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THE CHICAGO WATER DIVERSION CONTROVERSY*

HERBERT H. NAUJOKS

This article presents a study of the legal and factual problems relating to the Chicago Water Diversion Controversy. It offers an account of the history and background of this litigation, and describes the present status of the problem. It touches upon the legal issues involved, as well as the physical features of the Great Lakes-St. Lawrence system, the Illinois Waterway, the Chicago Drainage Canal, the details concerning sewage disposal in the Chicago area, and related matters. Finally, certain conclusions are drawn respecting a permanent disposition of this important controversy.

PART ONE: HISTORY AND PRESENT STATUS OF THE CHICAGO DIVERSION CONTROVERSY

(a) The Chicago Diversion Problem dates back to early Chicago.

The so-called diversion controversy arose out of the circumstance that between the years 1892 and 1900 the City of Chicago and its suburbs carried out a plan of disposing of the sewage of the Chicago metropolitan area by cutting a canal across the low continental divide which lies about ten miles west of Lake Michigan and discharging the sewage of that area into the Mississippi watershed by way of the Des Plaines and Illinois Rivers. To understand rightly this problem one should be familiar with the natural geography and history of the Chicago and the Great Lakes area.

The inception and development of the Chicago Drainage Canal plan of sewage disposal and protection of water supply really dates back to early Chicago. Even before Illinois was admitted to statehood in 1818, the water routes connecting Lake Michigan and the Mississippi River were the subject of Federal treaties with the Northwest and

*This is the first in a series of at least two articles on this subject. The next will appear in the February issue. In this first article Mr. Naujoks presents a chronological-historical study of a long and interesting controversy in which legal problems have been both novel and endless, and outlines the legal landmarks from early beginnings to the present day against a factual background of enveloping complexity. Subsequent parts of the treatise will deal directly with the legal problems involved.—Ed.
the Ottowa Indians. At this time the area of the proposed canal contained two short sluggish streams, one flowing into Lake Michigan and the other into the Mississippi watershed. Between them was a marshy lake. The site of the old Illinois and Michigan canal (which had no direct relation to the present canal) is an ancient portage. It was recognized and used from the earliest discoveries in America as the connecting link between the Atlantic Seaboard via the St. Lawrence River and the Great Lakes to the Gulf of Mexico via the Illinois and the Mississippi Rivers. This portage was used by Indians for centuries as a strategic route for war canoes during tribal conflicts and for the loaded craft of the Indian traders and hunters in time of peace. In a state of nature, before the advent of the white man, it was ample for the comparatively small traffic of that early day. With the coming of the Europeans, this portage site became the gateway for the discovery, conquest and colonization of our great inland empire. It was to this spot that Pere Marquette, the great Jesuit Missionary, came in 1673. Marquette’s frail boats were piloted by fierce Indian navigators who were familiar with this water route. It was to this place that the expedition of the intrepid LaSalle marched under command of the Loyal Tonti. The great LaSalle himself twice took the same path.

Following close on the heels of discovery and conquest, trade came in the form of gaunt and bearded adventurers and frontiersmen. It was then that the power and prestige of the red navigators from the nearby forests and plains began to wane under the civilizing influence of the missionaries and settlers. These newcomers quickly became familiar with the beaten paths and natural routes linking the great Atlantic Seacoast with the busy cities and marts along the Gulf Coast. Many decades later, after the American colonies had secured their independence from their Mother country, the United States Congress recognized the importance of this water route as affecting the general welfare of the country as a whole.

In 1818, an amendment to the Act enabling Illinois to organize as a state set aside a narrow strip of land for a proposed canal route to link Chicago by water with the Illinois River and the Mississippi Valley.

Congress, by the Act of March 30, 1822 authorized the State of Illinois to survey and mark through the public lands of the United States a route of a canal connecting the Illinois River with Lake Michigan, and set aside ninety feet of land on either side of the proposed canal in the aid of such scheme. A further grant of land

was made in the year 1827\textsuperscript{4} consisting of “one-half of five sections in width on each side of said canal” to the State of Illinois “for the purpose of aiding said state in opening a canal to unite the waters of the Illinois River with those of Lake Michigan.” In 1836, Illinois enacted legislation\textsuperscript{5} providing for the construction of the canal which was known as the Illinois and Michigan Canal. It was finally completed in 1848, a part of it substantially on the route of the present Chicago Drainage Canal. This Illinois and Michigan Canal crossed the Continental Divide between the Chicago and Des Plaines Rivers on a summit level eight feet above the Lake and then continued on to LaSalle, Illinois, where it entered the Illinois River.\textsuperscript{6} The funds provided for the canal proved inadequate for the original engineers’ plan and the purpose of the Act to provide a depth sufficient to take waters from Lake Michigan by gravity. It became necessary to supply the summit of the canal with water from the Chicago River by means of dams and pumps. At first only a small amount of water, enough to supply the needs of navigation, was pumped into the canal. However, this amount of water proved insufficient for all needs inasmuch as the City of Chicago, with a population of 80,000, constructed its first sewage system in 1856. This system discharged into the Chicago River. The City’s sole source of water supply was Lake Michigan. The sewage deposited in the river filled it up and in times of heavy flood this filth was washed out into the lake and contaminated the water supply. Before the year 1865 the Chicago River had become so offensive from receiving the sewage of the rapidly growing city that for its immediate relief the authorities agreed to pump water from the Chicago River in excess of the needs of navigation. This expedient was not successful and other measures were considered. In 1866 Congress appropriated funds\textsuperscript{7} for a survey of the project of enlarging the canal, and in 1867 the Chief of Engineers of the United States Army reported favorably thereon. In 1871 the State of Illinois enlarged this canal on the original plan.\textsuperscript{8}

By the year 1872 the summit level of the Illinois and Michigan Canal was lowered with the hope that this would result in a permanent flow of lake water through the south branch of the Chicago River

\begin{itemize}
\item[3.] 3 U.S.Stat. at L.659, chapter 14.
\item[4.] 4 U.S.Stat. at L. 234, chapter 451.
\item[5.] Session Laws of Illinois for 1836, p. 98.
\item[6.] This canal was to be supplied “with water from Lake Michigan and such other sources as the canal commissioners may think proper.” It was to be constructed in the manner “best “calculated to promote the permanent interest of the country reserving 90 feet on each side of said canal to enlarge its capacity” Session Laws of Illinois for 1836, p. 98, sec. 16.
\item[7.] 14 U.S.Stat. at L. 7.
\item[8.] This work was done pursuant to an enabling act of the Illinois Legislature of Feb. 16, 1865.
\end{itemize}
sufficient in amount to keep that stream unpolluted. However, this plan did not work and the Canal again became badly contaminated. Then, during the years 1880 to 1889, a continuance of this nuisance along the Canal resulted in the arousing of public opinion in favor of better drainage and water supply.

(b) Disposition of the sewage of the Chicago area the main reason for the construction of the present Chicago Drainage Canal.

Many investigations were undertaken and numerous reports filed. In 1887 the Drainage and Water Supply Commission was organized, consisting of Rudolph Hering, Samuel G. Arlingstall, and Benezette Williams, who had studied three methods of sewage disposal and who recommended as the most economical the discharge of the sewage into the Des Plaines River through a canal across the Continental Divide. The three methods of solving the problem of disposal of the sewage of Chicago which were considered by the Commission were: First, the discharge of sewage into Lake Michigan at one end of the city and the taking of the water supply at the other extreme end of the city; Second, the disposal of sewage on land by intermittent filtration over a vast sewage farm (as large as 15,000 acres); Third, the discharge of sewage into the Des Plaines River by means of the canal and resultant disposal by dilution. Disposal of sewage on land as practiced in many European cities was rejected as impracticable because of its cost. The disposal of sewage into Lake Michigan was reported unfavorably as not too practical, so the legislature authorized the construction of the Chicago Drainage Canal as the easiest and most economical solution to the problem. The purification method (now acknowledged to be the best method of sewage disposal) was not given much consideration by the Commission.

