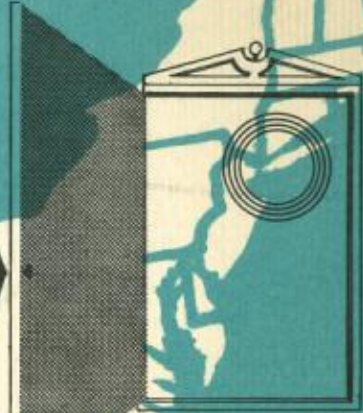


CLEANING UP

the DOORWAY TO AMERICA



20 Years
of Progress
in Pollution
Control
1936 — 1956

INTERSTATE SANITATION COMMISSION

NEW JERSEY

NEW YORK

CONNECTICUT

WESTERN UNION

W. P. MARSHALL, PRESIDENT

1250

SYMBOLS	
DL=Day Letter	
NL=Night Letter	
LT=Letter Telegram	
VLT=Int'l. Victory Etc.	

CLASS OF SERVICE
This is a full-rate Telegram or Cablegram unless its deferred character is indicated by a suitable symbol above or preceding the address.

The filing time shown in the date line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at point of destination.

NTO24 RX GOVT PD=THE WHITE HOUSE WASHINGTON DC 21 1025AME=
DR WILLIAM C COPE, CHAIRMAN THE INTERSTATE
SANITATION COMMISSION=110 WILLIAM ST=

TWENTY YEARS AGO, THE INTERSTATE COMPACT BETWEEN NEW YORK, NEW JERSEY AND CONNECTICUT WAS SIGNED. WITH THE APPROVAL OF THE CONGRESS, IT PROVIDED FOR THEIR PARTNERSHIP IN COMBATING THE GROWING POLLUTION OF THE INTERSTATE WATERS AROUND NEW YORK HARBOR. =

THE FIRST OF MANY INTERSTATE BODIES CREATED BY THE STATES TO DEAL WITH SUCH PROBLEMS, IT HAS BEEN A PIONEERING ORGANIZATION. I AM THEREFORE GLAD TO LEARN OF THE COMMISSION'S PLANS FOR ISSUING A PROGRESS REPORT. I HOPE IT WILL RECEIVE WIDESPREAD ATTENTION AMONG AMERICAN CITIZENS, FOR THE PROBLEM OF THE POLLUTION OF OUR WATERS IS OF CONCERN TO ALL OF US=
DWIGHT D EISENHOWER=

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

COMMISSIONERS

New Jersey

- William C. Cope, *Chairman*
- Dr. Daniel Bergsma
- Harry N. Lendall
- Roscoe P. McClave
- Leon A. Watson

New York

- Dr. Natale Colosi
- Dr. Herman E. Hilleboe
- Harry C. McClarity
- Hugh W. Robertson, *Vice-Chairman*
- Dr. Moses Spatt

Connecticut

- John J. Bracken
- Daniel F. B. Hickey, *Vice-Chairman*
- Dr. Stanley H. Osborn
- Andrew A. Radel
- William S. Wise

Seth G. Hess, *Director-Chief Engineer*
J. Raymond Tiffany, *General Counsel*

Fifty years ago the development of rapid transit and improved health standards produced a population explosion at America's Front Doorway.

Millions of people poured into the area and began to spread out around New York City. They abused the water resources (which brought them there) with a vague notion that the resources were inexhaustible.

Within a short time, the use of surrounding waters was narrowed to:

▶ A common sewer, holding as much waste as possible and depositing what they could not hold in the channels and along the shores, carried by tides and currents with a fine disregard for political boundaries.

▶ A common carrier for ships.

At the beginning of the 20th Century, bad trouble was upon the area.

Friction began between the states as to who was polluting whose waters. Beginning in 1903, and every few years thereafter, Commissions were appointed to solve the problem, but pollution, Augean-like, grew faster than Commissions.

This was no local problem. In 1925 there was an outbreak of typhoid in Chicago. It was attributed to eating polluted oysters. Following this the oyster beds between the Statue of Liberty and Staten Island, among others, were closed as polluted. Increasing concern caused the closing of many another shellfish area. The fish themselves took matters in their own fins and departed from oil and filth choked areas.

Waterfront property began to decline in value, and taxes followed that decline.

By 1930 conditions had worsened markedly. Bathing was permitted in grossly polluted waters, not because of callousness on the part of public officials, but because of the pressure of the teeming millions for some place to relax. Other local officials faced a dilemma. There was the undeniable need for sewage treatment plants. There was also the equally undeniable fact that one community's treatment plant could not clean up the sewage from neighboring communities, some of them in other states.

A JOINT OR COMMON AGENCY

Something had to be done to clean up the filth on the doorway to America.

A stalemate had been reached. As had happened just 149 years previously, when the question of control of common waters in this area laid the foundation for the Constitution of the U. S., the sovereign States of New York and New Jersey, (followed shortly by Connecticut), entered into an interstate compact for their common good. This was the first of such compacts between several states, and is the forerunner of others which have been set up in the path it blazed.

This compact recognized the growth of population, the increasing pollution, the menace to health and welfare, the prime importance of abatement and control. And it recognized the need for a joint or common agency to accomplish the needed results.

Faced with this somber picture, the states acted, carving out part of their sovereign power, and, with the consent of the Congress, as provided in the Constitution, turned over to a joint or common agency the powers, duties, jurisdiction, and pledged cooperation in control of future pollution.

The compact provided for commissioners from each state, and that each would serve without pay.

In January, 1936, the tri-state compact was signed by the New York and New Jersey Commissioners.

