

P U B L I C H E A R I N G
before
SENATE ENERGY AND ENVIRONMENT COMMITTEE
and
ASSEMBLY ENERGY AND NATURAL RESOURCES COMMITTEE
on
S-1610 through S-1614
(Water Supply Legislation)

Held:
February 17, 1981
West Morris Central High School
Chester, New Jersey

MEMBERS OF SENATE COMMITTEE PRESENT:

Senator Frank J. Dodd, Chairman

MEMBERS OF ASSEMBLY COMMITTEE PRESENT:

Assemblyman Robert P. Hollenbeck, Chairman
Assemblyman Elliott F. Smith
Assemblyman Thomas F. Cowan, Sr.

ALSO:

Algis P. Matioska, Research Associate
Office of Legislative Services
Aide, Assembly Energy and Natural Resources Committee

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SENATE, No. 1610

STATE OF NEW JERSEY

INTRODUCED NOVEMBER 24, 1980

By Senator DODD

Referred to Committee on Energy and Environment

AN ACT authorizing the creation of a debt of the State of New Jersey by the issuance of bonds of the State in the aggregate principal amount of \$345,000,000.00 for the purposes of State or local projects to rehabilitate, repair or consolidate antiquated, damaged or inadequately operating water supply systems; and to plan, design, acquire and construct various State water supply facilities; providing the ways and means to pay the interest of such debt and also to pay and discharge the principal thereof; and providing for the submission of this act to the people at a general election; and providing an appropriation therefor.

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

1 1. This act shall be known and may be cited as the "Water Supply
2 Bond Act of 1981."

1 2. The Legislature finds and determines that:

2 a. The health, safety, welfare, commerce and prosperity of the
3 people of the State depend on the availability of a safe, adequate
4 and reliable supply of water.

5 b. The New Jersey Statewide Water Supply Plan has identified
6 certain projects which are needed to provide additional supplies
7 of water, new transmission and distribution capabilities for existing
8 supplies, increased reserve and emergency response capabilities,
9 and increased water quality benefits which may reduce or eliminate
10 the need for advanced wastewater treatment levels in certain
11 areas.

12 c. The rehabilitation and repair of antiquated or damaged water
13 supply systems will help to conserve our vital water resources
14 through leakage reduction and will lend increased support to
15 New Jersey's revitalization and economic development.

16 d. Funds are needed to assist in the consolidation of deficiently
17 operating systems to provide more adequate services to the com-
18 munities they serve and to improve the quality of drinking water.

19 e. The construction of a multiple exchange facility at Great
20 Notch will allow for additional flexibility for water transfers
21 and will provide for improved response to variable stress and
22 emergency conditions, such as those experienced during times of
23 drought.

24 f. The overuse of available water supplies in the Passaic River
25 Basin necessitates the acquisition of new sources of water, which
26 can be obtained by diverting water from the Spruce Run and Round
27 Valley Reservoirs to areas of need in the Passaic River Basin.

28 g. The demand for an additional 18,000,000 gallons per day
29 of water by 1990 in Monmouth and Ocean counties, and the danger
30 to their supply posed by demand-induced regional declines in
31 groundwater levels and salt water intrusion, can best be met by
32 constructing the Manasquan Reservoir project.

33 h. The storage of augmented flow from the Raritan river to
34 Round Valley Reservoir for release into the Raritan river during
35 low flow or drought periods is necessary to meet downstream
36 requirements and water needs under emergency conditions.

37 i. The design and construction of the Hackettstown reservoir
38 and the Delanco surface water intake is needed to reverse the
39 deteriorating water quality of the Delaware River Basin caused
40 by the increasing depletive uses of water.

1 3. As used in this act:

2 a. "Bonds" means the bonds authorized to be issued, or issued
3 under this act;

4 b. "Commission" means the New Jersey Commission on Capital
5 Budgeting and Planning;

6 c. "Commissioner" means the Commissioner of Environmental
7 Protection;

8 d. "Construct" and "construction" mean, in addition to the
9 usual meaning thereof, acts of construction, reconstruction, replace-
10 ment, extension, improvement and betterment;

11 e. "Cost" means the cost of acquisition or construction of all
12 or any part of a project and of all or any real or personal property,
13 agreements and franchises deemed by the department to be neces-
14 sary or useful and convenient therefor or in connection therewith,
15 including interest or discount on bonds, costs of issuance of bonds,
16 cost of geological and hydrological services, administrative cost,
17 interconnection testing, engineering and inspection costs and legal
18 expenses, costs of financial, professional and other estimates and
19 advice, organization, operating and other expenses prior to and
20 during such acquisition or construction, and all such other expenses
21 as may be necessary or incident to the financing, acquisition, con-

22 struction and completion of such project or part thereof and the
23 placing of the same in operation, and also such provision for a
24 reserve fund, or reserves for working capital, operating, mainten-
25 ance or replacement expenses and for payment or security or
26 principal of or interest on bonds during or after such acquisition
27 or construction as the State Comptroller may determine;

28 f. "Department" means the Department of Environmental Pro-
29 tection;

30 g. "Project" means any work relating to water supply facilities;

31 h. "Real property" means lands, within or without the State,
32 and improvements thereof or thereon, any and all rights-of-way,
33 water, riparian and other rights, and any and all easement, and
34 privileges in real property, and any right or interest of any kind
35 or description in, relating to or connected with real property;

36 i. "Water supply facilities" means and refers to the real prop-
37 erty and the plants, structures, interconnections between existing
38 water supply facilities, machinery and equipment and other prop-
39 erty, real, personal and mixed, acquired, constructed or operated,
40 or to be acquired, constructed or operated, in whole or in part by
41 or on behalf of the State, or of a political subdivision of the State
42 or any agency thereof, for the purpose of augmenting the natural
43 water resources of the State and making available an increased
44 supply of water for all uses, and any and all appurtenances neces-
45 sary, useful or convenient for the collecting, impounding, storing,
46 improving, treating, filtering or transmitting of water, and for the
47 preservation and protection of these resources and facilities and
48 providing for the conservation and development of future water
49 supply resources, and facilitating incidental recreational uses
50 thereof.