By Act of May 29, 1889, the Illinois legislature authorized the creation of sanitary districts to provide for drainage, with power to construct channels, improve navigable and other waterways, and for this purpose to condemn property. This law was entitled "An Act to create Sanitary Districts and to Remove obstructions in the Illinois and Des Plaines Rivers." Pursuant to such authority, the Sanitary District of Chicago, a quasi-municipal corporation, was organized. The Act of 1889 provided for the construction of the Canal much in its present form. It contemplated abstraction of the waters of Lake Michigan through the Canal into the Illinois River and thence.

9. Memorandum issues by Trustees of the Sanitary District of Chicago dated December, 1932, p. 4. The main reason for adopting the dilution method instead of the purification method of disposing of the sewage of Chicago was to save expense. See pp. 1800-1820, Part 2, Rivers and Harbors Committee Hearing of April and May, 1924.
down the Mississippi River. The Canal was to be operated with a diversion from Lake Michigan of an amount of water up to 10,000 cubic feet per second.

In 1890, when organization was complete, the Sanitary District of Chicago embraced an area of 185 square miles. By later statutes the District was enlarged so that it now embraces approximately 442 square miles, extending from the Illinois state line on the southeast to the northern boundary of Cook County on the north, with about 34 miles of frontage on Lake Michigan, including within its boundaries Chicago and its suburbs, a total of sixty cities, towns and villages.

The Chicago Drainage Canal was constructed by the Sanitary District of Chicago between 1892 and January 17, 1900, when the canal was first opened. Section 23 of the original Act of 1889 provided for a canal 162 feet wide and not less than 14 feet deep with the water velocity to be not greater than three miles per hour. Section 20 of the Act makes mandatory a continuous flow of 20,000 cubic feet per minute for each 100,000 of the population within the Sanitary District. The Canal extends from the west fork of the south branch of the Chicago River near Robey Street, a point about 6 miles from the mouth of the Chicago River at Lake Michigan, to the Des Plaines River beyond Lockport, a distance of 30 miles. Since the opening of the Canal in 1900, the flow of the Chicago River has been reversed and it now flows away from Lake Michigan.

While some pretense was made that the Chicago Drainage Canal was for the purpose of creating in part a navigation route, the Canal ended in a dam without locks, below which was a non-navigable tailrace. There is a natural drop of 34 feet at Lockport. The purposes of the Canal were the disposal of sewage and also to obtain a profitable water-power. The United States Supreme Court found that those were the purposes for the diversion.11 Both purposes required as large a diversion as possible.

In 1896 Congress appropriated money for the dredging of the Chicago River, and in that year the Sanitary District asked for a permit from the Secretary of War to enlarge the cross section of the Chicago River, stating that this was necessary to make available the artificial channel under construction since 1892. The Secretary of War granted the permit, but stated that this authority was not to be interpreted as an approval of the plans of the Sanitary District to introduce a current into the Chicago River. This authority was to expire in two years. Other permits relating to the same subject were issued by the Secretary of War in 1897, 1898 and twice in 1899. After the Canal was opened the then Secretary of War, Elihu Root, granted

a permit on December 5, 1901 allowing a diversion of 4167 cubic feet per second.\textsuperscript{12}

Meanwhile, at about the time of the opening of the Canal in 1900, the State of Missouri brought an action against the State of Illinois to enjoin threatened pollution of the waters of the Mississippi through the use of the Sanitary Drainage Canal as a means of disposing of sewage of the City of Chicago. The United States Supreme Court denied, without prejudice, an injunction because it was not satisfied that the claims of Missouri as to the pollution of the waters of the Mississippi River at St. Louis and the alleged danger to public health were substantiated.\textsuperscript{13}

The Illinois Legislature passed an Act, approved May 14, 1903,\textsuperscript{14} which added certain territory to the Sanitary District and which authorized the Sanitary District of Chicago to construct all such dams, waterwheels and other works as should be necessary to develop and render available the power arising from the water passing through its main channel, and any auxiliary channels then in existence or thereafter to be constructed by the district. This Act also authorized the destruction of the old Illinois and Michigan Canal running from the Chicago River to the Des Plaines River.

An application to do certain work in the Calumet-Sag channel and to increase the flow from Lake Michigan through said channel was refused by the then Secretary of War, William Howard Taft, in March, 1907, and as the Sanitary District apparently decided to proceed with this work in spite of such refusal, the United States brought suit in 1908 to enjoin the construction and to prevent the increase of the flow of the waters of Lake Michigan through the Chicago Drainage Canal.

\begin{itemize}
\item[(c)] \textit{Water power profits, a dominant motive for a large diversion on the part of Illinois and the Sanitary District of Chicago.}
\end{itemize}

In 1908, separate Section 3 of the Constitution of Illinois of 1870 was amended to authorize the Illinois legislature to provide for the construction of a deep waterway or canal, from the waterpower plant of the Sanitary District of Chicago, at or near Lockport, to a point on the Illinois River at or near Utica, and for the installation and maintenance of power plants, locks, bridges, dams and appliances sufficient for the development and utilization of the waterpower of such waterway; it also being provided that all power so developed might

\textsuperscript{12} The permit of December 5, 1901, provides also that the "Sanitary District of Chicago shall be responsible for all damages inflicted upon navigation interests, by reason of the flow herein authorized."

\textsuperscript{13} Missouri v. Illinois, 180 U.S. 208 (1901); 200 U.S. 496 (1906).

\textsuperscript{14} Illinois Laws of 1905, pp. 113-117.
be leased, in part or whole, as the legislature might authorize, the rental to be subject to a revaluation every ten years and the income to be paid into the state treasury. From this time on, water power profits became a dominant motive for a large diversion.\(^1\)

The development of this project — the so-called Illinois waterway — was undertaken and justified by Illinois upon the ground that the State of Illinois would make a profit of three million dollars a year from the use of the water diverted from Lake Michigan for water power purposes.\(^6\) Twenty million dollars were to be expended for this purpose. No diversion of any consequence was necessary to provide a connecting navigable waterway, as distinguished from the requirements of sewage disposal, and the amount of water desired for water power, the profitableness of the water power being strictly proportional to the amount of water diverted. The large diversion of water from Lake Michigan at this time was made by the State of Illinois without the consent of any of the states bordering on the Great Lakes, in defiance of the Federal government, and in violation of the rights of a friendly foreign nation to the north, the Dominion of Canada. Temporary permits were from time to time granted by reluctant Secretaries of War solely on the plea that since the Chicago Sanitary District and Illinois had neglected or refused to install modern sewage disposal plants, enforcement of the law against impairment of the navigable capacity of the Great Lakes system, with consequent termination or substantial reduction of the diversion, would impair the health of the people of the Chicago metropolitan area.

Another application for diversion of 10,000 cubic feet per second was made by the Sanitary District of Chicago in 1913. The then Secretary of War, Henry L. Stimson, denied this application. In his written memorandum, the Secretary of War pointed out:

"In a word, every drop of water taken out at Chicago necessarily tends to nullify costly improvements made under direct authority of Congress throughout the Great Lakes, and a withdrawal of the amount now applied for would nullify such expenditures to the amount of many millions of dollars, as well as inflict an even greater loss upon the navigation interests using such waters.