The event was almost unnoticed. The august New York Times, a newspaper of record, devoted a short paragraph, and that was all.

There were ten men and a compact. The group included a real estate man, a banker, a philanthropist, a publisher, an insurance man, a professor, an engineer, a retired army officer, Commissioners of Health; a cross section of men with a high sense of duty.

It was a pioneer organization. There was no book to follow. That book had to be written.

This is it.

Ten men and a compact

Like our early congresses, their function was to build confidence in the program, to effect a sensible balance between need for action, and ability to take action, to create an honest partnership, just as the Constitution, our greatest interstate compact, had done.

The compact recognized the old common law principle that all, along a waterway, were entitled to reasonable use of the waters, but the user was required to maintain the waters without material change in its quality.

The Commission has recognized both the right of the municipalities acting for their citizens to the use of water, and their responsibility to maintain its condition.

The Commission was directed to prepare a plan for the most practical and economical method of securing conformity with standards set. As the plan was evolved, it viewed this as a series of local problems, with each municipality or local entity responsible for the control of its pollution. The works were to be carried out by the local bodies, with the police power used, if necessary, to secure conformity. This meant each local entity had to tax itself to do its part of the job.

The Commissioners, by grant from their respective states, have police power. But they put their badges in their pockets, declaring, "It has been generally found that when the public is informed of the manifold benefits to be obtained by pollution abatement, they will actively support abatement programs."

That policy has worked. During the 20 year life of the Commission 58 municipalities have built or improved sewage plants, without compulsion. In only 10 cases was court action necessary.

Of course, this police power has been tested in the Courts. Commenting on this, the New York Joint Legislative Committee on Interstate Cooperation, after exhaustive study, said:

"The Commission's orders have not been contested as to their reasonableness . . . (their) orders have been sustained by the Courts in every case. Notwithstanding its authority to issue orders, the Commission has made every effort to bring about a pollution control program by means of cooperation with established agencies within the states and through public education."

Let's look for a moment

at these men. Why do they serve without pay, at considerable personal sacrifice?

They cannot answer that question themselves. They are men who have risen to the top in their respective walks of life, banking, the law, teaching, research, real estate, science, the press and government. Some have served in their state legislatures, others have headed municipalities in the area. They know and understand the problems which follow each one of their decisions.

They are not experts in sanitation. The professional staff fulfills that function. They are experts in the art of human relations, the understanding of the other man's point of view, of helping him with his problems. As indicated by the Legislative Committee, that is the key to the success.

There has developed, over the years, a feeling of unity, of purpose and accomplishment among these men from the three states. Some members have served the full 20 years. Death has taken its toll of many of the early commissioners and they are sadly missed. Retirement has claimed others. But even in well-earned retirement, many have continued to serve as consultants and advisors. As each replacement has been made, the new man has worked toward the esteem held by his predecessor. The group has achieved a unified sense of purpose, duty and accomplishment, an understanding based on leadership of an informed public.

Out of this understanding grew the concept that the Commissioners from each state should see to it that their home state understood and lived up to the interstate compact.

This idea, that the agent is responsible for the actions of the principal is a new concept, and a clue to success.

The Commission meetings

are another clue. They have the quality of a Quaker meeting. A problem is presented. If all agree, it is so ordered. If agreement is not apparent, it is discussed, put over and rediscussed until the sense is clear and the action unanimous.

These characteristics of the Commissioners are reflected in the staff. The Director-Chief Engineer spends half his time making sure that the problem is understood by the people, and the other half at helping with engineering solutions. The general counsel is more interested in real solutions to problems than in litigation.

The people have responded to this leadership through their state legislatures, and it has been directly tested in the local polling place time after time in voting local bond issues. Every time a local bond issue is supported by a referendum, or proceeds because there is no local objection filed, the Commissioners feel this is a pat on the shoulder, a boost up the hill from hundreds of thousands of plain friendly people who have understood, welcomed and supported the program. This is the reward the Commission sought and won for its work.

The Commission has never been alone in its work. Its accomplishments have been made possible by the remarkable cooperation from many agencies, particularly those charged with water pollution control in each of the three states. In addition there are the agencies of the Federal Government, as well as state, interstate, county and municipal entities who worked wholeheartedly to attain the objectives.

There were also many non-governmental agencies, associations, leagues, as well as the press, radio and television, who kept the public informed. All have helped the program go forward. It has been a real partnership.