1 4. Bonds of the State of New Jersey are authorized to be issued
2 in the aggregate principal amount of \$345,000,000.00 to meet the
3 cost of providing State or local projects to rehabilitate, repair or
4 consolidate antiquated, damaged or inadequately operating water
5 supply systems; and to plan, design, acquire and construct the
6 Great Notch multiple exchange facility, the Raritan — Passaic
7 water supply interconnections, the Manasquan reservoir project,
8 the Raritan confluence reservoir, pumping station and force main,
9 and the Hackettstown reservoir and Delanco surface water intake.

10 a. Of the total moneys available under this act, \$65,000,000.00 is
11 allocated for grants or loans to public or private water purveyors
12 for the rehabilitation or repairs of antiquated or damaged water
13 supply systems and to assist in regionalizing troubled or in-
14 adequately operating systems.

15 b. Of the total moneys available under this act, \$10,000,000.00
16 is allocated for the construction of a multiple exchange facility at
17 Great Notch.

18 c. Of the total moneys available under this act, \$85,000,000.00
19 is allocated for the alignment analysis, design and construction of
20 a pipeline to transfer water stored in the Spruce Run and Round
21 Valley Reservoirs to areas of need in the Passaic valley.

22 d. Of the total moneys available under this act, \$40,000,000.00
23 is allocated for the construction of the Manasquan Reservoir
24 project.

25 e. Of the total moneys available under this act, \$55,000,000.00
26 is allocated for the design and construction of a reservoir at the
27 confluence of the North and South branches of the Raritan river
28 and a force main and pumping station at White House Station.

29 f. Of the total moneys available under this act, \$90,000,000.00
30 is allocated for the design and construction of the Hackettstown
31 reservoir and the Delanco surface water intake.

1 5. The commissioner shall issue and promulgate such rules and
2 regulations as are necessary and appropriate to carry out the
3 provisions of this act. The commissioner shall review and consider
4 the findings and recommendations of the commission in the admin-
5 istration of the provisions of this act.

1 6. The bonds shall be serial bonds and known as "Water Supply
2 Bonds" and as to each series, the last annual installment thereof
3 (subject to redemption prior to maturity) shall mature and be paid
4 not later than 35 years from the date of its issuance but may be
5 issued in whole or in part for a shorter term. Said bonds shall be
6 issued from time to time as the issuing officials herein named shall
7 determine.

1 7. The Governor, State Treasurer and Comptroller of the Trea-
2 sury or any two of such officials (hereinafter referred to as "the
3 issuing officials") are hereby authorized to carry out the provisions
4 of this act relating to the issuance of said bonds, and shall determine
5 all matters in connection therewith subject to provisions hereof.
6 In case any of said officials shall be absent from the State or
7 incapable of acting for any reason, his powers and duties shall be
8 exercised and performed by such person as shall be authorized by
9 law to act in his place as a State official.

1 8. Bonds issued in accordance with the provisions of this act shall
2 be a direct obligation of the State of New Jersey and the faith and
3 credit of the State are pledged for the payment of the interest
4 thereon as same shall become due and the payment of the principal

5 at maturity. The principal and interest of such bonds shall be
6 exempt from taxation by the State or by any county, municipality
7 or other taxing district of the State.

1 9. The bonds shall be signed in the name of the State by the
2 Governor or by his facsimile signature, under the Great Seal of the
3 State, and attested by the Secretary of State, or an assistant
4 Secretary of State, and shall be countersigned by the facsimile
5 signature of the Comptroller of the Treasury. Interest coupons
6 attached to said bonds shall be signed by the facsimile signature
7 of the Comptroller of the Treasury. Such bonds may be issued
8 notwithstanding that any of the officials signing them or whose
9 facsimile signature appear on the bonds or coupons shall cease to
10 hold office at the time of such issue or at the time of the delivery
11 of such bonds to the purchaser.

1 10. a. The bonds shall recite that they are issued for the purposes
2 set forth in section 4 of this act and that they are issued in
3 pursuance of this act and that this act was submitted to the people
4 of the State at the general election held in the month of November,
5 1981, and that it received the approval of the majority of votes cast
6 for and against it at such election. Such recital in said bonds
7 shall be conclusive evidence of the authority of the State to issue
8 said bonds and of their validity. Any bonds containing such
9 recital shall in any suit, action or proceeding involving their
10 validity be conclusively deemed to be fully authorized by this act
11 and to have been issued, sold, executed and delivered in conformity
12 therewith and with all other provisions of statutes applicable
13 thereto, and shall be incontestable for any cause.

14 b. Such bonds shall be issued in such denominations and in such
15 form or forms, whether coupon or registered as to both principal
16 and interest, and with or without such provisions for interchange-
17 ability thereof, as may be determined by the issuing officials.

1 11. When the bonds are issued from time to time the bonds of
2 each issue shall constitute a separate series to be designated by
3 the issuing officials. Each series of bonds shall bear such rate or
4 rates of interest as may be determined by the issuing officials,
5 which interest shall be payable semiannually; provided that the
6 first and last periods may be longer or shorter, in order that
7 intervening semiannual payments may be at convenient dates.

