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Legislative Commission To Study The Advisability
And Practicability Of Formulating And Implementing
A Comprehensive Water Supply Policy And Program To
Meet The Long Range Water Needs Of This State, Created
By Assembly Concurrent Resolution Number 31 Of 1968.

Members of the Commission:

Assemblyman Herbert M. Rinaldi
Chairman

Assemblyman W. Allen Cobb
Assemblyman John J. Fekety

Senator David W. Dowd

Senator Garrett W. Hagedorn
Senator Norman Tanzman

March 10, 1969

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ACKNOWLEDGEMENTS

The Commission would like to express its gratitude and appreciation to Robert A. Roe, Commissioner of Conservation and Economic Development, to Brendan T. Byrne, President of the Board of Public Utility Commissioners, and to the representatives of regional and local governing bodies, private water companies and the waterworks industry, the academic community, engineering organizations, public and private planning agencies, and other civic organizations for their cooperation in appearing before the Commission at its public hearings and for otherwise assisting us in our work.

The Commission would like to express its special appreciation and deep gratitude to two private citizens, Percy S. Wilson and Karl Honaman, for their voluntary service to this Commission. Mr. Wilson, an executive with the American Waterworks Association for many years, availed the Commission of his experience and guidance in the technical areas of water supply and water management. Mr. Honaman, former Mayor of Glen Ridge and deputy Assistant Secretary of Defense in the administration of President Eisenhower, brought to us his experience and guidance with respect to administrative problems.

LETTER OF TRANSMITTAL

To the Honorable Members of the Senate and General Assembly
of the State of New Jersey:

Pursuant to Assembly Concurrent Resolution Number 31 of 1968, the undersigned members of the Legislative Commission to Study the Advisability and Practicability of Formulating and Implementing a Comprehensive Water Supply Policy and Program to Meet the Long Range Water Needs of this State do hereby report, as directed by said resolution, our findings and recommendations.

Respectfully submitted,

/S/ Herbert M. Rinaldi
Assemblyman Herbert M. Rinaldi
Chairman

/S/ David W. Dowd
Senator David W. Dowd

/S/ Garrett W. Hagedorn
Senator Garrett W. Hagedorn

/S/ Norman Tanzman
Senator Norman Tanzman

/S/ W. Allen Cobb
Assemblyman W. Allen Cobb

/S/ John J. Fekety
Assemblyman John J. Fekety

ASSEMBLY CONCURRENT RESOLUTION No. 31

STATE OF NEW JERSEY

INTRODUCED MARCH 14, 1968

By Assemblymen RINALDI, KALTENBACHER, COBB, FONTANELLA, WILSON, DENNIS, FIORE, GIMSON, IRWIN, FAY, PARKER, A. S. SMITH, SELECKY, KEAN, MORAITES, HORN, FEKETY, EVERS, Assemblywoman MARGETTS, Assemblymen COLEMAN, LITTELL, WIL-ENTZ, CAPUTO, OLSEN, HOLLENBECK, THOMAS, W. L. SMITH, VOLK and RUSSO

Referred to Committee on Agriculture, Conservation and
Natural Resources

A CONCURRENT RESOLUTION creating a commission to study the advisability and practicability of formulating and implementing a comprehensive water supply policy and program to meet the long range water needs of this State.

1 WHEREAS, The State of New Jersey has recently experienced a
2 most severe shortage of water supply, which threatened the
3 health of its people and caused heavy losses and inconvenience
4 to its citizens and to commerce and industry; and

5 WHEREAS, It is the opinion of many informed technical authorities
6 that this water shortage might have been prevented to a large
7 degree by more adequate advance planning and by the proper
8 execution of such plans with relation to our water supply works
9 in the State; and

10 WHEREAS, Numerous studies of water supply problems have been
11 made during the past few years, including a report by the New
12 Jersey Committee of the Regional Plan Association, dated July
13 1967, and the Report of the State of New Jersey Commission on
14 Efficiency and Economy in State Government, dated November
15 1967, which studies clearly have indicated the need for improved
16 long-range planning, co-ordination and organization of our water
17 supply; and

18 WHEREAS, It is clearly evident from the foregoing that the agencies
19 which have been and are now in charge of the planning and de-
20 velopment and management of our water supply works have

21 been unable to perform their duties adequately and to discharge
22 their responsibilities fully; and

23 WHEREAS, By 1990, New Jersey's growth and development will
24 require greater than double the amount of water presently pro-
25 vided for homes, industries and public uses; and

26 WHEREAS, The responsibility for rectifying the present condition,
27 and the taking of such steps as are necessary to assure New
28 Jersey's citizens of an adequate and economic water supply,
29 rests finally upon the Legislature of this State which established
30 the present water supply organization; now, therefore,

1 BE IT RESOLVED *by the General Assembly of the State of New*
2 *Jersey (the Senate concurring):*

1 1. There is hereby created a commission to consist of 6 members,
2 3 to be appointed from the membership of the Senate by the Presi-
3 dent thereof, no more than 2 of whom shall be of the same political
4 party, and 3 to be appointed from the membership of the General
5 Assembly by the Speaker thereof, no more than 2 of whom shall
6 be of the same political party. Members of the commission shall
7 serve without compensation. Vacancies in the membership of the
8 commission shall be filled in the same manner as the original
9 appointments were made.

1 2. The commission shall organize as soon as may be after the
2 appointment of its members and shall select a chairman from
3 among its members and a secretary who need not be a member of
4 the commission.

1 3. It shall be the duty of said commission to study the advisability
2 and practicability of formulating and implementing a comprehen-
3 sive water supply policy and program to meet the long range water
4 needs of this State, and to make a report of its findings and to
5 make such recommendations for legislation as it deems desirable
6 and appropriate.

1 4. The commission shall be entitled to call to its assistance and
2 avail itself of the services of such employees of any State, county
3 or municipal department, board, bureau, commission or agency as
4 it may require and as may be available to it for said purpose, and
5 to employ such stenographic and clerical assistants and incur such
6 traveling and other miscellaneous expenses as it may deem neces-
7 sary, in order to perform its duties, and as may be within the
8 limits of funds appropriated or otherwise made available to it for
9 said purposes.