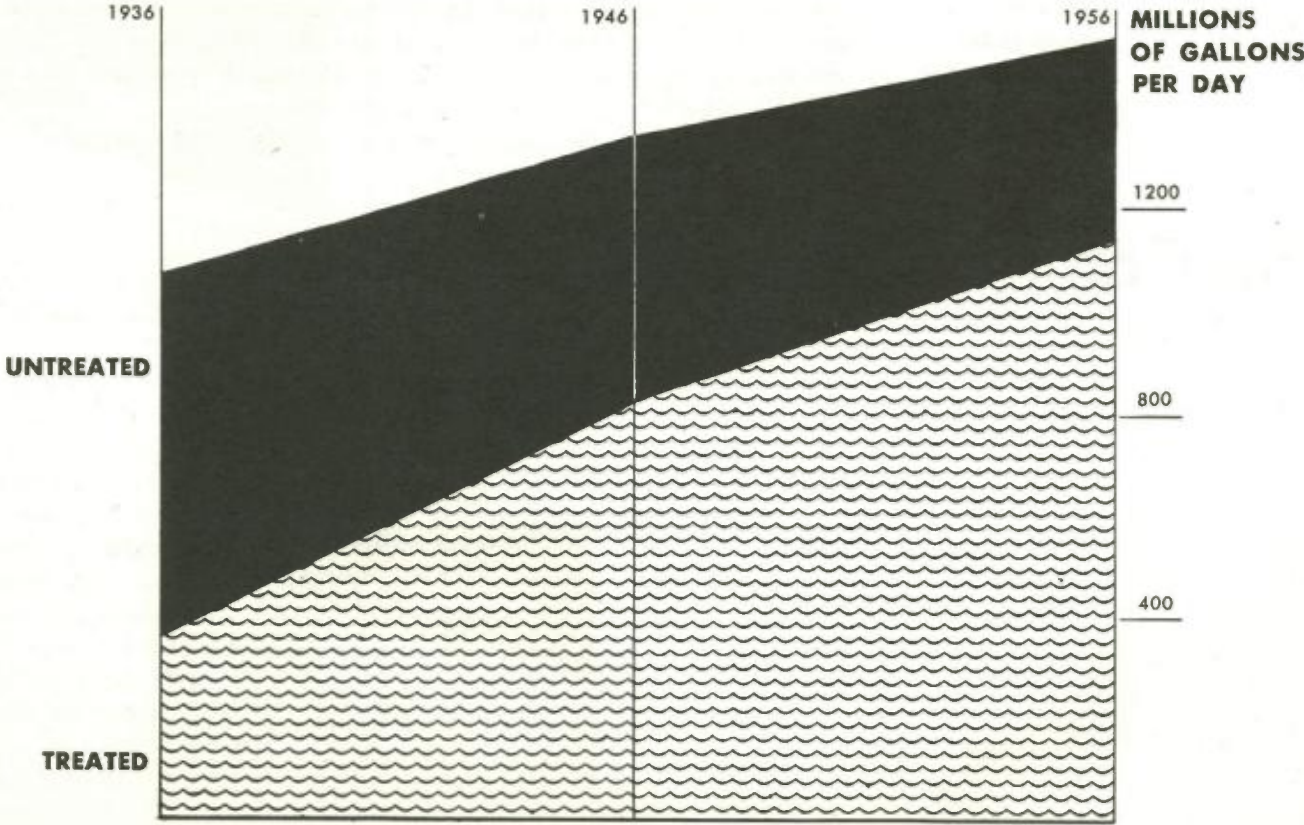
RESULTS

To measure results, an organization must have a defined objective, and a means of measuring progress toward that objective.

The Interstate Compact says "Each state pledges to the other faithful cooperation in control of future pollution, and agrees to provide for abatement of existing pollution, and to put and maintain the waters in a satisfactory sanitary condition . . ."

These terms mean, "clean up the pollution flowing into the district, and the mission will be accomplished".

Let's look at the record.



However, the Compact recognized that, because of the varied use of water for bathing, navigation, shellfish culture, fishing and the disposal of wastes, no single standard of purity is economically practical.

The Compact provided controls so that any discharge be sufficiently treated to meet the standards set.

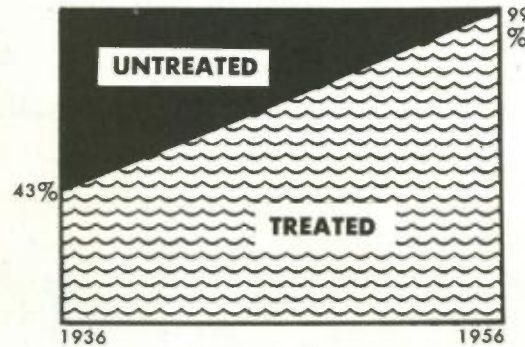
To accomplish these objectives, the Commission undertook a three phase program.

The waters were divided into:

Class A Waters — primarily used for recreational, shellfish and fish culture.

Phase I—99% complete

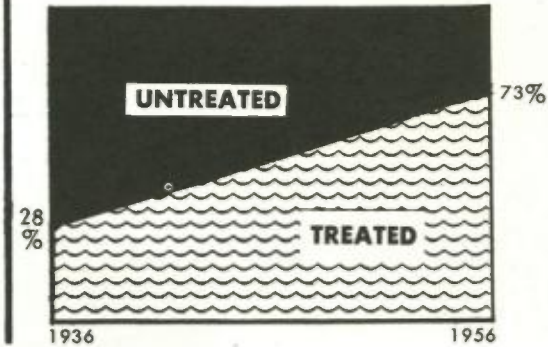
“To abate the discharge of all untreated sewage into waters expected to be used for recreation and fishing.”



Class B Waters — primarily used for other purposes.

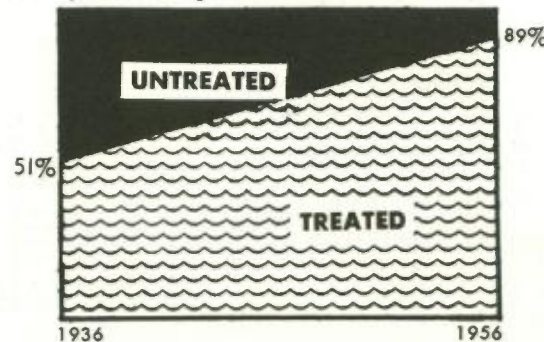
Phase II—73% complete

“To abate the discharge of all untreated sewage into Class B waters.”