1 12. The bonds shall be issued and sold at such price not less than
2 the par value thereof and accrued interest thereon, and under such
3 terms, conditions and regulations as the issuing officials may
4 prescribe, after notice of said sale, published at least once in at least
5 three newspapers published in the State of New Jersey, and at

6 least once in a publication carrying municipal bond notices and
7 devoted primarily to financial news, published in New Jersey or
8 the city of New York, the first notice to be at least 5 days prior
9 to the day of bidding. The said notice of sale may contain a pro-
10 vision to the effect that any or all bids in pursuance thereof may be
11 rejected. In the event of such rejection or of failure to receive any
12 acceptable bid, the issuing officials, at any time within 60 days from
13 the date of such advertised sale, may sell such bonds at private
14 sale at such price not less than the par value thereof and accrued
15 interest thereon and under such terms and conditions as the issuing
16 officials may prescribe. The issuing officials may sell all or part of
17 the bonds of any series as issued to any State fund or to the Federal
18 Government or any agency thereof, at private sale, without
19 advertisement.

1 13. Until permanent bonds can be prepared, the issuing officials
2 may, in their discretion, issue in lieu of the permanent bonds
3 temporary bonds in such form and with such privileges as to regis-
4 tration and exchange for permanent bonds as may be determined by
5 the issuing officials.

1 14. The proceeds from the sale of the bonds shall be paid to the
2 State Treasurer and be held by him in a separate fund, and be
3 deposited in such depositories as may be selected by him to the
4 credit of the fund, which fund shall be known as the "Water Supply
5 Fund".

1 15. a. The moneys in said "Water Supply Fund" are hereby
2 specifically dedicated and shall be applied to the cost of the purposes
3 set forth in section 4 of this act, and all such moneys are hereby
4 appropriated for such purposes, and no such moneys shall be
5 expended for such purposes, and no such moneys shall be expended
6 for such purpose (except as otherwise hereinbelow authorized)
7 without the specific appropriation thereof by the Legislature, but
8 bonds may be issued as herein provided notwithstanding that the
9 Legislature shall not have then adopted an act making specific
10 appropriation of any said moneys. Any act appropriating moneys
11 from the "Water Supply Fund" shall identify the particular
12 project or projects to be funded by such moneys.

13 b. At any time prior to the issuance and sale of bonds under
14 this act, the State Treasurer is hereby authorized to transfer from
15 any available money in the Treasury of the State to the credit of
16 the "Water Supply Fund" such sum as he may deem necessary.
17 Said sum so transferred shall be returned to the treasury of this
18 State by the treasurer thereof from the proceeds of the sale of the
19 first issue of bonds.

20 c. Pending their application to the purpose provided in this
21 act, moneys in the "Water Supply Fund" may be invested and
22 reinvested as other trust funds in the custody of the State Treasurer
23 in the manner provided by law. Net earnings received from the
24 investment or deposit of such fund shall be paid into the General
25 State Fund.

1 16. In case any coupon bonds or coupons thereunto appertaining
2 or any registered bond shall become lost, mutilated or destroyed,
3 a new bond shall be executed and delivered of like tenor, in sub-
4 stitution for the lost, mutilated or destroyed bonds or coupons,
5 upon the owner furnishing to the issuing officials evidence satis-
6 factory to them of such loss, mutilation or destruction, proof of
7 ownership and such security and indemnity and reimbursement for
8 expenses as the issuing officials may require.

1 17. Accrued interest received upon the sale of said bonds shall
2 be applied to the discharge of a like amount of interest upon said
3 bonds when due. Any expense incurred by the issuing officials for
4 advertising, engraving, printing, clerical, legal or other services
5 necessary to carry out the duties imposed upon them by the pro-
6 visions of this act shall be paid from the proceeds of the sale of
7 said bonds, by the State Treasurer upon warrant of the Comptroller
8 of the Treasury, in the same manner as other obligations of the
9 State are paid.

1 18. Bonds of each series issued hereunder shall mature in annual
2 installments commencing not later than the tenth year and ending
3 not later than the thirty-fifth year from the date of issue of such
4 series, and in such amounts as shall be determined by the issuing
5 officials, and the issuing officials may reserve to the State by appro-
6 priate provision in the bonds of any series the power to redeem all
7 or any of such bonds prior to maturity at such price or prices and
8 upon such terms and conditions as may be provided in such bonds.

1 19. The issuing officials may at any time and from time to time
2 issue refunding bonds for the purpose of refunding in whole or in
3 part an equal principal amount of the bonds of any series issued
4 and outstanding hereunder, which by their terms are subject to
5 redemption prior to maturity, provided such refunding bonds shall
6 mature at any time or times not later than the latest maturity date
7 of such series, and the aggregate amount of interest to be paid
8 on the refunding bonds, plus the premium, if any, to be paid on the
9 bonds refunded, shall not exceed the aggregate amount of interest
10 which would be paid on the bonds refunded if such bonds were not
11 so refunded. Refunding bonds shall constitute direct obligations of
12 the State of New Jersey, and the faith and credit of the State are

13 pledged for the payment of the principal thereof and the interest
14 thereon. The proceeds received from the sale of refunding bonds
15 shall be held in trust and applied to the payment of the bonds
16 refunded thereby. Refunding bonds shall be entitled to all the bene-
17 fits of this act and subject to all its limitations except as to the
18 maturities thereof and to the extent herein otherwise expressly
19 provided.

1 20. To provide funds to meet the interest and principal payment
2 requirements for the bonds issued under this act and outstanding,
3 there is hereby appropriated in the order following:

4 a. Net revenues, if any, with respect to water supply facilities
5 funded in whole or in part by the bonds.

6 b. Revenue derived from the collection of taxes as provided by
7 the "Sales and Use Tax Act", P. L. 1966, c. 30 (C. 54:32B-1 et seq.)
8 as amended and supplemented, or so much thereof as may be re-
9 quired; and

10 c. If in any year or at any time funds, as hereinabove appro-
11 priated, necessary to meet interest and principal payments upon
12 outstanding bonds issued under this act, be insufficient or not avail-
13 able then and in that case there shall be assessed, levied and
14 collected annually in each of the municipalities of the counties of
15 this State a tax on real and personal property upon which municipal
16 taxes are or shall be assessed, levied and collected, sufficient to meet
17 the interest on all outstanding bonds issued hereunder and on such
18 bonds as it is proposed to issue under this act in the calendar year
19 in which such tax is to be raised and for the payment of bonds
20 falling due in the year following the year for which the tax is levied.
21 The tax thus imposed shall be assessed, levied and collected in the
22 same manner and at the same time as other taxes upon real and
23 personal property are assessed, levied and collected. The governing
24 body of each municipality shall cause to be paid to the county
25 treasurer of the county in which such municipality is located, on or
26 before December 15 in each year, the amount of tax herein directed
27 to be assessed and levied, and the county treasurer shall pay the
28 amount of said tax to the State Treasurer on or before December
29 20 in each year.