1 5. The commission may meet and hold hearings at such place
2 or places as it shall designate during the sessions or recesses of

3 the Legislature and shall report its findings and recommendations
4 to the Legislature, accompanying the same with any Legislative
5 bills which it may desire to recommend for adoption by the Legis-
6 lature.

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INTRODUCTION:

Numerous studies have been undertaken recently in the area of water supply and water resource management, including those made by the Governor's Commission to Evaluate the Capital Needs of New Jersey, the Commission on Efficiency and Economy in State Government, the New Jersey Committee of the Regional Plan Association, the Department of Conservation and Economic Development, and the Public Policy Forum on Surface Water Control in New Jersey, sponsored by the Bureau of Government Research and University Extension Division. In October of 1968, three days of hearings were held by this Commission. These studies and the hearings and investigation of this Commission point out positively the need for immediate legislative action in the area of water resources and water management.

The need for legislation has two major aspects. The first aspect is in the area of capital improvements. Certain major capital projects must be undertaken by the State or a State agency immediately. It is readily apparent that no one company or supplier of water today has the financial resources, the capacity, or the responsibility to develop a Statewide plan to protect and develop the water resources that are needed now and in the future by all water users.

The second aspect is in the area of organization and management of our water resources. State Government must have the

authority to effectively manage and allocate the water resources of the State. It must ultimately be responsible for the coordination and supervision of the use of our water resources in order that the enormous water consumption demands of the future can be effectively met. In order to undertake effectively this management, coordination and supervision, certain restructuring of our government departments and agencies is required; certain additional powers must be provided by the Legislature to the State to insure that the task can be accomplished. It must be stressed, however, that this be done in a manner which will encourage the investor-owned water utilities, as well as the publicly owned water agencies, to further pursue their efforts in providing adequate water for New Jersey's citizens.

It must be declared, finally, that it is the public policy of the State of New Jersey, in recognition of its sovereign duty: to conserve and control its water resources for the benefit of all its citizens; to undertake on a continuing basis, comprehensive long range planning for the protection, conservation, and development of the water resources of this State to the end that these resources shall not be wasted and shall be adequate to meet the present and future needs of its citizens.

FINDINGS:

1. By 1990, New Jersey's growth and development will require

more than double the amount of water presently being provided for homes, industries, and public use. Accordingly, immediate provision must be made to insure an adequate supply of water based on this projection. The first step in meeting such a demand is the development of adequate water storage facilities. It was found that a need exists for immediate protection of existing reservoir sites by prompt acquisition of these sites throughout the State. Delay in acquiring reservoir sites, for whatever reason, has led to the loss of many such important locations. The land has been developed for residential, industrial, or other uses. Delay has increased acquisition costs substantially.

Commissioner Robert Roe of the Department of Conservation and Economic Development recommended to the Capital Needs Commission a priority schedule of site acquisitions and construction, at a total cost of \$105,850,000. It is significant that with the exception of the acquisition of certain miscellaneous reservoir sites -- described as southern and northwestern New Jersey, costing \$15 million -- the Commissioner's priority schedule coincided with an independent study conducted by the Capital Needs Commission and reflected a consensus of the majority of witnesses who testified before said Commission. The Capital Needs Commission recommended a minimum program of \$90,850,000, to be authorized immediately. Of this sum, the

amount of \$34,350,000 was allocated to acquisition costs, \$46,500,000 to construction costs, and \$10,000,000 to engineering designs and specifications. This Legislative Commission found no reason to differ with these recommendations.

2. It was found that one of the major problems encountered during the recent series of droughts was the lack of major water transmission facilities and distribution trunklines. The inability to redistribute our water resources geographically to the needed areas in an efficient manner was sadly evident. Under emergency priority, during the drought of 1965, the State had to make hasty plumbing connections between systems of various large water suppliers to feed water where it was needed most -- in the northern part of our State. As a last-ditch stand, in spite of all the conservation efforts of individuals and industry, it finally became necessary to build a pipeline to divert approximately four billion gallons of water from Lake Hopatcong into the northeast metropolitan region where the drought was felt the most severely. But for this connection, those communities being served in the Newark service area would have run out of water in November 1965. To further dramatize the magnitude of this near catastrophic situation, it was learned that a program had been actually worked out by our State officials, and held in reserve, to evacuate patients from hospitals where there were no self-contained ground-water well

supplies. Plans were being readied to transport water by rail and truck to the regions primarily affected by the drought.

It has been suggested by many witnesses who appeared before this Commission that the State must be responsible for building the major water aqueducts and distribution trunklines. It is suggested that these should be built as major arteries interconnecting existing water systems with new systems to be developed, thereby providing the optimum flexibility of serving any area of the State. These should be of such design and capacity as to allow the transference of huge quantities of water where needed, thereby providing a positive insurance policy against further drought crises.

3. There exists a real need for long range Statewide planning. To move ahead in the face of our future water demands without a comprehensive plan to guide the State's action is to invite disaster.

The Commission finds that this is an area in which there is total unanimity of opinion. All witnesses and sources agreed that the basis of effective water management is proper planning. Such a plan, however, must be constantly updated and revised to meet the dynamic problems and demands of our State. The plan must address itself not only to the continuing problems of storage, transmission, and allocation of water resources, but to the very closely interrelated problems of pollution

abatement, drainage, flood control, and water recreation. The planning must also include a fiscal program to meet the costs of capital investments.

The planning must obviously take into account not only the more urgent problems of northern New Jersey, where recent drought and floods have made these problems only too evident, but also the very real problems that will exist in the southern part of our State if adequate planning is not undertaken. Some of these problems already are evident in south Jersey.

Commissioner Roe has indicated that such a comprehensive master plan is being prepared by his Department and will be placed into a single document within six months time.