Phase III—89% complete

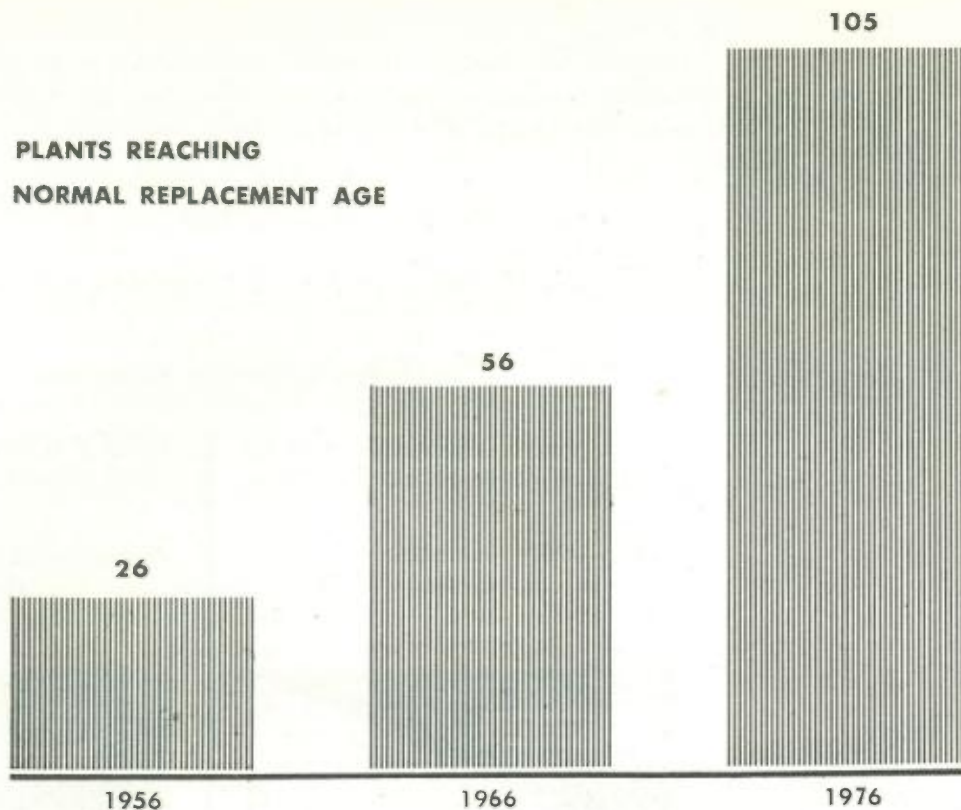
“To provide that all inadequately treated sewage discharged into the district be adequately treated as provided by the Compact.”



Sewage treatment plants become obsolete with time, with the development of more efficient equipment, and with shifting and increasing populations.

Plants are designed for a 20-year life and, as they become obsolete, they will be replaced by better plants. This is the result.

PLANTS REACHING NORMAL REPLACEMENT AGE



MEASURING PROGRESS

Now to put the picture in more concrete terms. The Compact sets up standards dealing directly in

1. *The amount of solids to be removed,*
2. *The number of germs to be killed,*
3. *The rights of the public in its varied legitimate uses of the waters of the district.*

Here is the record.

1. *Solids.* Each year now, the plants remove 3½ million tons of wet solids. This is about one quarter as much as the tonnage dredged each year out of the navigation channels.

2. *In killing germs.* By analyzing the bacteria coming into the plants, and counting the survivors after treatment, the Commission finds that the program has killed

10,000,000,000,000,000,000,000 bacteria,

or one quadrillion per person served.

This has been a contributing factor to the area's low death rate, and the long life expectancy of its citizens. Compare this area to lower standard areas in India and China, and you will realize the difference.

3. *The rights of the public in its varied legitimate uses of the waters of the district.*

Water is life.

Nowhere in the world has water meant so much to so many as the over 11,000,000 who live around America's Front Doorway. They are the greatest concentration of human beings anywhere on this planet.

Water is essential to their physiological processes.

Water provides the most economical transportation medium for international trade on which the area exists.

Water is the most convenient method of transporting and disposing of wastes.

Water is the prime fire fighter, and street flusher.

Water is the master solvent and cleanser.

Water is essential for industrial processes.

Water is the best agent for heat transfer in power generation.

Water is a never ending source of chemicals.

Water provides the greatest recreational facility for the closely packed millions.

Various groups of these millions have differing needs and claims on these waters. These needs were drowned in the turgid flood resulting from a single over-use—water is the most convenient method of waste disposal.

In the overview

the Commission's job is to protect the rights of the public in its varied legitimate uses of the waters of the district, by releasing the waters from their bondage of carrying waste.

Although the uses appear incompatible at first, it has long been recognized that waters serve many purposes, providing there is judicious control. This control starts with the Commission's classification by desired use, (the A and B classification). These classifications were set up after public hearings, so that all interested could be heard.

Once the classifications were set up, then standards of treatment established in the Compact became effective.

No treatment of wastes is perfect, and all effluent brings some pollution to the waters. But the waters have recuperative powers themselves with the action of tides, currents, sun, wind and benevolent bacteria.

The Commission's effort has been to keep the pollution low enough so that the natural recuperative powers could keep the waters in good shape.

This phase of the program is related to the directive of the Compact to abate present and "control future pollution."

We measure this in terms of people served. Here is the record.

In 1936 the sewage of 7,200,000 people was being discharged untreated into the waters of the district.