"On the other hand, the demand for the diversion of this water at Chicago is based solely upon the needs of that city for sanitation. There is involved in this case no issue of conflicting claims of navigation. The Chief of Engineers reports that so far as the interests of navigation alone are concerned, even if we should eventually construct a deep waterway from the Great Lakes to the Mississippi over the route of the Sanitary

\(^{15}\) Report of Special Master Hughes, dated November 25, 1927, p. 65.
\(^{16}\) Joint Abstract of Record filed January 24, 1928, p. 120.
Canal, the maximum amount of water to be diverted from Lake Michigan need actually be not over 1,000 feet per second, or less than a quarter of the amount already being used for sanitary purposes in the Canal. This estimate is confirmed by the report of the Special Board of Engineers on the deep waterway from Lockport, Illinois, to the mouth of the Illinois River, dated January 25, 1911. It is also confirmed by the practical experience of the great Manchester Ship Canal in England. From the standpoint of navigation alone in such a waterway, too great a diversion of water would be a distinct injury rather than a benefit. It would increase the velocity of the current and increase the danger of overflow and damage to adjacent lands.

"We have therefore presented in this case claims of entirely different characters and jurisdictions — the claim of sanitation on the one side and of navigation on the other; the vital interest of a single community on the one side and the broad interest of the commerce of the Nation on the other. The discretion given to the Secretary of War under Sections 9 and 10 of the Act of 1899 is very broad, but I have very grave doubts as to whether it was intended to authorize him to grant a permit which would inflict a substantial injury upon commerce in order to benefit sanitation. The entire purpose and scope of that legislation was to make him the guardian of the commercial interests of the Nation represented in their waterways. And while he sometimes under that statute must decide that the interests of one class of transportation are less important and must yield to the conflicting interests of another class, I have considerable doubt whether it was intended to give him authority to sacrifice substantial interests of navigation to entirely different claims over which he normally has no jurisdiction.

"It is therefore quite conceivable that compliance with their sanitary needs according to this method of sanitation may eventually materially change this great natural watercourse now existing through the Lakes. The weighing of the sanitation and possibly the health of one locality over against the commerce of the rest of the Nation, and the consideration of our relations and obligations to Canada in respect to a great international waterway, are not matters of mere technical or scientific deduction. They are broad questions of national policy. They are quite different in character, for example, from the question of fixing the proper location of a pierhead line or the height or width of a drawbridge over a navigable stream — fair samples of the class of questions which come to the Secretary of War for decision under the above mentioned Act of 1899. While the researches and opinions of experts in the respective fields are necessary and useful as an assistance towards reaching a fair and proper policy, the final determination of that policy should belong, not to an administrative officer, but rather to those bodies to whom we are accustomed to entrust the making of our laws and treaties.

"* * * I have carefully examined, however, the evidence which both sides have introduced bearing upon the sanitary
needs of the city of Chicago, and my conclusion is in no way shaken. I am not persuaded that the amount of water applied for is necessary to a proper sanitation of the city of Chicago. The evidence indicates that at bottom the issue comes down to the question of cost. Other adequate systems of sewage disposal are possible and are in use throughout the world. The problem that confronts Chicago is not different in kind but simply larger and more pressing than that which confronts all of the other cities on the Great Lakes, in which nearly three millions of the people of this country are living. The urban population of those cities, like that of Chicago, is rapidly increasing, and a method of disposition of their sewage which will not injure the potable character of the water of the Lakes must sooner or later be found for them all. The evidence before me satisfies me that it would be possible in one of several ways to at least so purify the sewage of Chicago as to require very much less water for its dilution than is now required by it in its unpurified condition. A recent report of the Engineer of the Sanitary Commission (October 12, 1911) proposes eventually to use some such method but proposes to postpone its installation for a number of years to come, relying upon the present more wasteful method in the meanwhile. It is manifest that so long as the city is permitted to increase the amount of water which it may take from the Lakes, there will be a very strong temptation placed upon it to postpone a more scientific and possibly more expensive method of disposing of its sewage. This is particularly true in view of the fact that by so doing it may still further diminish its expenses by utilizing the water diverted from the Lakes for water power at Lockport. But it must be remembered that for every unit of horsepower realized by this water at Lockport, four units of similar horsepower would be produced at Niagara, where the natural conditions are so much more favorable. Without, therefore, going into further detail in a discussion of this question, I feel clear that no such case of necessity has been presented by the evidence before me as would justify the proposed injury to the many varied interests in the great waterways of our lakes and their appurtenant rivers.

"* * * In short, after a careful consideration of all the facts presented, I have reached the following conclusions:

1. That the diversion of 10,000 cubic feet per second from Lake Michigan as applied for in this petition would substantially interfere with navigable capacity of the navigable waters in the Great Lakes and their connecting rivers.

2. That that being so, it would not be appropriate for me, without express Congressional sanction to permit such a diversion, however clearly demanded by the local interest of the sanitation of Chicago.

3. That on the facts here presented, no such case of local permanent necessity is made evident."
4. That the provisions of the Canadian treaty for a settlement by joint commission of 'questions or matters of difference' between the United States and Canada offer a further reason why no administrative officer should authorize a further diversion of water, manifestly so injurious to Canada, against Canadian protest."

On October 6, 1913 the United States filed another bill to enjoin the Sanitary District from diverting more than 4,167 cubic feet per second of water from Lake Michigan (the amount authorized by the permits issued by the Secretary of War) and the 1908 suit and the 1913 suit were consolidated and heard as one. After these cases were submitted to the court, they were held in abeyance for six years before Judge Kenesaw Mountain Landis gave an oral opinion in favor of the United States on June 19, 1920. No decree was entered, however, and thereafter Judge Landis resigned in 1922 to become dictator of organized baseball. Judge Carpenter then heard further arguments and, on June 18, 1923, directed judgment for the relief demanded by the United States. From this decree an appeal was taken to the United States Supreme Court where the decree was affirmed in January, 1925.17

The United States Supreme Court, in affirming the decree of the United States District Court, enjoining increased diversion of water from Lake Michigan through the Chicago Drainage Canal, said in part:18

"This is not a controversy between equals. The United States is asserting its sovereign power to regulate commerce and to control the navigable waters within its jurisdiction. It has a standing in this suit not only to remove obstruction to interstate and foreign commerce — the main ground, which we will deal with last — but also to carry out treaty obligations to a foreign power bordering upon some of the lakes concerned, and, it may be, also on the footing of an ultimate sovereign interest in the lakes. The Attorney General, by virtue of his office, may bring this proceeding, and no statute is necessary to authorize the suit. United States v. San Jacinto Tin Co., 125 U. S. 273, 31 L.ed. 747, 8 Supt. Ct. Rep. 850. With regard to second ground, the Treaty of January 11, 1909 (36 Stat. at L. 2448), with Great Britain, expressly provides against uses 'affecting the natural level or flow of boundary waters' without the authority of the United States or the Dominion of Canada within their respective jurisdictions and the approval of the International Joint Commission agreed upon therein. As to its ultimate interest in the lakes, the reasons seem to be stronger than those that have established a similar standing for a state, as the interests of the nation are more important.

than those of any state. * * * The main ground is the authority of the United States to remove obstructions to interstate and foreign commerce. There is no question that this power is superior to that of the states to provide for the welfare or necessities of their inhabitants. In matters where the states may act, the action of Congress overrides what they have done. * * *

“The parties have come to this court for the law, and we have no doubt that, as the law stands, the injunction prayed for must be granted. As we have indicated, a large part of the evidence is irrelevant and immaterial to the issues that we have to decide. Probably the dangers to which the city of Chicago will be subjected if the decree is carried out are exaggerated; but, in any event, we are not at liberty to consider them here as against the edict of a paramount power. The decree for an injunction as prayed is affirmed, to go into effect in sixty days, without prejudice to any permit that may be issued by the Secretary of War according to law.”

