Syllabus.

WISCONSIN ET AL. *v.* ILLINOIS ET AL.

MICHIGAN *v.* ILLINOIS ET AL.

NEW YORK v. ILLINOIS ET AL.

Nos. 7, 11, and 12, Original. Argued March 12, 13, 1930.—Decided April 14, 1930.

1. Passing upon the Master's report in this case and the exceptions thereto, the Court determines the amounts by which the unlawful diversion of water from Lake Michigan (278 U. S. 367) should be diminished from time to time and the times to be fixed for each step; the plans proposed for disposal of the Chicago sewage are considered as material only as bearing on what those determinations should be; the defendants must find the way to comply with the determinations. P. 197.
2. The performance to be exacted of the defendant State is to be gauged by what is possible if it devotes all its powers to the exigency. The State can base no defences upon difficulties which it has itself created, nor upon anything in its own constitution that may stand in the way of prompt action. *Id.*
3. In determining the extent to which the diversion of water should be reduced and the times at which the reductions should take place, a recent rise in the level of Lake Michigan cannot be taken into account, since, apart from speculation as to the duration of the rise, delays are allowable only for the purpose of limiting within fair possibility, the requirements of immediate justice pressed by the complaining States. *Id.*
4. These requirements as between the parties are the constitutional rights of those States, subject to whatever modification they may hereafter be subjected to by Congress acting within its authority. *Id.*
5. In present conditions there is no invasion of the authority of Congress by the former decision in these cases; and the right of the plaintiffs to a decree is not affected by the possibility that Congress may take some action in the matter. *Id.*
6. The Court approves the Master's recommendations as to the amounts in which the diversion shall be successively reduced and the times within which the reductions shall be made, with a provision requiring the defendant Sanitary District to file with the Clerk of this Court, at stated periods, reports of the progress of

the work involved, at the coming in of which either party may make application to the Court for such action as may be suitable. P. 198.

7. All action of the parties and the Court in this case will be subject to any order that Congress may make in pursuance of its constitutional powers and any modification that necessity may show should be made by this Court. *Id.*
8. The Court rejects the plaintiffs' demands that all diversion through the Drainage Canal cease, that the canal be closed at its connection with the Des Plaines River, with an incidental return of the flow of the Chicago River to its original course into the Lake, and also (a demand not contemplated by their bills) that all water pumped in the Sanitary District for domestic purposes be returned to the Lake after being purified in sewage works, and adopts as more reasonable the Master's report that, as the best way of preventing the pollution of navigable waters, an outflow from the canal into the Des Plaines should be permitted and that the interests of navigation in the Chicago River, as a part of the Port of Chicago, will require the diversion of an annual average not exceeding 1500 c. f. s., in addition to domestic pumpage after sewage treatment. P. 199.
9. The claims of the complaining States should not be pressed to a logical extreme without regard to relative suffering and to the time during which the plaintiffs have let the defendants go on without complaint. P. 200.
10. If the amount of water withdrawn for domestic purposes should be excessive, it will be open to complaint. *Id.*
11. Whether the right for domestic use extends to great industrial plants (not argued) may be open for consideration at some future time. *Id.*
12. The defendants, having made the suits necessary by persisting in unjustifiable acts, must pay the costs of the litigation. *Id.*

Decree directed, subject to future modification.

Suits brought originally in this Court by the States of Wisconsin, Minnesota, Ohio, Pennsylvania, Michigan, and New York, against the State of Illinois and the Chicago Sanitary District, to enjoin further taking of water from Lake Michigan for the purpose of carrying off the sewage of Chicago and vicinity through a drainage canal. Pursuant to the opinion reported in 278 U. S. 367, the case

was referred for the second time to Charles E. Hughes, Esquire, as Special Master. The Master was directed to take testimony on the practical measures needed to dispose of the sewage without the unlawful diversions of water, and the time required for their completion, and to report his conclusions for the formulation of a decree. The decision now reported was rendered after a hearing upon exceptions to the Master's report under the second reference.

Messrs. Raymond T. Jackson, Special Assistant Attorney General of Wisconsin; *Gilbert Bettman,* Attorney General of Ohio; *Wilbur M. Brucker,* Attorney General of Michigan; and *Newton D. Baker,* Special Assistant Attorney General of Ohio; with whom *Messrs. John W. Reynolds,* Attorney General, *Herman L. Ekern,* Special Assistant Attorney General, and *Herbert H. Naujoks,* Assistant Attorney General, of Wisconsin; *Henry N. Benson,* Attorney General of Minnesota; and *Cyrus E. Wood,* Attorney General and *Thomas E. Taylor,* Deputy Attorney General, of Pennsylvania, were on the brief, for the complainant States of Wisconsin, Minnesota, Ohio, Pennsylvania, and Michigan.

No diversion or flow at Lockport is necessary or legally admissible for the purpose of maintaining navigation in the Chicago River as part of the Port of Chicago, or for any other purpose, upon the completion of the program of practical measures.

