6. In ordinary times, or ordinary stages of the water in the Neosho river, at the points in question light boats could be transferred but could not be transported any great distance up or down the river at such ordinary times without being pushed or helped over the riffles.
" '7. The riffles are very shallow, and many of them [are] in said river as it runs through Neosho county.
" '8. The Neosho river has never been used for the transportation of the products of the country along said river in Neosho county, Kansas, such as corn, wheat, oats, hay, cattle, hogs, or other stock.' " 124 Kan. at 39, 257 P. 966.

Based on this evidence, the *Webb* court found the Neosho River to be nonnavigable. 124 Kan. at 41, 257 P. 966.

Only three rivers within the state have been declared navigable: the Kansas, the Arkansas, and the Missouri. See *State, ex rel. v. Akers,* 92 Kan. 169, 140 P. 637 (1914); *Dana v. Hurst,* 86 Kan. 947, 964, 122 Pac. 1041 (1912); and *Wood v. Fowler,* 26 Kan. 682. Likewise, only three rivers have been declared nonnavigable: the Neosho, the Delaware, and the Smoky Hill. See *Webb v. Neosho County Comm'rs,* 124 Kan. 38, 257 P. 966; *Piazzek v. Drainage District,* 119 Kan. 119, Syl. ¶ 2, 237 P. 1059 (1925); and *Kregar v. Fogarty,* 78 Kan. 541, Syl. ¶ 3, 96 P. 845 (1908).

[4] Did title to the Shoal Creek stream bed pass to the State upon entry into the Union or is there sufficient evidence to declare Shoal Creek navigable? The trial court made these findings of fact:

"(10) Shoal Creek cannot be floated without getting out of the canoe or boat at various locations.
"(11) John Link, Jr., owner of Ozark Quality Products, Inc., travels Shoal Creek several times a year collecting plants used in his business....
"(12) There is no evidence that Shoal Creek has ever been used for valuable floatage in transportation to market of the products of the country through which it runs.
"(13) During times of drouth, portions of Shoal Creek are impassable by even a canoe or small boat....
(14) Shoal Creek has been used for recreational purposes for more than fifteen years.
"(15) A canoe rental business exists, known as Holly Haven, which rents canoes to be used on Shoal Creek. The point of entry is near Joplin, ***104** Missouri, with the point of exit at Schermerhorn Park, Galena, Kansas, where the business picks up the canoes and their occupants for the return trip to Holly Haven."

Based on these findings, the district court held that Shoal Creek did not meet the *Webb* standard for navigability.

The State does not challenge the trial court's findings; rather, it argues that findings (11) and (15) indicate that the stream is susceptible of being used for commerce, thus meeting the *Webb* standard for navigability. The Kansas Wildlife Federation adds: "Because Shoal Creek is in the same natural condition as it was at the time of statehood, any commercial use of the river today conclusively demonstrates that the river was 'susceptible of use' at the time Kansas was admitted to the Union."

Based on the trial court's finding of facts, Shoal Creek is less "navigable" than the Neosho River. Under both the federal (*Holt Bank*) and current state (*Webb*) tests for navigability, title to the Shoal Creek stream bed did not pass to the State upon entry into the Union.

Though federal and state laws set the criteria to determine the issue of navigability for purposes of determining state title, individual states are relatively free to regulate the consumptive and nonconsumptive *use* of water within their borders. State regulatory concerns may depart from state ****1361** ownership of the beds of navigable bodies of water as the primary criterion by which public need or access to water is secured.

Based on the public's increasing desire to use water for nonconsumptive recreational purposes, the State urges us to adopt a "modern" view of navigability which would not affect landowners' title to the riverbeds. Other states have taken such action.

A 1959 Wyoming statute allowed persons and their property to float by boat, canoe, or raft on any stream in the state that had an average flow of water exceeding 1000 cubic feet per second during the month of July. The law prohibited landowners from obstructing the stream and persons who float on the stream from going on the landowners' property without permission. This statute was repealed in 1963. In *Day v. Armstrong,* 362 P.2d 137, 145-46 (Wyo.1961), the court determined that, under the Wyoming Constitution, title to the water is in the State. Neither the Wyoming Constitution nor the act of Congress admitting the ***105** state into the Union

limited the kind or type of use the State may make of its waters. Therefore, the legislature had the power to allow persons to float on the streams. In addition, the court determined that the public, while floating on the state's waters, may hunt, fish, or do anything which is not otherwise made unlawful.

In *People v. Mack*, 19 Cal.App.3d 1040, 1045-46, 97 Cal.Rptr. 448 (1971), the California court recognized that under the prior California law, a stream is navigable if it is susceptible to the useful commercial purpose of carrying the products of the country (citing *Wright v. Seymour*, 69 Cal. 122, 10 Pac. 323 [1886]) or when declared navigable by the legislature. A navigable stream may be used by the public for boating, swimming, fishing, hunting, and all recreational purposes. The court then discussed the modern tendency of several other states to allow the public to use any stream capable of being used for recreational purposes. It then determined that a stream that can be boated or sailed for pleasure is also navigable.

In *Southern Idaho F. & G. Ass'n v. Picabo Livestock, Inc.*, 96 Idaho 360, 362-63, 528 P.2d 1295 (1974), the Idaho court found that, while the federal test of navigability determines the title to stream beds, as the present action did not involve title to the bed of a navigable stream, the federal test of navigability does not preclude a less restrictive state test of navigability. It upheld the legislature's enactment that any stream which, in its natural state, will float logs or any other commercial or floatable commodity, or is capable of being navigated by oar or motor propelled small craft, for pleasure or commercial purposes, is navigable. The Idaho court concluded that, where a stream is navigable, the public's right to use the stream for fishing extended to boating, swimming, hunting, and all recreational purposes.

In *State v. McIlroy*, 268 Ark. 227, Syl. ¶ 6, 595 S.W.2d 659, *cert. denied* 449 U.S. 843, 101 S.Ct. 124, 66 L.Ed.2d 51 (1980), landowners along the Mulberry River brought suit because their privacy was being interrupted by people trespassing on their property, littering the stream, and generally destroying their property. The Arkansas Supreme Court, after recognizing that the criterion for determining the navigability of a stream depended upon the usefulness of the stream for carrying out farm and forest products and bringing in ***106** merchandise during some seasons of the year, expanded navigability to include the use of streams for recreational purposes, such as fishing in flatbottomed boats, canoeing, or floating.

The Arkansas court recognized that the landowners have a right to prohibit the public from crossing their property to reach the stream. In addition, the state government has a duty to protect the landowners' rights and the responsibility to keep navigable waters in their natural and unblemished state.

The Hays claim the adoption of a "modern" test for navigability by this court would be a radical change in current state law, citing *People v. Emmert*, 198 Colo. 137, 597 P.2d 1025 (1979), where the Colorado Supreme Court held that the defendants ****1362** did not have any right under the state constitution to float on nonnavigable streams within boundaries of privately owned property without the consent of the property owner. In that case, Emmert and two others were convicted of criminal trespass after they rafted down a nonnavigable stream without first obtaining the riparian landowner's permission. They challenged the convictions, claiming a right to use the stream under the following state constitutional provision:

> "The water of every natural stream, not heretofore appropriated, within the state of Colorado, is hereby declared to be the property of the public, and the same is dedicated to the use of the people of the state, subject to appropriation as hereinafter provided." Colo. Const. art. XVI, § 5.

In affirming the convictions, the Colorado Supreme Court held that this provision, which appeared under a section entitled "Irrigation," did not open state waters for public recreational use. The court found support for this interpretation in state statutes which: (1) codified the common-law rule of *cujus est solum, ejus est usque ad coelum* --he who owns the surface of the ground has the exclusive right to everything which is above it; (2) authorized the State Wildlife Commission to contract for public hunting and fishing on private land; and (3) made unauthorized entry upon private land a crime.

The Colorado court in *Emmert* concisely summarized the Hays' position: " 'If a change in long established judicial precedent is desirable, it is a legislative and not a judicial function to make any needed change.' " 198 Colo. at 141, 597 P.2d 1025. Our legislature's current ***107** view on the recreational use of water is discussed with the last issue.

Prescriptive Easement

The State also claims that the public has acquired the right to use Shoal Creek by prescriptive easement. Though we have never determined whether an

individual can acquire a prescriptive easement to use the nonnavigable waterways of this state, in *State, ex rel., Akers,* 92 Kan. 169, Syl. ¶ 4, 140 P. 637, we found that title to the waters or bed of a navigable stream cannot be acquired through private use or occupancy, whether adverse or by permission, however long continued, or by prescription.

By analogy, the requirements for an overland highway easement are set out in *Shanks v. Robertson,* 101 Kan. 463, 465, 168 P. 316 (1917):

> " 'To establish a highway by prescription the land in question must have been used by the public with the actual or implied knowledge of the landowner, adversely under claim or color of right, and not merely by the owner's permission, and continuously and uninterruptedly, for the period required to bar an action for the recovery of possession of land or otherwise prescribed by statute. When these conditions are present a highway exists by prescription; otherwise not.' "

The period required to bar an action for the recovery of possession of land is 15 years. K.S.A. 60-503. There is evidence that the public had used Shoal Creek for pleasure boating for more than 15 years.

In *Kratina v. Board of Commissioners,* 219 Kan. 499, Syl. ¶ 3, 548 P.2d 1232 (1976), we modified the *Shanks* test by adding the following requirement when a prescriptive easement is to be obtained by the public at large: "Mere use by the traveling public is not enough to establish ... that the use is adverse.... There must in addition be some action, formal or informal, by the public authorities indicating their intention to treat the road as a public one."

The Kansas Wildlife Federation claims the *Kratina* requirement is inapplicable because the stream in its natural condition needs no maintenance. For authority, the Kansas Wildlife Federation cites *Buffalo River Conservation v. National Park,* 558 F.2d 1342 (8th Cir.1977), *cert. denied* 435 U.S. 924, 98 S.Ct. 1487, 55 L.Ed.2d 517 (1978). There, riparian landowners sued the federal government to halt the creation of ***108** a national park along the Buffalo River. In affirming the district court's judgment against the landowners, the Court of Appeals noted that canoeists had floated the ****1363** Buffalo River for many years. This flotation had been open and ever-increasing in intensity, and open and adverse for more than the seven years required by Arkansas law for the establishment of a prescriptive public easement over the course of the stream and its bed. The Eighth Circuit went on to say: "While the cases cited deal with prescriptive rights-of-way over land, we agree with the trial court that they apply by analogy to rights- of-way over non-navigable streams and their beds." 558 F.2d at 1345.

The Hays argue that the *Buffalo River* case is of no precedential value because the Arkansas courts have imposed no *Kratina* -type requirement for official public action. They cite *Kempf v. Ellixson,* 69 Mich.App. 339, 244 N.W.2d 476 (1976), wherein littoral landowners brought suit contesting the public use of a lake. The Michigan court found that, unless there has been some action by representatives of the public, *i.e.,* the government, a public easement cannot be established by prescription. The court went on to say that recreational use of an area by various individuals over a period of years is insufficient to establish a public easement. Neither occasional use by a large number of bathers nor frequent or even constant use by a smaller number of bathers gives rise to a prescriptive right in the public to use privately owned beaches. It is only when the use during the prescribed period is so multitudinous that the facilities of local governmental agencies must be put into play to regulate traffic, keep the peace, and invoke sanitary measures that it can be said that the public has acquired a prescriptive right to use privately owned beaches. The court determined that to establish public recreation rights by prescription requires at a minimum governmental action to facilitate and control recreational use and remanded the case for a determination as to whether prescriptive easements had been established. 69 Mich.App. at 343-44, 244 N.W.2d 476.

[5][6] We agree that the doctrine of prescriptive easement for public highways extends to streams and rivers of this state. For the public to obtain a prescriptive easement for recreational travel, both the *Shanks* test and *Kratina* requirement for official public action are required. Neither occasional use of the creek by a large ***109** number of canoeists nor frequent use by a small number of canoeists gives rise to a prescriptive right in the public to use nonnavigable streams. A public prescriptive right arises during the prescribed period when public use becomes so burdensome that government must regulate traffic, keep the peace, invoke sanitary measures, and insure that the natural condition of the stream is maintained. Because public officials have taken no such action, there is no public prescriptive easement on Shoal Creek.

The Public Trust Doctrine

The State finally contends that the public is entitled

to use Shoal Creek under the public trust doctrine. The essence of the public trust doctrine was articulated by Professor Sax: "When a state holds a resource which is available for the free use of the general public, a court will look with considerable skepticism on *any* government conduct which is calculated *either* to reallocate that resource to more restricted uses *or* to subject public uses to the self-interest of private parties." Sax, *The Public Trust Doctrine in Natural Resource Law: Effective Judicial Intervention,* 68 Mich.L.Rev. 473, 490 (1970). See *Illinois Central Railroad v. Illinois,* 146 U.S. 387, 13 S.Ct. 110, 36 L.Ed. 1018 (1892).

Citing *Phillips Petroleum Co. v. Mississippi,* 484 U.S. 469, 108 S.Ct. 791, 98 L.Ed.2d 877 (1988), the Kansas Wildlife Federation points out that a state may extend the public trust doctrine to nonnavigable waters. In *Phillips,* the Court affirmed a decision by the Mississippi Supreme Court validating oil and gas leases the State had granted over certain nonnavigable streams and a bayou. The land underlying these waters was privately owned. Since the streams and bayou were influenced by tides running from the Gulf of Mexico, the Court found that title to the underlying land had passed to Mississippi upon its entry into the Union. Although the discussion in *Phillips* centered on ****1364** coastal water rights, the Court acknowledged: "[I]t has been long established that the individual States have the authority to define the limits of the lands held in public trust and to recognize private rights in such lands as they see fit." 484 U.S. at 475, 108 S.Ct. at 794.

At least one state, Montana, has applied the public trust doctrine under facts similar to those presented by this case. The Montana Supreme Court determined that, under the public trust ***110** doctrine and the 1972 Montana Constitution, "any surface waters that are capable of recreational use may be so used by the public without regard to streambed ownership or navigability." *Montana Coalition for Stream Access v. Curran,* 210 Mont. 38, 53, 682 P.2d 163 (1984). The constitutional provision to which the Montana court referred, Mont. Const. art. IX, § 3, provides: "All surface, underground, flood and atmospheric waters within the boundaries of the state are the property of the state for the use of its people and subject to appropriation for beneficial uses as provided by law."

The State analogizes the Montana constitutional provision with K.S.A. 82a-702, which provides:

> "Dedication of use of water. All water within the state of Kansas is hereby dedicated to the use of the people of the state, subject to the control and regulation of the state in the manner herein prescribed."

While the broad language in 82a-702 is similar to that which appears in the Montana Constitution and others, it is clear that our legislature did not intend to incorporate the State's position when it passed that statute. A thorough discussion of the history behind 82a-702 and related statutes appears in *Williams v. City of Wichita,* 190 Kan. 317, 331-36, 374 P.2d 578 (1962). Here, it is sufficient to note that these statutes were intended to address problems related to the consumptive use of water, and not nonconsumptive, recreational use. Statutory provisions concerned with consumptive appropriation cannot be applied to subvert a riparian landowner's right to exclusive surface use of waters bounded by his land.

Further evidence of our legislature's disinclination toward the State's position can be seen in the treatment of three bills introduced during the 1986 and 1987 legislative sessions. House Bill 2835, which was introduced in 1986, sought to amend K.S.A. 82a-702 by adding the following language:

> "All water of the state which can serve a beneficial purpose is hereby declared to be public waters, and the public shall have a right to make a nonconsumptive use of such water without obtaining an appropriation. The public character of the water shall not be determined exclusively by the proprietorship of the underlying, overlying or surrounding land or on whether it is a body or stream of water which was navigable in fact or ***111** susceptible of being used as a highway for commerce at the time this state was admitted to the union."

This bill was killed in the House Energy and Natural Resources Committee on February 27, 1986.

House Bill 3038 was also introduced during the 1986 session. Known as the Kansas Recreational River Act, this bill would have allowed the legislature to designate "selected rivers within this state [which possess] outstanding fish and wildlife, recreational, geologic or scenic values" as recreational rivers. This designation would have allowed the public "to enjoy and use such rivers through n ncontact river recreation." Noncontact river recreation was defined as "the public use of a recreational river by means of a vessel." This bill died in the House Energy and Natural Resources Committee without action.

House Bill 3038 was resurrected in 1987 as Senate Bill 94 and was killed by the Senate Energy and

Natural Resources Committee on February 6, 1987.

[7] Owners of the bed of a nonnavigable stream have the exclusive right of control of everything above the stream bed, subject only to constitutional and statutory limitations, restrictions, and regulations. Where the legislature refuses to create a **1365 public trust for recreational purposes in nonnavigable streams, courts should not alter the legislature's statement of public policy by judicial legislation. If the nonnavigable waters of this state are to be appropriated for recreational use, the legislative process is the proper method to achieve this goal.

[8] The public has no right to the use of nonnavigable water overlying private lands for recreational purposes without the consent of the landowner.

Affirmed.

785 P.2d 1356, 246 Kan. 99

END OF DOCUMENT

Sinnemahoning Creek—Pennsylvania

Reported Decision: Pennsylvania Environmental Council, Inc. v. Bartlett, 315 F. Supp 238 (M.D. Pa. 1970)

Reach at Issue: First Fork

Judicial Determination: Non-navigable

Facts Reported in Decision:

"The First Fork of Sinnemahoning Creek (First Fork) runs in a southerly direction, immediately parallel and to the East of Route 872, from Wharton to Sinnemahoning for a distance of approximately twenty miles and then courses in an easterly direction for approximately ten miles to where it flows into the Susquehanna River. On the First Fork, approximately midway between Wharton and Sinnemahoning, Sinnemahoning State Park is located, a part of which contains the George B. Stevenson Dam, erected primarily for flood control purposes." 315 F. Supp. at 240-41.