30 If on or before December 31 in any year the issuing officials shall
31 determine that there are moneys in the General State Fund beyond
32 the needs of the State, sufficient to meet the principal of bonds
33 falling due and all interest payable in the ensuing calendar year,
34 then and in the event such issuing officials shall by resolution so
35 find and shall file the same in the office of the State Treasurer,

36 whereupon the State Treasurer shall transfer such moneys to a
37 separate fund to be designated by him, and shall pay the principal
38 and interest out of said fund as the same shall become due and pay-
39 able, and the other sources of payment of said principal and interest
40 provided for in this section shall not then be available, and the
41 receipts for said year from the tax specified in subsection a. of this
42 section shall thereon be considered and treated as part of the
43 General State Fund, available for general purposes.

1 21. Should the State Treasurer, by December 31 of any year,
2 deem it necessary, because of insufficiency of funds to be collected
3 from the sources of revenues as hereinabove provided, to meet the
4 interest and principal payments for the year after the ensuing year,
5 then the treasurer shall certify to the Comptroller of the Treasury
6 the amount necessary to be raised by taxation for such purposes,
7 the same to be assessed, levied and collected for and in the ensuing
8 calendar year. In such case the Comptroller of the Treasury shall,
9 on or before March 1 following, calculate the amount in dollars to
10 be assessed, levied and collected as herein set forth in each county.
11 Such calculation shall be based upon the corrected assessed valua-
12 tion of such county for the year preceding the year in which such
13 tax is to be assessed, but such tax shall be assessed, levied and
14 collected upon the assessed valuation of the year in which the tax is
15 assessed and levied. The Comptroller of the Treasury shall certify
16 said amount to the county board of taxation and the county
17 treasurer of each county. The said county board of taxation shall
18 include the proper amount in the current tax levy of the several
19 taxing districts of the county in proportion to the ratables as
20 ascertained for the current year.

1 22. For the purpose of complying with the provisions of the State
2 Constitution this act shall, at the general election to be held in the
3 month of November, 1981 be submitted to the people. In order to
4 inform the people of the contents of this act it shall be the duty of
5 the Secretary of State, after this section shall take effect, and at
6 least 15 days prior to the said election, to cause this act to be
7 published in at least 10 newspapers published in the State and to
8 notify the clerk of each county of this State of the passage of this
9 act, and the said clerks respectively, in accordance with the instruc-
10 tions of the Secretary of State, shall cause to be printed on each
11 of the said ballots, the following:

12 If you approve the act entitled below, make a cross (×), plus
13 (+), or check (✓) mark in the square opposite the word "Yes."
14 If you disapprove the act entitled below, make a cross (×), plus
15 (+), or check (✓) mark in the square opposite the word "No."

16 If voting machines are used, a vote of "Yes" or "No" shall be
 17 equivalent to such markings respectively.

	Yes.	<p style="text-align: center;">WATER SUPPLY BOND ISSUE</p> <p>Should the "Water Supply Bond Act of 1981" which authorizes the State to issue bonds in the amount of \$345,000,000.00 for the purposes of rehabilitating, repairing or consolidating antiquated, damaged or inadequately operating water supply systems; and to plan, design, acquire and construct certain specified water supply facilities; providing the ways and means to pay the interest of such debt and also to pay and discharge the principal thereof, be approved?</p>
	No.	<p style="text-align: center;">INTERPRETIVE STATEMENT</p> <p>Approval of this act would authorize the sale of \$345,000,000.00 in bonds to be used for the planning, design, acquisition and construction of certain specified water supply facilities identified in this bond act and recommended by the New Jersey Statewide Water Supply Plan to solve water supply problems in different areas of New Jersey and to assure the availability of safe, adequate and reliable water supplies to the people of the State.</p>

18 The fact and date of the approval or passage of this act, as the
 19 case may be, may be inserted in the appropriate place after the
 20 title in said ballot. No other requirements of law of any kind or
 21 character as to notice or procedure except as herein provided need
 22 be adhered to.

23 The said votes so cast for and against the approval of this act, by
 24 ballot or voting machine, shall be counted and the result thereof
 25 returned by the election officer, and a canvass of such election had
 26 in the same manner as is provided for by law in the case of the
 27 election of a Governor, and the approval or disapproval of this act
 28 so determined shall be declared in the same manner as the result
 29 of an election for a Governor, and if there shall be a majority of all
 30 the votes cast for and against it at such election in favor of the
 31 approval of this act, then all the provisions of this act not made
 32 effective theretofore shall take effect forthwith.

1 23. There is appropriated the sum of \$5,000.00 to the Department
 2 of State for expenses in connection with the publication of notice
 3 pursuant to section 22.

1 24. The commissioner shall submit to the State Treasurer and the
 2 commission with the department's annual budget request a plan for

3 the expenditure of funds from the "Water Supply Fund" for the
4 upcoming fiscal year. This plan shall include the following informa-
5 tion: a performance evaluation of the expenditures made from the
6 fund to date; a description of programs planned during the up-
7 coming fiscal year; a copy of the regulations in force governing the
8 operation of programs that are financed, in part or whole, by funds
9 from the "Water Supply Fund"; and an estimate of expenditures
10 for the upcoming fiscal year.