The Master, in his original report, found that Illinois had no power to divert water from the Great Lakes-St. Lawrence Watershed as against the complainant States, and that finding was confirmed by this Court. 278 U. S. 367. His later conclusion would overrule the previous decision of this Court. It would not only authorize Illinois to withhold its entire natural contribution to the Great Lakes System, but also to abstract from two to five

or six times the amount in addition (depending on whether the domestic pumpage be included). This additional water, contributed by the lower riparian States, would never have been within the boundaries of Illinois except for her unlawful act. No equity to take it can be founded upon a claim that it is or will be useful to the appropriator. It could not be said that the expense which the defendant would save by the appropriation would exceed the damage inflicted upon the complainants. But a State can not justify the taking of waters of another State upon the ground that it can derive a greater profit from their use than could the rightful owner. *Wyoming* v. *Colorado,* 259 U. S. 419. The complainant States need give no reason for keeping their own. *Hudson County Water Co.* v. *McCarter,* 209 U. S. 349.

This Court did not delegate to the Master the discretion or duty to apportion the waters between the complainant States and Illinois, on the basis of use which he might think most beneficial, or on any other basis. His exposition of the basis upon which his conclusion rests demonstrates that it is without legal basis and not responsive to the mandate of re-reference issued by the Court.

The Court held that no diversion was admissible in the interests of sanitation and that the defendants must provide some method of disposing of the sewage other than promoting or continuing the existing diversion. If any diversion were to be justified by reason of or as incident to the disposal of the sewage, the burden was on the defendants to establish both its necessity and extent as an equitable defense *pro tanto.*

This Court expressly held that Congress had not attempted to authorize any diversion for navigation purposes on the Illinois or Mississippi Rivers and that no diversion of water for such purposes could be allowed in this case. The Master has specifically found that there has been no subsequent action by the Congress. The

question, therefore, here to be determined is solely whether on the completion of this program, the diversion of any quantity of water will be required in order to maintain such navigation as may use the Port of Chicago and the Chicago River in connection with the Great Lakes-St. Lawrence System. There is no navigation in any practical sense coming into the Chicago River by way of the Illinois Waterway or the Illinois-Michigan Canal. Only a few canoes and small pleasure craft have passed through the little lock of the Sanitary District.

With the cessation of all flow at Lockport, navigable depths will be increased in the Chicago River and the Drainage Canal because of the reversal of slope incident to restoration of the natural flow into Lake Michigan. The inquiry is then immediately reduced to the question of whether any diversion of water is necessary after completion of this program in order to prevent a nuisance which will obstruct navigation in the Chicago River as part of the Port of Chicago.

With the completion of practical measures recommended by the Master (less control works) or of complainants' program, for the disposition of the sewage without diversion and with no flow at Lockport, no interference with or obstruction in fact to navigation or navigable capacity will be created in the Chicago River as part of the Port of Chicago.

Assuming, solely for the sake of argument, that the Court, in adverting to the possibility of some negligible quantity of diversion being necessary to maintain navigation in the Chicago River, referred not merely to the preservation of adequate depths and widths, but to the prevention of any nuisance conditions arising from the disposal of the sewage which could create an interference with, or obstruction to, navigation or navigable capacity, complainants assume that the Court did not have in mind any fanciful standard for the Chicago River, but intended

simply to secure practical conditions which have been found adequate for navigation in line with the experience in navigable harbors generally.

While defendants originally contended that the discharge of the entire volume of raw sewage into the Chicago River did not create any interference with navigation, ever since this Court held that diversion for sanitation is illegal and inadmissible, defendants have steadily attempted to create an impression that, in order to maintain navigation at Chicago, it is necessary to eliminate all possibility of contamination of the water in the River, no matter how negligible, so that in effect it may be as pure as it was when there was no City of Chicago. If the contentions of the defendants were correct, there would be no free and unobstructed navigation at any of the substantial ports of the United States, and navigation, instead of growing, upon the lakes and elsewhere, would have died out long ago, as the cities continued to grow. On the contrary, it has rapidly increased. Cf. *New York* v. *New Jersey*, 256 U. S. 296.

Analysis of the evidence demonstrates that no diversion is necessary to maintain navigation in the Chicago River.

If it be assumed that the program of practical measures recommended by the Master is not adequate to prevent interference with navigation in the Chicago River as part of the Port of Chicago, with no flow at Lockport, then other available practical measures must be included in the program; and with their inclusion, no claim of a necessity for any diversion to maintain navigation in the Chicago River can be supported.

If an unusual standard of purity and beauty in the interests of navigation is to be adopted for the Chicago River, then there are available practical measures other than diversion for accomplishing such a standard.

Practical measures are available to wholly eliminate the effluent of the sewage treatment works and the discharge

of any untreated sewage at times of storm from the Chicago River, if that is deemed necessary. In any event, no permanent diversion in abridgement of complainants' rights is admissible as a matter of law.