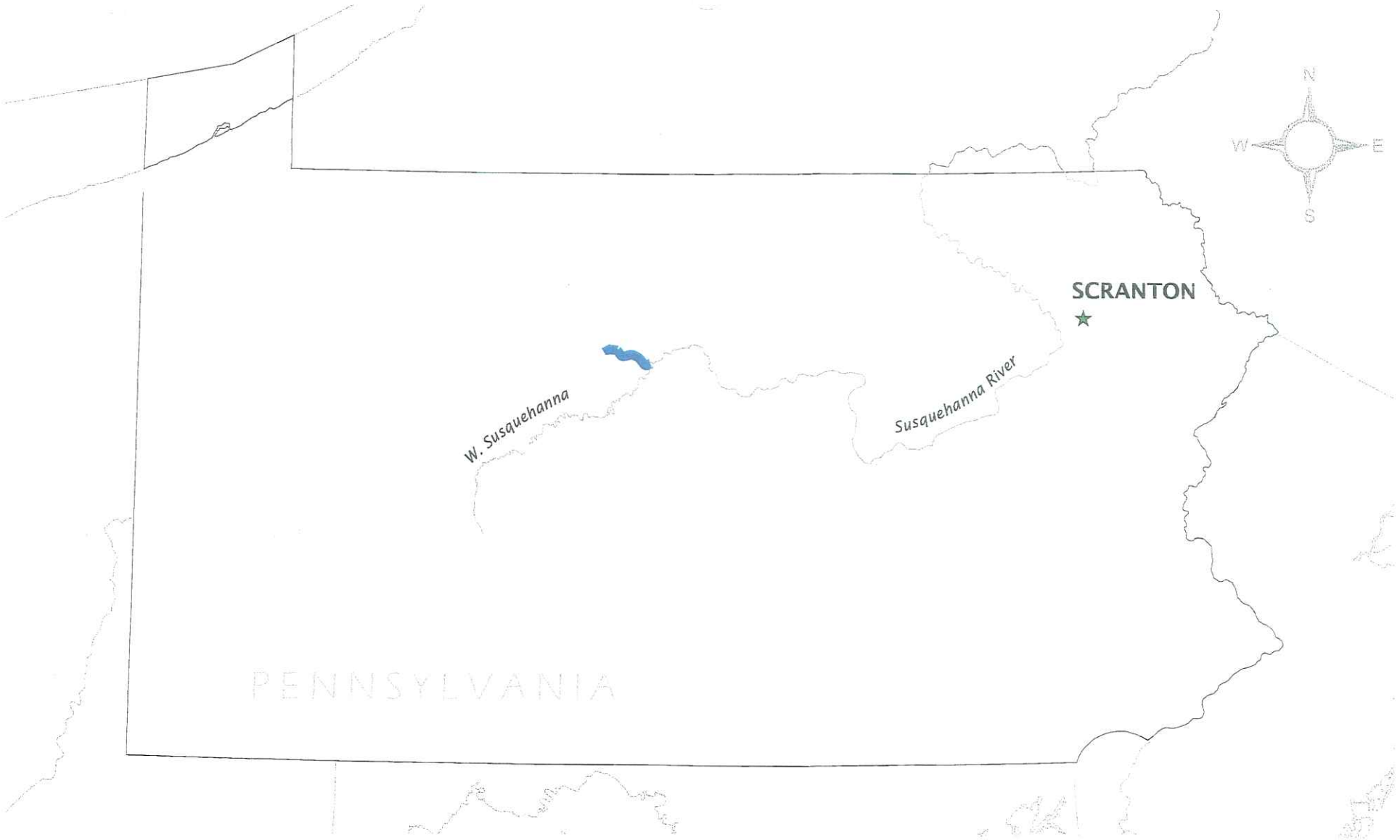
"Plaintiffs bottom their navigability claim on a Pennsylvania statute, the Act of May 21, 1874, P.L. 299, which allegedly designates the First Fork as a 'public highway' and the testimony of James Sproull that on April 19, 1970, he and two others paddled two kayak-type canoes on the Creek for a distance of 9 to 10 miles. He admitted scraping bottom on occasion, but stated that portions of his trip could have been navigated with an outboard motor." 315 F. Supp. at 252.

"A review of the cases on this particular issue reveals a much more extensive potential use of the stream, either commercial or private, than has been shown here. Furthermore, the testimony is persuasive that in the summer months the low level of the stream would even preclude the use of canoes in the First Fork area. As a matter of fact, Earl R. Hooftallen, who lives in the region of the First Fork, testified that in July and August he can . . . 'walk across the stream in my sneakers without getting my feet wet.'" 315 F. Supp. at 252.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Sinnemahoning, PA	399	1954-2000



Sinnemahoning Creek - Pennsylvania

REPORTED DECISION

H

United States District Court, M.D. Pennsylvania.

PENNSYLVANIA ENVIRONMENTAL COUNCIL, INC., a Pennsylvania Corporation, the Allegheny Mountain Chapter of Trout Unlimited, an unincorporated association, Colson E. Blakeslee, Marion E.Brooks, Robert L. Kolek, Bertil L. Anderson, and Joseph H. Fritz, Plaintiffs,
v.
Robert G. BARTLETT, individually and as Secretary of the Department ofHighways of the Commonwealth of Pennsylvania, John Volpe, individually and asSecretary of Transportation of the United States, Central Pennsylvania Quarry,Stripping andConstruction Co., , stabler Construction Co., and Reed and Kuhn, Inc., Defendants.

No. 70-123 Civ.

April 30, 1970.

Action to enjoin planned relocation of a highway and to require upgrading and repairing of an existing roadway. The District Court, Nealon, J., held that the plaintiffs had standing to sue and were not barred by laches but that the Pennsylvania Secretary of Highways and contractors performing work under contract with him were immune from suit, that the National Environmental Act of 1969 was not intended to be retroactive and in any event was not shown to have been violated, and that no violation of the provisions of the Federal-Aid Highway Act, Department of Transportation Act, instructional memorandum of the Bureau of Public Roads or the Rivers and Harbors Act was shown.

Complaint dismissed.

West Headnotes

[1] **Administrative Law and Procedure** 668
15Ak668 Most Cited Cases

[1] **Federal Civil Procedure** 112.1
170Ak112.1 Most Cited Cases
(Formerly 170Ak112)

Corporation formed to protect and conserve aesthetic qualities and recreational value of such areas as creek valley and park, anglers' association using and enjoying waters of creek and land and waters of park and state citizens enjoying land and waters of creek valley and park had standing to sue to protect aesthetic, conservational and recreational interests arguably intended to be protected under National Environmental Policy Act, Federal-Aid Highway Act and Department of Transportation Act, and were persons "aggrieved," within Administrative Procedure Act, by decision on highway project. 5 U.S.C.A. § 702; National Environmental Policy Act of 1969, § § 1-207, 42 U.S.C.A. § § 4321-4347; Department of Transportation Act, § § 1-11, 2(b) (2), 4, 4(f), 9, 49 U.S.C.A. § § 1651-1658, 1651(b) (2), 1653, 1653(f), 1657; 23 U.S.C.A. § § 101-141, 138; Rivers and Harbors Appropriation Act of 1899, § 9 et seq., 33 U.S.C.A. § 401 et seq.; General Bridge Act of 1946, § 502, 33 U.S.C.A. § 525; U.S.C.A.Const. Amend. 9.

[2] **Injunction** 113
212k113 Most Cited Cases

Though suit for injunction was not begun until 90 days after awarding of construction contracts, suit instituted about two months after first day of construction of highway relocation alleged to be violative of various statutes was not barred by laches in absence of showing of prejudice from delay. National Environmental Policy Act of 1969, § § 1-207, 42 U.S.C.A. § § 4321- 4347; Department of Transportation Act, § § 1-11, 4, 49 U.S.C.A. § § 1651- 1658, 1653; 23 U.S.C.A. § § 101-141, 138; Rivers and Harbors Appropriation Act of 1899, § 9 et seq., 33 U.S.C.A. § 401 et seq.; General Bridge Act of 1946, § 502, 33 U.S.C.A. § 525; U.S.C.A.Const. Amend. 9.

[3] **Federal Courts** 265
170Bk265 Most Cited Cases

Absent state's consent to suit or waiver of its sovereignty, state Secretary of Highways was immune from action to enjoin highway relocation, where suit was brought not by federal government but by private persons and organizations. U.S.C.A.Const. Amend. 11.

[4] **Federal Courts** 268.1
170Bk268.1 Most Cited Cases
(Formerly 170Bk268)

Where contractors performing work under contract

with state Secretary of Highways had commenced construction and were not alleged to be performing work in any manner other then in accord with contract of state, they shared immunity of commonwealth from action by private persons and organizations to enjoin highway relocation. U.S.C.A.Const. Amend. 11.

[5] **Environmental Law** 573
149Ek573 Most Cited Cases
(Formerly 199k20 Health and Environment)

National Environmental Policy Act of 1969 was not designed to be given retroactive application, and where highway relocation contract was awarded and finalized prior to passage of Act, no violation of Act occurred though actual construction had not begun when Act was passed. National Environmental Policy Act of 1969, § § 2, 101, 102, 42 U.S.C.A. § § 4321, 4331, 4332.

[6] **Highways** 99.1
200k99.1 Most Cited Cases
(Formerly 200k991/4, 393k82)

National Environmental Policy Act did not require Secretary of Transportation to make independent and affirmative evaluations of all phases of multitude of state secondary highway projects relative to their impact on environment, thereby duplicating state investigations and determinations, but permitted him to rely upon certificates and recommendations of State Highway Departments. National Environmental Policy Act of 1969, § § 2, 101, 102, 42 U.S.C.A. § § 4321, 4331, 4332; 23 U.S.C.A. § § 117, 117(a).

[7] **Injunction** 128(7)
212k128(7) Most Cited Cases

In action to enjoin highway relocation, evidence was insufficient to support any finding that alternative plan belatedly suggested by plaintiffs was feasible and prudent or that Secretary of Transportation in approving plans violated either Federal-Aid Highway Act or Department of Transportation Act. 23 U.S.C.A. § 138; Department of Transportation Act, § § 2(b) (2), 4(f), 49 U.S.C.A. § § 1651(b) (2), 1653(f).

[8] **Injunction** 128(7)
212k128(7) Most Cited Cases

Evidence in action for injunction against highway relocation failed to show any violation of instructional memorandum of Bureau of Public Roads concerning protection of fish and wildlife resources. National Environmental Policy Act of 1969, § § 1-207, 42 U.S.C.A. § § 4321-4347.

[9] **Highways** 103.1
200k103.1 Most Cited Cases
(Formerly 200k103)

In action to enjoin highway relocation, contention that notice requirements had not been complied with by State Highway Department was untenable where notice was shown to have been published in specified publication, where there was testimony by fish commission representative that he received notice, where federal regulation as to notice did not become effective until a year and a half subsequent to publication and there was no evidence indicating noncompliance with terms of such federal regulation. 23 U.S.C.A. § 128.

[10] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

Navigability does not depend on particular mode in which use of waters is or may be had nor on absence of occasional difficulties in navigation but on fact, if it be fact, that stream in its natural and ordinary condition affords channel for useful commerce. Rivers and Harbors Appropriation Act of 1899, § 9, 33 U.S.C.A. § 401.

[11] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Evidence in action to enjoin highway relocation established that First Fork of Sinnemahoning Creek was not navigable river or other navigable water of United States within Rivers and Harbors Act, and such Act was inapplicable. Rivers and Harbors Appropriation Act of 1899, § 9 et seq., 33 U.S.C.A. § 401 et seq.

[12] **Injunction** 128(7)
212k128(7) Most Cited Cases

Even if National Environmental Act of 1969 was intended to be retroactive, no violation by United States Secretary of Transportation or by Pennsylvania Secretary of Highways in connection with highway relocation was shown in action to enjoin relocation. National Environmental Policy Act of 1969, § § 1-207, 42 U.S.C.A. § § 4321-4347.

***240** Killian, Gephart & Snyder, Harrisburg, Pa.,

Robert ,0roughton, Meyer, Unkovic & Scott, Pittsburgh, Pa., for plaintiffs.

Robert W. Cunliffe, Lansford, Pa., Edward Hosey Plymouth, Pa., for Pennsylvania Dept. of Highways.

Francis J. Locke, Regional Counsel, Region 2, Baltimore, Md., for John Volpe, individually and as Secretary of Transportation.

S. John Cottone, U.S. Atty., Scranton, Pa., for the United States.

J. Thomas Menaker, McNees, Wallace & Nurick, Harrisburg, Pa., for Central Pennsylvania Quarry, Stripping and Construction Co., Stabler Construction Co. and Reed and Kuhn, Inc.

OPINION

NEALON, District Judge.

In this action, plaintiffs seek to enjoin defendants from proceeding further with the planned relocation of Pennsylvania Route 872 and from approving, granting or using any Federal funds for this project and, further, to order the defendant, Robert G. Bartlett, Pennsylvania Secretary of Highways, to upgrade and repair the existing roadbed of Route 872. [FN1] Plaintiffs are the Pennsylvania Environmental Council, Inc., and the Allegheny Mountain Chapter of Trout Unlimited, as well as several individual sportsmen. Defendants are the Pennsylvania Secretary of Highways, the Secretary of Transportation of the United States, and the contractors who were awarded construction contracts for the project. Plaintiffs contend that defendants are violating the National Evironmental Policy Act of 1969, 42 U.S.C. § § 4321-4327 (Supp. I, 1970); the Department of Transportation Act, 49 U.S.C. § § 1651-1658 (Supp.1970), particularly § § 1651, 1653 and 1657; the Federal-Aid Highway Act, 23 U.S.C. § § 101-141, specifically § 138, 23 C.F.R. Part 1, Appendix 1; the Rivers and Harbors Act of 1899, 33 U.S.C. § 401 et seq.; the General Bridge Act of 1946, 33 U.S.C. § 525, and the Ninth Amendment of the United States Constitution. Hearings were held and evidence presented on April 20, 21 and 22, 1970, and oral argument made April 24, 1970. [FN2] From the testimony taken and exhibits received, the following facts appear:

FN1. Jurisdiction is predicated upon the Administrative Procedure Act, 5 U.S.C. § 702, and 28 U.S.C. § 1331. Also asserted as bases are the Declaratory Judgment Act, 28 U.S.C. § § 2201-2202; the mandamus section of the United States Judicial Code, 28 U.S.C. § 1361, and the Commerce and Anti-Trust Statute, 28 U.S.C. § 1337. As in Citizens Committee for Hudson Valley v. Volpe, 302 F.Supp. 1083 n. 9 (S.D.N.Y.1969), I deem it unnecessary to determine the existence of jurisdiction under the latter Statutes since jurisdiction clearly exists under the Administrative Procedure Act and the Federal Question Statute. See Charlton v. United States, 412 F.2d 390 (3d Cir. 1969).

FN2. By stipulation, these hearings were considered as final and the case submitted on the merits. The parties requested a prompt and speedy determination by the Court because, commencing Friday, May 1, the contractors would stand to lose approximately $40,000 per week in fixed costs and payroll expenses and plaintiffs are unable to furnish a bond sufficient to cover this potential loss.

Pennsylvania Legislative Route 52001, also known as Traffic Route 872 (hereinafter Route 872), runs in a northerly-southerly direction for approximately fifty miles through Potter and Cameron Counties from its point of origin, where it intersects Route 6 near Coudersport, to its terminus, where it intersects Route 120 at the town of Sinnemahoning. The First Fork of Sinnemahoning Creek (First Fork) [FN3] runs in a southerly direction, immediately parallel and to the East of Route 872, from Wharton to Sinnemahoning for a distance of approximately twenty miles and then courses in an easterly direction for approximately ten miles to where it flows into the Susquehanna River. On the First Fork, approximately midway between Wharton and Sinnemahoning, Sinnemahoning ***241** State Park is located, a part of which contains the George B. Stevenson Dam, erected primarily for flood control purposes. Route 872 was constructed approximately forty years ago and is a narrow road which, at many points in the First Fork area, is cut out of the side of the mountain. The difference in elevation from the Sinnemahoning Creek to Route 872 ranges from 75 feet to 250 feet. Maintenance of this road for a

distance of one mile South of the confluence of Bailey Run with First Fork has been difficult as slides occur after rainstorms and the retaining wall has had to be rebuilt on three different occasions. The present width of the template [FN4] in this one-mile stretch is as low as 20 feet and the paved portion runs from 6 feet to 10 feet in width. Because of the maintenance difficulties and the dangers presented for vehicular traffic by the present road, residents in the Potter and Cameron County vicinity have been agitating for the construction of a new road from the Potter-Cameron line, North through Potter County past the confluence of Bailey Run, to the village of Wharton, a distance of approximately 5.1 miles, in hopes of alleviating the present dangers. Prior to May, 1967, on recommendation of the Pennsylvania Highways Department, the Pennsylvania Highway Commission approved a proposal to improve this 5.1-mile stretch. Advertisements were placed in the Potter Enterprise, Coudersport, Pennsylvania, on May 8 and May 15, 1967, notifying all interested persons of the proposed construction; advising that plans were available for inspection in the office of the District Engineer in Clearfield, Pennsylvania, and that any interested citizens from the communities affected might request a public hearing respecting such proposed construction by delivering a written request to the District Engineer on or before May 22, 1968. No requests were made for such a hearing. Location studies were made by the Pennsylvania Highways Department in the Fall of 1967 and the Winter of 1968. Because of the narrowness of the road and past difficulty with slides and maintenance, the Highways Department considered three possible alternatives in improving a section of the road running South from the confluence of Bailey Run for a distance of 7/10 of a mile (this is the precise area involved in this lawsuit). The alternatives were: (a) widening and improving the existing road on the westerly side of the Creek; (b) leaving the present route at a point 7/10 of a mile South of the confluence of Bailey Run and placing a bridge across the Creek to the easterly side, proceeding up the easterly side to a point where it would be necessary to place another bridge across the curving Creek and then rejoin Route 872 above Bailey Run, and (c) leaving the present route at a point 7/10 of a mile South of the confluence of Bailey Run and extend partially into the streambed on the westerly side and continue North on the westerly side, connecting with the road above Bailey Run. Inasmuch as the template proposed for the improved road would be 52 feet, it was decided not to attempt to widen and improve the existing road because the sandy and silty soil would necessitate making a massive cut into the mountain, which would be extremely expensive and would lead to uncontrolled erosion. According to Assistant District Engineer David Bobanick, a 1-foot vertical rise for every two feet in distance would be required and this would mean sloping the entire mountain. In addition, the cut would extend for 900 feet and in the process of filling-in the easterly bank of the road, a large amount of soil would be caused to go into the Creek. The Highways Department decided that the proposal to extend into the Creek on the westerly side was the most preferred and design plans were prepared. This proposal provided for the placing of fill along a 4100-foot corridor, encroaching into the westerly side of the Creek for a minimum of 10 feet and a maximum of 60 feet, as well *242 as a 2300-foot channel change at another point in the stream. The bridging of the Creek was not acceptable, presumably because it would be more expensive and would also involve constricting the stream channel and building up the area on the easterly side of the stream. Since December 30, 1963, a Memorandum of Understanding existed between the Department of Highways and the Pennsylvania Fish and Game Commissions whereby the Secretary of Highways has agreed, inter alia, to provide a copy of advance plans for each project to the Executive Directors of the Fish and Game Commissions and furnish a notice of all public hearings advertised and/or held concerning Federal-aid highway construction projects. The Executive Director of the Fish Commission was furnished with notices concerning the public hearings, but no plans were furnished until late September, 1968, when a blueprint was submitted requesting approval of a proposed channel change, which approval was granted on October 3, 1968. A new Memorandum of Understanding between the Highways Department and the Fish and Game Commissions was adopted on September 19, 1968, and sent to Field Representatives on October 12, 1968. On November 8, 1968, a meeting was held between representatives of the Fish Commission and the Highways Department and certain requirements of the Fish Commission, e.g., sloping the new channel toward the center and seeding the side slopes, were adopted. Since the plans were considered to be in the preliminary stages, the Fish Commission withheld approval or further comment until revised plans and cross-sections of the channel changes were submitted for review. Plans were then developed in accordance with the wishes of the representatives of the Fish Commission and transmitted to the Fish Commission on December 6, 1968. On December 20, 1968, the Department of Highways filed an application with the Pennsylvania Department of Forests and Waters, Water and Power