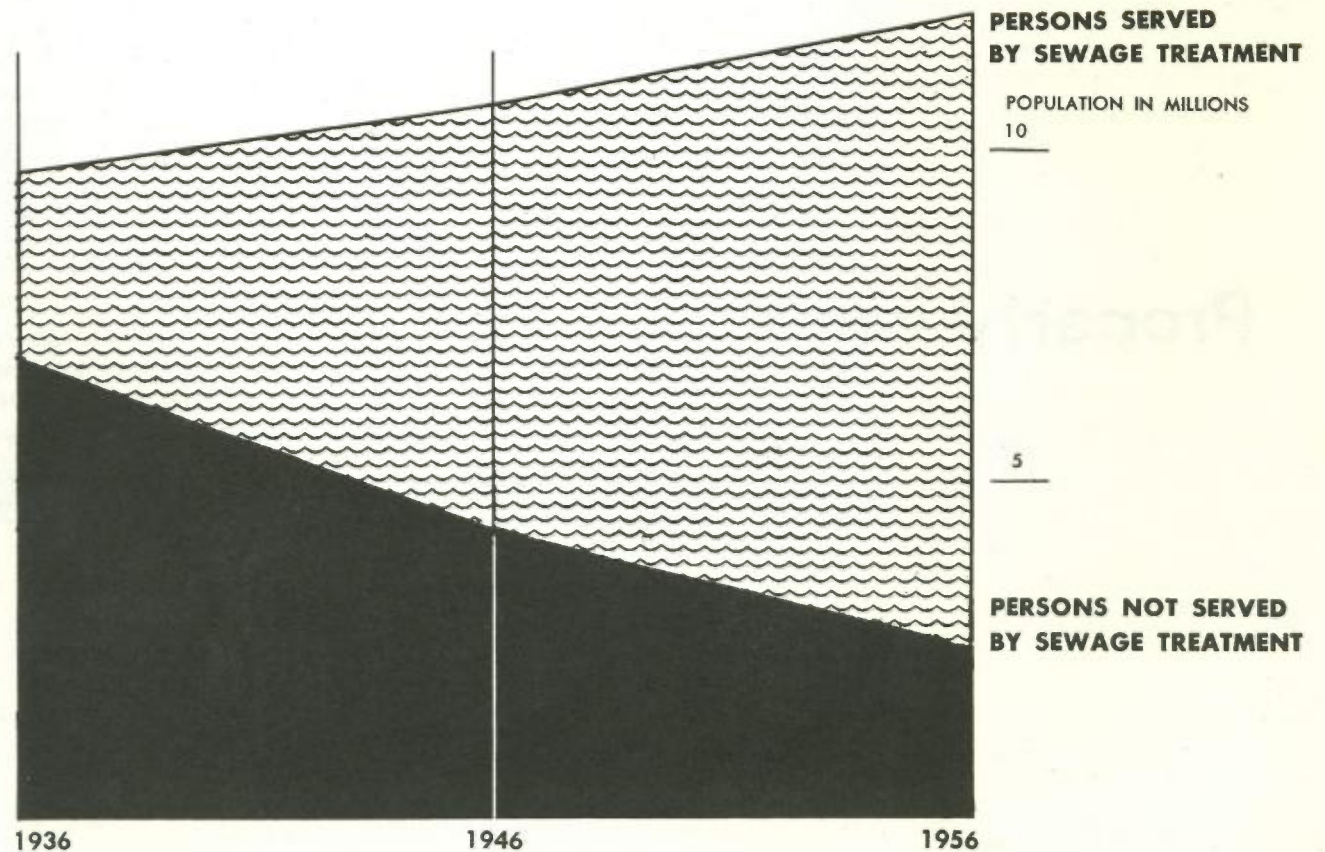
Today sewage from 9,500,000 is receiving treatment. This is more than the total contributing pollution 20 years ago.

Pollution existing in 1936 has been abated.

Future pollution comes from new people, by new areas sewered, by new industries, etc. By the Compact, no new untreated pollution is permitted in the district. By close partnership with control agencies in each state, no new untreated pollution is permitted to enter waters tributary to the district.

In addition, new treatment plant capacity is growing faster than population, and inadequate and obsolete plants are being replaced.

"Future pollution" is under control.



WHAT IT MEANS

Because we live in a democracy, and final judgment on any public body rests with the individual, a report must ultimately state results in terms of the individual.

Twenty years ago, the Compact stated: "Such pollution constitutes a grave menace to the health, welfare and recreational facilities of the people living in the area, and is occasioning great economic loss;"

This determined an overall objective to make the area a better place to live and work, and do business by controlling the environment for the greatest good of the greatest number—to maintain a balance between the environment and those who use it.

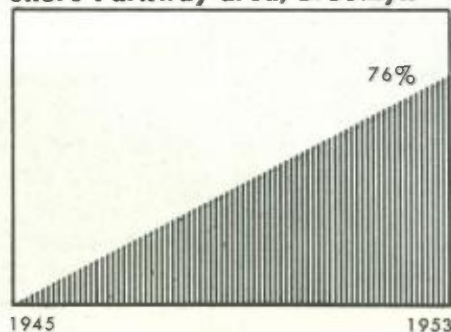
How does the individual measure progress in the field? The answer is found in the questions most commonly asked. They are:

1. Are we making progress in cleaning up this stinking mess? Are property and tax values coming back?
2. What has it cost and what have I gotten out of it?
3. Where is it safe to swim now?
4. Where is it safe to fish now?
5. Can my industry use the water safely?

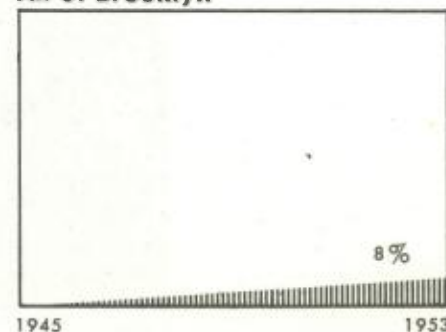
First, here is an example of economic benefits in terms of assessed valuations. This is the direct result of waters rid of what are euphemistically called "floating objects", sludge, grease, slick and sleek, odors and bacteria. This reflects people's opinion in dollars they pay for property along the water front parkways.