Diversion to remove a nuisance created by the sewage of Chicago is not in aid of navigation.

Congress, by general and special legislation, has affirmatively determined that the discharge of local sewage and street wash into any of the navigable waters of the United States shall not constitute an obstruction to navigation or navigable capacity as a matter of law. U. S. C., Title 33, §§ 407, 421. This determination is conclusive. *Pennsylvania* v. *Wheeling Bridge Co.,* 18 How. 421; *Southern Pacific Co.* v. *Olympian Dredging Co.,* 260 U. S. 205. It seems that, in *New York* v. *New Jersey,* 256 U. S. 296, this statute was not construed.

If the Court should find that there is any basis in fact for any diversion, subsequent to the completion of the program of practical measures, in the interests of navigation, complainants reassert their contentions (laid aside without decision in the opinion of January 14, 1929) that neither the State of Illinois nor the Federal Government has the power to authorize the diversion of any water in the Great Lakes-St. Lawrence Watershed to the Mississippi Watershed without the consent of the complainant States.

The City of Chicago does not divert the unconsumed portion of its domestic pumpage; it would have no legal right so to do against the objection of these complainants; and if such a right be conceded for the sake of argument, such a diversion could not be made the basis of diverting an additional quantity of water in derogation of the rights of the complainants.

Domestic pumpage does not cease to be water because it has become in a greater or lesser degree contaminated through its reasonable use for domestic purposes.

The State of Illinois under the circumstances of this case has not the power to authorize Chicago to take its domestic water supply from the Great Lakes Watershed and divert the unconsumed portion to the Mississippi Watershed. *Holyoke Water Power Co.* v. *Connecticut River Co.,* 22 Blatch. 131, 20 Fed. 71; *Saunders* v. *Bluefield Imp. Co.,* 58 Fed. 133; *Pine* v. *New York,* 50 C. C. A. 145, 112 Fed. 98, reversed on other grounds, 185 U. S. 93; *Rutz* v. *St. Louis,* 7 Fed. 438; *Hoge* v. *Eaton,* 135 Fed. 411.

The common law of waters obtains in the complainant and defendant States. Every riparian owner is entitled to the natural flow of the stream or watercourse without substantial diminution in either quantity or quality, and an upper riparian owner must return any waters diverted from a watercourse before it leaves his land. *Kimberly & Clark Co.* v. *Hewitt,* 79 Wis. 334; *Priewe* v. *Wisconsin Land & Imp. Co.,* 93 Wis. 534; *Dwight* v. *Hayes,* 150 Ill. 237; *Minnesota Loan & T. Co.* v. *St. Anthony Falls Waterpower Co.,* 82 Minn. 505; *Pinney* v. *Luce,* 44 Minn. 367; *Clark* v. *Pennsylvania R. Co.,* 145 Pa. St. 438; *Miller* v. *Miller,* 9 Pa. 74; *Strobel* v. *Kerr Salt Co.,* 164 N. Y. 303; *Loranger* v. *Flint,* 185 Mich. 454; *Stock* v. *Jefferson,* 114 Mich. 357; *Canton* v. *Shock,* 66 Oh. St. 19; *Stock* v. *Hillsdale,* 155 Mich. 375; *Philadelphia* v. *Collins,* 68 Pa. St. 106; *Haupt's Appeal,* 125 Pa. St. 211; *Lord* v. *Meadville Water Co.,* 135 Pa. 122; *Crill* v. *Rome,* 47 How. Pr. Rep. 398; *Sumner* v. *Gloversville,* 71 N. Y. S. 1088; *Smith* v. *Rochester,* 92 N. Y. 463; *Fulton Light, H. & P. Co.* v. *State,* 200 N. Y. 400; *Minneapolis Mill Co.* v. *Water Comm'n,* 56 Minn. 485; *Kimberly & Clark Co.* v. *Hewitt,* 79 Wis. 334; *Green Bay & Co.* v. *Kaukauna Water Co.,* 90 Wis. 370; *Elgin* v. *Elgin Hydraulic Co.,* 85 Ill. App. 182, affirmed, 194 Ill. 476.

The Master committed no error in not allowing a longer period of time for the construction and placing in operation of the practical measures recommended by him.

This Court has already decided, *Wisconsin* v. *Illinois,* 278 U. S. 367, that it has the jurisdiction to determine the extent of diversion, if any, which is legal, and its right so to do is clear.

The Master should have recommended that costs be taxed against the defendants, including the fees of the Master. *Nebraska* v. *Iowa,* 143 U. S. 359; *South Dakota* v. *North Carolina,* 192 U. S. 286; *New York* v. *New Jersey,* 256 U. S. 296; *North Dakota* v. *Minnesota,* 263 U. S. 583.

Mr. Hamilton Ward, Attorney General of New York, submitted for the complainant State of New York.