4. This Commission found a very troublesome problem arising from the fragmentation of management of our water resources. Control and regulation is scattered over many State agencies having jurisdiction over parts of the State's water program. In the executive branch of our State Government there are seven departments which have significant functional responsibilities in water management. These departments are: Conservation and Economic Development, Health, Agriculture, Public Utilities, Education, Community Affairs, and Transportation. Beyond this lies certain control and supervision in municipalities, county government, regional agencies, interstate commissions, the Federal Government, individuals, and numerous quasi-public and

private groups such as watershed associations and water companies. Such a staggering picture of fragmented control and management points up the obvious problem of coordinating our water suppliers and water consumers. The problem of coordinating the management and use of our water resources was constantly alluded to in the hearings before this Commission and in other reference sources investigated by this Commission. It is clearly one of the critical problem areas in water resource management. The problem was highlighted by the Capital Needs Commission which suggested that more orderly planning might be achieved if there were a coordinating agency governing all present and future water resources and their distribution. It suggested that the State -- plus the 300-odd public and private companies, authorities, and commissions -- present a broad array of interests which should have representation within a single body. It pointed beyond the need for coordination between water supply and water distribution, and indicated that a further complication is the obvious interrelationship between water supply and water pollution control. At the State level, these two are separated between the Department of Conservation and Economic Development and the Department of Health. The Capital Needs Commission posed the question, and we find it to be a reasonable one, as to whether the combining of State responsibility for water resources and water pollution in a single department might not remove at least one unnecessary

coordination requirement in a situation which is already overly complex.

5. It was found that there is a need for greater centralized control and regulation over the development, allocation, and use of our water resources. This need is largely derived from the aforementioned problem of fragmentation. Such fragmentation causes conflicting decisions, objectives, and inadequate coordination. This fragmented, decentralized structure often causes water management decisions which are neither effective nor efficient. Add to this fragmented structure the wide geographical scope of most water problems, and the result, at times, borders on chaos.

Such lack of adequate regulatory power, centrally located at the State level, necessitated the use of archaic World War II statutes by Governor Hughes during the recent drought of 1965 in order to avoid a crisis of disastrous proportions. It was necessary for the Governor to declare a state of emergency under such statutes and to thereby place the operation of public and private water suppliers of the State under the direction and jurisdiction of the State Department of Conservation and Economic Development.

The lack of centralized control and regulation of our water resources leads to the type of situation that presently exists in the Round Valley pipeline dispute. Protracted litigation

has impeded the construction of this major water transmission facility. Although the position of the City of Newark has consistently been found to be lacking in merit by our courts, nevertheless, Newark continues to litigate the matter; and the problem of delivering large quantities of Round Valley water to northeastern New Jersey remains unsolved. Such disputes should not have to be resolved through lengthy, expensive, burdensome litigations. The right of appeal to our courts should always be available, but a more expeditious decision-making process should exist at an administrative level.

Although the need for greater regulation of our water resources is more readily apparent in the northern part of our State -- as a result of the series of water crises of the past decade -- it becomes evident that the underground water resources of the central and southern part of our State, although abundant in quantity, can be subjected to the same problems. In the central and southern part of our State there is the ever-present problem of increasing salt water intrusion into the underground fresh water supplies. In addition, there is the problem of measuring and supervising the drain and demand upon these underground supplies. Expanded residential and industrial development in the next twenty years in the central and southern part of our State will magnify and intensify this situation. The mistakes of the past which, in part, have caused the water crises of the northern part of our State should serve as

adequate warning that central and southern New Jersey are equally vulnerable if there is a lack of adequate supervision and regulation.

6. The body of statutory law in New Jersey relating to water resources is in need of recodification or amendment. Frequently referred to as a veritable legal nightmare, the statutes are confusing and overlapping, and in many instances outdated. They contain many references to boards and commissions, either never filled or implemented or which have outlived their usefulness.

7. It was found that a serious potential problem can exist in the lack of adequate regulation over the rates of a municipal water supplier where service is furnished beyond the corporate limits of the municipality. The sale price of such water to a customer outside the corporate limits of the municipality is unregulated in certain instances. In theory and in actual practice, a customer could be charged arbitrary or unreasonable rates for the water. In comparison, water rates of a privately owned utility are regulated by the Public Utilities Commission.

8. The complexity of the facts of the Raritan Valley pipeline project and the dispute surrounding it are such that the findings made by this Legislative Commission, and the recommendations relative thereto, will be dealt with together under specific recommendations made by this Commission.

RECOMMENDATIONS:

1. It is recommended that the State acquire, at the earliest possible time, the following reservoir sites (the acquisition of these sites was given immediate priority by the Department of Conservation and Economic Development and the Capital Needs Commission):

South River Tidal Dam	\$ 5,000,000
Raritan Confluence	1,500,000
Manasquan - Upper and Lower	2,000,000
Six-Mile Run	4,600,000
Hardscrabble	8,000,000
Two Bridges	5,000,000
Schooley Mountain Reservoir	1,250,000
Hackettstown	5,000,000
Delaware River P.L.R.O.W.	<u>2,000,000</u>
Acquisition costs	- \$34,350,000

It is additionally recommended that the State undertake the following construction projects (also given immediate priority by the Department of Conservation and Economic Development and the Capital Needs Commission):

Round Valley Outlet Works	\$ 4,000,000
South River Tidal Dam	4,000,000
Raritan Confluence Reservoir	22,500,000
Manasquan - Lower	1,500,000
Six-Mile Run	6,000,000
Manasquan - Upper	<u>8,500,000</u>
Total Construction	\$46,500,000

For advanced preparation of engineering designs and specifications: \$10,000,000

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The total cost of the foregoing site acquisition and construction projects in the amount of \$90,850,000 should be raised through the sale of general obligation bonds issued by the State and authorized by referendum.

It is further recommended that as the State begins to acquire the reservoir sites, the municipalities involved should be given an "in lieu of taxes" payment.

It is further recommended that if such a bond referendum should fail to be approved by the electorate, then these acquisition and construction programs should be undertaken by the Water Resource Development Authority, an agency whose creation is recommended by this Legislative Commission. It is suggested that such an Authority have the capacity to raise the needed funds through revenue bonds.

