

GOVERNOR'S MESSAGE

RELATING TO THE

State Water-supply Problem

Transmitting Report thereon by the State Chamber of
Commerce to which is appended a Tri-State
compact to be submitted for
adoption

TO THE LEGISLATURE—SESSION OF 1925

TRENTON, N. J.
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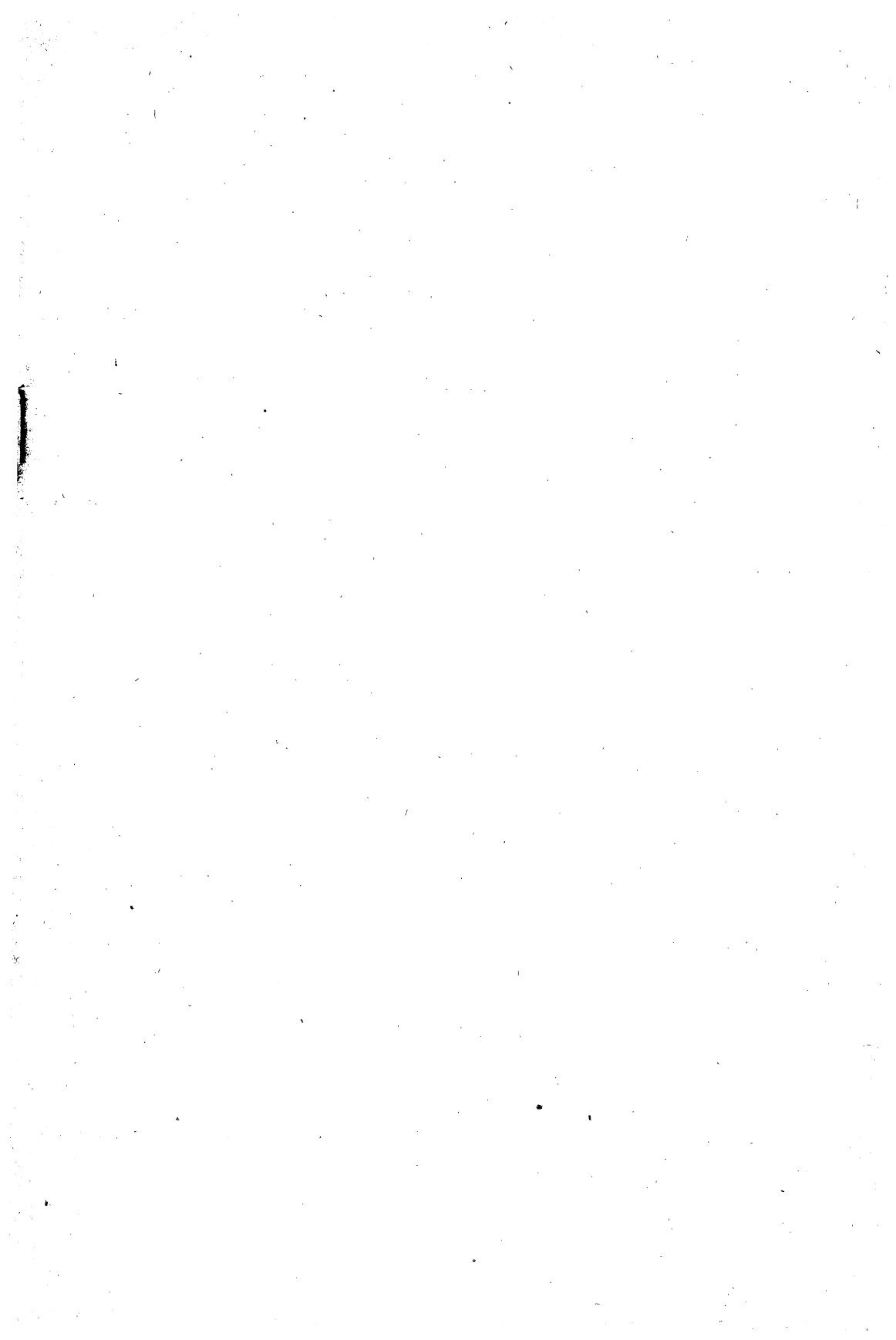
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MESSAGE

STATE OF NEW JERSEY,
EXECUTIVE DEPARTMENT,

January 27th, 1925.

WATER.

To the Legislature:

During the winter of nineteen hundred and twenty-three I called the attention of the State Chamber of Commerce to the conditions relating to the water problem which confronts the people of this State. Later, I communicated those views to the Legislature, with the suggestion that some steps be taken to study the problem and for the adoption of a definite State policy.

No action was taken by the Legislature, but the State Chamber of Commerce has, during the year, made a study of the question, and the report of their conclusions, as submitted to me, is appended hereto.

I commend this report and subsequent ones to you. This body is disinterested, and desires nothing but that which is good for the State. Eminent members of the organization have given of their time and ability in the study of the question and their conclusions are worthy of every consideration.

The practice at this time in New Jersey is to give municipalities the privilege of going beyond their boundaries to secure a water supply for their inhabitants.

In cases where jealousies arise and several communities desire to go into the same water-shed, after much wrangling, sometimes a compromise is reached and joint action is taken.

It was in this way that the North Jersey District Water Supply Commission was developed as the agency of certain municipalities. Under the leadership of Newark, it was given power to develop the Wanaque project. With this supply, these cities (naturally entitled to this water by reason of propinquity), will be well supplied.

This body can only act, however, when requested by the municipalities desiring its help. It does not, however, represent any State policy beyond the settling of a dispute between several communities, and serves as the instrument to distribute the water, in these water-sheds, so far as it will go, to the communities asking for it.

Beyond this, there is not, and has not been, a State policy.

We are growing so rapidly that we must soon adopt a wise and forward-looking policy for the State, if we are not to neglect our clear duty.

Governor Fort, about fifteen years ago, saw that we should take some such step, but his advice was not heeded. We are now that much closer to the necessity for action. If we let it go again, we shall soon be confronted by a much bigger, more complicated, more difficult and more expensive problem than we now have. It may even be prohibitive.

Numerous studies have been made by competent experts, and reports are on file, setting forth plans for development. These reports make it clear that it is our duty to act.

We should have a definite plan for development, and should proceed as rapidly as is necessary and economically practical, to carry the plan into effect. If this be done, the plan will gradually unfold and our eventual needs will be taken care of.