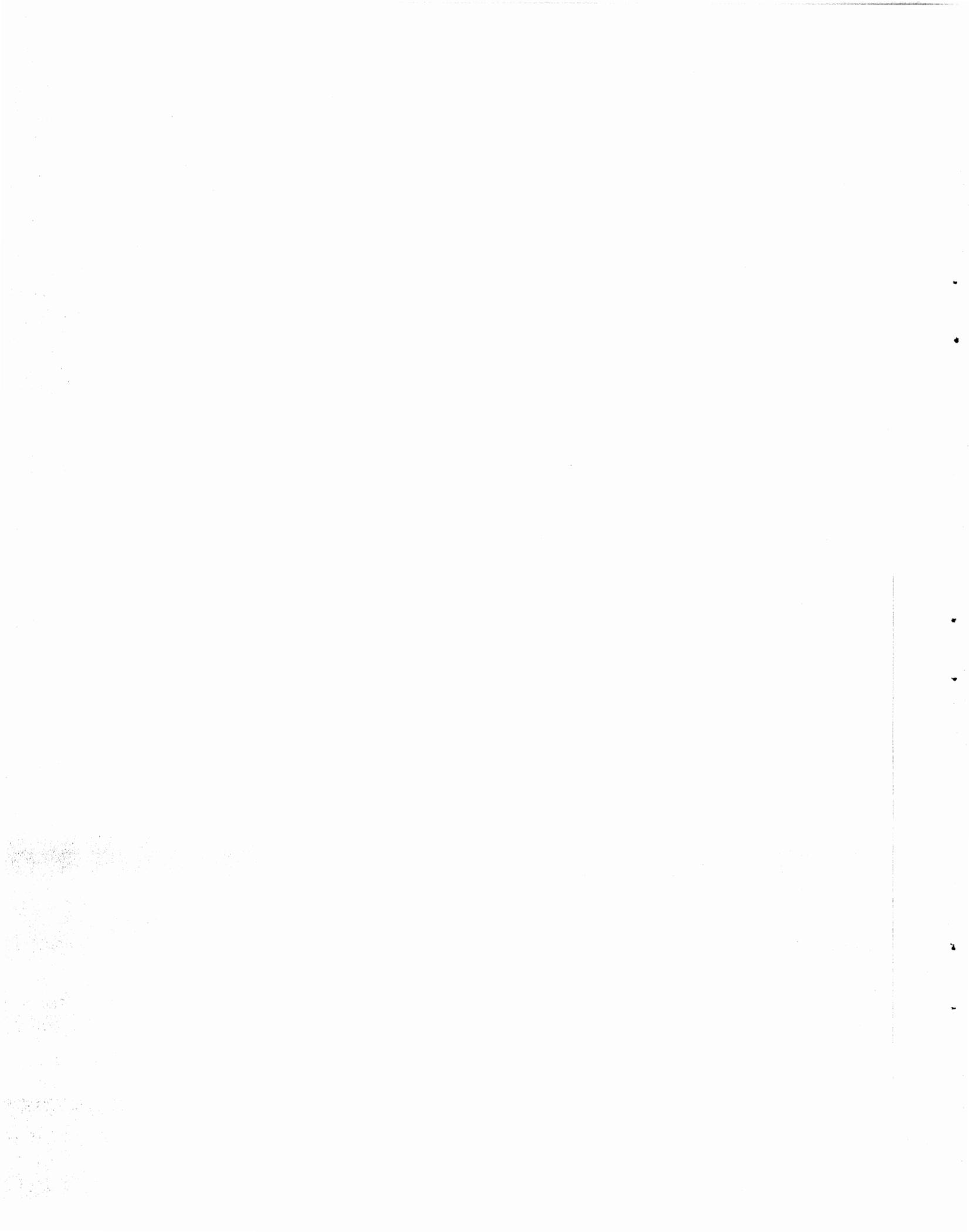
1 25. Immediately following the submission to the Legislature of
2 the Governor's Annual Budget Message the commissioner shall
3 submit to the relevant standing committees of the Legislature, as
4 designated by the President of the Senate and the Speaker of the
5 General Assembly, and to the special joint legislative committee
6 created pursuant to Assembly Concurrent Resolution No. 66 of the
7 1968 Legislature, as reconstituted and continued by the Legislature
8 from time to time, a copy of the plan called for under section 24 of
9 this act, together with such changes therein as may have been re-
10 quired by the Governor's budget message.

1 26. Not less than 30 days prior to the commissioner entering into
2 any contract, lease, obligation, or agreement to effectuate the
3 purposes of this act, the commissioner shall report to and consult
4 with the special joint legislative committee created pursuant to
5 Assembly Concurrent Resolution No. 66 of the 1968 Legislature as
6 reconstituted and continued from time to time by the Legislature.

1 27. This section and sections 22 and 23 shall take effect im-
2 mediately and the remainder of the act shall take effect as and when
3 provided in section 22.

STATEMENT

This bill authorizes the creation of a debt of the State of New Jersey of \$345,000,000.00, of which \$65,000,000.00 is allocated for grants or loans to local governments to rehabilitate, repair or consolidate antiquated, damaged or inadequately-operating water supply systems, \$10,000,000.00 to construct a multiple water exchange facility at Great Notch; \$85 million to construct a pipeline to transfer water from the Round Valley and Spruce Run Reservoirs to the Passaic River Basin; \$40 million to construct the Manasquan River Reservoir project; \$55 million to construct a reservoir at the confluence of the north and south branches of the Raritan river and a force main and pumping station at White House Station; and \$90 million for the design and construction of the Hackettstown reservoir and the Delanco surface water intake.



SENATE, No. 1611

STATE OF NEW JERSEY

INTRODUCED NOVEMBER 24, 1980

By Senator DODD

Referred to Committee on Energy and Environment

AN ACT concerning the management of water and the diversion of
any surface or ground water anywhere in the State, and revising
and repealing parts of the statutory law relating thereto.