2. This Commission does not, at this time, recommend the construction of any specific transmission facilities. (Reference will be made, however, in other recommendations that follow in this report as to the State's possible intervention in the construction of the Raritan Valley pipeline.)

The only specific cost figures made available to this Commission on proposed pipeline construction projects (other than the Raritan Valley pipeline), related to the Delaware River pipeline which would divert Delaware River water to new reservoir sites at a cost of \$130 million. New Jersey hopes to attain,

eventually, a minimum allocation of 300 million gallons per day from the yield of the Delaware River Basin Water System. Because the Delaware River Basin Commission has not yet determined the exact location for the diversion of Delaware River water, or the method of diversion, it cannot be recommended by this Legislative Commission that funds be authorized for the construction of this pipeline.

This Commission does, however, recommend that the State or a State agency be ultimately responsible for the construction of major water aqueducts and distribution trunklines. Although private utility companies and other public agencies can be frequently relied upon to undertake such projects, the fact remains -- and the water crises of the past several years bear out the single conclusion -- that all too frequently the private sector or other non-State agencies cannot or will not undertake these projects. Such projects usually are of such size or of such a nature that incentive or desire, for whatever reason, is lacking. Problems arise from financing, and from conflicting aims often framed by political boundaries. Such situations cannot be allowed to exist. In these situations the State, or an appropriate State agency, must step in and assume the responsibility for building the transmission facility.

3. Although this Commission did not pursue in depth the potential and the future of water desalination and water renovation,

it is obvious that this is an area in which continued concentrated study should be made; and this Commission so recommends. Although cost factors make the desalting process and the water re-use process almost prohibitive at this time, it is recognized that within the next twenty years additional sources of water supply must be found to supplement our present surface and underground supply. Water re-use and desalted water could well be the answer as we review the rapid technological advances and progress of our time.

4. The findings of this Commission point to the serious problem of governmental structure and organization with respect to total water management, both in the area of supervision and policy. The primary problems are inadequate coordination, conflicting objectives, and fragmentation of authority and decision-making. As a solution to these problems, it is recommended that there be created a commission designated as the New Jersey Water Management Commission. The responsibilities of this newly created commission would be primarily regulatory and supervisory; its powers would be quasi-judicial in nature. It would establish policy that would provide the basis for wise management of our water resources through equitable regulatory activities. It would be a strong coordinating and managing body of impartial experts with the interests of the citizens of New Jersey as its primary concern. This newly created commission would be

responsible for the formulation and adoption of truly comprehensive water management plans and standards. It would have the final power to review and approve water resource development projects, whether undertaken by the private sector or by another State, public or semi-public agency. The decisions of said commission would be final, except for the right of appeal to the courts.

Such a commission would supersede and assume all of the responsibilities now undertaken by the Division of Water Policy and Supply within the Department of Conservation and Economic Development, and the responsibilities relative to water resource management undertaken by the Division of Clean Air and Water and the Division of Environmental Health in the Department of Health, and by the State Soil Conservation Committee within the Department of Agriculture.

In addition to assuming those regulatory powers presently held by the aforesaid Divisions, the commission should be granted additional powers such as those suggested by Commissioner Roe and Governor Richard Hughes in their requests for a Water Board of Arbitration. The powers granted to this commission should be of such a nature that quick decisive action can be undertaken by the commission in times of emergency, whether stemming from drought, flooding, excessive water pollution, or other related problems. It should also have the power to arbitrate decisively disputes such as presently exist in the Raritan Valley pipeline

project.

It should be emphasized that this new commission would in no way directly undertake or participate in any developmental projects. It would not become involved in the construction or development of any water resource facilities, whether they be reservoirs, pipelines, treatment systems, or related projects. It would, however, coordinate such projects and finally determine, in the interest of the citizens of New Jersey, who should undertake such projects and who should be served by such projects.

It is recommended that this new commission be composed of five members appointed by the Governor with the advice and consent of the Senate. The appointive members should serve five-year terms and should be selected in such a manner that all geographical sectors of the State are represented. Each appointee should be salaried at a minimum of \$20,000 per year. It is further recommended that the Commissioner of Conservation and Economic Development, the Commissioner of Health, and the Secretary of Agriculture be appointed to serve as non-voting advisors to the commission. The commission should be adequately staffed by personnel who are highly qualified and have expertise in water economics, public works construction and financing, water law, water management engineering, and water planning. Salaries should be such as to attract those who qualify as experts.

It is recommended that the New Jersey Water Management Commission be given Department status. Another alternative would be to locate such commission in the Department of Conservation and Economic Development, but only for the purpose of satisfying the requirement of Article V, Section IV, Paragraph 1 of the Constitution of the State of New Jersey. This paragraph requires that all executive agencies of State government be located within not more than 20 principal departments. It is important that such a commission be essentially autonomous for it to adequately and equitably carry out its tasks of supervising, regulating and coordinating public and private water agencies, including State water agencies. The relationship between the commission and the Department of Conservation and Economic Development would be similar to the relationship between the New Jersey Turnpike Authority and the Department of Transportation.

5. It has been recognized by this Legislative Commission that there are numerous capital projects in the area of water resource development that require immediate attention. Specifically, the need for reservoir site acquisitions is the most urgent. These sites are rapidly disappearing and their acquisition costs increase as each year passes.

Of equal importance is the construction of certain reservoirs. These basic capital projects have been discussed in prior recommendations and it has been recommended by this

Commission that these projects be undertaken by the State and that their cost be funded through general obligation bonds of the State, approved by the electorate. If, however, the electorate should fail to approve such a bond issue, the needs will still remain and will be no less important. The projects must still be undertaken if the water resource needs of this State are to be met. Additionally, there are other capital projects in the area of water resource development that should possibly be undertaken by an agency of the State. It was recommended previously in this report that the State or an agency of the State should be ultimately responsible for the construction of major water aqueducts and transmission facilities.