The program outlined by the Master is not an adequate program of practical measures for the disposition of the sewage in the Sanitary District through other means than lake diversion, as interpreted by the Master, and does not comply with the order of this Court dated January 14, 1929.

The inclusion by the Master of controlling works as a part of his program of practical measures for the disposition of sewage was erroneous because it preserves rather than prevents diversion and because it conditions complainant's relief upon the discretion of the Secretary of War.

Upon the completion of the sewage disposal program, no diversion or flow at Lockport is necessary or legally admissible to maintain navigation in the Chicago River as part of the Port of Chicago.

Diversion is not necessary in the interests of navigation on the Chicago River as a part of the Great Lakes system.

Upon completion of the practical measures recommended by the Master, or of complainant's program, there will be no nuisance in the Chicago River such as to require the diversion of any lake water.

In *New York* v. *New Jersey,* 256 U. S. 296, the discharge of sewage into New York Harbor with only simple preliminary treatment for the removal of gross material was held not to be harmful to navigation.

Congress by general and special legislation has affirmatively determined that the discharge of local sewage and street wash into any of the navigable waters of the United States shall not constitute an obstruction of navigation or navigable capacity as a matter of law, U. S. C., Title 33, §§ 407, 421. This is conclusive. *Monongahela Bridge Co.* v. *United States,* 216 U. S. 177.

The time allowed by the Master for the construction and placing in operation of practical measures for sewage disposal is sufficient.

The jurisdiction of this Court to fix the amount of diversion in the interest of navigation has been decided. *Wisconsin* v. *Illinois,* 278 U. S. 376.

The Master was correct in not allowing additional diversion in the alleged interest of navigation in the Illinois River or Michigan Canal, and in finding it practicable to determine permissible reductions in diversion during the construction.

The decree proposed should have awarded costs to the complainant including the fees of the Master. *North Dakota* v. *Minnesota,* 263 U. S. 583.

Messrs. John W. Davis, James M. Beck and *Edmund D. Adcock,* with whom *Messrs. Oscar E. Carlstrom,* Attorney General of Illinois, *Walter E. Beebe, George F. Barrett, James Hamilton Lewis, Louis J. Behan, William P. Sidley* and *Cornelius Lynde* were on the brief, for the defendants, the State of Illinois and the Sanitary District of Chicago.*

* *Mr. Carlstrom* appeared as representing the State of Illinois; *Mr. Beebe* as Attorney, and *Messrs. Barrett* and *Adcock* as Solicitors, of the Sanitary District of Chicago. *Messrs. Davis, Beck, Lewis,* and

The manner and conditions of the discharge and flow of wastes in the navigable waters must be within the paramount power of Congress to regulate. Congress has provided for regulation by the Secretary of War on the recommendation of the Chief of Engineers. It would be improper for the Court to step over into this field of the political department.

The bills do not seek to interfere with the discharge of Chicago's sewage, wastes and storm water to the Des Plaines River.

Pursuant to these bills, much evidence was offered by complainants at the 1926–27 hearings, and their witnesses at those hearings never contemplated discharge of treated or untreated sewage and storm waters into Lake Michigan.

This Court's opinion of January 14, 1929, does not contemplate preventing discharge of sewage effluent, waste, storm water and rain water run-off to the Des Plaines River, nor does it intend that diversion from the Lake should cease. The Court understood that the only question involved was as to the amount of water that should be "directly abstracted from Lake Michigan."

The City of Chicago has the right to take water from Lake Michigan for its domestic purposes and discharge the drainage, sewage or effluent or wastes from sewage purification works wherever in its judgment it may deem most appropriate.

The Supreme Court, in original suits between States, adopts the law of the complainants and defendants as announced by Constitution, statute, or the opinions of their courts. *Wyoming* v. *Colorado,* 206 U. S. 46.

Behan appeared as counsel for the Sanitary District, as did also *Messrs. Sidley* and *Lynde,* the last two representing the Association of Commerce of Chicago.