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

1 1. This act shall be known and may be cited as the "Water Sup-
2 ply Management Act."

1 2. The Legislature finds and declares that the water resources
2 of the State are public assets of the State held in trust for its citi-
3 zens and are essential to the health, safety, economic welfare,
4 recreational and aesthetic enjoyment, and general welfare, of the
5 people of New Jersey; that ownership of these assets is in the State
6 as trustee of the people; that because some areas within the State
7 do not have enough water to meet their current needs and provide
8 an adequate margin of safety the water resources of the State and
9 any water brought into the State must be planned for and managed
10 as a common resource from which the requirements of the several
11 regions and localities in the State shall be met; that the present
12 regulatory system for these water resources is ineffective and
13 counter-productive; that each basin from which water is presently
14 diverted to another basin be provided with adequate water supplies
15 when needed in the future; that to ensure an adequate supply and
16 quality of water for citizens of the State, both present and future,
17 and to protect the natural environment of the waterways of the
18 State it is necessary that the State, through its Department of
19 Environmental Protection, have the power to manage the water
20 supply by adopting a uniform water diversion permit system and
21 fee schedule, a monitoring, inspection and enforcement program,
22 a program to study and manage the State's water resources and
23 plan for emergencies and future water needs, and regulations to

EXPLANATION—Matter enclosed in bold-faced brackets [thus] in the above bill
is not enacted and is intended to be omitted in the law.

24 manage the waters of the State during water supply and water
25 quality emergencies.

1 3. As used in this act:

2 a. "Commissioner" means the Commissioner of the Department
3 of Environmental Protection or his designated representative;

4 b. "Consumptive use" means any use of water diverted from
5 surface or ground waters other than a nonconsumptive use as
6 defined in this act;

7 c. "Department" means the Department of Environmental Pro-
8 tection;

9 d. "Diversion" means the taking or impoundment of water from
10 a river, stream, lake, pond, aquifer, well, other underground source,
11 or other waterbody, whether or not the water is returned thereto,
12 consumed, made to flow into another stream or basin, or discharged
13 elsewhere;

14 e. "Nonconsumptive use" means the use of water diverted from
15 surface or ground waters in such a manner that it is returned to
16 the surface or ground water at or near the point from which it was
17 taken without substantial diminution in quantity or substantial
18 impairment of quality;

19 f. "Person" means any individual, corporation, company, part-
20 nership, firm, association, owner or operator of a water supply
21 facility, political subdivision of the State and any state, or inter-
22 state agency or Federal agency;

23 g. "Waters" or "waters of the State" means all surface waters
24 and ground waters in the State.

1 4. The commissioner shall have the power to adopt, enforce,
2 amend or repeal, pursuant to the "Administrative Procedure Act,"
3 P. L. 1968, c. 410 (C. 52:14B-1 et seq.) rules and regulations to
4 control, conserve, and manage the water supply of the State and
5 the diversions of that water supply to assure the citizens of the
6 State an adequate supply of water under a variety of conditions and
7 to carry out the intent of this act. These rules and regulations may
8 apply throughout the State or in any region thereof and shall
9 provide for the allocation or the reallocation of the waters of the
10 State in such a manner as to provide an adequate quantity and
11 quality of water for the needs of the citizens of the State in the
12 present and in the future and may include, but shall not be limited
13 to:

14 a. A permit system to allocate or reallocate any or all of the
15 waters of the State, which system shall provide for the issuance of
16 permits to diverters of the waters of the State, containing at a
17 minimum the conditions required by this act;

18 b. Standards and procedures, incorporating the minimum re-
19 quirements of section 7 of this act, to determine the extent and use
20 of previously granted water privileges and to bring the possessors
21 of these privileges within any permit system which may be estab-
22 lished under this act;

23 c. Standards and procedures to be followed by diverters to
24 ensure that:

25 (1) Proper methods are used to divert water;

26 (2) Only the permitted quantity of water is diverted and that
27 the water is only used for its permitted purpose;

28 (3) The water quality of the water source is maintained and the
29 water standards for the use of the water are met;

30 (4) The department is provided with adequate and accurate
31 reports regarding the diversion and use of water;

32 d. Inspection, monitoring, reporting and enforcement procedures
33 necessary to implement and enforce the provisions of this act;

34 e. Standards and procedures to be followed to determine the
35 location, extent and quality of the water resources of the State
36 and plan for their future use to meet the needs of the citizens of
37 the State;

38 f. Standards and procedures to be followed to maintain the
39 minimum water levels and flow necessary to provide adequate
40 water quantity and quality;

41 g. Standards and procedures to determine and define a water
42 supply emergency in the State or any region thereof and the pro-
43 cedures and requirements to be followed to alleviate that
44 emergency;

45 h. Standards and procedures governing the maintenance of
46 adequate capacity by, and withdrawal limits for, water purveyors.

1 5. a. The department in developing the permit system established
2 by this act shall:

3 (1) Permit privileges previously allowed pursuant to lawful
4 legislative or administrative action, except that the department
5 may impose limits and conditions thereon as may be deemed neces-
6 sary to carry out the purposes of this act in a manner and to the
7 extent consistent with applicable provisions of law. All diversion
8 permits issued by the Water Policy and Supply Council prior to the
9 effective date of this act shall remain in effect until modified by the
10 department pursuant to this act. Persons having or claiming a
11 diversion privilege allowed by legislative action including persons
12 previously exempted from the requirement to obtain a permit, shall
13 apply for a permit pursuant to this act within 1 year of the
14 effective date of this act. All permits issued or modified pursuant to

15 this paragraph shall thereafter be deemed the sole and definitive
16 evidence of such previously allowed privileges.

17 (2) Not require any person diverting 1,000 or fewer gallons of
18 water per day or any person engaged in the business of growing
19 agricultural crops or raising livestock who diverts 100,000 or fewer
20 gallons of water per day to obtain a diversion permit.