If we do not do this, what will happen?

We will continue to drift, and, some day, will wake up to find ourselves confronted with a condition almost unsolvable, or, at least, solvable only at enormous expense.

We will continue to let each community develop its own water supply where it will. We will permit the North Jersey District **Water Supply Commission** to reach out into other fields and develop supplies only for those who apply. We will permit the Raritan Valley communities to develop a small part for their use. And so it will go by patch-work and drifting.

In this way, money in large amounts will have been spent upon these individual, separate and unrelated projects.

Then will come the awakening, for, with a largely increased population and a growing demand for more and still more water,

we shall find that by these encroachments upon a comprehensive plan (which would have provided for all and for many years to come), we have spoiled these sources and these opportunities, and have made impossible the development of our water-sheds to the best advantage. We will have made it impossible for all of our people to be taken care of.

Then, and then only, will we appreciate the lack of wisdom of our present practice, and the penalty we must pay for our neglect and indifference. Then we will be confronted by the necessity of seeking sources, if any are to be found, and paying what may be beyond the taxpayer's ability. With increase of population comes great increase in property value, and increased inability to protect against pollution.

The Tri-State Commission has been in conference with the representatives of New York and Pennsylvania, and has made a report of an agreement for the equitable distribution of the waters of the Delaware River and its tributaries in the three States. Their report is before you for action, having been transmitted herewith. This report represents the work of eminent engineers who have spent months of their time in conference with the representatives of New York and Pennsylvania.

This report, I believe, amply protects New Jersey, and should be adopted, and a treaty entered into carrying out the Commission's recommendations.

If this report is accepted and a treaty made between New York, Pennsylvania and New Jersey, whereby a part of the waters of the Delaware River will be available to the people of New Jersey, it follows that a comprehensive plan must be adopted based upon the best engineering advice, so that the best use may be made of this large quantity of water. When it becomes necessary, this supply, of course, will fit in with other sources now available in the northern part of the State.

Therefore, no piecemeal method of development should be permitted, which will jeopardize, from the standpoint of economy and efficiency, the use, not only of this Delaware River supply, but also of other water-sheds in the northwestern section of the State.

We must have, not only a comprehensive plan, but we must also avoid the necessity of private water companies entering our water-sheds. Their entry will put us to additional cost and trouble when we eventually decide to take the water.

The problem confronting us is an important one, more urgent, perhaps, in the northern part of the State, where the population is congested, but it is bound to present itself, in a few years, to other sections of the State, particularly those lying along the Atlantic Ocean and the Delaware River.

With the completion of the vehicular tunnel under the Hudson River, the erection of bridges over the Hudson and the Arthur Kill, and the opening of the great bridge connecting Philadelphia with Camden, this State will experience an enormous growth of population in the next few years.

The Atlantic coast is becoming more popular every year, not only as a summer resort, but as a place of permanent residence. This latter group is now supplied with water largely by individual companies, and the economic waste in this method of distribution is self-evident.

There is no reason for continuing the strife between communities seeking a water supply, neither is there any reason why all municipalities should not be treated alike, as this necessary of life must be supplied to all. This being true, the State must not be derelict in its duty to its children. The State should act the part of the parent, and furnish to the gates of these communities a sufficient amount of water for their needs. After the water reaches the boundary of the city or town, it is then the province of that municipality to say how, and in what manner, it shall be distributed to the inhabitants of the particular place; each town, of course, furnishing its own distribution system.

This is the only logical way to treat the situation. This is the only way in which the available water supply can be economically furnished, and this is the only way in which all available sources may be joined together in one comprehensive plan to avoid waste, duplication and excessive cost of construction and distribution.

The City of Newark and adjoining municipalities have been the pioneers in the important enterprise of furnishing their respective inhabitants with a wholesome supply of water. They had no power to go one step outside their own boundaries into other townships and take those townships' water away. They were only able to do this because the State consented to it, and because the State wanted to help this group of its citizens. The State has no desire to withdraw that help, but it does insist that no group shall stand in the way of providing all of the people of the State with pure and wholesome water, at reasonable cost. These municipalities have been able to accomplish this through the instrumentality of the North Jersey District Water Supply Commission, clothed with power by the State, but limited in that power.

Until a new body is created, we must not interfere with the enterprises now under way and designed to supply these cities with water, nor will we find it necessary to load the State with a large bonded debt for the purpose of securing the sources of supply.

All of the work cannot be done at once, nor is it advisable to develop all of the water-sheds immediately, and so a comparatively small sum will, in the beginning, finance the developments.

After the work is once under way, these enterprises will, to a large extent, pay for themselves. The wholesale rates received from the municipalities would be sufficient to maintain the works, pay the interest on the obligations, and amortize the cost. In all probability, in time there would be a surplus of sufficient size to permit the work of development to spread.

The important thing is to start; to study the plans which the State already has; to determine upon the right methods to pursue; to immediately bespeak the water-sheds to be acquired; to protect them against encroachments, private or municipal, and to save them from pollution.

I submit these recommendations to you for your earnest consideration, and I sincerely trust that the Legislature, this year, will determine upon a plan which will protect the people of the

whole State, and guarantee for all time an adequate and wholesome supply of water, at reasonable cost.

I presume that it is needless to say that this project is of such size and importance that all political consideration should be swept aside; that it should be approached in a broad, nonpartisan way, and that the men charged with the duty of carrying it out should be chosen from among those who are accustomed to big enterprises, who are thoroughly disinterested, and who would have no other purpose in mind than to conscientiously serve the State in which they live.

Respectfully submitted,

Attest:

GEORGE S. SILZER,

FREDERIC M. P. PEARSE,

Governor.

Secretary to the Governor.

**Report of Committee of State Chamber of Commerce Submitted
to the Governor.**

*To the Board of Trustees of the New Jersey State Chamber of
Commerce:*

GENTLEMEN—The Committee on State Water Policy, representing five counties, various points of view on the problems involved, and both political parties, presents the following summary of its conclusions and recommendations as a preliminary report to be supplemented in the near future:

1. The margin of available developed water supplies over requirements in the Metropolitan district in which two-thirds of the population of New Jersey reside was less than eight per cent. for the year 1923, and for the rest of the State was approximately ten per cent. During the drought of that summer, many communities suffered severely from a shortage of water, and it was necessary to ration consumers. We are thoroughly convinced, therefore, that the situation demands the earliest possible adoption of a comprehensive plan for the development of an adequate additional supply for all of the counties affected. Emergency conditions now exist in some sections and are imminent in others.