Resources Board, seeking its consent to change the channel of the First Fork, and such consent was granted on January 16, 1969. On January 20, 1969, the Engineering Division of the Fish Commission approved the plan submitted on December 6, 1968. On January 21, 1969, the Bureau of Design for the Highways Department in Harrisburg notified the Potter County District Engineer that the channel change had been approved by the Pennsylvania Department of Forests and Waters and that the project may proceed accordingly. The Potter County District Engineer was also requested to provide a stone embankment (known as rip-rap) along the West bank of the channel change in order to protect it from erosion. On February 25, 1969, Dr. C. E. Blackeslee, one of the plaintiffs, transmitted a letter to Robert C. Bartlett, Pennsylvania Secretary of Highways, protesting the proposed plans relocating a

> FN3. At some points, the width of the First Fork is as much as 120 feet.

> FN4. The template is the entire width of the road cut and is not merely the paved portion.

portion of the First Fork because of its impact on the stream and suggesting an early meeting with representatives of the Fish Commission. On April 13, 1969, Dr. Blakeslee and other plaintiffs toured the project area with the bridge designer and on April 23, met with engineering representatives of the Highways Department and Fish Commission. On May 2, 1969, Mr. Bruce F. Speegle, District Engineer, informed Dr. Blakeslee that after conference with the Secretary of Highways and local community authorities it was decided that the project, as designed, would best meet the needs of the traveling public and the objectives of the various planning agencies in the area and, consequently, construction plans would be completed and bid-letting made as soon as possible. A meeting was subsequently held on May 12, 1969, between certain of the individual plaintiffs and representatives of the plaintiff organizations with Secretary of Highways Bartlett, but the decision to continue with present plans was not changed. On the same day, on recommendation of the Fish Commission and the Department of Forests and Waters, the plans were revised and the 2300-foot channel change was eliminated. In addition, design*243 guidelines were prepared jointly by Fish Commission and Highways Department personnel. During the month of May, 1969, Dr. Blakeslee discussed the situation as it then existed with Michael J. Boyle, Esq., one of plaintiffs' counsel herein. Plaintiffs attended conferences at State College, Pennsylvania, on July 11 and 12, and August 6, 1969, concerning a certain number of highway projects, including the present one, which plaintiffs felt would unnecessarily damage the environment, and plans for litigation were discussed with Attorney Victor Yannacone, an Attorney from New York City. On October 20, 1969, final drawings for construction were recommended by Pennsylvania Highways Department District Engineer Bruce E. Speegle to his superiors. On November 6, 1969, the Pennsylvania Highways Department filed application with the Secretary of Transportation of the United States, pursuant to 23 U.S.C. 117, and, upon receipt of the concurrence of the Fish Commission to the channel relocation, the project was approved by the Secretary on November 20, 1969. The final plans were ultimately approved by Secretary of Highways Bartlett and Governor Raymond P. Shafer on November 24, 1969. Bids were opened on December 19, 1969, and contracts awarded to the defendant contractors on December 29, 1969.

The contract provided that the contractor must (a) seed and stabilize all stream banks upon completion of grading; (b) cross flowing channels with equipment only on dry roadways in order to prevent constant turbulence and siltation; (c) direct flowing water away from excavation area and refrain completely from removing material covered by water; (d) refrain from stream fordings; (e) seed all erodible cut and fill slopes when they reach a vertical height of 20 feet or when directed by the Engineer, and (f) place 80 boulders of 9 to 12 cubic feet each in the stream under observation of representatives of the Fish Commission. Siltation tests were commenced on January 7, 1970, by the Highways Department and taken periodically up to and including April 14, 1970. Representatives of the Highways Department, defendant contractors, Pennsylvania Fish Commission, Pennsylvania Game Commission, and utility companies met in Clearfield, Pennsylvania, on January 15, 1970, relative to commencing work on the project. Actual construction was commenced on February 2, 1970, and thereafter the clearing and grubbing of trees and shrubbery took place. This lawsuit was then filed on March 31, 1970, by the individual plaintiffs and the plaintiffs, Pennsylvania Environmental Council, Inc. (incorporated January 30, 1970) and the Allegheny Mountain Chapter of Trout Unlimited, an unincorporated association. Since the commencement of this lawsuit, on April 8,

1970, the Highways Department accepted the recommendation of the Department of Forests and Waters to raise the flood plane on the easterly side of the bank from 1.5 feet to 3.5 feet along the entire 4100-foot area involved. The following day, on April 9, defendant contractors were reprimanded for entering the streambed with a piece of construction equipment.

In addition to the chronological sequence of events, certain evidence should appropriately be mentioned here. A good trout stream requires cool, clear water with gravel, boulders and uneven streambed roughness in order to allow insect life to develop. It should have shady banks and a good balance of riffles and pools. If a stream is wide and shallow with inadequate water velocity, then the water temperature is susceptible to an excessive and rapid increase in the summer months when the flow is reduced and this presents a critical obstacle to trout survival. On the other hand, excessive water velocity is more harmful to smallmouth bass, [FN5] while siltation*244 is detrimental to both fish species. Because of the width and shallowness, First Fork is not considered by the Fish Commission to be a prime trout stream and it is classified as mediocre in terms of reproduction and carryover. It is stocked regularly by the Fish Commission and, consequently, is recognized as a good 'put and take' trout stream. While plaintiffs feel that the value of First Fork as a trout stream will be seriously impaired, Robert Bielo, Executive Director of the Pennsylvania Fish Commission, testified that the Commission will continue to stock in this area and is also of the opinion that the damage to fisheries resources will be very limited; that the construction of the stream channel through this 4100-foot corridor will be an improvement in terms of water flow, and, with the placing of boulders, a better fish habitat will result. Similarly, Dr. Maurice K. Goddard, Pennsylvania Secretary of Forests and Waters, stated that he is in full accord with narrowing the channel; that the raising of the flood level to 3.5 feet would decrease siltation, and the requirements imposed upon the contractors and the Highways Department are in accord with his views on environmental control. Finally, turbidity tests have been taken along the 4100-foot corridor on 13 occasions since January 7, and during the period when grubbing and clearing work was being performed and, with the exception of the test taken April 2, after a heavy rainfall, the siltation ratio did not increase.

FN5. Apparently, fish can only resist water velocity that is three times their size, e.g., a 12-inch bass can resist a water velocity of 3 feet per second. No test, however, of the velocity of the First Fork was made, so thatany judgment concerning its effect on the fish would be speculative.

The following issues have been presented: (1) whether plaintiffs have standing to maintain this action; (2) whether plaintiffs are barred by the doctrine of laches from maintaining this action; (3) whether the Eleventh Amendment precludes maintenance of this suit against Pennsylvania's Secretary of Highways and his contractors; (4) whether the National Environmental Policy Act of 1969, supra, should be applied retroactively; (5) if so, whether the United States Secretary of Transportation violated the provisions of the National Environmental Policy Act in approving the road relocation of Route 872 and channel encroachment in the First Fork of the Sinnemahoning Creek without making an independent determination of the effect thereof on the environment; (6) whether the United States Secretary of Transportation violated the Federal- Aid Highway Act, 23 U.S.C. § 138, by not considering whether a feasible and prudent alternative to the channel encroachment existed; (7) whether the notice provisions of the Instructional Memorandum dated May 12, 1963, by the Bureau of Public Roads, United States Department of Commerce, were violated by the United States Secretary of Transportation and the Pennsylvania Secretary of Highways, and (8) whether the Rivers and Harbors Act of 1899, 33 U.S.C. 401, was violated when the consent of Congress was not obtained for the construction of a dike across an allegedly navigable waterway, the First Fork of the Sinnemahoning Creek.

I. STANDING

[1] The United States Supreme Court recently reviewed the question of standing in related decisions, Assn. of Data Processing Service Organizations, Inc. v. Camp, 397 U.S. 150, 90 S.Ct. 827, 25 L.Ed.2d 184 (1970), and Barlow v. Collins, 397 U.S. 159, 90 S.Ct. 832, 838, 25 L.Ed.2d 192 (1970). In these cases, a two-pronged test was applied: (1) whether the plaintiff had alleged that the challenged action has caused him injury in fact, economic or otherwise, and (2) whether the interest asserted by the plaintiff is arguably within the zones of interests sought to be protected or regulated by the statute or constitutional guarantee in question. The Pennsylvania Secretary of Highways, who alone

challenges plaintiffs' standing to sue, contends (1) that plaintiffs have not made the required allegations as to injury, and (2) that no statute exists which protects the particular interests asserted by the plaintiffs.

I am satisfied that plaintiffs meet the two-pronged test of the Data Processing ***245** and Barlow cases. First of all, it is alleged in the complaint (1) that one of the principal purposes of the Pennsylvania Environmental Council, Inc. is to protect and conserve the material resources, aesthetic qualities and recreational value of areas, such as the Sinnemahoning Creek Valley and the nearby Sinnemahoning State Park; (2) that the members of the Allegheny Mountain Chapter of Trout Unlimited use and enjoy the waters of the Sinnemahoning Creek and the land and water in the nearby Sinnemahoning State Park, and (3) that the individually-named plaintiffs are Pennsylvania citizens who use and enjoy the land and the waters of the Sinnemahoning Creek Valley and the Sinnemahoning State Park. Secondly, it is alleged under Count I that the plaintiffs are, both individually and as a group, representative of the present and future generations who have a property right in the area in question and therefore have a right to have the resources not wasted or damaged and to prevent the expenditure of Federal funds in violation of law. The plaintiffs also allege that to permit the project to proceed would cause irreparable damage to Sinnemahoning Creek as a trout stream and recreation source and as an irreplaceable natural and aesthetic resource, specifically citing the siltation problem and the disturbances to the biotic community in the Creek. Under Count II, damage as a result of the present plans for Route 872 is also alleged to the Sinnemahoning Creek Valley and the George B. Stevenson Dam downstream. Count V raises plaintiffs' rights to the preservation of the natural resources of Pennsylvania guaranteed under the Ninth Amendment of the Constitution of the United States. While Counts III and IV are more concerned with the technical pleadings of statutes and regulations, their import is clear, viz., unless the road relocation project is enjoined, injury in fact will occur to plaintiffs and, although not economic, sufficiently damaging to their interests as citizens, sportsmen and environmentalists. Thus, I find from the allegations made by plaintiffs that the dispute sought to be adjudicated is presented in an adversary context, capable of being judicially resolved.

Insofar as the second part of the two-pronged test is concerned, I find that the aesthetic, conservational and recreational interests sought to be protected by the plaintiffs are arguably within the zone of interests to be protected or regulated by the National Environmental Policy Act of 1969, the Federal-Aid Highway Act, 23 U.S.C. § 138, and the Department of Transportation Act, 49 U.S.C. § § 1651(b)(2) and 1653(f). The rule is that '* * * if the statutes involved in the controversy are concerned with the protection of natural, historic, and scenic resources, then a congressional intent exists to give standing to groups interested in these factors and who allege that these factors are not being properly considered by the agency.' Citizens Committee for Hudson Valley v. Volpe, 302 F.Supp. 1083 (S.D.N.Y.1969). See Scenic Hudson Preservation Conference v. F.P.C., 354 F.2d 608 (2d Cir.1965); Road Review League v. Boyd, 270 F.Supp. 650 (S.D.N.Y.1967). Here, a cursory examination of the National Environmental Policy Act, the Federal-Aid Highway Act, and the Department of Transportation Act, all of which are concerned with the protection of natural, historic and scenic resources, establishes the existence of a zone of interests that encompasses the individual plaintiffs and groups, such as the Pennsylvania Environmental Council, Inc., and the Allegheny Mountain Chapter of Trout Unlimited. Accordingly, I conclude that the plaintiffs are persons 'aggrieved by agency action within the meaning of a relevant statute' as those words are used in the Administrative Procedure Act, 5 U.S.C. § 702. Citizens Committee for Hudson Valley v. Volpe, supra; Powelton Civic Homeowners Assn. v. HUD, 284 F.Supp. 809 (E.D.Pa.1968). See Landis and Sugerman, Annual Survey of Legal Developments-- ***246** Civil Rights Law, XLI Pa. Bar Assn. Quarterly 268-274 (March, 1970).

Finally, I note that no evidence exists in any of the aforementioned acts which would indicate a Congressional intent to preclude judicial review of administrative rulings and decisions on road projects, such as the improvement of Route 872 in this case. City of Chicago v. United States, 396 U.S. 162, 164, 90 S.Ct. 309, 24 L.Ed.2d 340 (1969); Abbott Laboratories v. Gardner, 387 U.S. 136, 87 S.Ct. 1507, 18 L.Ed.2d 681 (1967).

II. LACHES

The Pennsylvania Secretary of Highways and the United States Secretary of Transportation have raised the equitable defense of laches in asserting that plaintiffs are not entitled to the injunctive relief sought. The plaintiffs object to the raising of this defense, contending that the defendants are estopped by their conduct from raising this defense. Of course,

since the United States Secretary of Transportation was never a party to plaintiffs' prior contacts with the Secretary of Highways, it cannot be successfully maintained that he is estopped in any manner from raising the issue of laches. The estoppel question with respect to the Secretary of Highways need not be decided, however, in view of the following determination on the existence of laches.

[2] Laches is determined in the light of all the existing circumstances and requires that the delay be unreasonable and cause prejudice to the adversary. Sobosle v. United States Steel Corp., 359 F.2d 7 (3d Cir.1966). The mere lapse of time is not sufficient to constitute laches. Ritter v. Rohm & Haas Co., 271 F.Supp. 313 (S.D.N.Y.1967). In the circumstances of this case, I cannot find with absolute certainty that the plaintiffs knowingly slept on their rights. Granted that suit was not begun by plaintiffs until ninety days after the awarding of the construction contracts, but this is not the kind of deliberate delay with which we are normally confronted in laches situations. Here, the Pennsylvania Environmental Council, Inc. was not incorporated as a non-profit corporation until January 30, 1970, and had its first organizational meeting on March 14, 1970. The present suit was instituted on March 31, 1970. Under these circumstances, there was no unreasonable delay on the part of the Pennsylvania Environmental Council, Inc. in bringing suit.

Moreover, the individual plaintiffs and the Allegheny Mountain Chapter of Trout Unlimited cannot absolutely be charged with unreasonable delay in bringing suit. The time delay, in fact, is considerably shortened when February 2, 1970, the first day of construction, is compared with the date of the institution of suit. Furthermore, there is simply no evidence of prejudice to the United States Secretary of Transportation or to the Secretary of Highways by whatever delay may have occurred in the filing of this suit. Accordingly, I conclude that the defense of laches cannot be sustained on the present record.

III. SOVEREIGN IMMUNITY OF PENNSYLVANIA SECRETARY OF HIGHWAYS

[3] The situation with respect to defendant Bartlett is precisely the same as that faced by J. Burch McMorran, Commissioner of the Department of Transportation of the State of New York, in Citizens Committee for Hudson Valley v. Volpe, 297 F.Supp. 809 (S.D.N.Y.1969). Both were named in their official capacities by conservationists and environmentalists challenging construction of the highways. As in that case, even though Bartlett is sued individually, relief can only realistically be granted against the State itself. In McMorran's case, the Court found that the Eleventh Amendment of the United States Constitution immunized him from suit since the State had not consented to suit or waived its sovereignty. For the reasons so well expressed by the Court in the Hudson Valley decision, I hold that plaintiffs are precluded from maintaining this action ***247** against Secretary Bartlett since it is in reality a suit against the Commonwealth of Pennsylvania to which it has not consented and which immunity it has not waived. Urbano v. Board of Managers, 415 F.2d 247 (3d Cir.1969); Harris v. Pennsylvania Turnpike Commission, 410 F.2d 1332 (3d Cir.1969); S. J. Groves & Sons Co. v. New Jersey Turnpike Authority, 268 F.Supp. 568 (D.N.J.1967). It is immaterial whether or not the doctrine of sovereign immunity could be raised by the Commonwealth if the Federal Government brought suit against it for wrongful disbursement of federal funds since this situation was expressly provided for in Article III, § 2 of the United States Constitution. E.g., United States v. California, 297 U.S. 175, 56 S.Ct. 421, 80 L.Ed. 567 (1936). Any analogy to the present case is therefore inapposite.