Accordingly, it is recommended by this Commission that there be created an independent authority to be known as the New Jersey Water Resource Development Authority. The purpose of this Authority would be to plan and develop specific projects in the water resource area; including but not limited to facilities for water supply, facilities for stream flow improvement, dams, reservoirs, and other impoundments, water transmission lines and aqueducts, pumping stations and works for underground water recharge, and facilities for the treatment of waters, streams, and rivers. Such an Authority would have the power to issue revenue bonds, the proceeds of which would be used to finance the projects. The bond issues could be repaid with the

revenues derived by the authority from the sale of water or rentals, or other charges obtained for the use or services of any water development project. It is suggested that such bond issues have a forty-year term with a deferred amortization payment for the first ten years so that only interest payments would be required during the initial phases of the construction. An advantage to the construction and funding of capital projects through such an Authority would be that the State's general borrowing would not be reduced.

It is to be noted at this point, that such an Authority would have to submit its plans and projects to the proposed New Jersey Water Management Commission for final approval. The Authority would be subject to the regulation and supervision of the New Jersey Water Management Commission in the same manner as any other private or semi-public agency that would seek to develop water resources or facilities. This would protect the private and semi-public sector from unfair competition from an unregulated resource development agency of the State. Both would be submitting development plans and projects to the Commission for approval. The decision of the New Jersey Water Management Commission as to who could most efficiently and economically develop a project would be final. That plan which best serves the interest of the citizens of New Jersey would be the decisive factor.

It is recommended that a New Jersey Water Resource Development Authority be composed of five members appointed by the Governor with the advice and consent of the Senate. Each member would be non-salaried and would serve a five-year term. The Authority would require an adequate staff of personnel with expertise and experience in the area of water resource development projects, supervised by a salaried executive director. The Authority should be located within the Department of Conservation and Economic Development, but here again, only to satisfy the Constitutional requirement for executive agencies.

6. It is recommended that the present body of statutory law dealing with water resource management be examined thoroughly and recodified or amended. As indicated by this Commission in its findings, this area of the law is confusing, overlapping, and in many instances outdated.

7. It is recommended that where any municipality furnishes services beyond its corporate limits, or where a municipal utilities authority furnishes services beyond the corporate limits of the municipality in which it is located, such activity -- being in the nature of a private or proprietary enterprise -- should be regulated in the same manner as the activity of any other private utility. If the users in the neighboring municipality were being served by a privately owned utility,

obviously the rates would be subject to regulation by the Board of Public Utility Commissioners. Logic compels the conclusion that the Legislature should protect a consumer who purchases from a neighboring municipality or municipal utilities authority in the same manner that it protects a consumer who purchases from a private utility.

8. The complex Raritan Valley pipeline situation and the continuing dispute surrounding it clearly point out and dramatize many of the problems which this Legislative Commission has observed in its study of water resource management in this State. The situation is an intricate complex of conflicting goals, uncoordinated actions, and fragmented decisions combined with political and private jealousies and rivalries, unexplained facts, and unsupported conclusions. Contrary to the opinion of some, this Legislative Commission was not formed for the sole purpose of investigating and airing the Raritan Valley dispute. The Commission's primary goal was to study the whole range of problems affecting water resource management and water supply policy in this State. This Commission would, however, be remiss in its duties and responsibilities if it did not examine and comment on the Raritan Valley pipeline problem since this problem, more than any other, clearly embraces and sharply evidences most of the factors which place New Jersey's water resources and their management at a critical juncture.

It is unnecessary to review the entire history of the pipeline project at this time. The historical record is clear and readily available. It is sufficient to note that the construction of a major water transmission line from the Spruce Run-Round Valley reservoir complex into northeastern New Jersey was mandated by the Legislature in 1962. The construction task was given by the Legislature to the North Jersey District Water Supply Commission. Financial support was not given by the State. It may well be that this was a serious error. The need for a major facility was, however, evident; the subsequent drought conclusively proved the need. The present requirement for such a major transmission facility is equally evident. Northeastern New Jersey must have available for its use large quantities of water which can only be obtained, at this time and in the foreseeable future, from the Round Valley-Spruce Run complex. As northeastern New Jersey's water needs double within the next twenty years, according to reliable projections, and as the Hackensack Meadowlands project develops -- bringing with it even greater water demands -- the availability of Round Valley water to the area becomes critically important and significant.

It is to be hoped than an amicable, voluntary solution and settlement of the dispute can be arrived at in the near future. The matter appears to be bogged down, however, in extensive protracted litigation and the chances of a reasonable

settlement appear dim at this time. In fact, it was recently announced by the executive director of the Newark Municipal Utilities Authority that the City of Newark intends to appeal a Superior Court decision rendered by Judge Nelson K. Mintz, wherein it was decided by the Court that Newark may not withdraw from its contractual agreement to participate in the Round Valley pipeline project. The Court held that there was no basis in fact or in law for Newark's contention that the proposed project is economically unfeasible. This contention has been the main thrust of Newark's argument throughout the dispute.

It is to be noted at this point that if Newark does appeal the Court's decision, the North Jersey District Water Supply Commission cannot proceed to obtain the interim financing necessary to commence the project; there must be a certification by said Commission that the pipeline project is free from litigation in order to obtain the financing. Hence, continued litigation, for whatever reason, will continue to stall this badly needed pipeline facility.

As indicated, the focal point of the dispute has been the question of economic feasibility. Opponents of the project, led by Newark, contend that the cost of Round Valley water delivered through the pipeline will be far too expensive. In fact, a feasibility study of the project made by the Gilbert

Associates engineering firm and the State of New Jersey at a cost of \$255,000, indicated that the cost to participants under the recommended (2.5 million gallons per day) plan would range between \$1.50 and \$2.00 per million gallons. Newark disputed the validity of the study and further stated that in fact the actual present cost to the participants would be even higher, since many of the participants are not in need of water supply which exceeded their present needs but which would have to be paid for by the subscriber whether actually used or not. Newark has continually stated on the other hand, that it can deliver water to the same participants at a far cheaper rate.