2. There is ample evidence to show that where sufficient supplies of water are available, they can be developed on sound business lines as a self-supporting enterprise. Boston and the City of New York are two conspicuous examples. Even the great Catskill and other developments for New York have been self-sustaining in spite of their enormous cost.

3. The Law of 1916 represents a compromise between conflicting interests and is concededly imperfect. Under it, however, upon the initiative of Newark and with the recent co-operation of other communities, the development of the Wanaque watershed has proceeded. This work which the North Jersey District Water Supply Commission is carrying on is of the utmost importance and the co-operative effort of the interested cities should continue.

4. Great economic waste and consequent increase in taxation is involved in separate action by various communities to secure additional supplies. While there is plenty of water available in the central-western part of the State, there are not enough individual water-sheds for allocation to the communities affected in several counties. State control is, therefore, both essential and economic. Piecemeal development inevitably involves duplication of reservoirs, pipe-lines, pumping-stations, engineering staffs, abandonment of costly improvements when larger projects are called for, and greatly increased cost in other ways. Thus, while home rule is desirable, if it is carried to an extreme the interest of all must suffer.

5. We believe the time is ripe for the adoption of a treaty with New York and Pennsylvania for the allocation of the waters of the Delaware and its tributaries. Such treaty, however, should be scrutinized with the utmost care and the interests of New Jersey safeguarded beyond the peradventure of a doubt. Inasmuch as a treaty adopted by several States and confirmed by Congress would have greater force than a statute, there should be no possible question concerning the sacrifice of any essential New Jersey interest. Assuming that it is possible on the basis of the report of the Tri-State Commission, about to be made, with such modifications as may prove to be necessary, to reach an agreement with New York and Pennsylvania, New Jersey must then, through some proper body, handle and safeguard our interests in the Delaware drainage area.

6. We are convinced that a new Commission, non-political in character, should be created for this purpose in such a manner as to insure the selection of not more than five (preferably three) of the ablest business and financial men in the State. Outstanding men of this type would be willing to serve without compensation in the public interest. Such a Commission should have powers at least equal to those granted to the Metropolitan District Commission of Massachusetts and the Commission which developed the Catskill supply for New York City.

7. Financing may be provided for by different methods, but bearing in mind the self-supporting character of such enterprises,

as soon as the development period is completed, the Commission might well be granted power to issue bonds in the same manner as the Port of New York Authority. Bonds representing a first lien on all property and improvements could then be issued from time to time for a portion of the cost of development and sold to the general public without the State guaranty, but with a provision for amortization by the proceeds obtained from the sale of water. The remainder of the cost could be covered by the issuance of State bonds after a referendum and the bonds amortized in the same manner as indicated above. It can be shown clearly that the entire cost of the undertaking including maintenance, depreciation and replacements and the amortization of bonds, can be provided for from the receipts for the sale of water at reasonable prices to the various communities. For example, Boston is paying about \$57 per million gallons, which is very much less than that paid at the present time by many New Jersey cities and towns.

8. Within the compass of this summary it has been possible to touch upon only a few of the many questions involved. We earnestly recommend that an appeal be made to Governor Silzer and to the Legislature for early action looking to a solution of a problem which will become increasingly acute from year to year. We also recommend that every available means be employed to inform the people of the State regarding existing conditions, in order that an intelligent and aroused public opinion may facilitate the action so urgently needed, since under the most favorable conditions a number of years must elapse before ample supplies can be developed.

Respectfully submitted,

(Signed) WILLARD I. HAMILTON
 JAMES WILSON
 HENRY H. PARKER
 WILLIAM J. BUTTERFIELD
 J. S. RIPPEL
 JOHN A. CAMPBELL.

Committee.

January 21, 1925.

An Act to adopt a compact made between commissioners appointed by the Governor under a law of the Commonwealth of Pennsylvania, and commissioners appointed by the Governor under a law of the State of New Jersey and commissioners appointed by the Governor under a law of the State of New York, for the purpose of conserving the water resources of the Delaware river and making allotments therefrom to the said States respectively and determining and adjusting their respective rights therein.

BE IT ENACTED by the Senate and General Assembly of the State of New Jersey:

1. Whereas commissioners duly appointed on the part of the Commonwealth of Pennsylvania and commissioners duly appointed on the part of the State of New Jersey and commissioners duly appointed on the part of the State of New York, to negotiate and agree upon the terms of a compact relative to conserving the water resources of the Delaware river and making allotments therefrom to the said States respectively, and determining and adjusting their respective rights therein, have executed in triplicate an agreement for the purposes aforesaid, one for each State, which agreement is contained in the following words:

COMPACT.

The Commonwealth of Pennsylvania by legislative act, approved the twenty-fourth of May, A. D. 1923 (Pamphlet Laws 448), and the State of New Jersey by chapter 94 of the Laws of 1923, and the State of New York by chapter 56 of the Laws of 1923, having authorized their respective Governors to appoint commissioners for the purpose of negotiating a form of compact or treaty between the said three States, and the said States through their Governors having appointed as their commissioners:

Charles H. Miner, Robert Y. Stuart and Philip P. Wells, for the Commonwealth of Pennsylvania;

William A. Starrett and Frederick C. Schneider, for the State of New Jersey;

George MacDonald, Rudolph Reimer and Jefferson DeMont Thompson, for the State of New York; who, after negotiations, have agreed upon the following articles:

ARTICLE I

This compact, between the sovereign States of Pennsylvania, New York and New Jersey, is entered into for the purpose of conserving by storage and otherwise for all uses the water resources of the said States in the Delaware river, its tributaries and drainage area and, as a means to that end, for making allotments from the said water resources to the said States respectively and determining and adjusting their respective rights therein.

ARTICLE II.

Where used in this compact, singular words shall be construed as including the plural, masculine words shall be construed as including the feminine and neuter, and the following terms and expressions shall have the meanings as respectively designated for each:

The term "waters of the Delaware river" means all of the surface waters which, following their natural courses, flow into the channel of the Delaware river above that point in the said channel which marks the boundary between the States of Delaware, Pennsylvania and New Jersey.