[4] It is argued by the contractors that since they are the instrumentalities of the Commonwealth in carrying out the road improvement of Route 872, they, too, are immune from suit under the doctrine of sovereign immunity. Reliance is placed on Valley Forge Gardens, Inc. v. James D. Morrissey, Inc., 385 Pa. 477, 123 A.2d 888 (1956). It is significant in this regard that in the Valley Forge decision the Pennsylvania Supreme Court noted that a contractor may not plead the State's immunity from suit, but may only be relieved from liability to third persons if the work is performed in accordance with the plans and specifications of the State and not negligently or willfully done in a tortious manner. It is also worthwhile to note that the Third Circuit has recently reiterated that the question of whether an agency or instrumentality is the alter ego of the State and immune from suit under the Eleventh Amendment is a question of Federal and not State law. Harris v. Pennsylvania Turnpike Commission, supra, at n. 3. The Pennsylvania Supreme Court decision in Valley Forge Gardens, Inc. v. James D. Morrissey, Inc., supra, however, is entitled to more than passing notice, as the Urbano and Harris cases recognize. Plaintiffs have not cited any authority to the contrary and merely rely on the 'federal question' doctrine to assert a claim against the contractors.

December 29, 1969, the date of the contract award, was the first occasion on which the defendant contractors became involved in the present dispute. They began work in the beginning of February, 1970, and had actually completed some grubbing and clearing of the land before suit was filed. There is no allegation that they are performing this work in any manner other than in accord with their contract with the State. As long as they do so, I perceive no substantial reason why they sould be deprived of sharing the immunity of the Commonwealth in accordance with the principles expressed by the Pennsylvania Supreme Court in Valley Forge Gardens, Inc. v. James D. Morrissey, Inc. supra, and by the United States Supreme Court in Yearsley v. W. A. Ross Construction Co., 309 U.S. 18, 60 S.Ct. 413, 84 L.Ed. 554 (1940). Accordingly, I conclude that the contractors are immune from this suit as instrumentalities of the Commonwealth under the Eleventh Amendment.

IV. RETROACTIVITY OF THE ENVIRONMENTAL POLICY ACT OF 1969

[5] The National Environmental Policy Act of 1969 was passed by the United States Senate on December 20, 1969, and the House of Representatives on December 22, 1969, and became effective on January 1, 1970. All of the planning for the improvement of Route 872 occurred prior to this time. The contract, in fact, was awarded on December 29, 1969. Thus, all that remained on January 1, 1970, was the actual construction of the improved Route 872. Should the National Environmental Policy Act of 1969 now be applied in a retroactive manner so as to hold the United States Secretary of Transportation to the principles enunciated therein?

'As the Court said in ***248**Union Pac. R. Co. v. Laramie Stock Yards Co., 231 U.S. 190, 199, 34 S.Ct. 101, 102, 58 L.Ed. 179, 'the first rule of construction is that legislation must be considered as addressed to the future, not to the past * * * (and) a retrospective operation will not be given to a statute which interferes with antecedent rights * * * unless such be 'the unequivocal and inflexible import of the terms, and the manifest intention of the legislature.'" Greene v. United States, 376 U.S. 149, 160, 84 S.Ct. 615, 621, 11 L.Ed.2d 576 (1964). Plaintiffs rely on Texas Committee on Natural Resources v. United States, Civ. No. A-69-CA-119 (W.D.Tex., February 5, 1970), for the proposition that the National Environmental Policy Act of 1969 should be applied retroactively. In that case, the Court had occasion to discuss the Act while ruling on plaintiffs' motion for a stay order pending appeal to the Fifth Circuit Court of Appeals pursuant to Fed.R.App.P. 8(a). It is significant that the Court did not reach the issue of the retroactivity of the Act, but merely confined itself to deciding whether the application of the Act to the case before the Court would be a retroactive application. It was held that the stay should be granted since the plaintiffs had a reasonable chance of success on appeal in presenting the argument that the Federal Housing Administration may be able to comply with the Act since no money had yet been expended and since no construction had yet begun. In this case, construction has already begun, although it is conceded that the Federal Government has not paid out any money to the Commonwealth. Thus, in at least one respect, the present case is factually distinguishable from Texas Committee on Natural Resources v. United States, supra, and in no respect is that decision determinative of the retroactivity issue of the National Environmental Policy Act of 1969.

In my opinion, the most reasonable interpretation that can be given to the legislative history of the Act is that there is no manifest Congressional intention or unequivocal and inflexible import in the language used to indicate that the Act should be applied retroactively. See, 2 U.S.Code Cong. & Ad.News, pp. 2751-2773 (1969). Indeed, if the language of the Act favors any position, it most likely favors non-retroactivity. For instance, the use by Congress of the phrases 'to use all practicable means and measures' and 'to the fullest extent possible' in Sections 101 and 102 of the Act appears to indicate a moderate, flexible and pragmatic approach to the immediate application of the Act. These phrases are hardly of the type which would evidence a retroactive intent. Accordingly, I conclude that the National Environmental Policy Act of 1969 was not designed by Congress to be given retroactive application. Since the contract here in question was awarded and finalized prior to the Act's passage, no violation of the Act occurred on the part of the Secretary of Transportation.

V. THE APPLICATION OF THE NATIONAL ENVIRONMENTAL POLICY ACT

[6] Assuming arguendo, that retroactive application of the National Environmental Policy Act of 1969 is necessary and that the defense of Governmental Immunity is not applicable here, we will proceed to discuss this case on its merits. The Act, made effective January 1, 1970, declared:

'a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.' 42 U.S.C. § 4321 (Supp. I, 1970) This Statute properly demonstrates Governmental concern over the damage that man has inflicted, and continues to inflict, on the environment. To implement the broad policy enunciated in the Act, Title I of the Act proclaimed it to be ***249** 'the continuing responsibility of the Federal Government to use all practicable means, consistent with other essential considerations of national policy, to improve and coordinate Federal plans, functions, programs, and resources * * *' in order to attain the numerous objectives outlined in the Act, such as assuring '* * * for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings * * *.' Further, Congress authorized and directed '* * * that, to the fullest extent possible: (1) the policies, regulations, and public laws of the United States shall be interpreted and administered in accordance with the policies set forth in this Act * * *.'

Specifically, plaintiffs assert that the Secretary of Transportation approved the Pennsylvania Highways Department application filed under 23 U.S.C. § 117, relying on various certificates which were submitted to him, and did not make an independent and affirmative determination of the effect of this project on the environment. According to plaintiffs, the Secretary, in failing to make such a determination, violated his statutory responsibility 'to use all practicable means' to protect the environment. The evidence in this case indicates that the Secretary of Transportation does not make an independent study of plans for secondary highways, but delegates that responsibility to the State Highways Department pursuant to 23 U.S.C. § 117(a), which provides:

'(a) The Secretary may, upon the request of any State highway department, discharge his responsibility relative to the plans, specifications, estimates, surveys, contract awards, design, inspection, and construction of all projects on the Federal-aid secondary system by his receiving and approving a certified statement by the State highway department setting forth that the plans, design, and construction for each such project are in accord with those standards and procedures which (1) were adopted by such State highway department, (2) were applicable to projects in this category, and (3) were approved by him.'

Melvin J. Deale, District Engineer for the United States Department of Transportation, testified that the required certificates under 23 U.S.C. 117(a) were submitted to his Department by the Pennsylvania Secretary of Highways together with the concurrence, with recommendations, of the Pennsylvania Fish Commission as to the stream encroachment. A requirement that the Secretary of Transportation must make independent and affirmative evaluations of all phases of the multitude of State secondary highway projects relative to their impact on the environment not only would place a staggering burden on the Secretary, but also would cause him to duplicate State investigations and determinations. The purpose of the National Environmental Policy Act of 1969 is laudatory and urgently necessary, but I am satisfied that Congress did not intend it to necessitate Secretarial action of the import urged by plaintiffs.

VI. THE FEDERAL-AID HIGHWAY ACT

[7] Title 23 U.S.C. § 138 provides as follows:

'It is hereby declared to be the national policy that special effort should be made to preserve the natural beauty of the countryside and public park and recreation lands, wildlife and waterfowl refuges, and historic sites. The Secretary of Transportation shall cooperate and consult with the Secretaries of the Interior, Housing and Urban Development and Agriculture, and with the States in developing transportation plans and programs that include measures to maintain or enhance the natural beauty of the lands traversed. After the effective date of the Federal-Aid Highway Act of 1968, the Secretary shall not approve any program or project which requires the use of any publicly owned land from a public park, recreation area, or wildlife and waterfowl refuge of national, State, or local significance ***250** as determined by the Federal, State, or local officials having jurisdiction thereof, or any land from an historic site of national, State, or local significance as so determined by such officials unless (1) there is no feasible and prudent alternative to the use of such land, and (2) such program includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use.' [FN6]

FN6. The portions of the Department of Transportation Act relied upon by plaintiffs

at oral argument, 49 U.S.C. § § 1651(b)(2) and 1653(f), although not listed under any of the five Counts of their complaint, are substantially similar to 23 U.S.C. § 138 and thus will not be separately discussed.

Plaintiffs contend that the use of clear-span bridges across the Sinnemahoning Creek is a feasible and prudent alternative to the stream encroachment plan as finally designed, basing this conclusion on Mr. Bobanick's testimony that this alternative is engineeringly feasible and would have less impact on the stream. Interestingly enough, this alternative is not mentioned in plaintiffs' complaint and departs from their specific request for relief that the Pennsylvania Highways Secretary be ordered to upgrade and repair the existing roadbed of Route 872. Another immediate impression is that the alternative suggested would also involve the use of public recreation lands on the East side of the streambed, which would not appear to be the type of alternative contemplated under this section. Nevertheless, it must be pointed out that Mr. Bobanick stated that the bridge plan would also affect the Sinnemahoning Creek since the embankment construction on the easterly side would bring about a constriction of the flood channel. The erection of two clear-span bridges would also be more expensive and, according to Dr. Maurice K. Goddard, may be just as detrimental to the stream as the proposed plan. Mr. Bielo similarly preferred the project as planned, stating that two additional bridges would involve about the same amount of stream disturbance and expressing concern that a proper discharge of water could not be accommodated under these bridges. Plaintiffs' assertion that the clear-span bridges proposal is a feasible and prudent alternative is speculative and uncertain and is not buttressed by competent, expert opinion testimony. Consequently, the evidence does not support a finding that the alternative plan, as belatedly suggested by plaintiffs, is a feasible and prudent one or that the Secretary of Transportation failed to comply with Section 138 of Title 23 of the United States Code. Accordingly, I am unable to find that a violation of either the Federal-Aid Highway Act or the Department of Transportation Act has occurred as a result of the Secretary of Transportation's approval of the plans for the improvement of Route 872.

VII. NOTICE PROVISIONS OF INSTRUCTIONAL MEMORANDUM OF THE BUREAU OF PUBLIC ROADS DATED MAY 12, 1963

[8][9] The Instructional Memorandum concerns itself with affording protection of fish and wildlife resources in the locating, planning, designing and construction of Federal-Aid highway projects and directs the State Highways Department to '(a) submit programs of proposed Federal-aid highway projects to the State fish and game agencies at an early stage with a request that the fish and game agencies indicate those projects of interest; (b) furnish notice of public hearings, where required by Section 128 of Title 23, United States Code, to the fish and game agencies; and (c) adopt such other methods as will afford the State fish and game agency full opportunity to study and make recommendations to the State highway department concerning the proposed project prior to its submission by the State to the Secretary.' Plaintiffs contend that (a) the programs were not submitted to the State fish and game agencies 'at an early stage'; (b) notice of public ***251** hearings to such agencies was not given, and (c) full opportunity to study and make recommendations was not given prior to submission of the proposed project by the Commonwealth to the Secretary of Transportation. As to (a), Mr. Bielo testified that he did not receive the plans on behalf of the Fish Commission in time to make needed changes, but he also complained that he cannot make a competent review with the limited engineering manpower available to him. However, the record is replete with conferences, recommendations and changes in plans because of requests from the Fish Commission and the Department of Forests and Waters. It is true that the channel relocation had been decided upon by the Highways Department before plans were submitted to the Fish Commission and the Department of Forests and Waters, but both agencies are on record as favoring the present construction plan on the basis that it will not present a serious conflict in terms of the fishing aspects of the stream. The record will also show that a great deal of consultation occurred between Highways Department representatives and Agency officials prior to the submission of the proposed project to the Secretary of Transportation on November 6, 1969. Furthermore, although final design plans were submitted to the Fish Commission in September, 1968, its recommendation in May, 1969, that the proposed 2300-foot corridor be eliminated was accepted by the Highways Department and incorporated in the plans. It would be hoped that closer cooperation would be forthcoming among the State agencies involved, but under the circumstances of this case, I find no violation of the Instructional Memorandum. Finally, plaintiffs' position that notice requirements were not

complied with is untenable for four reasons: (1) notice was published May 8 and May 15, 1967, in the Potter Enterprise; (2) Mr. Bielo testified that he was furnished with notices of public hearings; (3) the regulation relied on by plaintiffs, 23 C.F.R. Part 1, Appendix 1, by its terms did not become effective until January 29, 1969, a year and a half subsequent to the publication of the notices in the Potter Enterprise, and (4) assuming the applicability of 23 C.F.R. Part 1, Appendix 1, there is no evidence in this record indicating noncompliance with its terms.

Defendants argue further that the Instructional Memorandum is not an agency rule or regulation that has the force of law inasmuch as it was not published in the Federal Register, but because of our disposition of the main question, we do not reach this issue. See generally, 5 U.S.C. § 552.

VIII. CONSTRUCTION OF A DIKE ON A NAVIGABLE WATERWAY IN VIOLATION OF THE RIVERS AND HARBORS ACT of 1899, 33 U.S.C. 401

The Rivers and Harbors Act of 1899 provides, in pertinent part:

'It shall not be lawful to construct or commence the construction of any bridge, dam, dike, or causeway over or in any port, roadstead, haven, harbor, canal, navigable river, or other navigable water of the United States until the consent of Congress to the building of such structures shall have been obtained and until the plans for the same shall been submitted to and approved by the Chief of Engineers and by the Secretary of the Army: * * *.' 33 U.S.C. § 401. [FN7]

> FN7. Since no bridge across the Sinnemahoning Creek is involved in the improvement of Route 872, the General Bridge Act, 33 U.S.C. § 525 et seq., is inapplicable to this case.

Defendants challenge any contention that the channel encroachment constitutes a 'dike' within the contemplation of Section 401 or that the Sinnemahoning Creek qualifies as a 'navigable river, or other navigable water of the United States'.

It is unnecessary to reach the issue as to what Congress intended when it included the term 'dike' in the same context ***252** with 'bridge, dam, * * * or causeway * * *', but see Citizens Committee for Hudson Valley v. Volpe, 302 F.Supp. at 1088-1089, because I think it is apparent that the First Fork of the Sinnemahoning Creek does not qualify as a navigable river or other navigable water of the United States. Plaintiffs bottom their navigability claim on a Pennsylvania Statute, the Act of May 21, 1874, P.L. 299, which allegedly designates the First Fork as a 'public highway' and the testimony of James Sproull that on April 19, 1970, he and two others paddled two kayak-type canoes on the Creek for a distance of 9 to 10 miles. He admitted scraping bottom on occasion, but stated that portions of his trip could have been navigated with an outboard motor.

[10][11] In considering the question of navigability, we must start with the test announced in The Daniel Ball, 10 Wall. 557, 19 L.Ed. 999 (1870):

'Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water. And they constitute navigable waters of the United States within the meaning of the acts of Congress, in contradistinction from the navigable waters of the States, when they form in their ordinary condition by themselves, or by uniting with other waters, a continued highway over which commerce is or may be carried on with other States or foreign countries in the customary modes in which such commerce is conducted by water.'

Further, navigability does not depend on the particular mode in which such use is or may be had--whether by steamboats, sailing vessels or flatboats--nor on an absence of occasional difficulties in navigation, but on the fact, if it be a fact, that the stream in its natural and ordinary condition affords a channel for useful commerce. United States v. Holt State Bank, 270 U.S. 49, 46 S.Ct. 197, 70 L.Ed. 465 (1926). It is not, however, '* * * every creek in which a fishing skiff or gunning canoe can be made to float at high water which is deemed navigable, but, in order to give it the character of a navigable stream, it must be generally and commonly useful to some purpose of trade or agriculture.' The Montello, 20 Wall. 430, 442, 22 L.Ed. 391 (1874). The test of The Daniel Ball was refined in United States v. Appalachian Electric Power Co., 311 U.S. 377, 61 S.Ct. 291, 85 L.Ed. 243 (1940), so that navigability would not be confined only to a consideration of the

natural condition of the waterway, but would also involve the consideration of 'feasibility of interstate use after reasonable improvements which might be made.' 311 U.S. at 409, 61 S.Ct. at 300. A recent well-reasoned Court opinion holds that a stream is navigable if (1) it presently is being used or is suitable for use, or (2) it has been used or was suitable for use in the past, or (3) it could be made suitable for use in the future by reasonable improvements. Rochester Gas and Electric Corp. v. F.P.C., 344 F.2d 594 (2d Cir. 1965). 'Although the rule on navigability has been at times liberalized, * * * none of the authoritative cases has liberalized the rule so as to indicate that mere pleasure fishing on a stream of water is such usage as would constitute navigability.' George v. Beavark, Inc., 402 F.2d 977 (8th Cir. 1968). A review of the cases on this particular issue reveals a much more extensive potential use of the stream, either commercial or private, than has been shown here. Furthermore, the testimony is persuasive that in the summer months the low level of the stream would even preclude the use of canoes in the First Fork area. As a matter of fact, Earl R. Hooftallen, who lives in the region of the First Fork, testified that in July and August he can '* * * walk across the stream in my sneakers without getting my feet wet'. ***253** With reference to the purpose of the Act of 1874, Dr. Maurice K. Goddard testified that the First Fork was statutorily declared a public highway merely to allow for the floating of logs downstream from a logging operation and not as a determination of navigability. Even so, a holding of navigability under State law is not determinative of navigability under Federal law. State of Wisconsin v. F.P.C., 214 F.2d 334 (7th Cir. 1954). As was observed in George v. Beavark, Inc., supra, 402 F.2d at 979: 'Such pastime (float fishing), however, standing alone is too fragile a basis to support a holding of legal navigability, absent any evidence of a channel of useful purpose to trade or commerce.' Consequently, I conclude that the First Fork of the Sinnemahoning Creek is not a navigable river of other navigable water of the United States, as those terms are used in the Rivers and Harbors Act of 1899, 33 U.S.C. § 401.