On March 3, 1925, the Secretary of War, John W. Weeks, granted a permit to the Sanitary District of Chicago authorizing a diversion of water from Lake Michigan not to exceed 8500 cubic feet per second, upon certain conditions. This was a temporary permit, looking to a progressive reduction in the diversion as rapidly as possible, and this permit was granted for humanitarian reasons only.19

Under Section 4 of the 1925 permit, it was provided that: “The Sanitary District of Chicago shall carry out a program of sewage treatment by artificial processes which will provide the equivalent of complete (100%) treatment of the sewage of the human population of at least 1,200,000 before the expiration of the permit.” The permit was to expire, if not previously revoked or specifically extended, on December 31, 1929.

Meanwhile, for many years, even before the Canal was opened in 1900, the Federal Government had viewed with considerable alarm the extensive plans that had been made to construct and complete

19. The various permits recite that they were issued pursuant to section 10 of the Rivers and Harbors Act of March 3, 1899 (30 U.S. Stat. at L.1151) which reads as follows:

Sec. 10. That the creation of any obstruction not affirmatively authorized by Congress, to the navigable capacity of any of the waters of the United States is hereby 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 War, 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 or refuge or enclosure 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 War prior to beginning the same.”
the Chicago Drainage Canal with its state law required abstraction through such Canal of huge quantities of water from Lake Michigan. Studies had been made of this situation and it was estimated that a diversion of 10,000 cubic feet per second of the waters of the Great Lakes-St. Lawrence watershed would lower the levels of the Lakes Michigan and Huron and lower St. Mary's River about six to eight inches at mean lake stage, Lakes Erie and Ontario five to six inches and the St. Lawrence River more than six inches in its upper reaches to more than five inches at Montreal. The Great Lakes port cities protested the proposed action by the Sanitary District of Chicago. Many people in Canada objected also. The residents of the lower Illinois River valley voiced their fears concerning the damage that might result to their farms since any flood damage would be accentuated by the Chicago diversion.

On April 24, 1899, the United States District Engineer at Chicago, in reporting upon the initial application of the Sanitary District to open the Chicago Drainage Canal and reverse the Chicago River, said in part:

"* * * It is a strange fact that this city has expended or will expend, over $30,000,000 with the intention of diverting an apparently unlimited amount of water from the Great Lakes to the Mississippi drainage area for sanitary purposes without finding out whether such diversion would be allowed by the great interests of the United States and the Colonies of Great Britain along the chain of Great Lakes in the navigation of the rivers and harbors of the Great Lakes. Now they ask the authority of an executive officer of the United States to open a channel that will to some unknown extent lower the levels of all the Great Lakes below Lake Superior and of their outlets, introduce a current also unknown and not to be ascertained otherwise than by actual experiment, in Chicago River, the most important navigable river of its length on the Globe, but which is already obstructed by bridges, masses of masonry and bends, and of difficult navigation at best.

"The possible effects of this diversion are not known, further than that to some unknown degree they will be injurious. Whether the amount of this injury will be so small as to be accepted by the interests affected in view of the manifest advantages and apparent necessities of their neighbors, cannot be determined by other than the interests themselves.

"It is clear to me that I am not competent to make a recommendation as to what should ultimately and definitely be done.

"* * * In my opinion the abstraction of from 300,000 to 600,000 cubic feet per minute will permanently lower Michigan, Huron and Erie from 3 to 8 inches; not more than 8 nor less than 3 inches, corresponding to an extreme reduction of from 160 to 466 tons in carrying capacity of the large vessels of the Lakes, and that it will take from three to four years for
this full effect to be attained. But the State law is unlimited in its requirements. 20,000 cubic feet per minute must be taken from Lake Michigan for each 100,000 population of the district; already nearly 400,000 c. ft. must be taken, and at the same ratio of increase for a few decades, in a very short time there must be taken 1,000,000 c. ft. per minute under this indefinite law. The amount should be limited and the injurious effect stopped somewhere.

"The mean current to be introduced in Chicago River upon the opening of the canal is estimated by the Engineers of the Drainage Board at one and one-fourth miles per hour or 110 ft. per minute. This is simply an assumption that with such velocity in an unobstructed river, the amount of 300,000 cubic feet per minute can be discharged through Chicago River but I have seen this River so jammed with vessels, drawing all the water that is in it, that by leaping from deck to deck I could cross the river. What the velocity would be in such condition with Lake Michigan on one side and a great fall on the other side of such vessels, no one knows. But it is a simple mathematical problem to determine the effect on steel-plate vessels of from 2,000 to 4,000 tons mass drifting upon or striking stone piers with a velocity of near two feet a second. They will go to the bottom."

The above warning voiced by the United States District Engineer of Chicago almost nine months before the Chicago Drainage Canal was opened on January 17, 1900, went unheeded.

(d) History and Present Status of the Litigation Involving the Great Lakes States over the Diversion of Waters of Lake Michigan at Chicago.

After the Chicago Drainage Canal was opened in 1900 and the diversion of waters from the Great Lakes-St. Lawrence system had begun; various aroused civic groups and city officials along the Great Lakes filed protests and made personal appearances before the several Secretaries of War to demand the cessation of the Chicago diversion because of the huge continuing damages being inflicted upon the peoples of the Great Lakes states. In the City of Chicago, too, there was considerable objection to the abstraction of large quantities of water from the Great Lakes-St. Lawrence watershed. On March 14, 1901, the Chicago River Improvement Association protested against the diversion of water from Lake Michigan through the Chicago River and the Chicago Drainage Canal because of the interference with navigation occasioned by the swift current introduced into the Chicago River. The landowners along the lower Illinois River complained that their crops were damaged by floods whose intensity and destruction were increased by the diversion of water from Lake Michigan in times of heavy rainstorms.
However, except for the suits filed by the Federal Government, which at this time had not been finally decided, no relief appeared imminent. Then, at one of the hearings before Secretary of War John W. Weeks in early 1922, complaint was made that despite the continued abstraction of huge quantities of water from Lake Michigan by the Chicago Sanitary District and despite the violation of the permits issued by the Secretaries of War up to that time, no agency of the Government appeared capable of stopping the Chicago diversion, notwithstanding the huge continuing damages being inflicted upon the peoples of the Great Lakes States and the port cities. Secretary Weeks asked his Judge Advocate General what could be done in this situation, and he suggested that the lake states bring an original action in the United States Supreme Court to enjoin the continued abstraction of waters from the Great Lakes-St. Lawrence watershed.

Thereafter, on July 14, 1922, the State of Wisconsin filed an original bill in the United States Supreme Court against the Sanitary District of Chicago and the State of Illinois, seeking an injunction against the diversion of waters of the Great Lakes through the Chicago Drainage Canal. On October 5, 1925, an amended bill was filed and the states of Wisconsin, Minnesota, Ohio and Pennsylvania became co-complainants. In 1926, the states of Michigan and New York each filed separate bills against the State of Illinois and the Sanitary District of Chicago wherein they sought to enjoin the defendants from diverting any water from Lake Michigan. The lake states contended that the Permit issued by Secretary of War Weeks, dated March 3, 1925, was ultra vires and void and constituted no authority for the abstraction of the waters of the Great Lakes-St. Lawrence System by the State of Illinois and the Sanitary District of Chicago.