The term "waters of the Delaware river" means all lands and bed of the river on and over which the waters of the Delaware river flow, beginning at that point near "Monument Island" which is the northeastern corner of the Commonwealth of Pennsylvania and extending thence continuously as the said channel winds and turns to the point which is the common boundary between the States of Pennsylvania, New Jersey and Delaware.

The term "drainage area of the Delaware river" means the entire area of both land and water from which the surface waters naturally flow into the channel of the Delaware river.

The term "tributary" or "tributary of the Delaware river" means any watercourse, the waters of which naturally reach the channel of the said river.

The term "domestic and municipal" as applied to the use of water means the use of water by or for water-works serving the public.

The term "sanitation" as applied to the use of water means the use of water for the conveyance of sewage and industrial wastes.

The term "sewage" means any substance or liquid containing any of the waste products or excrementitious or other discharges from the bodies of human beings or animals.

The term "industrial waste" means any liquid or solid substance, not sewage, resulting from any process employed in manufacturing or industry.

The term "water returned" or its equivalent means the return into a tributary or into the channel of the Delaware river of water after the same has been used for any purpose and in this sense the terms "sewage" and "industrial waste" shall be construed as being "water returned."

The term "industry" as applied to the use of water means the use of water for manufacturing and industrial purposes in all cases in which the water used is not taken from a public water supply system.

The term "power" as applied to the use of water means the use of water for the development of energy whether that use be direct or indirect.

The term "navigation" as applied to the use of water means the use of water for transportation and for the operation of water craft for all purposes.

The term "develop," "developed" or "development," when referring to the use of water from the channel of the Delaware river or a tributary shall include any means for making the water available for use by the construction of any intake, dam or other works.

The term "point of development" means the point nearest the mouth of a tributary at which any dam or intake is built in connection with any development of the waters of such tributary.

The term "divert" or diversion" when referring to water in the channel of the Delaware river means the taking or removal of water from the said channel when the water taken or removed is not returned into the said channel within a distance of twelve miles below the point of diversion measured along the center line of the said channel.

The term "divert" or diversion" when referring to the water of a tributary of the Delaware river means the taking or removal of water from that tributary or from

any portion thereof when the water taken or removed is not returned into the channel of the Delaware river either above the point at which the tributary enters the said channel or within a distance of twelve miles below that point, measured along the center line of the said channel.

The term "point of diversion" means the point or place at which water is taken or removed from tributary or from the channel of the Delaware river.

The term "developed for diversion" means conservation of water by storage or otherwise on or from any one or more tributaries for the purpose of diversion at any point on the tributary or tributaries, or at some lower point in the channel of the Delaware river after the water shall have reached said lower point as water in transit.

The term "ordinary flow" means a flow of forty-five hundredths (0.45) of a cubic foot per second for each square mile of drainage area above the point at which the "ordinary flow" is to be determined.

The term "ordinary low flow" means a flow of fifteen hundredths (0.15) of a cubic foot per second for each square mile of drainage area above the point at which the "ordinary low flow" is to be determined.

The term "allotment" means the share of any signatory state in the water flowing in the channel of the Delaware river which is in excess of all water in transit.

The term "New York-New Jersey State line" means the boundary line between the States of New York and New Jersey, which line, for the purposes of this compact, shall be considered as crossing the channel of the Delaware river due east to the so-called "Tri-State Rock" and continuing thence in a southeasterly direction across the Neversink river to a rock on the west shore of the Hudson river near the village of Nyack.

The term "water in transit" means water which has been developed by storage or otherwise and which is flowing in the channel of the Delaware river under the provisions of Article VII.

The term "point of storage" means the point or place in the channel of the Delaware river at which a dam is maintained.

The term "commission" means the Tri-State Delaware River Commission.

ARTICLE III.

In the development, use or diversion of the waters of the Delaware river and in all considerations of quantity and preservation of quality the order of importance and public value of water shall be as follows: (A) domestic and municipal, (B) sanitation, (C) industry and power, and (D) navigation.

ARTICLE IV.

Any administrative department, political subdivision, corporation, partnership, association or person authorized in that behalf by or under the laws of any signatory state may exercise the rights and privileges herein conferred on such State, subject to the duties and obligations herein imposed on such State.

ARTICLE V.

Any tributary or any part of any tributary of the Delaware river may be developed for any purpose by or under the authority of the signatory State in which it is located, and water so developed may be diverted for use at any point either within or without the drainage area of the Delaware river. In case water so developed is diverted, then the following restrictions and limitations shall apply:

(1) Every such development shall be carried out in compliance with the legislative provisions governing such matters in the State in which it is located.

(2) Every such development shall be so planned and the works shall be so constructed as to bring about the greatest practicable conservation and use of the waters of the tributary on which it is located.

(3) In the case of every such development located above the New York-New Jersey State line there shall be maintained below the point of development during the months of July, August, September and October a reserve flow equal to the ordinary flow at that point, and also if at any other time during the year the flow in the tributary at the point of development is less than the ordinary flow at that point, then a reserve flow equal to the ordinary flow shall be maintained below the point of development. In the case of every such development located below the New York-New Jersey

State line there shall, at all times, be maintained below the point of development a reserve flow equal to the ordinary low flow at that point.

(4) The total drainage area in any State which may be developed for diversion under the provisions of this article shall not exceed three-fifths of the drainage area of the Delaware river which lies within that State.

ARTICLE VI.

All water which, at any time, is flowing in the channel of the Delaware river above the New York-New Jersey State line and which is in excess of all water in transit in said channel is allotted to the States of New Jersey New York and Pennsylvania, and with the approval of the commission, as provided in Article VIII hereof, each of these States may divert from the said channel at any point, above the said State line, that portion of its allotment which is in excess of a reserve flow of fifteen hundredths (0.15) of a cubic foot per second for each square mile of drainage area above the point of diversion and at any point below the New York-New Jersey State line each of the said States may divert that portion of its allotment which is in excess of a reserve flow of twelve hundredths (0.12) of a cubic foot per second for each square mile of drainage area above the New York-New Jersey State line. The allotments of the respective States shall be computed from time to time as follows:

In case no tributary within the drainage area above the New York-New Jersey State line shall have been developed for diversion, then the allotment of each State, at any point in the channel of the Delaware river above the said State line, hereinafter called the normal allotment, shall be one-third of the total water which may, at any time, be flowing in said channel at that point. In case one or more tributaries within said drainage area shall have been developed for diversion by only one of the signatory States, then the respective allotments of the signatory States shall be determined by the following rule: The allotment of said diverting State shall be determined by subtracting from its normal allotment an amount to be computed by multiplying said normal allotment by a fraction, the numerator of which shall be the total drainage area developed for diversion on said tributaries within that State above the New York-New Jersey State line and the denominator of said frac-

tion shall be the total drainage area above the said State line; and the allotment of each one of the other two States shall be determined by adding to its normal allotment one-half of the amount subtracted from the allotment of the diverting State. In case tributaries within the drainage area above the New York-New Jersey State line shall have been developed for diversion by two or more States the rule herein above stated shall be applied separately and in turn as to each diverting State, and the subtractions from and additions to the normal allotments of the States, thus determined, shall fix the allotments of the States as of that time.