Accordingly, after reviewing all of the evidence, I make the following

CONCLUSIONS OF LAW

1. The Court has jurisdiction of the parties and the subject matter.

2. Plaintiffs have standing to maintain this suit.

3. Plaintiffs are not barred from maintaining this suit by laches.

4. The Pennsylvania Secretary of Highways is immune from this suit under the Eleventh Amendment of the United States Constitution.

5. The defendant contractors are immune from this suit as instrumentalities of the Commonwealth of Pennsylvania.

6. The National Environmental Act of 1969 was not intended by Congress to be retroactive legislation.

[12] 7. Assuming that it was so intended, the provisions of the National Environmental Act of 1969 were not violated by the United States Secretary of Transportation or the Pennsylvania Secretary of Highways.

8. The United States Secretary of Transportation did not violate the provisions of the Federal-Aid Highway Act or the Department of Transportation Act when he approved the Commonwealth's plan for Route 872 in the Sinnemahoning Creek Valley.

9. The United States Secretary of Transportation and the Pennsylvania Secretary of Highways did not violate the Instructional Memorandum of the Bureau of Public Roads, Department of Commerce, dated May 21, 1963, or 23 C.F.R. Part 1, Appendix 1.

10. The Rivers and Harbors Act of 1899 was not violated by the Commonwealth's plains for Route 872 in the Sinnemahoning Creek Valley, which were approved by the United States Secretary of Transportation, since the First Fork of the Sinnemahoning Creek is not a navigable waterway.

11. Plaintiffs are not entitled to injunctive relief.

12. Plaintiffs' complaint is dismissed.

315 F.Supp. 238, 1 ERC 1271

END OF DOCUMENT

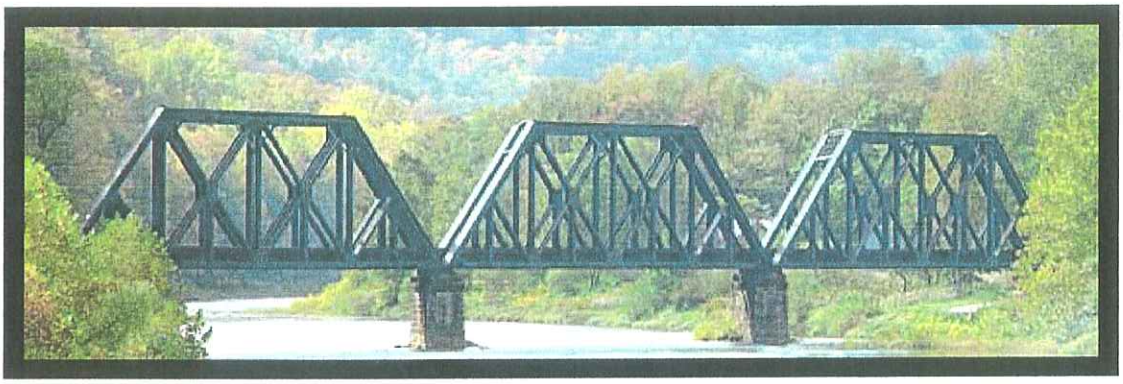
ADDITIONAL INFORMATION

"A personal web page could serve just about any purpose. This one serves mine."
-the Venango County Ambassador to the World explaining the significance of his web site

Disappearing Bridges Menu:
Allegheny River Oil Creek French Creek Clarion River Venango County
Crawford County Bridges Here and There Ohio Links What Can I Do?
Disappearing Bridges Home

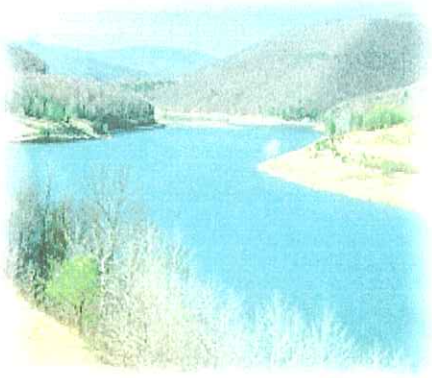
Bridges Here And There Menu:
Benezette 3 Span Benezette Pony Brokenstraw Airport
Bryner's Mill Road Butler PA 68 Carrollton Railroad Cedar Run
Chappel Hill Road Clearfield Market Street Clearfield RR
Conneautee Road Dotyville Hill Road Edinboro Old Mill
Emporium Driftwood Emporium North Emporium Portage Flat Road
Fort Pitt Grant Greenville Porter Road Greenville Williamson Road
Hilborn Jamestown Railroad Pair Jersey Mills Kinzua Creek Highway 59
Kinzua Viaduct Lynch Nebraska Oswayo Bryant Hollow
Oswayo Depot Street Oswayo Toad Hollow Paint Creek Trestle Pittsfield
Sheffield Sinnemahoning RR South Fork Pine Creek Tunungwant Creek
US 6N Westfield Wykoff Run Road Bridges Here And There Home

Railroad Bridge Over Sinnemahoning Creek At Sinnemahoning, Cameron County, PA



Seen From Wykoff Run Road Bridge
photo copyright © 2002 Daniel Alward

1902 Date Carved In Northern Abutment



Water Resources

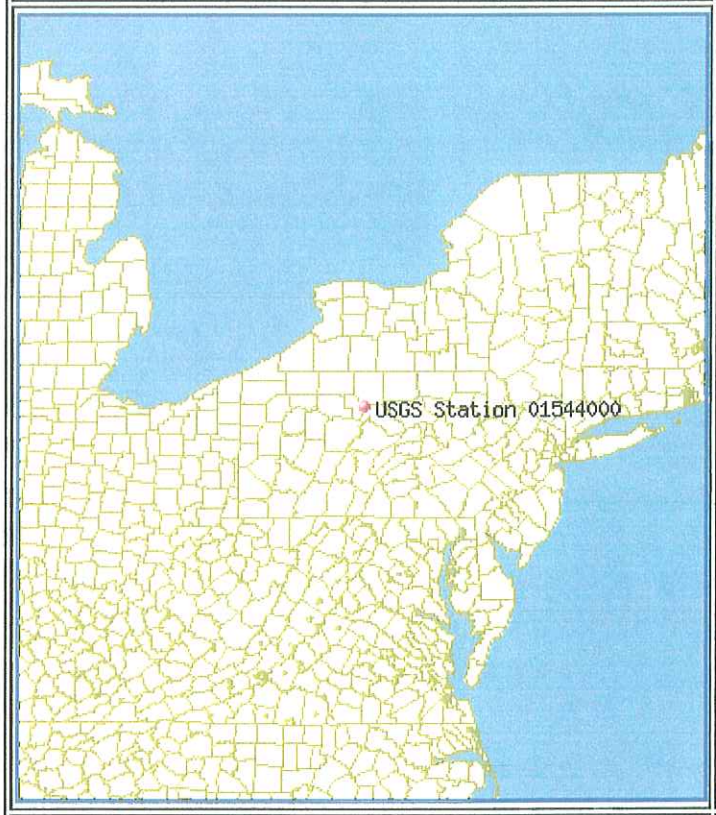
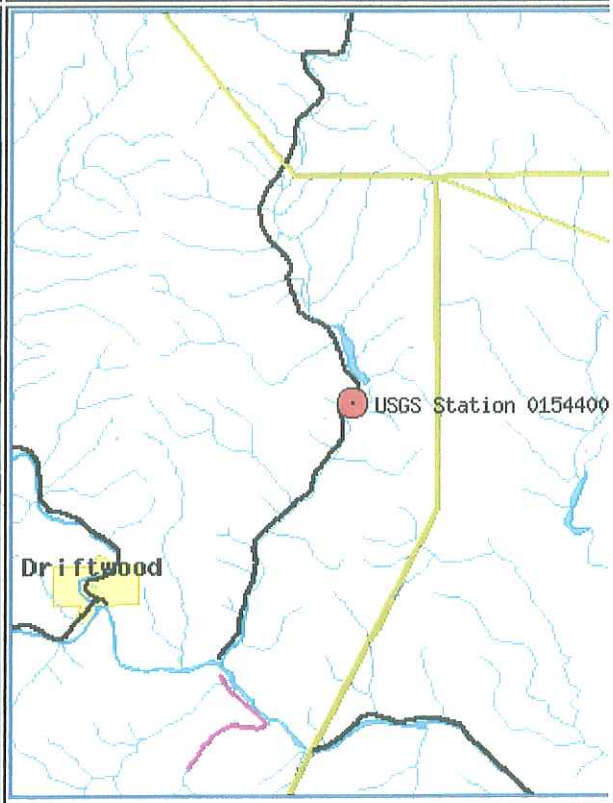
Data Category: Site Information | Geographic Area: Pennsylvania | GO

Site Map for Pennsylvania

USGS 01544000 First Fork Sinnemahoning Cr near Sinnemahoning, PA

Available data for this site: Station site map | GO

Cameron County, Pennsylvania
Hydrologic Unit Code 02050202
Latitude 41°24'06", Longitude 78°01'28" NAD27
Drainage area 245.00 square miles
Gage datum 878.71 feet above sea level NGVD29

Location of the site in Pennsylvania.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-pa_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-pa_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Pennsylvania: Site Map

Water Resources

Data Category: Surface Water | Geographic Area: Pennsylvania | GO

Calendar Year Streamflow Statistics for Pennsylvania

USGS 01544000 First Fork Sinnemahoning Cr near Sinnemahoning, PA

Available data for this site: Surface-water: Annual streamflow statistics | GO

Cameron County, Pennsylvania
Hydrologic Unit Code 02050202
Latitude 41°24'06", Longitude 78°01'28" NAD27
Drainage area 245.00 square miles
Gage datum 878.71 feet above sea level NGVD29

Output formats

HTML table of all data
Tab-separated data
Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1954	367	1966	325	1978	396	1990	546
1955	414	1967	407	1979	509	1991	254
1956	486	1968	304	1980	299	1992	516
1957	299	1969	303	1981	450	1993	523
1958	375	1970	495	1982	375	1994	556
1959	411	1971	321	1983	353	1995	334
1960	313	1972	587	1984	543	1996	623
1961	343	1973	481	1985	372	1997	373
1962	270	1974	484	1986	434	1998	311
1963	268	1975	504	1987	358	1999	286
1964	323	1976	365	1988	277	2000	343
1965	304	1977	568	1989	407		

White River—Arkansas

Reported Decision: George v. Beavark, Inc., 402 F.2d 977 (8th Cir. 1968)

Reach at Issue: Stretch near Beaver Lake

Judicial Determination: Non-navigable

Facts Reported in Decision:

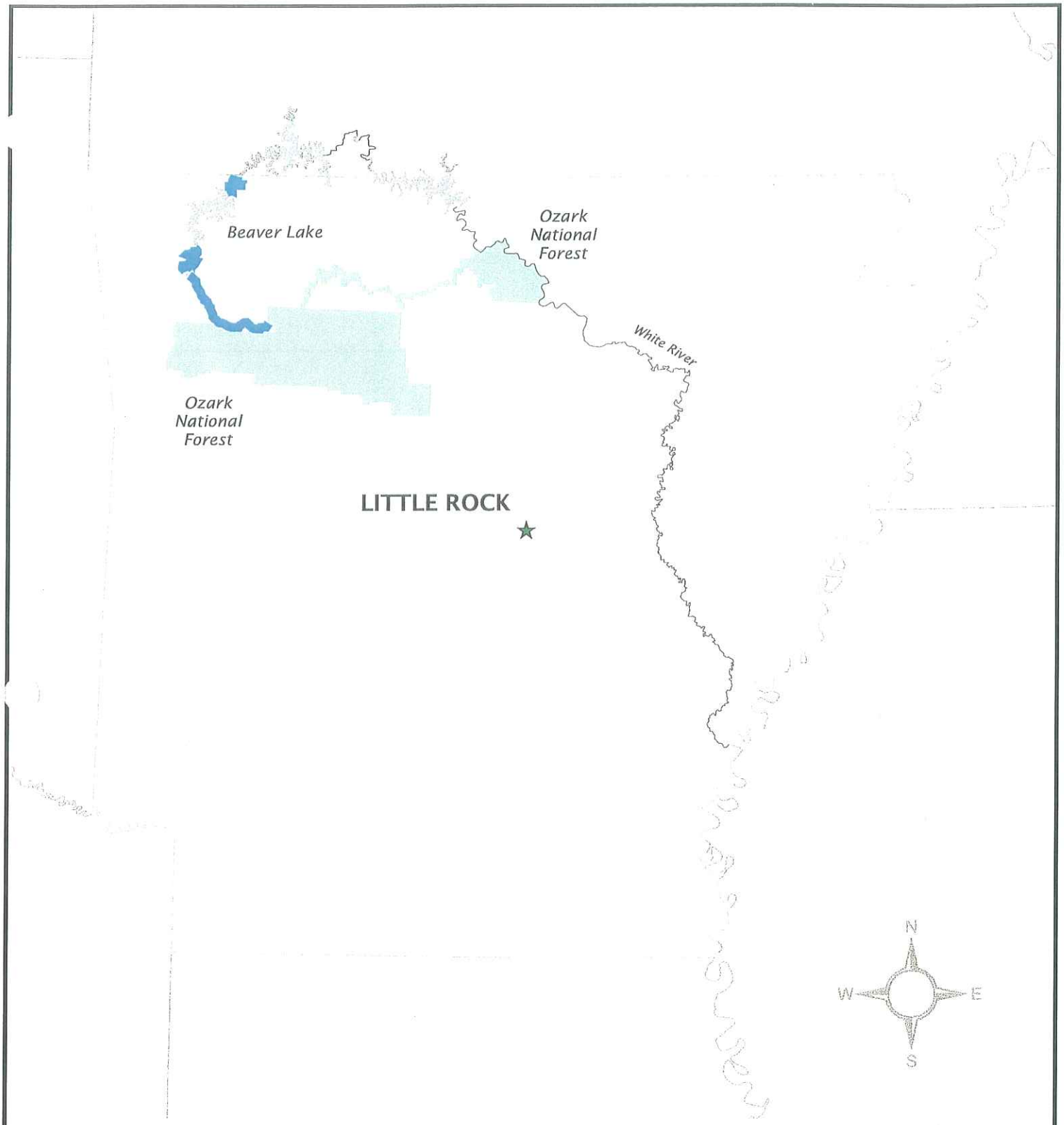
"Aside from the answers to the interrogatories, the evidence was elicited from fishing guides who each testified that at times he took parties during the fishing season on float trips lasting from one to seven days. They used what were described as old John or old river boats which were of light draft and flat bottomed, usually for 16 to 18 feet long, which would accommodate the guide and two persons and their gear. Of necessity this type boat was used because the river consisted of slow-moving deep holes interspersed by shallow water and shoals and, in fact, was negotiable only by these flat bottomed boats with a draw of from two to at most six inches of water, depending upon the load. No motors were used on the boats and while the guides would paddle over most of the shoals the stream was not such that a modern motor-propelled ski boat could be operated upon it. There is no history of the stream's being used commercially for hauling passengers or goods and no barges were ever seen on the river. The guides, of course, knew where the rapids and shoals were. Customarily, if the trip was an overnight one the fishing party would camp out on a gravel bar and in case of bad weather would sometimes erect a tent. There were also locations along the river where the float party could stop and be met by a car and trailer, enabling them to spend the night with more comfortable accommodations than on the river bank. If the trip continued, they would return and float the following day." 402 F.2d at 979.

"There was no showing or claim that persons or regional products were ever transported commercially upon the river. Float fishing is nothing more than pleasure fishing and is conducted in much the same manner as game fishing in most any lake or stream, the main difference being that in a stream such as this a guide is necessary to negotiate the shoals, and the use of motorless flat bottomed boats such as described is necessary." 402 F.2d at 979.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Fayetteville, AR	563	1964-1993



White River - Arkansas

REPORTED DECISION

▷

United States Court of Appeals Eighth Circuit.

Luther GEORGE and Wife, Helen George, Appellants,
v.
BEAVARK, INC., and James Cypert, Appellees.

No. 19175.

Nov. 12, 1968.

Proceeding on petition by vessel owners in admiralty for a limitation of liability. The United States District Court for the Western District of Arkansas, John E. Miller, Senior District Judge, 275 F.Supp. 403, entered judgment denying petition and the petitioners appealed. The Court of Appeals, Mehaffy, Circuit Judge, held that the conducting of float fishing trips on river in flat bottom boats which drew only two to six inches of water did not constitute such commerce and transportation as to characterize stream as navigable.

Affirmed.

West Headnotes

[1] **Shipping** 203
354k203 Most Cited Cases

Purpose of statutes providing for limitation of shipowner's liability was to strengthen maritime industry in United States so that it could better meet foreign competition and encourage development of a strong merchant marine fleet. 46 U.S.C.A. § 185.

[2] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

If river was navigable prior to construction of dam, it continues to be considered as navigable stream.

[3] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

The conducting of float fishing trips on river in flat bottom boats which drew only two to six inches of water did not constitute such commerce and transportation as to characterize stream as navigable.