It is the observation of the Joint Legislative Commission that the Newark plan to deliver water to the participants of the water to these communities leaves several questions unanswered. Newark would propose to obtain water from the Delaware River through its existing water treatment plant. It can be stated at this time that the ability to obtain Delaware River water at all is very questionable and, at best, speculative because of many complications. What assurance does Newark have that it will be able to obtain this source? When will Delaware River water be available seasonally, how much will this water cost -- if and when it is available? How much will it cost to bring water from this project into Newark?

Newark speaks of the transfer of its water system valued at \$150 million to the newly created Newark Municipal Utilities Authority. What will be the financial details of this transfer? Will it be gifted, leased, or sold; and for how much? If the Authority is to purchase this water system, the price of the transfer and the method of payment -- whether through bonding or some other method -- are significant factors affecting the cost of water for the Authority and the price for which it will ultimately sell water to other municipalities. Mayor Addonizio of Newark recently estimated that if the \$150 million system were purchased by the Authority and paid for by the issuance of bonds, the water rates in Newark would have to double if \$7 million were to be paid off annually. Newark, further, speaks of selling water to others at \$165 per mgd. It also, however, states that it would offer its standard form of twenty-year contract to water purchasers which allows for possible increases "at the end of each five-year term." Thus, purchasers are neither assured of the future price of water nor are they guaranteed a supply of water since the contract is subject to the prior right of Newark to supply water to all of its present or future consumers within the City of Newark. Newark additionally contends that it will be able to continue to purchase surplus water from Elizabethtown Water Company at the present "dump" price of \$132 per mgd. What assurance has

Newark of this? Will this price not be raised in the future? What will be the cost to Newark of refurbishing its transmission, distribution, and treatment systems to handle large additional quantities of water which it would seek to obtain from Elizabethtown Water Company and sell to others? The foregoing are but a few of the many unanswered questions surrounding Newark's proposal that it can sell large quantities of water in the future at costs considerably below those offered by the Raritan Valley pipeline project. Most significantly, if not most importantly, is the consideration that participants to the Raritan Valley pipeline project are paying not just for water but for a proprietary interest -- ownership in the pipeline. Once the pipeline is paid for, a very substantial reduction in the price of water to the participants is predictable. History has proved that those municipalities in northeastern New Jersey which had the foresight and courage to embark upon the Wanaque Reservoir project in a similar cooperative venture many years ago, at a cost which then must have seemed very high, will -- within a very few years -- be enjoying a water supply at very low rates. The capital costs of the project will be fully paid shortly. The Raritan Valley pipeline project, in parallel fashion, appears to offer a similar opportunity today.

However, encouragement and incentive should be given to those communities seeking to participate in the Raritan Valley

pipeline project. Accordingly, the following is recommended to the Legislature by this Legislative Commission:

The State of New Jersey should agree to bear temporarily the cost for the unsubscribed 9 mgd in the project. (It should be noted that only 61 mgd of the 70 mgd required to build the project have been subscribed for by the participants. If the balance of 9 mgd were not subscribed for, the cost could rise to as high as \$282 per mgd.) In effect, the State would be a 9 mgd partner. This would have the effect of stabilizing the cost and keeping it from rising above the figure of \$251 per mgd. As additional subscribers for the water enroll in the project, they would repay the State for any outlay it may have made. It should be noted further that another problem arises from the fact that several of the participants have overestimated their future water needs, thereby substantially raising their per-million-gallon rate. It is suggested that the total amount of oversubscription could be as high as 5 mgd. While this does not sound like a large amount of water, for a few of the smaller communities it means paying twice what other Raritan Valley participants will be paying. It is therefore further recommended to the Legislature that the State agree to pick up this extra amount for a total of approximately 14 mgd. Again, this would be only until a sufficient number of additional subscribers entroll. Future subscribers would compensate the State for its initial outlays.

The Elizabethtown Water Company has presented proposals to this Legislative Commission which require examination. Elizabethtown maintains that shortly it will be able to deliver 40 mgd to the southerly end of the Newark system. It does not, however, indicate that it will sell this water at a fixed price indefinitely to Newark on an uninterrupted basis. Elizabethtown now sells surplus water to Newark on an "interruptible basis." Will the Elizabethtown price to Newark of \$132 per mg for surplus water be raised? Can Newark handle this additional water without expending substantial sums to renovate its system? Elizabethtown further proposes to deliver an additional 40 mgd of Raritan water through another parallel pipeline. Again, this is a bare proposal. Construction costs of this project are speculative, if known, as is the price of water to be sold by Elizabethtown through this facility. Elizabethtown cannot state at this time that its projected program to bring a total of 80 mgd of Raritan Water into northeastern New Jersey would not result in a rate increase. There is also the significant question as to how this water could be handled through the Newark system. Newark has complained that it cannot handle the Raritan Valley pipeline project water through its system without spending several million dollars to improve its system. The fact that there are many unanswered questions to the Elizabethtown proposal leaves this Legislative Commission in

a position wherein it cannot accept Elizabethtown's proposals as a feasible alternative to the Raritan Valley pipeline project. Additionally and lastly, it is to be noted that the ultimate reward for an owner-partner in the Raritan Valley pipeline project, viz., the predictable reduction in water costs to the owners of the pipeline when the pipeline is paid for, is lacking in the Elizabethtown proposal. The Elizabethtown proposal obviously does not offer ownership of a project to water users.

It should be stated that the proposed Newark by-pass line is a proposal worthy of continued serious study and consideration. This supplemental plan which has been recently presented by the North Jersey District Water Supply Commission would relieve Newark of obligations for major reconstruction of its water distribution system. This by-pass line would take water from the Raritan Valley pipeline at the southerly end of Newark, run easterly to the New Jersey Turnpike and then northerly, paralleling the Turnpike. This line could deliver water directly to Bayonne and Kearney, to the easterly side of the City of Newark and most importantly, could feed large volumes of water into the projected Meadowlands development of the future. It could place Raritan Water within easy reach of the Hackensack Water Company for future use in Bergen County.