All water which originates within the drainage area below the New York-New Jersey State line and enters the channel of the Delaware river below that line and which is in excess of all water in transit in said channel is hereby allotted to the States of New Jersey and Pennsylvania and with the approval of the commission as provided in Article VIII hereof, each of said States may divert from said channel at any point below the said State line that portion of its allotment which is in excess of a reserve flow of eighteen hundredths (0.18) of a cubic foot per second for each square mile of drainage area lying above the point of diversion and below the New York-New Jersey State line. The allotments of the States of New Jersey and Pennsylvania in the waters which originate within the drainage area below the New York-New Jersey State line shall be computed from time to time as follows:

In case no tributary within the drainage area below the New York-New Jersey State line shall have been developed for diversion, then the allotment of the States of New Jersey and Pennsylvania at any point in the channel of the Delaware river below said State line, hereinafter called the normal allotment, shall be one-half of the water which has originated within the said drainage area and which, at any time, is flowing in the said channel at such point below said State line; in case New Jersey or Pennsylvania shall have developed for diversion one or more tributaries within said drainage area, then the allotment of the diverting State shall be determined by subtracting from its normal allotment an amount to be computed by multiplying said normal allotment by a fraction, the numerator of which shall be the total drainage area developed for diversion on said tributaries

within that State below the New York-New Jersey State line and the denominator shall be the total drainage area below the said State line, and the allotment of the other State shall be increased by the amount by which the allotment of the diverting State has been reduced. In case tributaries within the drainage area below the New York-New Jersey State line shall have been developed for diversion by both New Jersey and Pennsylvania the rule herein above stated shall be applied separately and in turns as to each of them and the subtractions from and additions to the normal allotments of the States, thus determined, shall fix the allotments of the States as of that time.

Dams may be constructed across the channel of the Delaware river by or under the authority of any one of the signatory States for the purpose of storing water developed for diversion, water in transit belonging to said State, or any part or all of the water allotted to it under the provisions of this article. All water so stored may be diverted or released from such reservoir or reservoirs by or under the authority of such State but the flow in the said channel below the point of storage must not be reduced below the ordinary flow whenever the flow above the point of storage is greater than the said ordinary flow. When and if the flow in the said channel above the point of storage is less than the ordinary flow then and in every such case a flow equal to that above the point of storage shall be maintained in the said channel below the point of storage. At all times, however, neither the water in transit nor the allotment or allotments of the other signatory State or States shall be interfered with but must at all times be permitted to pass such dam or dams.

It is the intention of this article that no water shall be diverted from the channel of the Delaware river above the New York-New Jersey State line whenever the flow in the said channel is less than forty-five hundredths (0.45) of a cubic foot per second for each square mile of the total drainage area lying above the point of diversion and it is further intended that no water shall be diverted from the channel of the Delaware river below the New York-New Jersey State line whenever the flow in the said channel is less than thirty-six hundredths (0.36) of a cubic foot per second for each square mile of the total drainage area lying above the point of

diversion, but nothing contained in this article shall be construed to limit or prevent the diversion of water in transit, of water diverted under any vested right, or of water stored for diversion as herein provided.

ARTICLE VII.

The channel of the Delaware river is hereby constituted a carrier for conducting water, designated as "water in transit" which has been developed or stored in accordance with the terms of Article V or Article VI. Such water may be removed or diverted at any time or place from the channel of the Delaware river by or under authority of the State under whose auspices the development was made, irrespective of the quantity of water flowing in the channel of the Delaware river and the reserve flow provisions of Article VI. The rate at which such water is released or delivered shall be regulated so far as may be consistent with its economic utilization in such manner as not to unduly interfere with private rights or public interests along the said channel. The daily rate at which such water may be removed or diverted from the channel of the Delaware river shall not exceed the daily rate at which it is released or delivered and no greater quantity may be diverted from the said channel than shall have been released or delivered from the developments made under the provisions of Articles V and VI less the reserve flows provided for in the said Articles V and VI, except that allotted water may be diverted as provided in Article VI. No development or construction in the channel of the Delaware river shall be permitted to interfere with the regularity of the flow of any water which has been released or delivered for carriage.

ARTICLE VIII.

In order to render possible the utilization or diversion of water flowing in the channel of the Delaware river, each signatory State shall have the right to build dams entirely or partly across said channel and to construct wing dams, headworks, intakes or other necessary facilities at any point or points in or along said channel, subject to the following limitations and stipulations:

(a) All such works shall be built in compliance with the legislative provisions governing such matters in the State or States in which they are located.

(b) Works for the development of water power may not be built except with the approval of the commission in accordance with the provisions of Article X hereof.

(c) Approval of the commission shall be secured for every project which involves the removal or diversion of more than two million gallons of water per day from the channel of the Delaware river; such approval, however, need not at any time be obtained by any administrative department of a signatory State or any political subdivision within a signatory State or by any corporation, partnership, association or person in the case of any intake which is in existence at any point in said channel on the date when this compact becomes effective.

In the exercise of this authority, said commission shall be governed and its power and authority shall extend to and be limited by the following principles, restrictions and reservations, to wit:

(1) In the case of any project which, in the judgment of the commission, will not interfere or conflict with any other use of the water flowing in the channel of the Delaware river, the commission shall approve said project without imposing any restrictions or conditions except such as may be necessary to insure compliance with the provisions of this compact.