21 b. Nothing in this act shall prevent the department from includ-
22 ing, or require the department to include, the presently non-utilized
23 existing privileges in the new or any future diversion permits
24 issued to the present possessors of these privileges.

1 6. Except as provided by section 5 of this act, no person may
2 divert any waters of the State or construct any building or
3 structure which may require a diversion of water unless he obtains
4 a diversion permit.

1 7. Every permit issued pursuant to this act shall include
2 provisions:

3 a. Fixing the term of the permit;

4 b. Fixing the maximum allowable diversion, expressed both in
5 terms of a daily and monthly diversion;

6 c. Identifying and limiting the use or uses to which the water
7 may be put;

8 d. Requiring the diverter to meter the water being diverted and
9 report the amount and quality of the water being diverted, except
10 that commercial growers of agricultural crops and livestock may be
11 granted the option of keeping a log or other appropriate records
12 on the amount of water diverted;

13 e. Allowing the department to enter the diverter's facilities or
14 property to inspect and monitor the diversion;

15 f. Allowing the department to modify the permit during water
16 supply or water quality emergencies;

17 g. Requiring that all water diverted for a nonconsumptive use
18 be returned to the water body designated by the department;

19 h. Allowing the transfer of a permit with the consent of the
20 department, but only for the identical use of the waters by the
21 transferee;

22 i. Governing the operations and maintenance of the specific
23 facilities, equipment or premises not otherwise established in
24 regulations because of the unique nature of the facilities, equip-
25 ment or premises;

26 j. Permitting the department to modify, suspend or terminate
27 the permit when it deems it necessary for the public interest, or for
28 violations of its conditions, this act, regulations adopted or orders
29 issued by the department.

1 8. The Board of Public Utilities shall fix just and reasonable rates
2 for any public water supply system subject to its jurisdiction,
3 necessary for that system to comply with an order issued by the
4 department or the terms and conditions of a permit issued pursuant
5 to this act.

1 9. Any expenditures necessary to comply with an order or permit
2 issued by the department for construction, improvement, repair or
3 rehabilitation of public water supply systems shall, for the pur-
4 poses of P. L. 1976, c. 68 (C. 40A:4-45.1 et seq.) be considered as
5 expenditures mandated by State law.

1 10. The department shall, in accordance with a fee schedule
2 adopted by regulation, establish and charge reasonable administra-
3 tive fees, which fees shall be based upon, and not exceed, the
4 estimated cost of processing, monitoring, administering and en-
5 forcing the diversion permits. The department shall deposit the
6 fees in the "Environmental Services Fund" created by P. L. 1975,
7 c. 232 (C. 13:1D-30 et seq.). There shall be annually appropriated
8 an amount equivalent to the amount anticipated to be collected as
9 fees by the department for the administration of the water supply
10 management program.

1 11. No person supplying or proposing to supply water to any
2 other person shall have the power to condemn lands, water or
3 water privileges for any new or additional source of ground or
4 surface water until that person has first submitted an application
5 diverting the source of the water to the department and the
6 department has approved the application subject to such condi-
7 tions as it may determine to be necessary to protect the public
8 health and welfare.

1 12. a. The department is authorized and directed to maintain
2 current, a Statewide water supply master plan which will accurately
3 reflect the quantity and quality of the waters of the State, the
4 quantity and quality of the waters being used, the measures needed
5 to protect the water supply and insure an efficient distribution of
6 the water supply, and the State's future water needs and the
7 measures needed to meet those needs.

8 b. The department shall implement the Statewide water supply
9 master plan by incorporating its recommendations into its water
10 supply management program policies and regulations.

1 13. a. The department shall promulgate and keep current a plan
2 for the conservation and allocation of the water resources of the
3 State under emergency circumstances. These emergency circum-
4 stances shall include, but are not limited to: a determination that
5 the water resources, either throughout the State or in certain areas

6 of the State, are insufficient to meet the needs of the people in the
7 State or in those particular areas affected by the shortages; and a
8 determination that the quality of waters, either throughout the
9 State or in certain areas of the State, is unsatisfactory.

10 b. In emergency circumstances, either throughout the State or in
11 certain areas of the State, the department is authorized to monitor
12 diversions, impose conditions on existing permits, refrain from
13 granting any new permits, mandate the interconnections of water
14 supplies and water supply systems and order the transfer of water
15 from system to system, whether in public or private ownership,
16 without notice or hearing, notwithstanding the provisions of sec-
17 tion 15 of this act, issue orders, and take other action which it
18 deems necessary to protect the public health and welfare. Orders of
19 the department implementing this section shall be upon fair com-
20 pensation, reasonable rates and just and equitable terms to be
21 prescribed by the Board of Public Utilities upon notice and hearing
22 which may take place subsequent to the order and compliance with
23 the order.

24 c. The department is authorized to require water purveyors, and
25 said surveyors are authorized and required, to impose and collect
26 surcharges and penalties designed to reduce the use of water during
27 emergencies, which surcharges and penalties may be established
28 by the department. Disposition of revenues collected pursuant to
29 this subsection shall be subject to the direction of the Board of
30 Public Utilities.

1 14. When the department determines that the developed water
2 supply available to a water purveyor is inadequate to service its
3 users with an adequate supply of water under a variety of condi-
4 tions, the department may order the water purveyor to develop or
5 acquire, within a reasonable period of time, additional water sup-
6 plies sufficient to provide that service.