A final observation should be made relative to the Raritan Valley pipeline project. The needs for Raritan Valley water in

northeastern New Jersey are glaringly obvious. The demand will grow rapidly in the future. The economic feasibility of the pipeline has been demonstrated clearly and emphatically. The feasibility report by Gilbert Associates spelled out the financial details of the project adequately and fairly. Alternative proposals raise more questions than do they provide answers. Accordingly, if the participants in this pipeline construction project cannot forthwith settle their differences in a reasonable and equitable manner, and if the project continues to be mired in interminable litigation, the citizens of northeastern New Jersey can no longer be expected to wait for this very important source of water. It would be strongly urged by this Legislative Commission that the State of New Jersey, or an agency thereof, build the pipeline.

Statement of Senator Norman Tanzman

First, I would like to commend Assemblyman Herbert M. Rinaldi for the time and effort he expended in the study of the water supply problem in New Jersey as chairman of this Commission, and for the preparation of this report. I have considered the report carefully and while I am basically in accord with its major findings and recommendations, there are several items which I think should be explored further before I could concur completely.

On Page 12, Item 2, the report says, "This Commission does not at this time recommend the construction of any specific transmission facilities." However, on Page 30, last Paragraph, last sentence, states, "It would be strongly urged by this Legislative Commission that the State of New Jersey, or any agency thereof, build the pipeline." This is an apparent contradiction.

Further, on Page 28, the last sentence on the page, the report states, "The fact that there are many unanswered questions to the Elizabethtown proposal leaves this Legislative Commission in a position wherein it cannot accept Elizabethtown's proposals as a feasible alternative to the Raritan Valley pipeline project." It would seem to me that we ought

to sit down with the Elizabethtown people again and get the answers before the State becomes committed to an undertaking of this size.

On Page 27, it is recommended that the State become a partner in the Raritan Valley pipeline project by paying the cost of unsubscribed water. It seems to me that this requires some further exploration before a definite recommendation is made.

With the above reservations, I respectfully join with the other members of the Commission in transmitting this report to the Legislature.

Minority Report of the Legislative Water
Policy and Supply Study Commission
created pursuant to ACR-31 of 1968
by Assemblyman John J. Fekety

While I am in agreement with much of the substance of the Commission's report, I cannot concur with the majority of the members of this Commission in some of its recommendations.

The Commission recommends that the State acquire selected reservoir sites and undertake the construction of certain water supply projects. The total cost of such State action in the amount of \$90,850,000 is to be raised through the sale of general obligation bonds issued by the State and authorized by a bond referendum. I have serious doubts as to whether or not the State should undertake these projects, and I am not convinced that such State action will better serve the public interest than the undertaking of these projects by investor-owned water utilities and public water agencies. The Commission has concluded that private water utility companies are either unwilling or unable, or both, to undertake reservoir construction. I am not convinced that the facts justify such a conclusion.

There are presently two State reservoirs, Spruce Run and Round Valley, which projects were authorized by law in 1958 and financed through the sale of general obligation bonds of the State. I am mindful of the significant, and

in retrospect, indispensable addition to the total water supply of this State and of the other benefits provided by these reservoirs. I do not feel, however, that these projects prove that private enterprise is unable or unwilling to undertake reservoir construction. At least one private water company and a regional public water agency had prepared plans for the development of new water supply facilities in the Raritan River Basin prior to State action in this area. I wonder if perhaps private and local initiative and incentive have been discouraged by State entrance into the reservoir construction business and by the persistent calls for expansion of State activity in this business.

Does the State build generating stations for power companies?

If there is any disinclination or lack of initiative on the part of the private water companies and public water agencies to undertake reservoir construction projects, perhaps the reason is to be found in the divided jurisdiction, regulation and control exercised over them by various State departments rather than in any inherent inability in these companies and agencies in themselves. Similarly, if investor-owned water companies are unwilling to undertake these projects, perhaps the uncoordinated and seemingly chaotic division of responsibility for and jurisdiction over water

supply among the several levels of government in this State is the real cause.

Whatever the reasons are behind the water supply problems of this State, I feel that the more appropriate action by the State and the Legislature at this time would be to create some agency on the State level to coordinate the plans and activities of the various State and local government agencies and private companies concerned with water supply and water resources management. Such an agency could develop a comprehensive plan for water resources management in New Jersey. Such a plan should not be a delineation of what reservoirs and water supply facility construction projects the State should undertake, but should clearly outline the existing water supplies and responsibilities for water supply in the different areas of the State and any proposed expansion of these supplies and responsibilities, the need for new supplies and assumption of responsibility for them, and a clear indication of who should assume the responsibilities for these supplies. In short, and as the report also indicates the need for such a plan, I feel the first step should be the formulation of a comprehensive State water plan. This can only be effectively accomplished by including representatives of all the present suppliers of water in its preparation. A cardinal

report of this Commission, I respectfully join with the other members of the Commission in signing this report and transmitting it to the Legislature.

LIST OF WITNESSES WHO APPEARED BEFORE OR
SUBMITTED STATEMENTS FOR THE RECORD OF
THE PUBLIC HEARINGS OF THE COMMISSION

1. Brendan T. Byrne - President, Board of Public Utility Commissioners
2. Robert A. Roe - Commissioner, Department of Conservation and Economic Development
3. Wayne Dumont, Jr. - Senator from the 15th District (Sussex, Warren and Hunterdon Counties)
4. Walter J. Davis - Mayor, Town of Bloomfield
5. Joseph R. Brumale - President, North Jersey District Water Supply Commission
6. Oscar R. Wilensky - Counsel, North Jersey District Water Supply Commission
7. Douglas E. Gimson - Assemblyman from District 15 (Sussex, Warren and Hunterdon Counties)
8. John J. Barr - President, American Water Works Company, Inc.
9. David I. Stepacoff - Water Policy and Supply Council
10. James J. Bannon III - Mayor, Cedar Grove Township
11. Walter S. Steinman - Administrator, Borough of Verona
12. James F. Wright - Executive Director, Delaware River Basin Commission
13. Kenneth J. Quazza - Councilman, Cedar Grove Township
14. Morgan R. Seiffert - Chairman, Water Supply Advisory Committee, Middlesex Planning Board
15. Charles Capen & Paul Rigo - Capen-Rigo Associates, Consulting Engineers
16. Raymond Schroeder - Essex County Planning Board
17. Alfred Crew - Alfred Crew Consulting Engineers, Inc.