(2) As between any one or more proposed or possible conflicting uses, the action of the commission shall be based upon the relative importance of the uses to which the water may be put, as fixed in Article III of this compact, and to the extent that conflict is irreconcilable, that possible and practicable project which will effect the use of water standing highest in the order of importance shall be approved without restrictions or conditions, except such as the commission may deem necessary to insure compliance with the provisions of this compact. To the extent that conflict is avoidable by a reasonable modification of any or all of the projects which may be involved, the commission shall fix the terms of such modification, but such terms shall not require, as against the higher use, pumping in place of gravity delivery of water, nor impose on the higher use the cost of any impounding works or any unreasonable enlargement of pipe lines, conduits or tunnels, or impose on the higher use any undue burden in either expense or convenience of operation. In the case of

conflict in uses of the same relative order of importance, preference shall be given to an established use over a proposed one and the commission shall have authority to determine the manner in which such conflicting uses may be harmonized, without imposing unreasonable expense or undue burden upon either or any of them.

ARTICLE IV.

No water from the drainage area of the Delaware river shall be diverted to any point outside of the boundaries of the States signatory to this compact. No one of the signatory States may give, grant or dispose of to another signatory State, or to any holder of an authorization therefrom, any water developed by or allotted to it under the provisions of this compact, except by legislative act when necessary and then only with the approval of the commission; but nothing herein contained shall be construed to prevent or prohibit the joint exercise by or under the authority of any two or more of the signatory States of the rights conferred by this compact and such joint exercise of rights is hereby authorized.

ARTICLE X.

With the approval of the commission any signatory State may construct or authorize the construction of a dam, wing dam, headworks, power house or other structure in or across the channel of the Delaware river for the main purpose of the development of water power. *Provided*, that every such authorization shall be limited to such period not exceeding fifty years as the said State shall determine and set forth in its authorization. *Provided, further*, that the holder of such authorization shall be entitled to extension and renewal thereof upon the same terms until such holder shall have received, through recapture or purchase by the authorizing State or by a duly authorized subsequent holder of like authority from said State, repayment of the capital prudently invested in the power project upon the faith of the authorization plus such reasonable damages, if any, to property of such holder which is valuable, serviceable and dependent for its usefulness upon the continuance of such authorization, but not recaptured or purchased, as may be caused by the severance therefrom of property taken. *Provided, further*, that the authorizing State may, in the discretion of its appropriate

agency, officer or employee empowered in that behalf, embody in its authorization such other terms, conditions and stipulations as such agency, officer or employee shall deem necessary to protect the present and future interests of each of the three signatory States and their people in the construction, maintenance and operation of the project and in the water and power resources to be utilized thereby and suitable to secure to the holder of such authorization a reasonable opportunity for a fair return on the capital prudently invested in the project. *And provided, further,* that every such authorization shall be on the following conditions, which shall be expressed in such authorization, namely: (a) That the authorization shall become null and void unless, within the time specified therein, the holder of such authorization shall secure from the United States such license, permit or authority as may be lawfully required; and (b) that if and to the extent that any of the rights or powers set forth or reserved as rights or powers of the United States in or pursuant to the provisions of such license, permit or authority shall be waived by the United States or be unenforceable by the United States, then and to that extent such rights and powers (including, if so waived or unenforceable any rights of recapture, extension, or renewal so set forth or reserved), subject to such alterations in plans, specifications, or structures, and such extensions of time for commencing or completing structures, as may have been made or granted by the United States, may be exercised and enforced by the signatory State which originally authorized the construction. No project authorized and constructed under the provisions of this article shall, at any time, be operated so as to injuriously affect any project for municipal and domestic water supply which has been or may be established under the provisions of this compact. Subject to such conditions as the commission may embody in its approval, water for the development of power may be removed from the channel of the Delaware river and carried in a canal or in a pipe to any point below a dam constructed under the provisions of this article, but said water shall be returned to said channel within a distance of twelve miles below the point of removal measured along the center line of the said channel and there shall always be maintained in the said channel immediately below the dam, such regular and

uniform flow of water as the commission may determine to be reasonable and proper.

ARTICLE XI.

In connection with each and every development made under any provision of this compact, there shall be installed and maintained all equipment and apparatus for measuring quantities and rates of water flow, the determination of which may be necessary for the purpose of showing that the development or construction is being operated in compliance with the provisions of this compact.

ARTICLE XII.

In order to put and maintain the waters in the channel of the Delaware river in a condition sanitary and suitable for the uses and purposes set forth by this compact no sewage or industrial waste shall be discharged or permitted to flow into or be placed in or permitted to fall or move into the channel of the Delaware river or into any of its tributaries otherwise than under the following conditions and restrictions:

(1) All sewage discharged or permitted to flow into the channel of the Delaware river above the confluence with the Lehigh river shall, within a time reasonable for the construction of the necessary works, have been so treated as to remove settleable solids, to render the effluent non-putrescible and to effect a reasonable reduction of *B. Coli Communis*.

(2) All sewage discharged or permitted to flow into the channel of the Delaware river below the confluence with the Lehigh river shall, within a time reasonable for the construction of the necessary works, have been so treated as to at least remove settleable solids and shall be discharged through submerged outlets into said channel; *provided*, that such submerged outlets shall be located and constructed as may be required by the commission; *and provided, further*, that in order to protect the public health in specific instances such higher degree of treatment shall be used as may be determined to be necessary by the commission after due notice and hearing.

(3) All sewage discharged or permitted to flow into any tributary of the Delaware river, except the Lehigh river, shall be treated to that extent, if any, which may be necessary to maintain the water of such tributary

immediately above its confluence with the Delaware river in a sanitary condition at any time at least equal to the sanitary condition at such time of the water of the Delaware river immediately above such confluence.

All sewage discharged or permitted to flow into the Lehigh river shall be treated to that extent, if any, which may be necessary to maintain the water of the Lehigh river immediately above its confluence with the Delaware river in that sanitary condition which the commission, after due notice and hearing, shall have determined to be necessary because of the nature and extent of the use of the water of the Delaware river below such confluence; *provided, however*, that the commission may not require the sanitary condition of the Lehigh river immediately above its confluence with the Delaware river to exceed that of the sanitary condition of the Delaware river immediately above such confluence.