The United States Supreme Court referred these causes to Honorable Charles Evans Hughes as Special Master,20 and after full hearings the Special Master filed his report on November 25, 1927. In his report, Special Master Hughes made, among others, the following findings of fact:

"(e) The Chicago diversion — As the Chicago drainage canal created a new outlet for the water of Lake Michigan, it is not open to dispute that this diversion has operated to reduce the levels of the Great Lakes (other than Lake Superior) below the levels which otherwise would have existed. * * *"

"I find that the full effect of a diversion of 8,500 c. f. s. of water from Lake Michigan at Chicago through the drainage canal of the Sanitary District would be to lower the levels of Lakes Michigan and Huron approximately six inches at mean

lake levels; the levels of Lakes Erie and Ontario, approximately five inches at mean lake levels; and the levels of the connecting rivers, bays and harbors, so far as they have the same mean levels as the above-mentioned lakes, to the same extent, respectively. (p. 104)

"I find, further, that an increase of the diversion at Chicago above 8,500 c. f. s. would cause an additional lowering of the levels of the lakes and their connecting waterways in proportion to the amounts above stated. Thus a diversion of an additional 1,500 c. f. s. or a total diversion of 10,000 c. f. s. would cause an additional lowering in Lakes Michigan and Huron of about one inch, and in Lakes Erie and Ontario a little less than one inch, with a corresponding additional lowering in the connecting waterways having the same levels at the lakes respectively.

"I also find that if the diversion at Chicago were ended, assuming that other diversions remained the same, the mean levels of the lakes and rivers affected by the Chicago diversion would be raised in the course of several years (about five years in the case of Lakes Michigan and Huron and about one year in the case of Lakes Erie and Ontario) to the same extent as they had been lowered, respectively, by that diversion. (p. 105)

"The Great Lakes and their connecting channels form a natural highway for transportation having a water surface of over 95,000 square miles and a shore line of 8,300 miles, extending from Duluth-Superior, and from Chicago and Gary, to Montreal, at the head of deep-draft ocean navigation on the St. Lawrence. There are approximately 400 harbors on the Great Lakes and connecting channels, of which about 100 have been improved by the Federal Government. The Federal improvements in the case of harbors as a rule consist of the excavation and maintenance of channels from deep water in the lakes to the harbor entrance. Inner or local harbors are located inside of the Federal channels, and the depths in the inner harbors have been obtained and are maintained at local expense. For example, the inner harbor at the city of Milwaukee consists of three rivers which have been improved and maintained at local expense for a distance of eight miles. Inner harbors are necessary to afford practical navigation. Extensive and expensive loading, unloading and other terminal facilities have been constructed in these various ports within the territory of the complainant States, on the Great Lakes, at local expense. The water levels in the inner harbors and channels maintained at local expense and connecting with Federal channels and with the Great Lakes are ordinarily identical with and directly dependent upon the levels of the lakes with which they connect, except that in time of flood there might be some slight slope created at the mouth of the connecting river. (p. 107)

"I am satisfied that the evidence requires the finding that the lowering of lake levels of approximately six inches has had
a substantial and injurious effect upon the carrying capacity of vessels, and has deprived navigation and commercial interests of the facilities which otherwise they would have enjoyed in commerce on the Great Lakes.

"With respect to the other items of damage alleged by the complainant States, similar considerations are deemed to be controlling. The witnesses naturally observe the total lowering of lake levels, and much of the testimony permits no satisfactory conclusion as to the damage that can be attributed exclusively to the Chicago diversion accounting for only six inches of the total reduction. But there is sufficient evidence to require the finding that a lowering of six inches has been a substantial contribution to the injury caused by the total reduction, in connection with fishing and hunting grounds, the availability and convenience of beaches at summer resorts, and public parks. (pp. 116-117) * * *

"I therefore find that the complainants have established that the diversion through the Chicago drainage canal has caused substantial damage to their navigation, commercial and other interests as above stated. (p. 118) * * *

Special Master Hughes summarized his conclusions of law as follows:

1. That the complainants present a justiciable controversy.

2. That the State of Illinois and the Sanitary District of Chicago have no authority to make or continue the diversion in question without the consent of the United States.

3. That Congress has power to regulate the diversion, that is, to determine whether and to what extent it should be permitted.

4. That Congress has not directly authorized the diversion in question.

5. That Congress has conferred authority upon the Secretary of War to regulate the diversion, provided he acts in reasonable relation to the purpose of his delegated authority and not arbitrarily.

6. That the permit of March 3, 1925, is valid and effective according to its terms, the entire control of the diversion remaining with Congress." (p. 196) * * *

In his recommendations for a decree, the Special Master concluded as follows:

"In the light of these conclusions, the bill, in my opinion, should be dismissed. I think, however, that if a situation should develop in which the defendants were seeking to create or continue a withdrawal of water from Lake Michigan without the sanction of Congress or of administrative officers acting under its authority, the complainant States have such an in-
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terest as would entitle them to bring a bill to restrain such action.

"I therefore recommend that the bill be dismissed without prejudice to the right of the complainants to institute such to prevent a diversion of water from Lake Michigan in case such diversion is made or attempted without authority of law. (p. 197)"

On January 14, 1929, the United States Supreme Court rendered its decision in which the court reversed the Special Master in his construction of the law but sustained his findings of fact. The Court held that the complainants were entitled to a decree which would be "effective in bringing that violation (of the lake states' rights) and the unwarranted part of the diversion to an end."\(^{21}\) However, by way of avoiding any unnecessary hazard to the health of the people of Chicago, the court decided to frame its decree so as to allow a reasonable and practicable time within which to provide some other means of disposing of the sewage of the Sanitary District, reducing the diversion as the artificial disposition of the sewage increased from time to time, when a permanent, final and effective injunction should issue.\(^{22}\)

In the opinion written by the late William Howard Taft, then Chief Justice, the United States Supreme Court stated that "the normal authority of the Secretary of War Under Section 10 of the Act of March 3, 1899, ch. 425, is to maintain the navigable capacity of Lake Michigan, and not to restrict or destroy it by diversions,"\(^{23}\) and that such authority cannot be expanded merely to aid the Sanitary District of Chicago to dispose of its sewage. The Court then upheld the right of the lake states to an injunction to enjoin the State of Illinois and the Sanitary District of Chicago from diverting water from Lake Michigan through the Chicago Drainage Canal beyond what diversion is necessary to keep up the normal navigation in the Chicago River and the Port of Chicago.

In touching upon the damages suffered by the Great Lakes states and their people due to the diversion at Chicago, the Court said:\(^{24}\)

"The master finds that the damage due to the diversion at Chicago relates to navigation and commercial interests, to structures, to the convenience of summer resorts, to fishing and hunting grounds, to public parks and other enterprises, and to riparian property generally, but does not report that injury to agriculture is established. * * *"

"The great losses to which the complainant states and their citizens and their property owners have been subjected by the

\(^{21}\) 278 U.S. 367 (1929).


\(^{23}\) 278 U.S. 367 at p. 417.

\(^{24}\) 278 U.S. 367 at pp. 408 and 409.
reductions of levels in the various lakes and rivers, except Lake Superior, are made apparent by these figures.