[4] **Navigable Waters** 1(1)
270k1(1) Most Cited Cases

Mere pleasure fishing does not constitute a stream navigable in fact when it has always been susceptible for use only for this purpose.

[5] **Navigable Waters** 1(7)
270k1(7) Most Cited Cases

Actions by Corps of Engineers reflecting opinion that stream was nonnavigable was not dispositive of issue but was not without significance.

*977 Owen C. Pearce, Fort Smith, Ark., for appellants; David A. Stewart, Fort Smith, Ark., and Thomas R. Fox, Dallas, Tex., on the brief.

James W. Gallman, Fayetteville, Ark., for appellees; E. J. Ball, Fayetteville, Ark., and James Cypert, in pro. per., on the brief.

*978 Before MATTHES, MEHAFFY and HEANEY, Circuit Judges.

MEHAFFY, Circuit Judge.

[1] Luther George and Helen George, his wife, petitioned in the United States District Court for the Western District of Arkansas in admiralty for limitation of their liabilities under 46 U.S.C.A. § 185 and related federal statutes. [FN1]

FN1. 46 U.S.C.A. § 185 provides:
'The vessel owner, within six months after a claimant shall have given to or filed with such owner written notice of claim, may petition a district court of the United States of competent jurisdiction for limitation of liability within the provisions of this chapter and the owner (a) shall deposit with the court, for the benefit of claimants, a sum equal to the amount or value of the interest of such owner in the vessel and freight, or approved security therefor, and in addition such sums, or approved security therefor, as the court may from time to time fix as necessary to carry out the provisions of section 183 of this title, or (b) at his option shall transfer, for the benefit of claimants, to a trustee to be appointed by the court his interest in the vessel and freight, together with such sums, or approved security therefor, as the court may from time to time fix as necessary to carry out the provisions

> of section 183 of this title. Upon compliance with the requirements of this section all claims and proceedings against the owner with respect to the matter in question shall cease.'
>
> The purpose of this type of legislation, which in a sense is a subsidy, was to strengthen the maritime industry in the United States so that it could better meet foreign competition and encourage the development of a strong merchant marine fleet. Perhaps no need presently exists for such statutes but so long as Congress sees fit to retain the statutes it is the courts' duty to observe them.

Petitioners were the owners of a 38-foot-long boat, the RIVER QUEEN, which was moored at the Hickory Creek Boat Dock on Beaver Lake, a man-made lake formed by the building of a dam on the upper reaches of the White River in Northwest arkansas. The river in that area flows north from Beaver Lake in Arkansas across the Missouri line and then curls back into Arkansas. In the early morning of March 26, 1967, fire broke out on the RIVER QUEEN, virtually destroying it, and damaging the boat dock and other boats moored in adjacent slips of the dock.

By this petition in admiralty, petitioners seek to use the federal statutes to limit their liability to $510.00, the salvage value of the RIVER QUEEN.

[2] If the river was navigable prior to construction of the dam, it continues to be considered as a navigable stream. United States v. Appalachian Elec. Power Co., 311 U.S. 377, 408, 61 S.Ct. 291, 85 L.Ed. 243 (1940); Economy Light & Power Co. v. United States, 256 U.S. 113, 118, 41 S.Ct. 409, 65 L.Ed. 847 (1921).

[3] The sole issue on this appeal is whether 'float fishing' constitutes such commerce and transportation as to characterize the stream as navigable, thus affording petitioners the advantages of the federal statutes above referred to. As stated in petitioners' brief:

'We have made no claim in this case that White River has been navigated, and that commerce and transportation have existed on White River, in a manner comparable to that on the larger rivers of the country. We have claimed merely that there has been at least one significant type of commerce and transportation, namely float fishing. Actually, in this Record there is a suggestion of two other types of commerce and transportation, namely the floating of staves or logs (R. 42-43), and the business of trapping fur-bearing animals (R. 44); but the Record does not show them to be significant.'

The case was tried to the district court upon answers to interrogatories, live testimony and stipulated evidence. The Honorable John E. Miller, a distinguished and experienced senior district judge, in a very thorough opinion published in 275 F.Supp. 403 under the title of In re River Queen dismissed the petition for lack of jurisdiction, and we affirm.

***979** There is little or no factual dispute. Petitioners had leased dock space under an oral contract and after occurrence of the fire collected the insurance carried on the RIVER QUEEN and bought the salvage for the net sum of $510.00. Aside from the answers to the interrogatories, the evidence was elicited from fishing guides who each testified that at times he took parties during the fishing season on float trips lasting from one to seven days. They used what were described as old John or old river boats which were of light draft and flat bottomed, usually from 16 to 18 feet long, which would accommodate the guide and two persons and their gear. Of necessity this type boat was used because the river consisted of slow-moving deep holes interspersed by shallow water and shoals and, in fact, was negotiable only by these flat bottomed boats with a draw of from two to at most six inches of water, depending upon the load. No motors were used on the boats and while the guides would paddle over most of the shoals the stream was not such that a modern motor-propelled ski boat could be operated upon it. There is no history of the stream's being used commercially for hauling passengers or goods and no barges were ever seen on the river. The guides, of course, knew where the rapids and shoals were. Customarily, if the trip was an overnight one the fishing party would camp out on a gravel bar and in case of bad weather would sometimes erect a tent. There were also locations along the river where the float party could stop and be met by a car and trailer, enabling them to spend the night with more comfortable accommodations than on the river bank. If the trip continued, they could return and float the following day. They would eventually be met by someone in a car with a trailer or have one stationed where they knew they were going to put in and have need for it. There was no showing or claim that persons or regional products were ever transported commercially upon the river. Float fishing is nothing more than pleasure fishing and is conducted in much the same manner as game fishing in most any lake or

stream, the main difference being that in a stream such as this a guide is necessary to negotiate the shoals, and the use of motorless flat bottomed boats such as described is necessary. Float fishing in this area is popular as it lends itself to a pleasurable as well as scenic adventure. Such pastime, however, standing alone is too fragile a basis to support a holding of legal navigability, absent any evidence of a channel of useful purpose to trade or commerce.

From time to time our admiralty laws have been liberalized to accommodate the needs and growth of our country. Always, however, there has existed a pragmatic reason which is nonexistent in the situation here. Originally, it was held, based on English common law, that admiralty jurisdiction was limited to navigable waters within the ebb and flow of the tide. The Steamboat Thomas Jefferson, 23 U.S. (10 Wheat.) 428, 6 L.Ed. 328 (1825). This rule, however, was abandoned in The Propeller Genesee Chief v. Fitzhugh, 53 U.S. (12 How.) 443, 13 L.Ed. 1058 (1851), where it was held that jurisdiction depended upon the navigable character of the water and not upon the ebb and flow of the tide. In the landmark case of The Daniel Ball, 77 U.S. (10 Wall.) 557, 19 L.Ed. 999 (1870), it was ruled that rivers are regarded as public navigable rivers in law which are navigable in fact, and that rivers are navigable in fact when they are used or susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water. The rule was further liberalized in The Montello, 87 U.S. (20 Wall.) 430, 22 L.Ed. 391 (1874), to include rivers difficult to navigate because of obstructions, and this case placed emphasis upon the past history of rivers rather than the present nonnavigability and held that navigability does not depend upon the mode by which commerce is conducted upon it. ***980** it is significant, however, to note that the court in this case stated at page 442:

'It is not, however, as Chief Justice Shaw said, (Rowe v. Bridge Co., 21 Pickering, Mass., 344) 'every small creek in which a fishing skiff or gunning canoe can be made to float at high water which is deemed navigable, but, in order to give it the character of a navigable stream, it must be generally and commonly useful to some purpose of trade or agriculture."

There is no real problem in arriving at a general definition of navigable waters. Petitioners cite the definition found in Guinn, an Analysis of Navigable Waters of the United States, 18 Baylor L.Rev. 559 (1966). [FN2]

FN2. Professor Guinn defines the rule for admiralty purposes at pages 577-578 as follows:
'In reliance upon these cases, perhaps one could properly declare the rule of navigability for admiralty purposes to be: Those rivers, streams and lakes must be regarded as public navigable waters in law which are navigable in fact. They are navigable in fact when they are used or have been used in the past, or are susceptible of being used in the future, in their ordinary or improved condition (provided need and cost justify its improvement) as highways for commerce or transportation over which trade and travel are or may be conducted in the customary modes of trade and travel on water. The true criterion is capability of use, however difficult, by the public for purposes of transportation and commerce, and the mode by which transportation or commerce is conducted is of no import, whether by steamer, sailing vessel or canoe. The waterway may be artificial if all other basic criteria are met. Waters constitute navigable waters of the United States in contradistinction from the navigable waters of the states, when they form in their ordinary or improved condition by themselves or by uniting with other waters, a continued highway over which commerce is or may be carried on with other states or foreign countries.'

The Supreme Court has often defined the test for navigability. In United States v. State of Utah, 283 U.S. 64, at page 76, 51 S.Ct. 438, 441, 75 L.Ed. 844 (1931), the Court expressed itself as follows:

'The test of navigability has frequently been stated by this Court. In The Daniel Ball, 10 Wall. 557, 563 (19L.Ed. 999,) the Court said: 'Those rivers must be regarded as public navigable rivers in law which are navigable in fact. And they are navigable in fact when they are used, or are susceptible of being used, in their ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water.' In The Montello, 20 Wall. 430, 441, 442, (22 L.Ed. 391) it was pointed out that 'the true test of the navigability of a stream does not depend on the mode by which commerce is, or may be, conducted, nor the difficulties attending navigation,' and that 'it

would be a narrow rule to hold that in this country, unless a river was capable of being navigated by steam or sail vessels, it could not be treated as a public highway.' The principles thus laid down have recently been restated in United States v. Holt State Bank, 270 U.S. 49, 56, (46 S.Ct. 197, 70 L.Ed. 465) where the Court said: 'The rule long since approved by this Court in applying the Constitution and laws of the United States is that streams or lakes which are navigable in fact must be regarded as navigable in law; that they are navigable in fact when they are used, or are susceptible of being used, in their natural and ordinary condition, as highways for commerce, over which trade and travel are or may be conducted in the customary modes of trade and travel on water; and further that navigability does not depend on the particular mode in which such use is or may be had--whether by steamboats, sailing vessels or flatboats--nor on an absence of occasional difficulties in navigation, but on the fact, if it be a fact, that the stream in its natural and ordinary condition affords a channel for useful commerce."

***981** [4] Although the rule on navigability has been at times liberalized, to our knowledge none of the authoritative cases has liberalized the rule so as to indicate that mere pleasure fishing on a stream of water is such usage as would constitute navigability. The difficult problem is alway application of the particular facts in each case. In the instant case, it is simplified by petitioners' candor in limiting the problem to engagement in float fishing as being the only commerce upon the river. There is no record evidence of past history or no suggestion of practicability in liberalizing the rule to hold that mere pleasure fishing (and that is what float fishing is) constitutes a stream navigable in fact when it always has been susceptible for use only for this purpose. We do not think float or any other kind of fishing suffices when it is the sole ingredient to constitute navigability of a stream. If that be so, there are literally hundreds of overflow lands, drainage ditches, etc. where fishing is prevalent and useful for no other purpose which would be subject to admiralty jurisdiction. In the early case of Harrison v. Fite, 148 F. 781 (8th Cir. 1906), this court stated at page 783:

'To meet the test of navigability as understood in the American law a water course should be susceptible of use for purposes of commerce or possess a capacity for valuable floatage in the transportation to market of the products of the country through which it runs.'

Harrison was cited with approval in our later case of Gratz v. McKee, 270 F. 713, 716 (8th Cir. 1920), aff'd 260 U.S. 127, 43 S.Ct. 16, 67 L.Ed. 167; 23 A.L.R. 1393, where we also noted a number of cases constituting the 'great weight of authority' holding that in order to be navigable waters must be capable of practical general uses. The above quotation from Harrison is still sound and viable when applied to a fact situation such as we have here.

The Supreme Court in United States v. State of Utah, supra, supplies the condition that the stream must afford 'a channel for useful commerce.' We do not view the evidence as sufficing to indicate the existence of a channel for useful commerce or even to indicate that such a channel could be created with reasonable expenditures.

The Supreme Court of California in Bolsa Land Co. v. Burdict, 151 Cal. 254, 90 P. 532, 535, 12 L.R.A.N.S., 275 (1907), observed:

'Though the belief seems to be somewhat widely held, it is not true that wherever one may catch fish the waters are navigable, or that wherever one may row or pole a boat he has the right so to do because of the navigability of the water.'

[5] The district judge was personally familiar with the river and noted in his opinion the great number of eminent domain cases resulting from the construction of the dam which reflect the opinion of the Corps of Engineers that the stream was nonnavigable. This, of course, is not dispositive of the issue but is not without significance. As stated by the Supreme Court in United States v. State of Oregon, 295 U.S. 1 at 23, 55 S.Ct. 610, 619, 79 L.Ed. 1267 (1935): 'It is not without significance that the disputed area has been treated as nonnavigable both by the Secretary of the Interior and the Oregon courts.'

We have mentioned the trend toward liberality in the treatment of admiralty jurisdiction but we are wary of unnecessary extension of any rule on navigability, particularly when it could well lead to absurdity. There are many fishing streams throughout the country which are not usable as highways for commerce or transportation in the customary mode. Float fishing on a stream does not render the stream navigable in fact, and the judgment of the district court is affirmed.

402 F.2d 977

END OF DOCUMENT

ADDITIONAL INFORMATION

WELCOME TO
SEARCYARKANSAS

A digital community service provided by the Searcy Chamber of Commerce

--> -->
Welcome
Calendar of Events
Chamber of Commerce
Education
Employment Opportunities
Government
Health Care
Businesses Online
Business & Industry
Recreation
Relocation
Retirement
Site Index/Search
Contact Us
Home

White River

The White River is part of the McClellan-Kerr Inland Waterway Navigation System and meanders from its source in the northwest corner of the state, across the Missouri state line, and back into Arkansas to the Mississippi River. The river traverses a wide variety of Arkansas' landscapes, ranging from the Mississippi River Delta, the Central Arkansas Lowlands, and the Ozark Mountains of Arkansas and Missouri. Along its course lies the White River National Wildlife Refuge, the historical Jacksonport State Park, the Ozark Folk Center, and the beautiful Ozark National Forest. The White River offers some of the state's best bass and trout fishing, and also some excellent catfish along the southern reaches. Access to the river is convenient from Searcy and there are many services available, including boat rentals, resorts, and guide services. In the northern portion of the state, the White River is popular among canoeists and rafters.

For More Information

Searcy Chamber of Commerce
2323 South Main Street
Searcy, Arkansas 72143
Phone: (501) 268-2458
Fax: (501) 268-9530
E-mail:scc@cswnet.com

Arkansas Department of Parks and Tourism
One Capitol Mall
Little Rock, Arkansas 72201
Phone: (501) 682-7777
Fax: (501) 682-1364

Water Resources

Data Category: Site Information | Geographic Area: Arkansas | GO

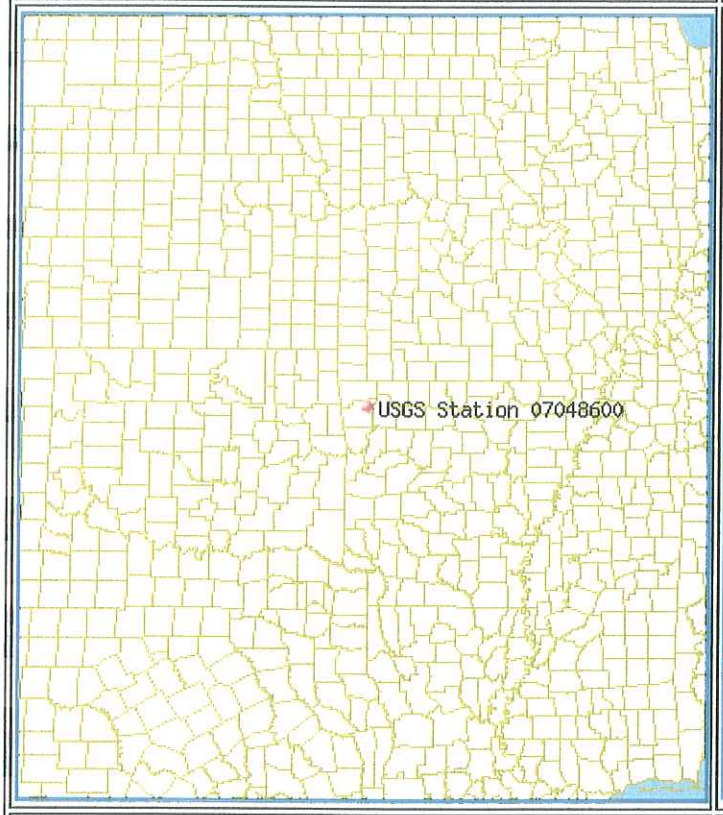
Site Map for Arkansas

USGS 07048600 White River near Fayetteville

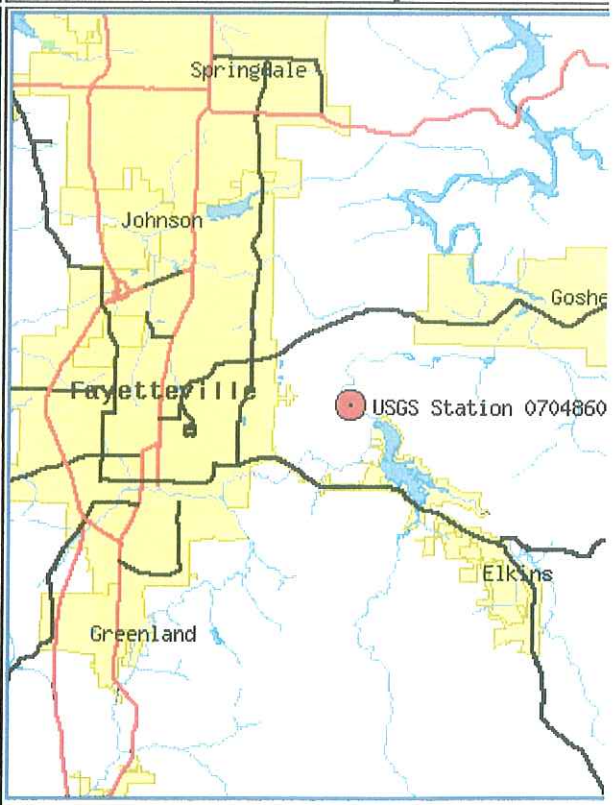
Available data for this site: Station site map | GO

Washington County, Arkansas
Hydrologic Unit Code 11010001
Latitude 36°04'23", Longitude 94°04'52" NAD27
Drainage area 400.00 square miles
Gage datum 1,138.25 feet above sea level NGVD29

Location of the site in Arkansas.