Mr. Lewis was present at the argument, but yielded his time to *Mr. Adcock.*

The law of the complainant and defendant States is that a city located upon a public navigable waterway has the right to take water for its domestic purposes and appropriate it for all the uses to which the city may put it, such as drinking, cooking, sanitary, manufacturing, fire department and such like, either as riparian owner or by virtue of a grant by the State of such use of public waters, and no lower or other riparian owner can complain of such use for domestic purposes. *City of Canton* v. *Shock,* 66 Ohio 19; *Minneapolis Mill Co.* v. *Board of Water Comm'rs,* 56 Minn. 485; *Lamprey* v. *Minnesota,* 52 Minn. 181; *Loranger* v. *City of Flint,* 185 Mich. 454; *Appeal of Frank Haupt,* 125 Pa. St. 211; *Philadelphia* v. *Collins,* 68 Pa. 106; *Philadelphia* v. *Comm'rs of Spring Garden,* 7 Pa. 348; *Filbert* v. *Dechert,* 22 Pa. Sup. Ct. 362; *Palmer Water Co.* v. *Lehighton Water S. Co.,* 280 Pa. St. 492; *Boalsburg Water Co.* v. *State College Water Co.,* 240 Pa. St. 198; *Scranton Gas & W. Co.* v. *D. L. & W. R. Co.,* 240 Pa. St. 604; *Crill* v. *The City of Rome,* 47 How. Prac. Rep. 398; *Illinois Central R. Co.* v. *Illinois,* 146 U. S. 387; *Strobel* v. *Kerr Salt Co.,* 164 N. Y. 303; *United P. B. Co.* v. *Iroquois P. & P. Co.,* 226 N. Y. 38; *Haseltine* v. *Case,* 46 Wis. 391; *State* v. *Southerland,* 166 Wis. 511; *Metropolitan Investment Co.* v. *Milwaukee,* 165 Wis. 216; *Thomas Furnace Co.* v. *Milwaukee,* 156 Wis. 549; *Wisconsin River Imp. Co.* v. *Lyons,* 30 Wis. 61; *Diana Shooting Club* v. *Husting,* 156 Wis. 261; *City of Elgin* v. *Elgin Hydraulic Co.,* 85 Ill. App. 182; *Watuppa Reservoir Co.* v. *Fall River,* 147 Mass. 548; *Fisk* v. *Hartford,* 69 Conn. 375; *City of Auburn* v. *Union Water Power Co.,* 90 Me. 576; *Barre Water Co.* v. *Carnes,* 65 Vt. 626.

Diversions of water from one watershed to another have been the common practice of complainant States. These diversions have been acquiesced in and were undoubtedly made for the purpose of taking advantage of the natural

resources of the States making the diversions. See *Wyoming* v. *Colorado,* 259 U. S. 419, 466.

The Acts of Congress of 1822 and 1827, and the Acts of Illinois, have brought Chicago within the watershed of the Mississippi River, at least for the purpose of discharging the run-off of the Chicago River drainage area and sewage. *Missouri* v. *Illinois,* 200 U. S. 496.

Since about 1865, there has been discharged to the Des Plaines River by way of the Illinois and Michigan Canal, or the Sanitary and Ship Canal, and from the Chicago River, an amount of sewage and water equal to the average rain water run-off of the Chicago River drainage area and the sewage and wastes.

After the works recommended in the Master's report for the treatment of sewage and wastes have been installed, then there will have been disposed of and eliminated all the sewage and wastes that may be so disposed of from a practicable standpoint. There will be left a residue of wastes in the effluents and in the storm water after such works are put in operation. Therefore, a reasonable amount of water will be required and may be diverted from Lake Michigan to prevent nuisance to or interference with navigation or navigable waters in the port and harbor of Chicago and in Lake Michigan, to prevent pollution and impairment of the domestic water supply, and bathing beaches, and to prevent other nuisances.

The Court in exercising its jurisdiction in controversies between States, will apply the principle of comity and equality of right and opportunity and such equitable principles as will effect a just and equitable solution of the problem under all the circumstances of the case.

Equality of right does not mean an equal division of water. The States stand on an equal level or plane. Each State has the right to take advantage of what nature

has by reason of its topography, natural resources and other advantages provided it, even though in putting such resources to the best available uses, the State may encroach to some extent upon the solitary rights or the equally full enjoyment of rights of some other State or States. Each State has an equal right to use those great natural assets which are available to many States in common, and in appropriating part is not to be limited by technical or narrow rules. Thus generally the public welfare of the people of all the States will be advanced.

The discharge of the effluent and storm water, together with a reasonable amount of water direct from Lake Michigan, to the Des Plaines River, constitutes the natural and logical method of disposing of these wastes and protecting navigation.

The ordinary rain water run-off of the Calumet and Chicago River drainage areas must necessarily become mixed with and a part of the sewage. In any event, this ordinary rain water run-off has been discharged to the Des Plaines River since 1865. In this there has been such long acquiescence that there can be no possibility of complaint. The amount of water required from Lake Michigan to protect navigation is small, and the effect, if any, upon the interests of complainant States, is negligible in comparison with the great financial burden that would be placed upon the people of Chicago, and the inconveniences from nuisance to the people living at Chicago, as well as to the persons navigating the Lakes. *Kansas* v. *Colorado,* 206 U. S. 46; *North Dakota* v. *Minnesota,* 263 U. S. 365; *Wyoming* v. *Colorado,* 259 U. S. 419; *Minnesota Rate Cases,* 230 U. S. 352; *Kansas* v. *Colorado,* 185 U. S. 125.

The recent Colorado River compact is excellent authority in support of the doctrine of equal right and opportunity between States, and becomes a persuasive

precedent in applying interstate law principles in controversies between the States.

The discharge into Lake Michigan of effluent from treatment plants, storm water, untreated sewage therein and drainage, as complainants propose, would forever impair Chicago's only water supply.