Property values

PROPERTY VALUES
Shore Parkway area, Brooklyn



PROPERTY VALUES
All of Brooklyn



Costs

This program, like any other improvement, has cost money. First let us clearly state that the administrative cost of the Commission is small compared to the cost of construction of sewage treatment plants and appurtenances, which total to date \$300,000,000. The construction costs are carried by local bond issues and taxes, and the Commission's job is to assure each municipality that all other municipalities will construct plants to equal the standards set, and to synchronize the program so that no municipality is unduly penalized for its efforts.

Notwithstanding the accomplishment over the 20 year period the costs of constructing these treatment plants averages about \$1.00 per year per person served.

Industry

The importance of the waters of the area to the industry cannot be overrated. Some industries which are large employers and taxpayers in the area, utilize waters in the millions of gallons per day.

To the knowledge of the Commission, no industry has left the area because of the quality of the waters for which the Commission is responsible, and no undue hardships in treatment of water have been imposed.

Recreation

Health is always first.

Despite the dysentery epidemic in Chicago from sewage pollution in the '30's, and the catastrophe of 1100 cases of gastroenteritis following Harbor water entering water mains on the West Coast a few years back, the Commission will not guarantee that drinking or swimming in polluted water, or eating polluted shellfish will kill you. It might, but no guarantee.

The Chief Engineer puts the story of polluted water in this comparison:

"Fill your bathtub with clean, warm water. Take a dipper, and dip out one quart from the used but unflushed toilet bowl. Dump it in the tub. That is the equivalent of some of the bathing waters when the Commission started 20 years ago."

You *can* bathe in that bathtub but people consider it an unpleasant idea and not up to American standards.

Today, in the A areas, the picture is different—like a well-known soap—99% plus of all discharge into the bathing area is treated and sterilized with chlorine.

In fishing and shellfishing, the Commission's program of treatment has produced a gradual improvement in the waters of the district despite the fact that 2,000,000 more people have moved into the area. This is reflected in the fact that there is now fishing in Jamaica Bay, where one doubts there were many fish twenty years ago. There have been changes in opening and closing shellfish areas. Shellfish are reported being cultured in the Hudson for transfer elsewhere for growth. The Harlem River, once a black, fetid stream is now much improved. And so it goes down a long list of waters of the area.

How it looks, feels, and smells

Statistically, the foregoing is important. But the usual citizen wants to know the answer to his question. Can I see, smell and feel the difference? Here is one man's experience.

"I worked with the Commission 19 years ago when it was just getting underway. I left the area, and returned the summer of 1955 to make an inspection trip with the Commissioners.

"Three facts struck me.

"First, on the entire 35-mile boat trip we did not see a single floating object or any filth, grease, slick or oil on the waters.

"Second, the water did not stink.

"Third, there are far greater shorefront park areas used by millions more people than there were two decades ago.

"Perhaps you people who have watched the slow steady evolution do not realize how great is this change. I do."

One Commissioner stated it even more succinctly. He said "We got the filth off the beaches."

THE ROAD AHEAD

As has been indicated there is a job ahead to:

1. complete the remaining work now under way to bring treatment up to present standards,
2. maintain an equitable use of the waters of the area through the changing years ahead,
3. revise the standards as the purity of the waters increases, to meet new needs as populations increase, to cope with new industries and new types of pollution.