Site map.



ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-ar_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ar_NWISWeb_Maintainer@usgs.gov

Return to top of page

NWIS Site Inventory for Arkansas: Site Map

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Arkansas | GO

Calendar Year Streamflow Statistics for Arkansas

USGS 07048600 White River near Fayetteville

Available data for this site: Surface-water: Annual streamflow statistics | GO

Washington County, Arkansas
Hydrologic Unit Code 11010001
Latitude 36°04'23", Longitude 94°04'52" NAD27
Drainage area 400.00 square miles
Gage datum 1,138.25 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1964	187	1974	884	1984	817
1965	369	1975	588	1985	829
1966	481	1976	280	1986	472
1967	442	1977	349	1987	669
1968	813	1978	480	1988	448
1969	450	1979	593	1989	535
1970	702	1980	155	1990	998
1971	454	1981	449	1991	609
1972	353	1982	676	1992	435
1973	1,196	1983	372	1993	794

Questions about data gs-w-ar_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-ar_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Arkansas: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/ar/nwis/annual/calendar_year?

Retrieved on 2003-03-19 10:39:15 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Arkansas
Privacy Statement || Disclaimer || Accessibility
0.77 0.66

Wolf River—Tennessee

Reported Decision: Miller v. State, 124 Tenn. 293, 137 S.W. 760 (1911)

Reach at Issue: Entire length

Judicial Determination: Non-navigable

Facts Reported in Decision:

"Wolf River is a narrow, crooked, rocky, and swift stream something over 50 miles in length. In its ordinary condition, and with the exception of a few days each year, when swollen by heavy rains, it is for the most part shallow, having numerous shoals, where it is ofttimes less than 8 inches deep, and cannot in the ordinary state of its waters be navigated or used for floatage, ascending or descending, for commercial purposes. During the winder and spring months, as a result of heavy and continuous rains for six or more hours, it has tides or floods, lasting from 12 to 36 hours, during which small rafts containing 25 to 50 logs can be floated from points some 40 miles above its mouth. There are usually about six of these tides each year, and they can be relied upon to occur periodically with reasonable certainty. There is a large amount of valuable timber on and near this river, which can only reach the market by being floated down it is rafts upon these tides, and it has been used for this purpose for over 30 years; there now being floated down its waters each year from $50,000 to $75,000 worth of logs in rafts of the size mentioned." 137 S.W. at 760.

"There is only one instance of a flatboat or barge being floated down the river, and this occurred many years ago. The preponderance of evidence clearly shows that the stream can only be used profitably for commercial purposes for floating loose logs and small rafts, at regular, recurrent periods, some six times each year, each period lasting from 12 to 36 hours, dependent upon the quantity and duration of the fall of rain." 137 S.W. at 761.

"Wolf River does not come within these definitions of a navigable stream. It cannot be navigated profitably for commercial purposes ascending at any time, and can only be used descending for the transportation of logs and rafts for short periods of time, when swollen with rains, 10 or 12 days in each year." 137 S.W. at 762.

Additional Information:

USGS Streamflow Data—Annual Mean Streamflow ("cfs")

Gage location	cfs (average)	Period of Record
Germantown, TN	1,107	1970-2000
Rossville, TN	652	1930-1971

Wolf River - Tennessee

REPORTED DECISION

C

Supreme Court of Tennessee.

MILLER
v.
STATE.

May 8, 1911.

Error to Criminal Court, Pickett County; J. M. Gardenhire, Judge.

John L. Miller was convicted of obstructing a navigable stream, and he brings error. Reversed and remanded.

West Headnotes

Eminent Domain 2(10)
148k2(10) Most Cited Cases

Navigable Waters 1(2)
270k1(2) Most Cited Cases

Waters and Water Courses 37
405k37 Most Cited Cases

Under Const. art. 1, § 21, prohibiting the taking of private property for public use unless just compensation be made, the Legislature cannot arbitrarily declare a stream to be navigable, when it is in fact not so, to the prejudice of riparian owners.

Navigable Waters 1(3)
270k1(3) Most Cited Cases

Navigability of streams in Tennessee in the legal sense depends upon their navigability in the ordinary sense.

Navigable Waters 1(5)
270k1(5) Most Cited Cases

A river is not navigable when it cannot be navigated profitably for commercial purposes ascending, and can only be used descending for the transportation of logs and rafts for short periods, during floods, 10 or 12 days in each year.

Navigable Waters 1(5)
270k1(5) Most Cited Cases

While beds of nonnavigable streams belong to the riparian proprietors, if a stream's volume at periods recurring with reasonable certainty permits profitable use in transporting forest and other products, the public has an easement of highway therein, which riparian proprietors cannot unreasonably obstruct; but the stream must be sufficiently large to float, by force of the current and without the aid of persons traveling on the banks, craft and rafts sufficiently large to make the business profitable.

Navigable Waters 26(3)
270k26(3) Most Cited Cases

Evidence held insufficient to show unlawful obstruction of a stream, navigable only for floating logs, by maintenance of a dam.

Navigable Waters 39(6)
270k39(6) Most Cited Cases

Navigable Waters 40
270k40 Most Cited Cases

The public easement for floatage of logs in streams is subject to riparian rights including reasonable use for power.

***760** S. M. Turner and A. H. Roberts, for plaintiff in error.

Assistant Attorney General Faw, for the State.

SHIELDS, C. J.

The indictment in this case contains two counts.

The first charges that the plaintiff in error "did unlawfully obstruct the navigation of the main channel of a navigable stream, viz., Wolf river, at a place generally known as 'Miller's Mill,' in the Fourth civil district of Pickett county, by erecting a dam in and across the same."

The second count charges that the plaintiff in error "did unlawfully obstruct Wolf river, a navigable stream, at a place in the Fourth civil district of Pickett county known as 'Miller's Mill,' the same being a public highway for the transportation of large amounts of logs and lumber, by erecting and maintaining in and across said stream a dam, which obstructs navigation and is hurtful and injurious to

the people generally, rendering passage along such stream for rafts and lumber dangerous and inconvenient to the public."

There was a trial, and a general verdict of guilty, and from the judgment of the court thereon the plaintiff in error has brought the case to this court for review.

There is little or no controversy about the material facts of this case. Wolf river is a narrow, crooked, rocky, and swift stream something over 50 miles in length. In its ordinary condition, and with the exception of a few days each year, when swollen by heavy rains, it is for the most part shallow, having numerous shoals, where it is ofttimes less than 8 inches deep, and cannot in the ordinary state of its waters be navigated or used for floatage, ascending or descending, for commercial purposes. During the winter and spring months, as a result of heavy and continuous rains for six or more hours, it has tides or floods, lasting from 12 to 36 hours, during which small rafts containing 25 to 50 logs can be floated from points some 40 miles above its mouth. There are usually about six of these tides each year, and they can be relied upon to occur periodically with reasonable certainty. There is a large amount of valuable timber on and near this river, which can only reach the market by being floated down it in rafts upon these tides, and it has been used for this purpose for over 30 years; there now being floated down its waters each year from $50,000 to $75,000 worth of logs in rafts of the size mentioned.

The river also affords along its entire length much valuable water power, which is utilized by a number of valuable mills for grinding corn and wheat and sawing lumber on its banks, operated by this power; the waters of the river being collected and held by dams erected and maintained in and across the river for that purpose.

The plaintiff in error owns a valuable tract of land situated upon both sides of the river in Pickett county, upon which he has ***761** a valuable mill for manufacturing meal, flour, and lumber; the power being furnished by the waters of the river, accumulated in a dam, which he maintains in the river. These lands were granted to the predecessors in title of the plaintiff in error in 1792, and the mill and dam now operated and maintained by him have been so operated and maintained by the owners of the property for more than 60 years. It is a custom mill, and accommodates a large number of people in that section of the country.

John Elder, one of the former owners of this property, was indicted in the circuit court of Pickett county, in 1884, upon the same charge preferred against the plaintiff in error, for maintaining this dam, and upon his building and agreeing to maintain a "slope," composed of timbers resting upon the dam at one end and in the bed of the river at the other, for the waters to flow over, of sufficient width to accommodate rafts, the prosecution was dismissed. This "slope" has been maintained since that date, and furnishes a reasonably safe and convenient means by which rafts may befloated over the dam during tides in the river. Arranged in this way, the dam is not a much greater obstruction to floating rafts down the stream than exists from natural causes in other places.

The description here given of the river applies to it at the dam of the plaintiff in error and above that point. There is only one instance of a flatboat or barge being floated down the river, and this occurred many years ago. The preponderance of evidence clearly shows that the stream can only be used profitably for commercial purposes for floating loose logs and small rafts, at regular, recurrent periods, some six times each year, each period lasting from 12 to 36 hours, dependent upon the quantity and duration of the fall of rain.

[1] The questions to be determined upon these facts are whether or not Wolf river is a navigable stream, as averred in the first count of the indictment, and, if not, whether it is a highway for transportation of commerce, which the public has the right to have kept open and unobstructed for its use in floating logs and rafts.

For the state it is insisted that these questions are concluded by three acts of the General Assembly--chapter 39, Acts of 1837-38, chapter 165, Acts of 1879, and chapter 118, Acts of 1893--declaring Wolf river navigable for rafts and flatboats from its mouth to points considerably above the dam of the plaintiff in error.

This contention cannot be sustained. The General Assembly cannot arbitrarily declare a stream to be navigable. Whether a freshwater stream is navigable is always a question of fact. Railroad v. Ferguson, 105 Tenn. 552, 59 S. W. 343, 80 Am. St. Rep. 908; Griffith v. Holman, 23 Wash. 347, 63 Pac. 239, 54 L. R. A. 178, 83 Am. St. Rep. 821; Farnham's Waters and Water Rights, § 24.

If Wolf river is not in fact navigable, all these acts are violative of article 1, § 21, of our Constitution,

ordaining that private property shall not be taken or applied to public use without the consent of the owner, through his representatives, and just compensation being made.

The lands upon which the dam of the plaintiff in error is located were granted previous to the enactment of these statutes, and if Wolf river be not a navigable stream in a legal or technical sense the owner--the riparian proprietor--has title to the banks and the bed of the stream and the right to use his property for the purposes for which it is suitable. The statutes declaring the stream navigable and a public highway would, if valid, deprive him of this use without compensation. There could not be a clearer case of violation of the constitutional provisions stated. This is in substance held in Stuart v. Clark's Lessees, 2 Swan, 17, 58 Am. Dec. 49.

It has been repeatedly so adjudged by the courts of other states having similar constitutional provisions. Murray v. Preston, 106 Ky. 561, 50 S. W. 1095, 90 Am. St. Rep. 232; People v. Elk River Mill Co., 107 Cal. 221, 40 Pac. 531, 48 Am. St. Rep. 125; Bayzer v. McMillan Mill Co., 105 Ala. 395, 16 South. 923, 53 Am. St. Rep. 133; Walker v. Board of Public Works, 16 Ohio, 540; State v. Pool, 74 N. C. 402; Morgan v. King, 35 N. Y. 454, 91 Am. Dec. 58; Partridge v. Eaton, 63 N. Y. 482; Barclay R. & Coal Co. v. Ingham, 36 Pa. 194; Allen v. Weber, 80 Wis. 531, 50 N. W. 514, 14 L. R. A. 361, 27 Am. St. Rep. 51; Cooley's Const. Lim. 862, 863; Farnham's Waters and Water Rights, § § 24, 77.

[2][3] We are also of the opinion that Wolf river is not a navigable stream within the sense of the laws of Tennessee. The common-law rule, that all waters in which the tide ebbs and flows are navigable, was held in Elder v. Burrus, 6 Humph. 358, to be inapplicable to conditions in this state, as there are no such waters within its boundaries; and the rule of the civil law, that rivers capable of being navigated or navigable in the common sense of the term, was adopted and held to be applicable to all our rivers coming within that definition. This case has been frequently followed by this court, and the rule there announced is now the settled law of this state. Stuart v. Clark's Lessees, 2 Swan, 17, 58 Am. Dec. 49; Sigler v. State, 7 Baxt. 496; Holbert v. Edens, 5 Lea, 204, 40 Am. Rep. 26; Webster v. Harris, 111 Tenn. 676, 69 S. W. 782, 59 L. R. A. 324.

Judge McKinney, in Stuart v. Clark's Lessees, supra, after discussing the subject fully, defines a navigable stream to be "a river capable, in the ordinary state of water, of navigation, ascending or descending, by vessels; *762 that is, such vessels as are employed in the ordinary purposes of commerce, whether foreign or inland, and whether steam or sail vessels."

In Holbert v. Edens, supra, it is said: "A stream is navigable, in a legal sense, when it is capable in the ordinary stage of water of being navigated, both ascending and descending, by such vessels as are usually employed for purposes of commerce."

And in the last case upon the subject, Webster v. Harris, supra, it is said: "The test of a navigable stream is whether, in the ordinary state of water, it has capacity and suitability for the usual purposes of navigation, ascending or descending, by vessels such as are employed in the ordinary purposes of commerce, whether foreign or inland, and whether stream or sail vessels."

Wolf river does not come within these definitions of a navigable stream. It cannot be navigated profitably for commercial purposes, ascending at any time, and can only be used descending for the transportation of logs and rafts for short periods of time, when swollen with rains, 10 or 12 days in each year.

The remaining question, then, is whether this stream is a public highway, which the public has the right to use for transportation purposes, and whether the plaintiff in error, by the maintenance of his dam across the same, is unlawfully obstructing it.

[4] While the beds of all streams not navigable in the legal sense belong to the riparian proprietors and are private property, yet if in its natural state the volume of a stream, whether ordinary or when swollen by rains at certain periods of the year occurring with reasonable certainty, is such that the stream can be used profitably for commercial purposes in the transportation of the products of the forest, mines, tillage of the soil, or other articles of commerce, the public has an easement of highway therein, and this easement cannot be unreasonably obstructed by the riparian proprietors.

In Stuart v. Clark's Lessees, supra, upon this subject, it is said:

"Having considered this case upon the principles of law involved in it, rather than upon the facts, we do not feel it incumbent upon us to express any opinion as to the character of the Nolachucky river--whether navigable or otherwise. This question, however, upon the principles herein laid down, will be of no difficult

solution.

"Neither have we deemed it material to notice particularly Acts of 1799, c. 35, and other subsequent acts of like import, declaring that the navigation of Nolachucky and certain other rivers 'shall remain free and open, and affixing a penalty for any obstruction thereof. We suppose that legislation of this character was neither designed to have, nor can be allowed to have, any effect whatever upon the rights of the riparian proprietors. More especially can it have no such effect upon rights acquired prior to the date of the earliest statute upon the subject. *But these acts, so far as they provide that the rivers shall remain open and free for purposes of navigation, are merely declaratory of the common law, as has already been shown.*"

That case really involved the title to the land covered by the waters of Nolachucky river as between two adjoining proprietors, and not the respective rights of the public desiring to navigate the river and a riparian proprietor, and the court does not, therefore, undertake to define the latter rights fully.

In Sigler v. State, 7 Baxt. 496, this court quoted with approval from Angell on Highways as follows, viz.:

"The ebb and flow is not the only test, nor is the public easement always formed upon usage or custom. The test is whether there is in the stream capacity for use for the purpose of transportation valuable to the public; and in this view it is not necessary that the stream should have a capacity for floatage at all seasons of the year, nor that it should be available for use against the current as well as with it. If, in its natural state and with its ordinary volume of water, either constantly or at regularly recurring seasons, it has such capacity that it is valuable to the public, it is sufficient."

This easement, however, does not extend to all streams in this state. The stream must be of sufficient size to float, by the force of the current, and without the aid of persons traveling upon the banks, craft and rafts of sufficient size to make the business profitable. It is not sufficient that loose logs or lumber can be floated down it when at flood. Streams of that character are not subject to the public servitude, but are private property. Allison v. Davidson, 39 S. W. 905, 908, 909; Irwin v. Brown, 3 Shan. Cas. 310.

[5] We think that Wolf river is such a stream that the public has an easement in, and the right to use, its waters for floatage at such periods as this right can be profitably exercised in the natural state of the stream. This easement, however, is not an absolute and unqualified right of way. The riparian proprietors also have rights in such streams as valuable as that of the public, and these respective rights of the public and the riparian proprietors must be so used and exercised as not to unreasonably interfere with and obstruct each other.

The evidence in this case demonstrates that the water power furnished by the river is very valuable, and doubtless in many instances the only value inhering in the lands through which it flows, and that in the near future this value will greatly exceed the value of the use of the river for floating logs ***763** and rafts, which articles of commerce will, in the course of time, become exhausted.

The value of the natural water powers of the country for manufacturing purposes is constantly increasing, and is difficult to overestimate. The public is as much interested in the conservation of this class of property as it is in the protection of highways in streams. The policy of this state has been, and is now, to encourage the building of mills and the promotion of other manufacturing enterprises, for the operation of which these natural forces are of great value, and may be absolutely necessary. Public policy demands that these interests be reconciled, so that both can be enjoyed and neither be unnecessarily or unreasonably obstructed or destroyed, and just regard must be had in all such cases to the rights of the riparian proprietors. This is the view that has been taken of this question in a number of states where conditions are similar to those in this state, and we believe it to be just and sound.