The practicable measures required for the disposition of the sewage and wastes of the Sanitary District, do not embrace the additional works which the complainants now insist should have been included by the Master.

The diversion from Lake Michigan, when all the sewage treatment works are in operation, should be fixed with relation to the needs and interest of navigation not only of the port and harbor of Chicago, but also of the Des Plaines and Illinois Rivers. *Wisconsin* v. *Illinois,* 278 U. S. 367; *New York* v. *New Jersey,* 256 U. S. 296.

Considering the interests of navigation on the Illinois River, as well as that at the port of Chicago, the evidence is undisputed that approximately 5,000 c. f. s. of diversion, including domestic pumpage, is required to maintain unobjectionable conditions on the Illinois River.

Considering only the waters of the port of Chicago, 2,000 c. f. s., in addition to domestic pumpage and rain water run-off is required for navigation.

The modern trend of thought, congressional legislation, and official action of government and state officers is toward keeping and maintaining navigable and other waters of the United States free from future pollution by sewage and waste contamination of cities. *Missouri* v. *Illinois,* 200 U. S. 496; *New York* v. *New Jersey,* 256 U. S. 296.

The provision for controlling works to prevent reversals of the Chicago River into the Lake, is part of the defendants' construction program to provide practical measures in order that the amount of water diverted from the Lake, when all the works are in operation, may be reduced to

the lowest practicable amount consistent with the interests of navigation and prevention of nuisance to the various interests involved.

Unless such controlling works are installed, it will be impracticable, as the Master found, to reduce the diversion below 6,500 cubic second feet.

The drainage canal and the Chicago River are navigable waters of the United States, and it will be necessary before such controlling works may be installed, that the plans therefor be approved by the Secretary of War, on the recommendation of the Chief of Engineers, under § 10 of the Rivers and Harbors Act of March 3, 1899. *Mortell* v. *Clark,* 272 Ill. 201; *People* v. *Economy Power & L. Co.,* 241 Ill. 329; *Ex parte Boyer,* 109 U. S. 628; *United States* v. *Cress,* 243 U. S. 316; *Perry* v. *Haines,* 191 U. S. 17; *DuPont* v. *Miller,* 310 Ill. 140.

The Master has found that such controlling works will not materially interfere with navigation, and has provided by his form of decree that the defendant Sanitary District shall immediately submit plans to the War Department for such control works and that the control works shall be constructed and installed by the Sanitary District within two years after the date of the approval of such plans by the War Department. Consequently, an exception on any prognosis that they may not be built is without merit.

The amounts of the diversion at various times during the period of construction, and the amount after all the works are completed, should be fixed by the Secretary of War, on the recommendation of the Chief of Engineers.

The opinion of January 14, 1929, intends that the Secretary of War, on the recommendation of the Chief of Engineers, shall continue the exercise of the functions heretofore exercised in fixing the amounts of the diversions in the interests of navigation and its protection as the exigencies of the situation may prompt.

The Court ought not to take any action in fixing the amount of the diversion which will invade the sphere of action of the political department. The Court's opinion of January 14, 1929, must not be so construed and, if it may bear such construction, it should be modified. *Sanitary District* v. *United States,* 266 U. S. 405; *Pacific Tel. Co.* v. *Oregon,* 223 U. S. 118; *Prentis* v. *Atlantic Coast Line,* 211 U. S. 210.

It is impracticable now to fix amounts of the diversion. The practical solution is to provide by the decree that the diversion shall be, during the construction period, such amounts as may be determined by permits issued according to law by the Secretary of War on the recommendation of the Chief of Engineers; but that such permits shall be subject to review by this Court on the evidence already submitted and any further evidence that may then be presented.

The time fixed by the Master's report for the installation of all the different works is too short.

The rise in lake levels since the introduction of the evidence on which the Court's opinion of January 14, 1929, was rendered, should have caused the Master to disregard his conclusion that the Court intended to impose " an immediately heavy burden " in the installation of works. Reasonable time for completion should have been allowed. The shorter time which would impose such immediately heavy burden is inequitable under the circumstances.

Liberal allowance for unforeseeable delays in the construction of such vast and unusual works, should have been made, which would have extended the construction period beyond the date fixed by the Master.

It is inappropriate at this time to determine which one of the parties shall pay the costs. Cf. *North Dakota* v. *Minnesota,* 263 U. S. 583; *Kansas* v. *Colorado,* 206 U. S. 46; *Wyoming* v. *Colorado,* 259 U. S. 496.

Messrs. Stratton Shartel, Attorney General of Missouri, *J. W. Cammack,* Attorney General of Kentucky, *Charles H. Thompson,* Attorney General of Tennessee, *Percy Saint,* Attorney General of Louisiana, *Rush H. Knox,* Attorney General of Mississippi, *Hal L. Norwood,* Attorney General of Arkansas, and *Daniel N. Kirby,* on behalf of the Mississippi Valley States, intervening defendants, joined in the foregoing brief.