The Court then concluded that:25

"In increasing the diversion from 4,167 cubic feet a second to 8,500, the drainage district defied the authority of the national government resting in the Secretary of War. And in so far as the prior diversion was not for the purposes of maintaining navigation in the Chicago river, it was without any legal basis, because made for an inadmissible purpose. It, therefore, is the duty of this court by an appropriate decree to compel the reduction of the diversion to a point where it rests on a legal basis, and thus to restore the navigable capacity of Lake Michigan to its proper level. The sanitary district authorities, relying on the argument with reference to the health of its people, have much too long delayed the needed substitution of suitable sewage plants as a means of avoiding the diversion in the future. Therefore, they cannot now complain if an immediately heavy burden is placed upon the district because of their attitude and course. The situation requires the district to devise proper methods for providing sufficient money and to construct and put in operation with all reasonable expedition adequate plants for the disposition of the sewage through other means than the lake diversion.

"Though the restoration of just rights to the complainants will be gradual instead of immediate, it must be continuous and as speedy as practicable, and must include everything that is essential to an effective project.

"The court expresses its obligation to the master for his useful, fair, and comprehensive report.

"To determine the practical measure needed to effect the object just stated and the period required for their completion there will be need for the examination of experts; and the appropriate provisions of the necessary decree will require careful consideration. For this reason, the case will be again referred to the Master for a further examination into the questions indicated. * * *"

The causes were then referred back to Honorable Charles Evans Hughes who was directed to take testimony on the practical measures needed to dispose of the sewage without the unlawful diversion of water, and the time required for their completion, and to report his conclusions for the formulation of a decree. On December 17, 1929, the report of the Special Master upon re-reference was filed, and on April 14, 1930, the decision of the United States Supreme Court on re-reference was rendered26 wherein the Court, through Mr. Justice Holmes, again pointed out it was already decided that:

"the defendants are doing a wrong to the complainants, and that they must stop it. They must find a way out of their peril.

25. 278 U.S. 367 at pp. 420-421.
We have only to consider what is possible if the state of Illinois devotes all its powers to dealing with an exigency to the magnitude of which it seems not yet to have fully awakened. It can base no defenses upon difficulties that it has itself created. If its constitution stands in the way of prompt action, it must amend it or yield to an authority that is paramount to the state.27

The Court further held that costs should be paid by the defendants "who have made this suit necessary by persisting in unjustifiable acts."28

On April 21, 1930, the decree of the Court was entered.29 This decree provided, in part, that: (1) on and after July 1, 1930, the diversion of the waters of the Great Lakes-St. Lawrence system through the Chicago Drainage Canal should be reduced to an annual average of 6,500 cubic feet per second, in addition to domestic pumpage, (2) on and after December 31, 1935, this diversion should be reduced to 5,000 cubic feet per second, in addition to domestic pumpage, and (3) on and after December 31, 1938, this diversion should be reduced to 1,500 cubic feet per second, in addition to domestic pumpage.

In October, 1932, the states of Wisconsin, Minnesota, Ohio and Michigan applied for the appointment of a Commissioner or other special officer to execute the decree of April 21, 1930,30 on behalf of and at the expense of the defendants. The four lake states complained of the delay in the completion of the works and facilities embraced in the program of the Sanitary District of Chicago for the disposition of sewage so as to obviate danger to the health of the inhabitants of the District on the reductions in diversion on December 31, 1935 and December 31, 1938, as the decree provided, in the diversion of water from Lake Michigan through the Chicago Drainage Canal.

The Court directed the Sanitary District of Chicago and the State of Illinois to show cause why they had not taken appropriate steps to effect compliance with the provisions of the decree of April 21, 1930. After hearing upon the return of the rule, the Court appointed Edward F. McClennen as Special Master to make summary inquiry and to report to the Court: (1) as to the cause of the delay in obtaining approval by the Secretary of War of the construction of controlling works in the Chicago River and the steps necessary to obtain such approval and prompt construction; (2) as to the causes of the delay in providing for the construction of the Southwest Side Treatment

27. 281 U.S. 179 at p. 197.
29. 281 U.S. 696 (1930).
30. 281 U.S. 696 (1930).
Works and the steps which should be taken for that purpose, and (3) as to the financial measures on the part of the Sanitary District or the State of Illinois which should be reasonable and necessary to carry out the decree of the court.\textsuperscript{31}

The Special Master proceeded accordingly and after full hearing submitted his report and recommendations. The Special Master in his finding concluded that: (1) the causes of the delay in obtaining approval of the construction of controlling works in the Chicago River “are a total and inexcusable failure of the defendants to make an application to the Secretary of War for such approval,” and (2) the causes of delay in providing for the construction of the Southwest Side Treatment Works are (a) “an inexcusable and planned postponement of the beginning of construction of these works to January 1, 1935, which left an inadequate time for their completion before December 31, 1938, at the rate of progress expected or to be expected under the methods pursued by the Sanitary District,” and (b) “the failure to proceed to a definite decision as to site and to the acquisition of a site so chosen,” and (c) “the failure to proceed with reasonable diligence to prepare designs, plans and specifications for the works at this site or some other site of the West Side Works.”\textsuperscript{32}

The Special Master concluded, with respect to the steps to be taken to secure completion of the works above mentioned, that because of its financial situation, the Sanitary District is at present powerless to contract “for the design or construction of controlling works or for the construction in a large way of the Southwest Side Treatment Works.” He further concluded that “in the conditions which now exist, there is no reasonable financial measure which the Sanitary District can take, which it is failing to take;” and that “no way has come to light whereby this decree can be performed under tolerable conditions, unless the State of Illinois meets its responsibility and provides the money.”\textsuperscript{33} The Special Master then recommended that the decree of April 21, 1930 be enlarged so as to require the State of Illinois to provide the moneys necessary and to take the appropriate steps, to secure the completion of adequate facilities for the treatment and disposition of the sewage in order to carry out the decree of the United States Supreme Court.\textsuperscript{34}

Upon that report, the Supreme Court on May 22, 1933, rendered its decision,\textsuperscript{35} affirming the Special Master’s report. On the same day,

\begin{itemize}
\item \textsuperscript{31} 287 U.S. 578 (1932).
\item \textsuperscript{32} Report of Special Master Edward F. McClennen, dated April 10, 1933, pp. 5-60, 125-126.
\item \textsuperscript{33} Report of Special Master Edw. F. McClennen, dated Apr. 10, 1933, pp. 61-88, 126.
\item \textsuperscript{34} Report of Special Master, Edw. F. McClennen, dated Apr. 10, 1933, pp. 61-112, 126-128.
\item \textsuperscript{35} 289 U.S. 395 (1933).
\end{itemize}
the United States Supreme Court enlarged the decree to provide in part that the State of Illinois was required to take all necessary steps to cause and secure the completion of adequate sewage disposal plants and sewers, to the end that the reductions in diversion should have been made at the times fixed in the decree.

Thereafter the Committee on Rivers and Harbors, House of Representatives, adopted on June 15, 1934, a resolution on the question whether it was advisable for the United States to purchase the canals owned by the Sanitary District of Chicago. This proposal was opposed by the States of Wisconsin, Ohio, Minnesota and Michigan. The Sanitary District of Chicago demanded that the Federal Government purchase the canals and pay to it approximately 90 million dollars for the canals. The United States District Engineer at Chicago and the War Department reported unfavorably upon this proposal and such purchase was not made.