Mr. Farnham, in his valuable work on Waters and Water Rights (section 29), says:

"When it is said that the right of the public is paramount, nothing more is meant than that the riparian owner can do nothing to close the highway. He cannot divert the water from the stream, nor consume it so as to defeat the possibility of navigation; nor can he place any insuperable obstructions in the stream. Conversely, the right of public navigation is not such as to destroy the rights of the riparian owner. The right cannot be exercised to the unnecessary or wanton destruction of private rights, or so as to deprive the riparian proprietors of the use of the stream for legitimate purposes which will not unreasonably interfere with the right of navigation. The navigation right is the right of

passage merely, and so long as the right is preserved without unreasonable impairment the riparian owner may abridge the stream, or use water therefrom, or even throw a dam across it, if he makes provision for the right of passage. The rights may be said to be reciprocal, each modifying the other, each to be used so as not to interfere unreasonably with the other right. The riparian owner is not bound to provide a better passage than is furnished by nature. He may even abridge the rights to some extent, if he leaves a convenient passageway."

This text is well sustained by adjudged cases of courts of last resort. Gaston v. Mace, 33 W. Va. 14, 10 S. E. 60, 5 L. R. A. 392, 25 Am. St. Rep. 854, 855; Com'rs of Burke Co. v. Lumber Co., 116 N. C. 731, 21 S. E. 941, 47 Am. St. Rep. 838; Ward v. Greenville Township, 32 Can. S. C. 510; Pearson v. Rolfe, 76 Me. 380; Foster v. Searsport Spool & Block Co., 79 Me. 508, 11 Atl. 273; Lancey v. Clifford, 54 Me. 487, 92 Am. Dec. 561.

In this last case, Dickerson, Judge, speaking for the court, says:

"Reasonable use is the touchstone for determining the rights of the respective parties. Thus, in considering this subject, we find the public right of way over the stream, and the landowner's right of soil under it, and his right to use its flow. The rights of both these parties are necessary for the purposes of commerce, agriculture, and manufactures. The products of the forest would be of little value, if the riparian proprietors have no right to raise the water by dams, and erect mills for the manufacture of these products into lumber. The right to use the water of such streams for milling purposes is as necessary as the right of transportation. Indeed, it is this consideration that oftentimes imparts the chief value to the estate of the riparian proprietors, and without which it would have no value whatever in many instances. Each right is the handmaid of civilization; and neither can be exercised without in some degree impairing the other. This conflict of rights, therefore, must be reconciled. The common law, in its wonderful adaptation to the vicissitudes of human affairs, and to promote the comfort and conveniences of men, as unfolded in the progress of society, furnishes a solution of this difficulty by allowing the owner of the soil, over which a floatable stream which is not technically navigable passes, to build a dam across it, and erect a mill thereon, provided he furnishes a convenient and suitable sluice or passageway for the public by or through his erections. In this way both these rights may be exercised without substantial prejudice or inconvenience.

"We therefore hold that, on a stream which is valuable for the floatage of loose logs, but not for navigation in any more enlarged sense, it cannot be said that the right of such floatage is so far paramount to the use of the water for machinery and other valuable purposes as to require the sacrifice of the latter to the former."

The latest case in which the question is involved that has been called to our attention is that of Blackman v. Mauldin, recently decided by the Supreme Court of Alabama, and to be found reported in 164 Ala. 337, 51 South. 23, 27 L. R. A. (N. S.) 670. There, after holding that the public has an easement of a right of way for floatage purposes in nonnavigable streams of the character of Wolf river, it is said:

"But we are not disposed to accord to the public the same unqualified right to the use of streams valuable only for the floatage of loose logs and timber as in the case of streams navigable in the true sense of that word. The right of floatage must be preserved to the extent which the experience of those who have utilized the stream for that purpose has shown to be practicable and profitable, and to meet the probable future needs of the country which it serves. Its water *764 may not be diverted nor consumed, so as to render impossible its customary use; nor must insuperable obstacles be put across the stream. But a just regard for the rights of the owners of the beds and banks of the streams capable only of such limited use would require that their situation be considered in judicial decision. Such consideration cannot be unreasonable in the circumstances of this case, because, during considerable parts of the year, the stream is not capable of floatage, and at such times it would be unreasonable to deprive the owner of the opportunity to utilize the water power of the stream, or to make such other uses of his property as will not unreasonably interfere with those uses of the stream which the public has and will hereafter make of it. Gristmills, sawmills, and gins serve also a public purpose."

[6] While we think that the preponderance of the evidence in this record places Wolf river in that class of streams in which the public has the right of floatage for the transportation of sawlogs and rafts, yet, under the rule in this state as announced in the cases of Irwin v. Brown, supra, and Allison v. Davidson, supra, it is not more than in that class, and the public, in exercising its rights in it, must do so

with unusual care not to interfere with those of the riparian proprietors. The great weight of the evidence clearly establishes that the dam of the plaintiff in error, as maintained by him, is not an unreasonable, and therefore not an unlawful, obstruction to the navigation of the stream. It has been there for 60 years, and the "slope," built for the accommodation and protection of rafts in crossing it, has been maintained for about 25 years. During all this time rafts have gone over the dam upon this "slope" without greater inconvenience or danger to the logs and those in charge of them than ordinarily incident to the navigation of the river. The dam does not constitute a greater obstruction, provided, as it is, with the "slope" for the passage of rafts, than the plaintiff in error, as riparian proprietor, has the right to build and maintain upon his own property. It is not an obstruction of a navigable stream, either under the common law or our statute; for Wolf river is not navigable within the sense of the law.

Thetrial judge, upon the evidence introduced by the state, should have so instructed the jury. He should have further charged the jury concerning the respective and reciprocal rights of the public and those of plaintiff in error as riparian proprietor in the stream. It is, we think, reasonably clear that, had this been done, the verdict of the jury would have been in favor of the plaintiff in error, as the preponderance of the evidence is against the verdict that was found, and in favor of his innocence.

For these reasons, the judgment of the criminal court is reversed, and the case remanded for a new trial.

137 S.W. 760, 16 Cates 293, 124 Tenn. 293, 35 L.R.A.N.S. 407, Am.Ann.Cas. 1912D, 1086

END OF DOCUMENT

ADDITIONAL INFORMATION

removed, as a safety need!

Electric Outlook is located just west of Germantown road. This area highlights the importance of electricity, generation and 'greenpower'. benches are provided and the view of the river and sandbars is great. To the East is Germantown road, Wal-Mart and Chick-Fil-A. The trail goes under the bridge.

Enjoying the View at Electric Overlook

Wolf River from Electric Overlook

Move your mouse around the map. If it changes to a hand, click your mouse

Water Resources

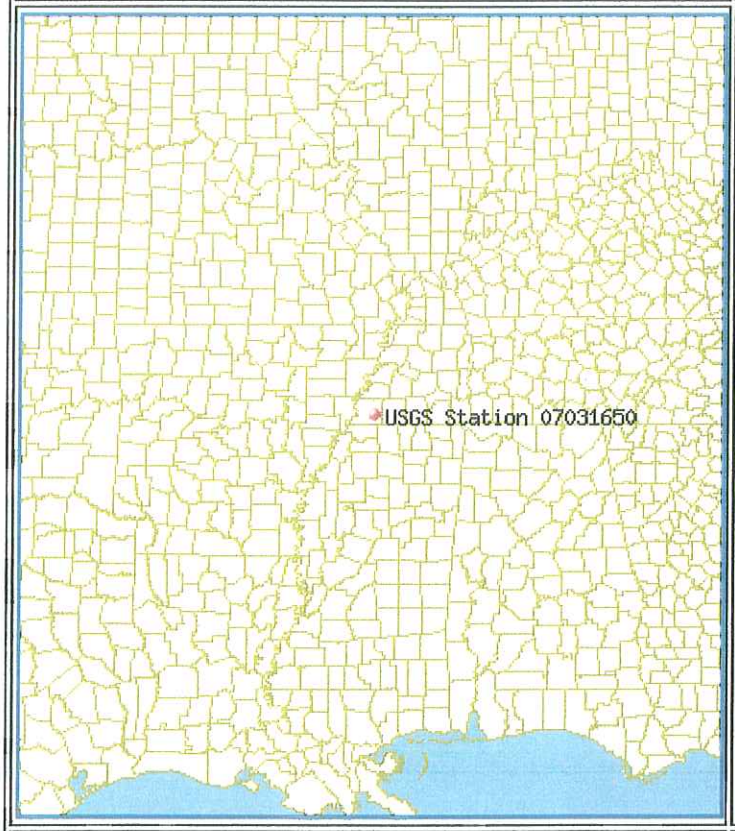
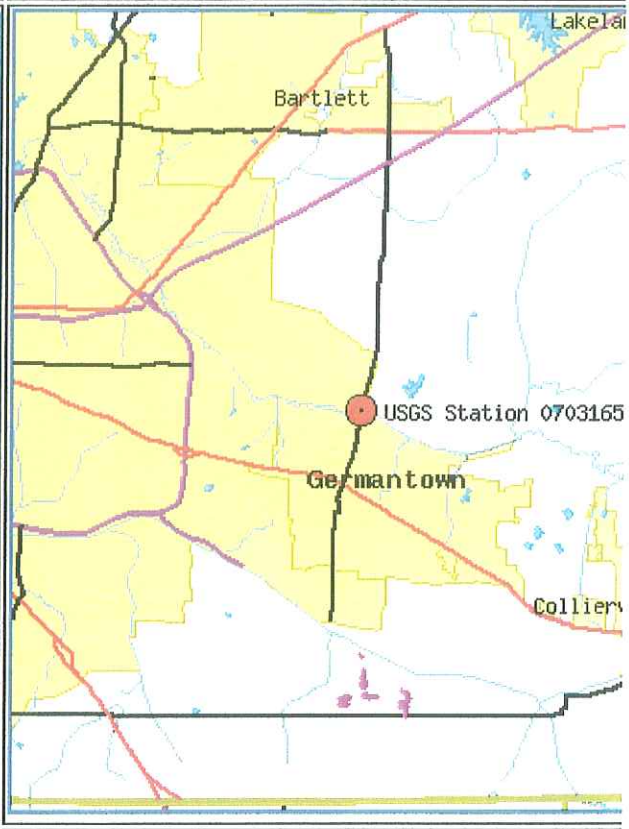
Data Category: Site Information | Geographic Area: Tennessee | GO

Site Map for Tennessee

USGS 07031650 WOLF RIVER AT GERMANTOWN, TN

Available data for this site: Station site map | GO

Shelby County, Tennessee
Hydrologic Unit Code 08010210
Latitude 35°06'59", Longitude 89°48'05" NAD27
Drainage area 699.00 square miles
Gage datum 235.76 feet above sea level NGVD29

Location of the site in Tennessee.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-tn_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-tn_NWISWeb_Maintainer@usgs.gov
NWIS Site Inventory for Tennessee: Site Map

Return to top of page

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Tennessee | GO

Calendar Year Streamflow Statistics for Tennessee

USGS 07031650 WOLF RIVER AT GERMANTOWN, TN

Available data for this site: Surface-water: Annual streamflow statistics | GO

Shelby County, Tennessee
Hydrologic Unit Code 08010210
Latitude 35°06'59", Longitude 89°48'05" NAD27
Drainage area 699.00 square miles
Gage datum 235.76 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1970	853	1979	1,749	1993	768
1971	616	1980	1,160	1994	1,050
1972	890	1981	574	1995	627
1973	1,368	1982	1,273	1996	1,080
1974	1,218	1983	1,250	1997	1,331
1975	1,280	1984	1,108	1998	1,007
1976	744	1985	711	1999	947
1977	864	1991	1,761	2000	500
1978	920	1992	783		

Questions about data gs-w-tn_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-tn_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Tennessee: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/tn/nwis/annual/calendar_year?

Retrieved on 2003-03-19 13:04:09 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Tennessee
Privacy Statement || Disclaimer || Accessibility
0.85 0.66

Water Resources

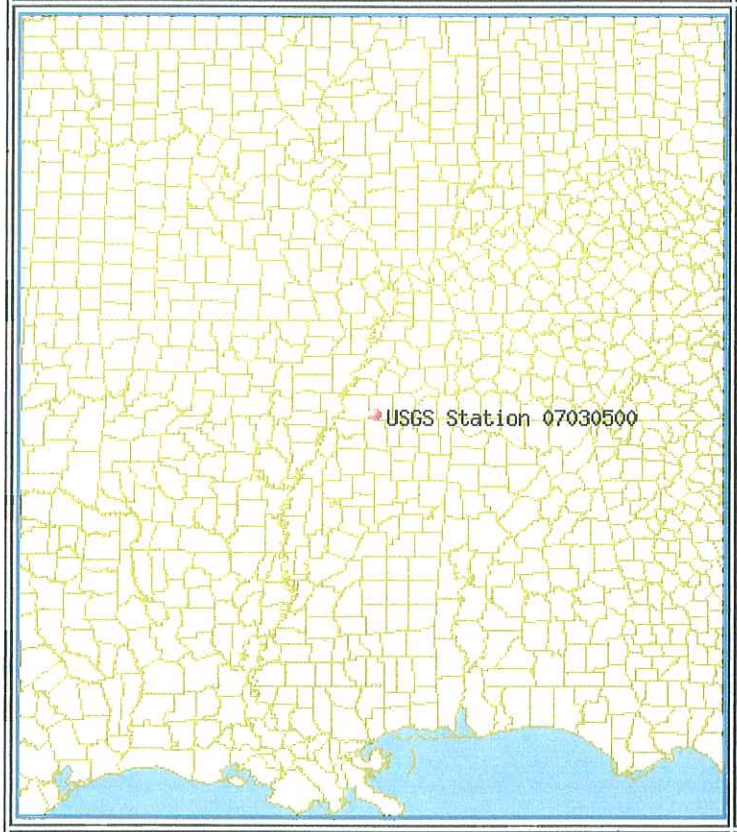
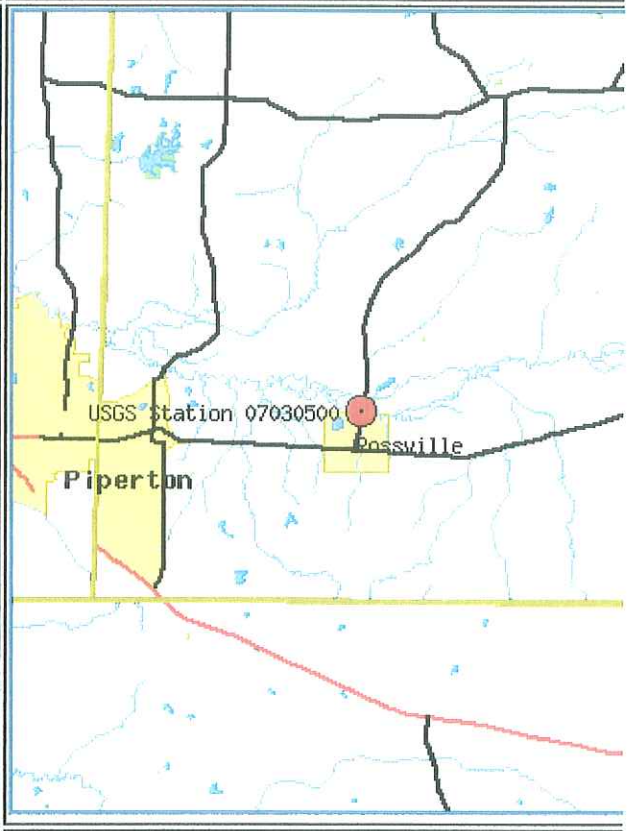
Data Category: Site Information | Geographic Area: Tennessee | GO

Site Map for Tennessee

USGS 07030500 WOLF RIVER AT ROSSVILLE, TN

Available data for this site: Station site map | GO

Fayette County, Tennessee
Hydrologic Unit Code 08010210
Latitude 35°03'15", Longitude 89°32'28" NAD27
Drainage area 503.00 square miles
Gage datum 300.74 feet above sea level NGVD29

Location of the site in Tennessee.	Site map.
	
	ZOOM IN 2X, 4X, 6X, 8X, or ZOOM OUT 2X 6X. 8X.

Maps are generated by US Census Bureau TIGER Mapping Service.

Questions about data gs-w-tn_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-tn_NWISWeb_Maintainer@usgs.gov
Return to top of page

NWIS Site Inventory for Tennessee: Site Map

USGS

Water Resources

Data Category: Surface Water | Geographic Area: Tennessee | GO

Calendar Year Streamflow Statistics for Tennessee

USGS 07030500 WOLF RIVER AT ROSSVILLE, TN

Available data for this site: Surface-water: Annual streamflow statistics | GO

Fayette County, Tennessee
Hydrologic Unit Code 08010210
Latitude 35°03'15", Longitude 89°32'28" NAD27
Drainage area 503.00 square miles
Gage datum 300.74 feet above sea level NGVD29

Output formats: HTML table of all data | Tab-separated data | Reselect output format

Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s	Year	Annual mean streamflow, in ft^3/s
1930	577	1941	305	1952	575	1962	608
1931	574	1942	482	1953	859	1963	427
1932	1,125	1943	438	1954	486	1964	600
1933	1,037	1944	778	1955	601	1965	634
1934	490	1945	988	1956	529	1966	438
1935	690	1946	861	1957	860	1967	661
1936	405	1947	590	1958	544	1968	718
1937	645	1948	991	1959	513	1969	582
1938	630	1949	842	1960	458	1970	591
1939	833	1950	989	1961	695	1971	506
1940	323	1951	920				

Questions about data gs-w-tn_NWISWeb_Data_Inquiries@usgs.gov
Feedback on this website gs-w-tn_NWISWeb_Maintainer@usgs.gov

Return to top of page

Surface Water data for Tennessee: Calendar Year Streamflow Statistics
http://waterdata.usgs.gov/tn/nwis/annual/calendar_year?

Retrieved on 2003-03-19 13:01:26 EST
Department of the Interior, U.S. Geological Survey
USGS Water Resources of Tennessee
Privacy Statement || Disclaimer || Accessibility
0.66 0.64