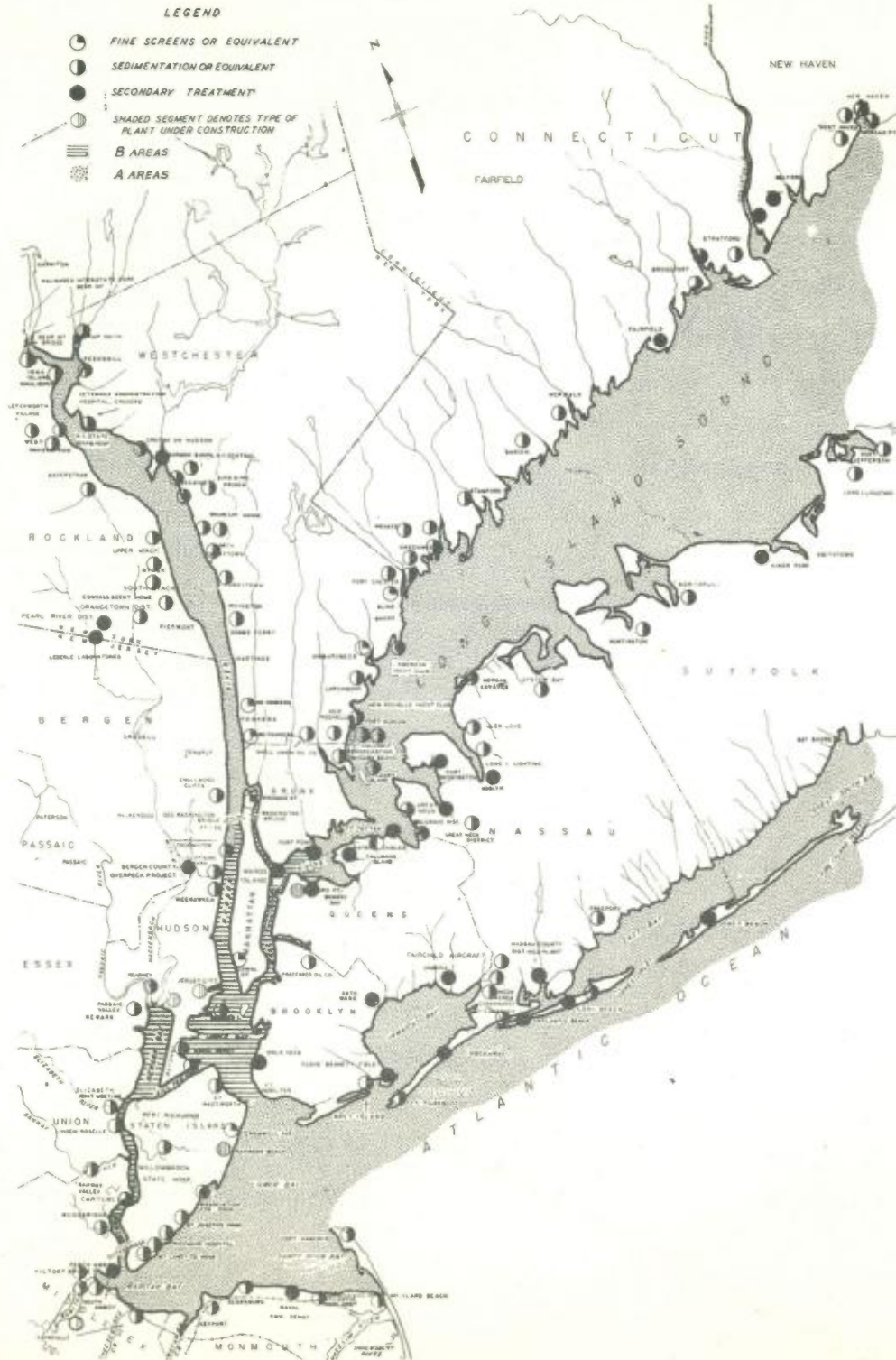
Not only are there such new problems as radioactive and chemical wastes, but the Legislatures of New York and New Jersey have delegated to the Commission the task of studying whether air pollution is an interstate problem, in the New York metropolitan area, and to recommend means of control. Connecticut has enacted legislation giving its consent to the study, subject to the approval of the Congress of the United States.

This will bring a new kind of problem to the Commission to study, in a new field, under an extension of the Interstate Compact.

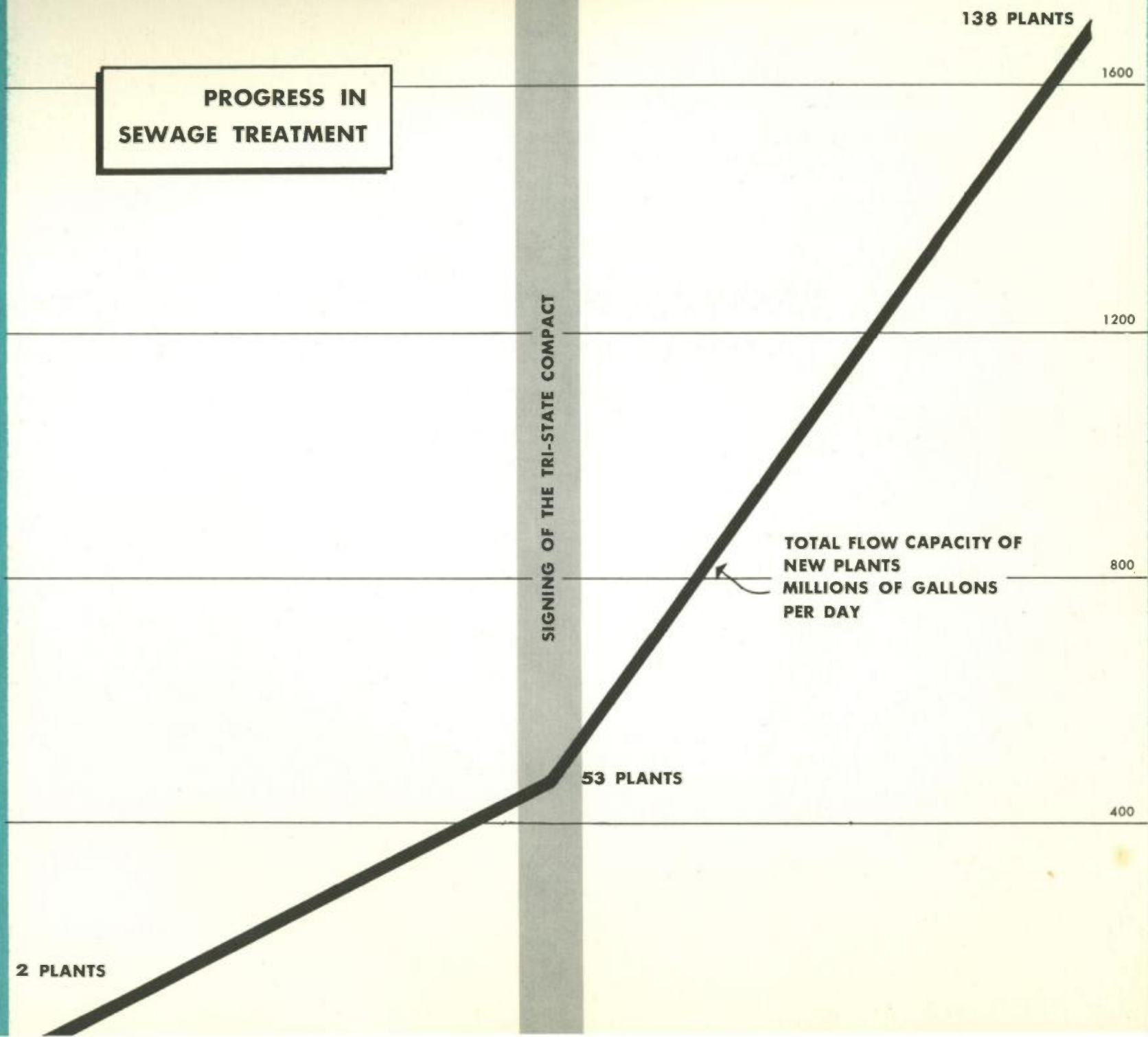
The Joint Legislative Committee on Interstate Cooperation regarded the work of the Interstate Sanitation Commission "AS ONE OF THE OUTSTANDING EXAMPLES IN THE U. S. OF AN EFFECTIVE POLLUTION ABATEMENT PROGRAM. THE SUCCESS OF THIS INTERSTATE COMPACT DEMONSTRATES THE GREAT POTENTIALITIES OF INTERSTATE COOPERATION AND THE COMPACT METHOD IN SOLUTION OF INTERSTATE PROBLEMS."