Several years after the failure to obtain approval of the proposal to have the United States Government purchase the Chicago Drainage Canal, the proponents of increased diversion again turned to Congress for aid. The time was approaching when the final reduction in diversion to 1,500 cubic feet per second, plus domestic pumpage, had to be made under the decree of April 21, 1930. The required reductions in the diversion to 6,500 cubic feet per second, plus domestic pumpage, on July 1, 1930, and to 5,000 cubic feet per second, plus domestic pumpage, on December 31, 1935, had all been made. There remained only the final reduction on December 31, 1938, to 1,500 cubic feet per second, plus domestic pumpage. The very thought of making this final reduction in diversion was abhorrent to many groups in and about Chicago. The fight for a large continuing diversion was supported by the following groups: (1) those who honestly believed the decision of the United States Supreme Court was wrong and should be rectified; (2) those who desired a large diversion for power purposes; (3) those who claimed additional diversion was necessary for navigation on the Illinois or Mississippi Rivers, and (4) those who used the diversion issue for publicity purposes or for political reasons.

The result was that on August 20, 1937, Congressman Claude V. Parsons, of Illinois, introduced a bill which, had it been enacted into law and held constitutional, would have authorized an increase in diversion of water from Lake Michigan through the Canal to 5,000 c. f. s., plus domestic pumpage. This bill was vigorously opposed by the Lake states, port cities and groups residing along the lower Illinois

36. 289 U.S. 710 (1933).
37. H.R. 8327, 75th Congress, 2nd Session.
River. After extensive hearings in 1938, this bill was not recommended for passage by the Rivers and Harbors Committee.

Then on January 11, 1940, the State of Illinois applied for a modification of the decree entered by the Supreme Court on April 21, 1930, so as to permit a temporary increase of the diversion to 5,000 c. f. s., in addition to domestic pumpage, until December 31, 1942, upon the grounds that conditions in the Illinois Waterway, particularly at Joliet, Illinois, due to deposit in such waterway of untreated or partially treated sewage by the Sanitary District of Chicago, constituted a menace to health. After a hearing upon this application, the Court, on April 30, 1940, rendered a per curiam opinion, in which was said, in part:38

"The State of Illinois has failed to show that it has provided all possible means at its command for the completion of the sewage treatment system as required by the decree as specifically enlarged in 1933 (289 U. S. 395, 710.) No adequate excuse has been presented for the delay. Nor has the State submitted appropriate proof that the conditions complained of constitute a menace to the health of the inhabitants of the complaining communities or that the State is not able to provide suitable measures to remedy or ameliorate the alleged conditions without an increase in the diversion of water from Lake Michigan in violation of the rights of the complainant States as adjudged by this Court."

However, in order to satisfy the Court that no actual menace to the health of the inhabitants of the complaining communities existed, the cause was referred to Monte M. Lemann, Esq., as Special Master, to hold hearings and to report to the Court together with recommendations for a decree. After extensive hearings, the Special Master filed his report on March 31, 1941, in which he held that "the actual condition of the Illinois Waterway by reason of the introduction of untreated sewage creates in the summer months a nuisance through offensive odors at Joliet and Lockport, but does not present a menace to health. No nuisance conditions were proven to exist along the Waterway at any other points."39 The Special Master recommended that a decree be entered dismissing the petition of the State of Illinois for a modification of the decree of April 21, 1930. The United States Supreme Court overruled the exceptions to the report of the Special Master and confirmed the report.40

38. 309 U.S. 569 (1940).
40. 313 U.S. 547 (1941). It should be noted that under the decree of April 21, 1930, the United States Supreme Court still retains jurisdiction of the Chicago Water Diversion Controversy.
The fight in Congress and before Federal Officials for increased Diversion at Chicago.

However, the Supreme Court's decision of May 26, 1941, did not end the fight by Chicago interests for increased diversion. Measures on this subject were introduced in each session of the United States House of Representatives by Representatives Parsons, Reed, Sabath and Rowan, of Illinois. No one of these measures was ever approved by the Rivers and Harbors Committee of the House of Representatives, and the diversion of water at Chicago remained at 1,500 cubic feet per second, plus domestic pumpage, as fixed by the decree of April 21, 1930.

Then came Pearl Harbor and the entry of the United States into World War II. Those seeking increased diversion saw here an opportunity to obtain increased diversion through the intervention of the President of the United States or the War Department. So, on December 22, 1941, the City Club of Chicago sent telegrams to President Roosevelt and to the Secretary of War at Washington requesting an increase in diversion from 1,500 cubic second feet to 10,000 c. f. s., plus domestic pumpage, on the ground that this increase in diversion would help the war effort by providing additional hydro-electric power and by releasing for other uses hundreds of coal freight cars now needed to provide coal for steam power plants in the Chicago area. It was contended that an increase in diversion to 10,000 cubic second feet for the duration of the war would quadruple the electric power output and that this additional power would serve the war industries at Wilmington, Joliet and other nearby centers.41

Thereafter, Mayor Edward J. Kelly of Chicago also wired the President and the Secretary of War requesting increased diversion, but on the ground that such additional diversion was needed to protect the health of the people of Chicago, and particularly the war workers in the Calumet area where it was alleged that the polluted waters of Lake Michigan constituted a threat to the domestic water supply on Chicago's south side.

41. The Sanitary District of Chicago today uses all of the electricity generated at Lockport for its own purposes and, in addition, purchases much additional electricity. The Sanitary District has, in fact, no extra power to sell to others and it is doubtful that there would be much available for outside use from the Lockport plant even though the diversion were increased to 10,000 c.f.s. Any electricity generated would however, benefit the Sanitary District of Chicago. The Special Master in his report to the United States Supreme Court, dated March 31, 1941, in discussing the 10-day experimental flushing when the total flow at Lockport, less domestic pumpage, averaged 9,973 cubic feet per second, said that "the additional water which came through the wheels of the Sanitary District powerhouse at Lockport (during the 10 days) generated power worth $12,500, of which the District had the benefit." See page 82 of Special Master's Report dated March 31, 1941.
On December 26, 1941, and again on January 5, 1942, the Secretary of War, through the Chief of Engineers, United States Army, advised the City Club of Chicago that the War Department had no jurisdiction to authorize an increase in diversion and that the United States Supreme Court alone had jurisdiction in the premises.

Meanwhile, on January 27, 1942, the Federal Power Commission at Washington dismissed, without prejudice, the application of the State of Illinois for a major power license for the development of four power sites located on the Illinois Waterway between Lockport and Starved Rock, Illinois. The State of Illinois had never provided the necessary funds to complete these power projects because it felt that it would be unwise to expend the necessary funds unless the State of Illinois had some assurance that the minimum diversion would be at least 5,000 cubic second feet, plus domestic pumpage. Illinois had made it plain that if it obtained a diversion of at least 5,000 c. f. s., plus domestic pumpage, the State would again file an application with the Federal Power Commission for a power license for these sites.

During the entire year 1942, Illinois and Chicago interests pushed intermittent drives to obtain increased diversion by appealing to the President, to the Secretary of War and to the War Production Board — Honorable Donald Nelson, Chairman. No Government official or Department at Washington at this time ever attempted to issue any orders to increase the diversion at Chicago. The Lake states then contended and still contend that no Governmental official or Federal Department has any authority whatsoever to modify or set aside any of the terms of the decree of the United States Supreme Court dated April 21, 1930, and that such Court alone has this power.