18. William E. Roach, Jr. - Planning Director, Somerset County
Planning Board
19. Francis Downey - City Engineer, City of Elizabeth
20. Edward V. Lipman - New Jersey Farm Bureau
21. J. Garfield DeMarco - Vice-President, American Cranberry
Growers
22. Ernest Erber - Director, New Jersey Committee, Regional
Plan Association
23. Peter Homack - Consulting Engineer, Morris County Utilities
Authority
24. George Buck - President, Hackensack Water Company
25. Arthur Fynst - New Jersey State Chamber of Commerce
26. Robert F. Ferguson, Jr. - Executive Vice-President, New
Jersey Association of Real Estate
Boards
27. Philip J. Cocuzza - Executive Director, New Jersey Home
Builders Association
28. Alfred Macaluso - M & M Associates
29. Mrs. Frank Rooney - State Board Water Chairman, League of
Women Voters
30. Ferdinand Biunno - Business Administrator, City of Newark
31. Calvin West - Vice-Chairman, Newark Municipal Utilities
Authority
32. Anthony P. LaMorte - Director, Newark Municipal Utilities
Authority
33. Glen Holman - Chairman, Cape May County Water Advisory
Committee, Cape May County Planning
Board
34. Richard D. Goodenough - Executive Director, Upper Raritan
Watershed Association

35. John R. Gideonse - Director, Atlantic County Planning Board
36. John Ploskonka - Borough Engineer, Sayreville
37. Clifford S. Evans - Raritan Valley Regional Chamber of
Commerce
38. Phillip Alampi - Secretary of Agriculture, N. J. Department
of Agriculture, on behalf of the
Agricultural Conservation and Marketing
Complex in N. J.
39. Edward D. Bastian - Chief Engineer, Middlesex Water Company
40. Claude W. Birdsall - Consulting Engineer to the Board of
Chosen Freeholders of the County of
Monmouth
41. Dr. Samuel D. Faust - Department of Environmental Sciences,
College of Agriculture and Environmental
Sciences, Rutgers, The State University
42. Robert W. Kean, Jr. - President, Elizabethtown Water Company
43. Herman Kleindienst - President, N. J. Association of Soil
Conservation District Supervisors on
behalf of the Soil Conservation
Districts in N. J.
44. Frederick F. Richardson - Counsellor at Law, Former Mayor
of New Brunswick and later its Water
Counsel
45. Joseph Ostrower - Vice-President, Woodbridge Area Chamber of
Commerce

LIST OF WITNESSES INVITED TO TESTIFY AT THE
PUBLIC HEARINGS OF THE COMMISSION

1. Robert A. Roe - Commissioner, Department of Conservation
and Economic Development
2. Brendan T. Byrne - President, Board of Public Utility
Commissioners
3. Joseph R. Brumale - President, North Jersey District Water
Supply Commission
4. Hugh J. Addonizio - Mayor, City of Newark
5. Anthony P. LaMorte - Director, Newark Municipal Utilities
Authority
6. Francis G. Fitzpatrick - Mayor, City of Bayonne
7. Walter J. Davis - Mayor, Town of Bloomfield
8. James J. Bannon III - Mayor, Cedar Grove Township
9. Thomas G. Dunn - Mayor, City of Elizabeth
10. Herbert H. Johnson - Mayor, Borough of Glen Ridge
11. Joseph M. Healy - Mayor, Town of Kearny
12. Harry W. Chenoweth - Mayor, Town of Nutley
13. Brian D. Conlon - Mayor, Village of South Orange
14. Walter D. McKinley - Mayor, Borough of Verona
15. Cuyler W. Hasemann - Mayor, Borough of West Caldwell
16. Capen-Rigo Associates
17. Robert W. Kean, Jr. - President, Elizabethtown Water Company
18. George Buck - President, Hackensack Water Company
19. John J. Barr - President, American Water Works Company, Inc.

20. L. W. Klockner, Jr. - Director for the New Jersey Section,
American Water Works Association
21. Stanley M. Levine - President, Passaic Valley Water
Commission
22. Douglas S. Powell - Director, Middlesex County Planning
Board
23. James F. Wright - Executive Director, Delaware River Basin
Commission
24. Ernest Erber - Director, New Jersey Committee, Regional
Plan Association
25. Joseph Ludlum - New Jersey State Chamber of Commerce
26. Ernest C. Reock, Jr. - Director, Bureau of Government
Research
27. Clarence J. Ziegler - Executive Director, New Jersey
Taxpayers Association
28. Mrs. Frank Rooney - State Board Water Chairman, League of
Women Voters
29. J. Anton Hagios - Executive Legislative Representative,
Greater Newark Chamber of Commerce
30. Robert H. Fust - Executive Director, New Jersey League
of Municipalities
31. Leonard C. Johnson - President, New Jersey Manufacturers
Association
32. Thomas J. Whelan - Mayor, Jersey City
33. Victor L. Woodhull - Mayor, Morristown
34. Carmen J. Armenti - Mayor, City of Trenton
35. Alfred R. Pierce - Mayor, City of Camden
36. Norman J. Griffiths - Executive Director, Morris County
Utility Authority
37. Alfred Macaluso - M & M Associates

38. Manager - Duhernial Water System
39. William E. Roach, Jr. - Planning Director, Somerset County
Planning Board
40. Arthur John Bray, Jr. - County Planning Officer, Essex
County Planning Board
41. Paul M. VanWegen - President, Stony Brook-Millstone
Watersheds Association
42. Atlantic County Board of Freeholders
43. Burlington County Board of Freeholders
44. Cape May County Board of Freeholders
45. Ocean County Board of Freeholders
46. Alfred Crew - Alfred Crew Consulting Engineers, Inc.
47. John S. Kosko - Essex County Planning Board

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