(4) All industrial wastes discharged or permitted to flow into or be placed in or permitted to fall or move into the channel of the Delaware river or any tributary thereof shall first have been treated to such extent, if any, as may be necessary to maintain in the channel of the Delaware river sanitary conditions equivalent to those which would be attained by the treatment of sewage above required in this article; *provided, nevertheless*, that industrial wastes containing substances likely, in the judgment of the commission, to produce offensive tastes and odors in any public water supply from the channel of the Delaware river, shall either be wholly prevented from being discharged or from flowing into or from being placed in or permitted to fall or move into said channel or any tributary of the Delaware river, or shall first have been treated to such an extent as to wholly eliminate such taste and odor producing constituents.

This article shall become effective when any one of the signatory States, or any holder of an authorization therefrom, shall have begun the work of construction on any project under the provisions of this compact.

Nothing in this article shall be construed to repeal or prevent the enactment of any legislation or the enforcement of any requirement by any signatory State imposing any additional conditions and restrictions to lessen or prevent the pollution of streams within their several jurisdictions.

In order to maintain the water of any tributary immediately above its confluence with the channel of the Delaware river in a sanitary condition which will meet the requirements set forth in paragraphs (3) and (4) of this article, the administrative determination and enforcement of the degree of treatment, if any, necessary to fulfill such requirements shall be made and undertaken by the proper officer or agent of the State wherein such tributary lies; *provided, however*, that any other signatory State or any municipality, citizen or resident thereof or property owner therein or any holder of any authorization therefrom under this compact, shall nevertheless have full right either jointly or severally to sue for the enforcement of any and all of the provisions of this article and for the redress of any injuries which may have resulted by reason of a violation thereof.

ARTICLE XIII.

The beneficial effects of forest covered areas on the regularization of stream flow, with attendant greater potential use of streams for domestic, industrial and navigation purposes, and the greater stability of public ownership in management for the protection of forested drainage areas is clearly recognized and agreed to by the States party to this compact. Each signatory State hereby adopts and will adhere to a policy covering the establishment and maintenance of an adequate forest cover on public and privately owned land in the drainage area of the Delaware river and the maintenance of the highest practicable standards of protection from fire on these lands.

ARTICLE XIV.

All lands, water-rights or easements necessary for the construction and maintenance of any dam in or across the channel of the Delaware river may, with the approval of the commission, be appropriated and condemned by any signatory State or by the holder of authorization therefrom. All damage resulting from the exercise of the right and power of condemnation conferred by this article shall be ascertained, recovered and paid as provided by Article XV hereof.

ARTICLE XV.

All damage to persons or property resulting from the exercise of any rights under this compact shall be de-

terminated under the rule of damages, in accordance with the procedure, and in such manner as is provided by the law of the state in which the damages are suffered. The damages suffered in the State of Pennsylvania shall be ascertained, recovered and paid as provided by the forty-first section of the act approved April twenty-ninth, one thousand eight hundred and seventy-four (Pamphlet Laws 73), and the amendments and supplements thereto. The damages suffered in the State of New York or in the State of New Jersey shall be ascertained, recovered and paid as provided by any general or other act applying thereto in effect at the time when the development is authorized. The court or courts which have jurisdiction of the subject matter in the respective States shall have jurisdiction of the person of every party in interest for the purposes of notice, summons and hearing throughout all three signatory States.

ARTICLE XVI.

Nothing herein contained shall be construed to abridge any riparian rights under the laws of the several States to the use of water from the channel of the Delaware river or from any of its tributaries except upon payment of just compensation to be ascertained and adjudged by due process of law.

ARTICLE XVII.

Nothing contained in this compact shall operate to impair any vested right of diversion or use of the waters of the Delaware river which may exist or have become vested at any time prior to the ratification hereof, but the amount of water diverted under such vested right shall be charged against the allotment of the State under whose authority or jurisdiction said right became vested. In each of the signatory States rights to divert or use the waters of the Delaware river or its tributaries, together with property necessary to effect the same, though devoted to public use, may be taken for any other public use higher in the order of importance as set forth in Article III, provided that nothing in this article shall be construed to authorize the taking of vested rights or property without just compensation to be determined by due process of law governing such matters in the respective States.

ARTICLE XVIII.

Nothing in this compact shall be construed to prevent the institution or prosecution of any proceedings in any court of competent jurisdiction for the purpose of remedying or correcting by damages, injunction, mandamus or other process civil or criminal any act of commission or omission in violation of the provisions of this compact, for the protection of any rights under it, for the enforcement of any of its provisions, or for the awarding and enforcement of payment of compensation for any injury which may be caused by the exercise of any right or privilege herein authorized.

ARTICLE XIX.

Nothing in any existing treaty between any two of the States signatory hereto shall be modified or changed or invalidated by anything herein contained except as any provision in any such existing treaty may be expressly repugnant to any provision of this compact, but nothing in any said existing treaty shall be construed to prevent the erection and maintenance of any dam across the channel of the Delaware river, as authorized or permitted under the provisions of this compact.

ARTICLE XX.

The governor of each of the signatory States is hereby directed to designate an appropriate State officer or employee and may appoint not more than two other persons all of whom shall serve, until their successors are designated or appointed, on a joint commission to be known as the Tri-State Delaware River Commission. In voting on all matters which come before the commission, each signatory State shall have one vote and no decision or approval shall be rendered by the said commission except on the unanimous vote of the three signatory States. Every decision rendered by the commission shall be accompanied by a certificate of the commissioners to the effect that the said decision is for the best public interest and is in compliance with the provisions of this compact. The commission in rendering every decision shall therein fully state the reasons on which its action in the premises was based.

The commission shall meet annually on the first Wednesday in October, the first annual meeting to be held

at Trenton, New Jersey, and subsequent annual meetings shall be held at such place or places as the commission may determine. The powers and duties of the commission, in addition to those hereinbefore set forth, shall be as follows:

(1) To make rules and regulations respecting the government of its organization and the conduct of its business.

(2) To appoint from among its members a chairman, a vice chairman and a secretary and to hold meetings at such times and such places as it may determine.

(3) To set up and require the keeping of a comprehensive system of stream flow and other measurements as may be necessary to determine:

(a) The amounts of water diverted and released under any provision of this compact.

(b) The maintenance of the required reserve flows below all points of development and diversion.

(c) All other facts and data requisite for determining that the provisions of this compact are at all times being complied with.

(4) To report annually to the governors for the information of the legislatures of the signatory States as to the developments and projects which have been begun and completed under the terms of this compact and as to such other matters as may come within its purview.

(5) To observe the operation of all developments and to issue such orders as may be necessary to require compliance with any of the provisions of this compact.