During the year 1943, there were introduced in Congress three measures which, had they been enacted into law and held constitutional, would have had the effect of circumventing and nullifying the United States Supreme Court decree of April 21, 1930\textsuperscript{42} which limits the diversion to 1,500 c. f. s., plus domestic pumpage. These measures were:

1. H. J. Resolution 148, "To permit the diversion of waters from Lake Michigan to safeguard public health," by Representative Sabath of Illinois;

2. H. R. 1026, a bill "To promote interstate and foreign commerce; to improve the navigability of the Lakes-to-the-Gulf Waterway, and for other purposes," by Representative Reed of Illinois; and

3. H. R. 3146, a bill "To provide for a temporary diversion by the Sanitary District of Chicago of an additional amount

\textsuperscript{42} 281 U.S. 696.
of water from the Great Lakes-St. Lawrence System or watershed in order to protect the health of war workers, members of armed forces, and other persons living in and near Chicago," by Representative Rowan of Illinois.

All three measures were referred to the House Committee on Rivers and Harbors for consideration.

Meanwhile, President Roosevelt referred to Honorable Donald Nelson, Chairman of the War Production Board and to Leland Olds, Chairman of the Federal Power Commission, the question of whether he (the President) should exercise his emergency war powers by authorizing an increase in diversion at Chicago. After study, a report was made to the President on August 6, 1943 and this report is commonly referred to as the Nelson-Olds Report, in which it was recommended "that exercise of emergency war powers for this purpose (increasing temporarily diversion at Chicago) did not appear appropriate." The report stated that "Such action would imply that the Supreme Court would not, on proper application, take all steps necessary to enable the City of Chicago adequately to safeguard public health."

Thereafter the House Rivers and Harbors Committee began hearings on the Sabath Resolution on September 28, 1943.

Many witnesses were called by the proponents of the Sabath Bill to testify in its behalf.

Those favoring the passage of the Sabath Bill argued in substance as follows: That a menace to public health existed by reason of the pollution by war industries located largely in Indiana, of the waters of the Calumet area of Lake Michigan; that the polluted waters of Lake Michigan might reach the Dunne and 68th Street water intakes (which are located in Lake Michigan 4½ miles off the shores on Chicago's south side); that this pollution had created a serious menace to the health and lives of 1,400,000 people living in the area and served with water from these two intakes; that there were already 971 reported cases "of typhoid and infantile paralysis, due to pollution of this water," and that the increased diversion was necessary to protect the lives and health of 1,400,000 people residing in Chicago. It was conceded that there were but two deaths from typhoid in Chicago in the entire year of 1942, and that there was no evidence proving that polio is due to drinking water. At these hearings, the opposing Great Lakes states and port cities, through the Great Lakes Harbors Association, vigorously opposed this bill.

The position of the opposing Great Lakes states was stated at these hearings to be:

First: Neither the Rivers and Harbors Committee nor the Congress has the authority, under the United States Constitution, to pass the Sabath Bill in its present form, because the Congress has no jurisdiction in the premises nor has Congress power to authorize the transfer of huge quantities of water from the Great Lakes watershed to the Mississippi watershed with substantial damages to the Great Lakes states and their peoples.

Second: The Supreme Court of the United States has expressly retained jurisdiction of this subject matter, and the proper forum is that Court. It has the machinery, and it has functioned many times, both on the application of the State of Illinois, and also on the application of the opposing Lake States to determine issues arising out of the Chicago diversion.

Third: The interests of Canada, a friendly foreign nation, with whom we have been at peace for more than 150 years; and which has a vital interest in maintaining the integrity of the lake levels, must be considered.

Fourth: There is no merit to the Sabath or similar bills because:
(1) No danger to public health exists. Mayor Kelly of Chicago in radio addresses has boasted that Chicago is the healthiest city in the world, and that Chicago has the safest water supply in the country; (2) the pollution situation in the Calumet area of Lake Michigan is better than it has been in the past and presents no actual threat to the city's water supply; (3) increased diversion would not materially aid this situation; (4) remedial measures (without increased diversion) to ameliorate conditions complained of are available, including (a) construction of a barrier in the Calumet River to prevent industrial and domestic wastes from being discharged into Lake Michigan, (b) budgeting of authorized diversion to increase the water taken through the Calumet River so as to draw any polluted waters away from the South Side water intakes during the summer months when complaints of pollution are loudest, (c) reducing domestic consumption of water by 50% to make chlorination of domestic water more effective, (d) enjoining by legal process the State of Indiana and the cities of Gary, Hammond, East Chicago and Whiting from depositing untreated industrial wastes and sewage into Lake Michigan; (5) increased diversion would result in serious and continuing damages to the navigation and commercial interests, to harbor facilities and riparian property in the Great Lakes States; (6) increased diversion would retard the war effort by reducing and carrying capacity of the lake fleet which hauls so much iron ore, grain, finished products and other necessities.
After all the evidence was placed before the Committee, the Chairman closed the hearings. The Rivers and Harbors Committee then studied carefully the arguments for and against increased diversion and once again refused to recommend the Sabath or any of the other diversion bills for passage.

The failure of Chicago interests to secure approval in Committee of the Sabath or other diversion bills did not lessen the efforts to obtain increased diversion. The appeals to Congress and to Federal officials did not stop. On the contrary, continued pressure for a large diversion at Chicago has been rather constantly applied in Washington.

(f) Recent Efforts to Obtain Increased Diversion.

The latest appeals to Washington have in general been based on an alleged health hazard to the people residing in the Chicago metropolitan area due to contaminated water in the south end of Lake Michigan. This claimed danger to public health has at all times been grossly exaggerated. The Lake states and port cities through the Great Lakes Harbors Association, as might be expected, vigorously opposed all such petitions for increased diversion. The result to date has been a denial of all such appeals. During the April and May, 1946 nation-wide coal and railroad strikes, an urgent request was again made to Washington for increased diversion. This time the appeal was based upon the ground that increased diversion would permit more hydro-electric power to be generated at the Lockport Power House of the Sanitary District and thus ameliorate the conditions brought about by the power shortage which the said coal and transportation strikes created. This plea again proved futile but from all indications the Chicago interests have not yet given up their perennial efforts to obtain a large diversion at the expense of the Great Lakes states and their peoples.

During past months there appeared in one of the Chicago newspapers a series of articles on the pollution of waters and the Chicago diversion problem. In these articles, the author seeks to justify the Chicago demand for increased diversion of water from Lake Michigan through the Chicago Drainage Canal on the ground that more water is needed for sewage disposal. Spokesmen for some of the interests pushing the efforts for increased diversion have said on many occasions that they would never give up their attempts to obtain increased diversion. Even if Congress were to authorize increased diversion for sewage or sanitation purposes it is plain that the United States Supreme Court would hold such action unconstitutional.44

The recent flare-up in the long-drawn-out Chicago diversion controversy might indicate the beginning of another drive for increased diversion. Considered in the light of past events, one must remain skeptical of any permanent solution to this problem in the very near future. The Lakes Diversion litigation could well exceed the controversy described in Dickens' "Bleak House" in costliness and time required for a final disposition of the issues involved.45

45. In November, 1946, the Chicago Sanitary District again made application to the Secretary of War for increased diversion on the basis of emergency conditions created by the recent coal strike. This application was opposed by protests filed with the Secretary of War by the Attorneys General of several of the Lake States. Editorials favoring increased diversion appeared in at least one Chicago newspaper, and the hope was expressed that a change in political administration might force a reopening of the case in the Supreme Court. On or about December 4, Secretary of War Patterson denied the application for increased diversion.