Mr. Justice Holmes delivered the opinion of the Court.

These suits, brought to prevent the State of Illinois and the Sanitary District of Chicago from continuing to withdraw water from Lake Michigan as they now are doing, have passed through their first stage in this Court. The facts were set forth in detail and the law governing the parties was established by the decision reported in 278 U. S. 367. It was decided that the defendant State and its creature the Sanitary District were reducing the level of the Great Lakes, were inflicting great losses upon the complainants and were violating their rights, by diverting from Lake Michigan 8,500 or more cubic feet per second into the Chicago Drainage Canal for the purpose of diluting and carrying away the sewage of Chicago. The diversion of the water for that purpose was held illegal, but the restoration of the just rights of the complainants was made gradual rather than immediate in order to avoid so far as might be the possible pestilence and ruin with which the defendants have done much to confront themselves. The case was referred a second time to the master to consider what measures would be necessary and what time required to effect the object to be attained. The master now has reported. Both sides have taken exceptions, but, as we shall endeavor to show, the issues open here are of no great scope.

The defendants have submitted their plans for the disposal of the sewage of Chicago in such a way as to diminish so far as possible the diversion of water from the Lake. In the main these plans are approved by the complainants. The master has given them a most thorough and conscientious examination. But they are material only as bearing on the amount of diminution to be required from time to time and the times to be fixed for each step, and therefore we shall not repeat the examination. It already has been decided that the defendants are doing a wrong to the complainants and that they must stop it. They must find out a way at their peril. 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 awaked. It can base no defences 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.

The defendants' exceptions deal with the extent to which the diversion of water should be reduced and to the time at which the reductions should take place. They argue that a recent rise in the level of Lake Michigan should be taken into account. This cannot be done. Apart from the speculation involved as to the duration of the rise, there is a wrong to be righted, and the delays allowed are allowed only for the purpose of limiting, within fair possibility, the requirements of immediate justice pressed by the complaining States. These requirements as between the parties are the constitutional right of those States, subject to whatever modification they hereafter may be subjected to by Congress acting within its authority. It will be time enough to consider the scope of that authority when it is exercised. In present conditions there is no invasion of it by the former decision of this Court, as urged by the defendants. The

right of the complainants to a decree is not affected by the possibility that Congress may take some action in the matter. See *Southern Utilities Co.* v. *Palatka,* 268 U. S. 232, 233. *Kansas* v. *Colorado,* 206 U. S. 46, 117.

The master finds that, on and after July 1, 1930, the diversion of water from Lake Michigan should not be allowed to exceed an annual average of 6,500 cubic feet per second in addition to what is drawn for domestic uses. He finds that when the contemplated controlling works are constructed that are necessary for the purpose of preventing reversals of the Chicago River at times of storm and the introduction of storm flow into Lake Michigan, works that will require the approval of the Secretary of War and that the master finds should be completed and put in operation within two years after the approval is given, and probably by December 31, 1935, the diversion should be limited to an annual average of 5,000 c. f. s. "in addition to domestic pumpage." On this point we deal only with the amount and the time. When the whole system for sewage treatment is complete and the controlling works installed he finds that the diversion should be cut down to an annual average of 1,500 c. f. s. in addition to domestic pumpage. This, he finds, should be accomplished on or before December 31, 1938; and the full operation of one of the contemplated works, the West Side Sewage Treatment Plant, which would permit a partial reduction of the diversion, is to be not later than December 31, 1935. These recommendations are subject to the appointment of a commission to supervise the work, or, better in our opinion, to the filing with the clerk of this Court, at stated periods, by the Sanitary District, of reports as to the progress of the work, at the coming in of which either party may make application to the Court for such action as may seem to be suitable. All action of the parties and the Court in this case will be subject, of course, to any order that Congress may

make in pursuance of its constitutional powers and any modification that necessity may show should be made by this Court. These recommendations we approve within the limits stated above, and they will be embodied in the decree. The defendants argue for delay at every point but we have indicated sufficiently why their arguments cannot prevail. The master was as liberal in the allowance of time as the evidence permitted him to be.

The exceptions of the complainants go mainly to a point not yet mentioned. The sewage of Chicago at present is discharged into a canal that extends to Lockport on the Des Plaines River, (which flows into the Illinois, which in its turn flows into the Mississippi,) from Wilmette on the north and a point on the Lake near the boundary line of Indiana on the south, with another intake midway between these two at the mouth of the Chicago River, which has been reversed from its former flow into Lake Michigan to a flow from the Lake. The change is narrated at length in the former decision of this case. 278 U. S. 367, 401, *et seq.* See also *Missouri* v. *Illinois,* 180 U. S. 208, 211, *et seq.* s. c. 200 U. S. 496. It is partially to oxidize and carry off this sewage that the main diversion of water is made. The complainants demand that this diversion cease, and the canal be closed at Lockport, with an incidental return of the Chicago River to its original course. They also argue that what is called the domestic pumpage after being purified in the sewage works be returned to the Lake. These demands seem to us excessive upon the facts in this case. The master reports that the best way of preventing the pollution of navigable waters is to permit an outflow from the Drainage Canal at Lockport, and that the interests of navigation in the Chicago River as a part of the port of Chicago will require the diversion of an annual average of from 1,000 c. f. s. to 1,500 c. f. s. in addition to domestic pumpage after the sewage