INTERSTATE SANITATION DISTRICT AND CLASSIFICATION AREAS

SEWAGE TREATMENT PLANTS



**PROGRESS IN
SEWAGE TREATMENT**



SIGNING OF THE TRI-STATE COMPACT

TOTAL FLOW CAPACITY OF
NEW PLANTS
MILLIONS OF GALLONS
PER DAY

2 PLANTS

53 PLANTS

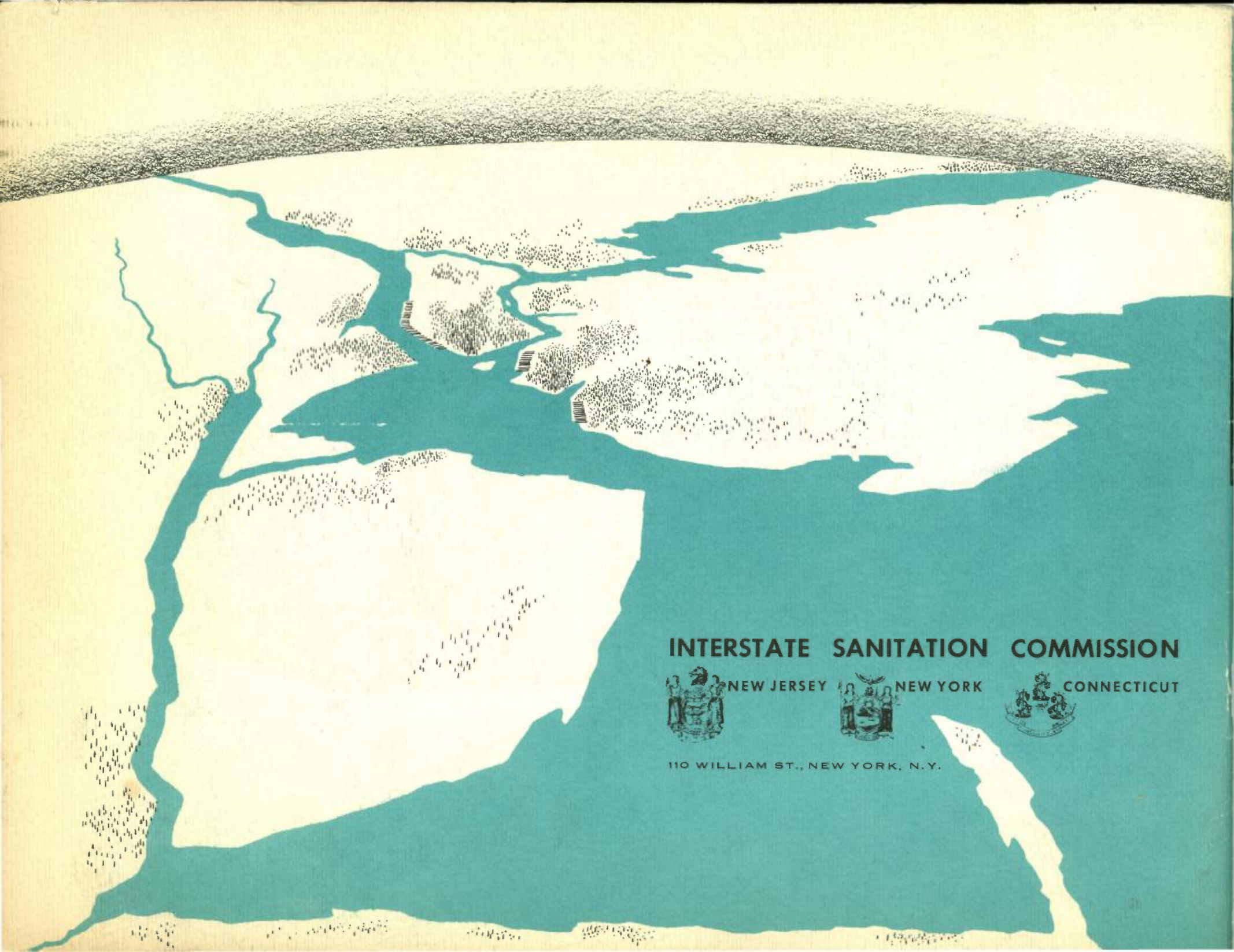
138 PLANTS

1600

1200

800

400



INTERSTATE SANITATION COMMISSION



NEW JERSEY



NEW YORK



CONNECTICUT

110 WILLIAM ST., NEW YORK, N.Y.