(6) To proceed with a study and investigation looking toward a complete and comprehensive development of all the water resources of the drainage area of the Delaware river and to report the results of such study and investigation to the governors of the signatory States for the information of the respective legislatures.

(7) To make a study of the possibilities for the development of water power along the channel of the Delaware river and to designate tentative locations and heights of dams along the said channel.

(8) The commission or any member or any duly authorized officer, agent or representative shall have power to and is hereby authorized to enter without let or hindrance upon the lands and property upon which any or all projects and developments are being constructed, operated or maintained under any authoriza-

tion provided by this compact. Each State through its appropriate departments shall co-operate with the commission as the said commission may require in obtaining such data, information and records which may be necessary to enable said commission to exercise its powers and duties.

(9) The Attorney-General of each signatory State or a deputy shall serve as the legal adviser of the commissioners representing that State.

(10) The commission shall have the power to compel the attendance of witnesses and the production of any papers, books, documents and records for any purpose that may be necessary to ascertain that the provisions of this compact are at all times complied with, and any member of the commission shall have power to administer oaths to all witnesses who may be called before it. Subpœnas issued by the commission shall be signed by one of the members thereof within the jurisdiction of the State from which he has been designated and may be served by any person of full age. The fees of witnesses required to attend before such commission shall be five dollars (\$5.00) for each day's attendance and ten cents (\$0.10) for each mile of travel by the nearest generally traveled route in going to and from the place where the attendance of the witness is required, such fees to be paid when the witness is excused from further attendance, and the disbursements made in payment of his fees shall be audited and paid in the same manner provided for the payment of expenses of said commission; *provided, however*, that no witness subpœnaed at the instance of parties other than such commission shall be entitled to compensation therefrom for attendance and travel, unless the commission shall certify that his testimony was material to the matter investigated and necessary or essential for the effectuation of this compact. If the person subpœnaed to attend before the commission, of a member thereof, fails to obey the commands of such subpœna without reasonable cause, or if a person in attendance before such commission, or a member thereof, refuses, without lawful cause, to be examined or to answer a legal or pertinent question or to produce a book or paper or other document when ordered so to do by the commission, or any member thereof, the commission, or such member thereof, may apply to any court of general jurisdiction in the State or county

wherein such testimony is taken or to be taken, and such court, or any judge or justice thereof, shall have power, upon proof, by affidavit, of the facts to make an order, returnable in not less than two days nor more than ten days, directing such person to show cause before the court, or the justice thereof, who made the order, or any other justice or judge having jurisdiction, why he should not comply with the subpoena or order of the commission. Upon the return of such order, the court or justice or judge before whom the matter shall come on for hearing shall examine such person under oath, whose testimony may be relevant, and such person shall be given an opportunity to be heard, and if the court or justice or judge shall determine that such person refuses without reasonable excuse to obey the command of such subpoena or to be examined or to answer a legal or pertinent question or produce a book, document or other paper, which he was ordered to produce, said court or justice or judge may order such person to comply forthwith with the subpoena or order of the commission, and any failure to obey such order of the court or justice or judge may be punished by said court or justice or judge as a contempt of such court. No person shall be excused from testifying or producing any books, papers or other documents subject to the authorization of this article upon the ground that his testimony might tend to incriminate him or to subject him to a penalty or forfeiture. But no person shall be prosecuted, punished or subjected to any penalty or forfeiture for or on account of any act, transaction, matter or thing concerning which he shall, under oath, have testified or produced documentary evidence, and no testimony so given or produced shall be received against him upon any criminal or penal investigations or proceedings; *provided, however*, that no person so testifying shall be exempt from prosecution or punishment for any perjury committed by him in his testimony. Nothing herein contained is intended to give or shall be construed as in any manner giving to any corporation immunity of any kind.

(11) The appropriate department of each signatory State represented by the commissioner designated under the provisions of this article shall, as the commission may determine, furnish at the cost of the three signatory States in equal shares all such equipment, service and facilities as will enable the commission to properly and

efficiently exercise the powers and perform the duties defined in this article. All expenses of the commission shall be paid, share and share alike, from funds provided by the signatory States, said funds in each State being made available to that department of the State which is represented by the officer or employee designated by the Governor as a member of the said commission and all said expenses shall be paid from said funds on the certification of the said designated State officer or employee or in such other manner as the laws of the signatory State may prescribe.

ARTICLE XXI.

Should any claim or controversy arise between any two or more of the States signatory to this compact with respect to the meaning or performance of any of the terms of this compact, or in case it should become desirable to modify any provision or all of this compact, then the Governor of each State affected, upon the request of any one of them, shall each forthwith appoint a commissioner empowered to jointly consider and adjust such claim or controversy or recommend such modification subject to ratification by the Legislatures of the signatory States, and, the Congress of the United States having consented thereto, such modifications shall be in full force and effect.

ARTICLE XXII.

Should any part of this compact be held to be contrary to the Constitution of any signatory State or of the United States all other severable parts of this compact shall continue to be in full force and effect.

ARTICLE XXIII.

This compact may be terminated at any time by concurrent legislative action of all the signatory States. In the event of the termination of this compact all rights and obligations which may have become established or vested under its provisions shall remain and continue unimpaired. Said termination shall be subject to such terms and conditions as may be agreed to by the signatory States.

ARTICLE XXIV.

This compact shall be submitted for adoption to the Legislature of each of the signatory States at their several sessions, beginning in the month of January, 1925; and upon adoption by the legislative act of each and all of said States, the Congress of the United States having consented thereto, it shall be in full force and effect.

In Witness Whereof, the commissioners have signed this compact in triplicate originals, one of which shall be deposited with the Secretary of State of each of the signatory States.

Done at the city of New York, New York, this twenty-fourth day of January, in the year of our Lord one thousand nine hundred and twenty-five.

CHARLES H. MINER,
ROBERT Y. STUART,
PHILIP P. WELLS,
W. A. STARRETT,
FREDERICK C. SCHNEIDER,
GEORGE MACDONALD,
RUDOLPH REIMER,
J. A. THOMPSON.

2. The aforesaid agreement and every article, clause, matter and thing therein contained shall be and the same hereby is fully adopted and shall be and ever hereafter remain in force, agreeably to the true tenor and extent thereof.

3. All acts and parts of acts inconsistent herewith, are hereby repealed and this act shall take effect immediately.