treatment program has been carried out. The canal was opened at the beginning of the century, thirty years ago. In 1900 it already was a subject of litigation in this Court. The amount of water ultimately to be withdrawn unless Congress may prescribe a different measure is relatively small. We think that upon the principles stated in *Missouri* v. *Illinois,* 200 U. S. 496, 520, *et seq.,* the claims of the complainants should not be pressed to a logical extreme without regard to relative suffering and the time during which the complainants have let the defendants go on without complaint.

Perhaps the complainants would not be very insistent with regard to the 1,000 or 1,500 c. f. s. which earlier in this case they seemed to admit to be reasonable, if their demand were allowed that the domestic pumpage be purified and returned to the Lake—a demand not contemplated by their bill. But purification is not absolute. How nearly perfect it will be with the colossal works that the defendants have started is somewhat a matter of speculation. The master estimates that with efficient operation the proposed treatment should reach an average of 85 per cent purification and probably will be 90 per cent or more. Even so we are somewhat surprised that the complainants should desire the effluent returned. The withdrawal of water for domestic purposes is not assailed by the complainants and we are of opinion that the course recommended by the master is more reasonable than the opposite demand. If the amount withdrawn should be excessive, it will be open to complaint. Whether the right for domestic use extends to great industrial plants within the District has not been argued but may be open to consideration at some future time.

We see no reason why costs should not be paid by the defendants, who have made this suit necessary by persisting in unjustifiable acts. *North Dakota* v. *Minnesota,* 263 U. S. 583.

A decree will be entered to the effect that, subject to such modifications as may be ordered by the Court hereafter,

1. On and after July 1, 1930, the defendants, the State of Illinois and the Sanitary District of Chicago, are enjoined from diverting any of the waters of the Great Lakes-St. Lawrence system or watershed through the Chicago Drainage Canal and its auxiliary channels or otherwise in excess of an annual average of 6,500 c. f. s. in addition to domestic pumpage.

2. That on and after December 31, 1935, unless good cause be shown to the contrary the said defendants are enjoined from diverting as above in excess of an annual average of 5,000 c. f. s. in addition to domestic pumpage.

3. That on and after December 31, 1938, the said defendants are enjoined from diverting as above in excess of the annual average of 1,500 c. f. s. in addition to domestic pumpage.

4. That the provisions of this decree as to the diverting of the waters of the Great Lakes-St. Lawrence system or watershed relate to the flow diverted by the defendants exclusive of the water drawn by the City of Chicago for domestic water supply purposes and entering the Chicago River and its branches or the Calumet River or the Chicago Drainage Canal as sewage. The amount so diverted is to be determined by deducting from the total flow at Lockport the amount of water pumped by the City of Chicago into its water mains and as so computed will include the run-off of the Chicago and Calumet drainage area.

5. That the defendant the Sanitary District of Chicago shall file with the clerk of this Court semi-annually on July first and January first of each year, beginning July first, 1930, a report to this Court adequately setting forth the progress made in the construction of the sewage treatment plants and appurtenances outlined in the program as proposed by the Sanitary District of Chicago, and also

setting forth the extent and effects of the operation of the sewage treatment plants, respectively, that shall have been placed in operation, and also the average diversion of water from Lake Michigan during the period from the entry of this decree down to the date of such report.

6. That on the coming in of each of said reports, and on due notice to the other parties, any of the parties to the above entitled suits, complainants or defendants, may apply to the Court for such action or relief, either with respect to the time to be allowed for the construction, or the progress of construction, or the methods of operation, of any of said sewage treatment plants, or with respect to the diversion of water from Lake Michigan, as may be deemed to be appropriate.

7. That any of the parties hereto, complainants or defendants, may, irrespective of the filing of the above-described reports, apply at the foot of this decree for any other or further action or relief, and this Court retains jurisdiction of the above-entitled suits for the purpose of any order or direction, or modification of this decree, or any supplemental decree, which it may deem at any time to be proper in relation to the subject matter in controversy.

The CHIEF JUSTICE took no part in the consideration or decision of these cases.

UNITED STATES *v.* ADAMS.

SAME *v.* SAME.

APPEALS FROM THE DISTRICT COURT OF THE UNITED STATES FOR THE EASTERN DISTRICT OF ARKANSAS.

Nos. 281 and 282. Argued March 6, 1930.—Decided April 14, 1930.

1. Under Rev. Stats. § 5209, as amended; U. S. C., Title 12, § 592; which punishes any officer of a federal reserve or member bank