1 15. The department is authorized to:

2 a. Perform any and all acts and issue such orders as are neces-
3 sary to carry out the purposes and requirements of this act;

4 b. Administer and enforce the provisions of this act and rules,
5 regulations and orders promulgated, issued or effective hereunder;

6 c. Present proper identification and then enter upon any land or
7 water for the purpose of making any investigation, examination or
8 survey contemplated by this act;

9 d. Subpena and require the attendance of witnesses and the
10 production by them of books and papers pertinent to the investiga-
11 tions and inquiries the department is authorized to make under
12 this act, and examine them and such public records as shall be
13 required in relation thereto;

14 e. Order the interconnection of public water supply systems,
15 whether in public or private ownership, whenever the department
16 determines that the public interest requires that such interconnec-
17 tion be made, and require the furnishing of water by means of that
18 system to another system, but no order shall be issued before
19 comments have been solicited at a public hearing, notice of which
20 has been published at least 1 week before the hearing, in one
21 newspaper circulating generally in the area served by each involved
22 public water supply system, called for the purpose of soliciting
23 comments on the proposed action;

24 f. Order any person diverting water to improve or repair its
25 water supply facilities so that water loss is eliminated so far as
26 practicable, safe yield is maintained and the drinking water quality
27 standards adopted pursuant to the "Safe Drinking Water Act,"
28 P. L. 1977, c. 224 (C. 58:12A-1 et seq.) are met;

29 g. Enter into agreements, contracts, or cooperative arrangements
30 under such terms and conditions as the department deems appro-
31 priate with other states, other State agencies, Federal agencies,
32 municipalities, counties, educational institutions, investor owned
33 water companies, municipal utilities authorities, or other organiza-
34 tions or persons;

35 h. Receive financial and technical assistance from the Federal
36 Government and other public or private agencies;

37 i. Participate in related programs of the Federal Government,
38 other states, interstate agencies, or other public or private agencies
39 or organizations;

40 j. Establish adequate fiscal controls and accounting procedures to
41 assure proper disbursement of and accounting for funds appro-
42 priated or otherwise provided for the purpose of carrying out the
43 provisions of this act;

44 k. Delegate those responsibilities and duties to personnel of the
45 department as deemed appropriate for the purpose of administer-
46 ing the requirements of this act;

47 l. Combine permits issued pursuant to this act with permits
48 issued pursuant to any other act whenever that action would
49 improve the administration of both acts;

50 m. Evaluate and determine the adequacy of ground and surface
51 water supplies and develop methods to protect aquifer recharge
52 areas.

1 16. Rules, regulations and orders issued pursuant to this act
2 have the force and effect of law. If any person violates any of the
3 provisions of this act or any rule, regulation or order promulgated
4 or issued pursuant to the provisions of this act, the department may

5 institute a civil action in a court of competent jurisdiction for in-
6 junctive relief to enforce said provisions and to prohibit and pre-
7 vent that violation and the court may proceed in the action in a
8 summary manner. Any person who violates the provisions of this
9 act or any rule, regulation or order promulgated pursuant to this
10 act shall be liable to a civil administrative penalty of not more than
11 \$5,000.00 for each offense to be imposed by the department pursuant
12 to standards adopted in regulations; or a civil penalty of not more
13 than \$5,000.00 for each offense, to be collected in a civil action by a
14 summary proceeding under "the penalty enforcement law" (N. J. S.
15 2A:58-1 et seq.) or in any case before a court of competent jurisdic-
16 tion wherein injunctive relief has been requested. The Superior
17 Court and county district court shall have jurisdiction to enforce
18 the penalty enforcement law. If the violation is of a continuing
19 nature, each day during which it continues shall constitute an addi-
20 tional, separate and distinct offense. The department is authorized
21 to compromise and settle any claim for a penalty under this section
22 in such amount in the discretion of the department as may appear
23 appropriate and equitable under all of the circumstances.

1 17. All of the powers, duties and functions of the Water Policy
2 and Supply Council are transferred to the Department of Environ-
3 mental Protection. Whenever the term "Water Policy and Supply
4 Council" occurs or any reference is made thereto in any law, con-
5 tract or document, administrative or judicial determination, or
6 otherwise, it shall be deemed to mean or refer to the Department of
7 Environmental Protection.

1 18. R. S. 58:2-2 is amended to read as follows:

2 58:2-2. Payment for water diverted as provided in [section]
3 R. S. 58:2-1 [of this title] shall be deemed to be a license and its
4 amount shall be fixed by the [State Water Policy Commission]
5 department at a rate of not less than \$1.00 nor more than \$10.00 per
6 million gallons. If at all times an amount equal to the average daily
7 flow for the driest month, as shown by the existing records, or in
8 lieu thereof 175,000 gallons daily for each square mile of unappro-
9 priated watershed above the point of diversion, shall be allowed to
10 flow down the stream. The [commission] department shall fix the
11 minimum rate and may increase the rate proportionally as a less
12 amount is allowed to flow down the stream below the point of
13 diversion, due account being taken in fixing said increase both of the
14 duration and amount of the deficiency. The aforesaid 125,000
15 gallons daily for each square mile of unappropriated watershed
16 shall be additional to the dry-season flow or any part thereof which
17 may be allowed to flow down from any appropriated watershed or
18 watersheds above the point of diversion.

19 Water diverted within the corporate limits of a municipality for
20 manufacturing and fire purposes only and returned without pollu-
21 tion to the stream from which it was taken within said corporate
22 limits shall not be reckoned in making up the aggregate amount
23 diverted.

24 Any party aggrieved by the action of the **[commission]** *depart-*
25 *ment* upon filing written complaint on or before March twentieth,
26 shall be heard and permitted to give evidence of the facts, and the
27 sum fixed may be changed, reduced, or cancelled, as the facts may
28 warrant.

1 19. R. S. 58:2-3 is amended to read as follows:

2 58:2-3. The **[State Water Policy Commission]** *department* shall
3 annually certify to the State Comptroller, as soon as practicable
4 after January first, and not later than February fifteenth, the
5 names of all municipalities, corporations or private persons owing
6 money to the State for the diversion of water during the preceding
7 year, with the amounts so due.

8 The State Comptroller shall promptly notify said municipalities,
9 water companies or persons of their indebtedness to the State, and
10 if said amounts are not paid to the State Treasurer on or before
11 July first of the same year, the State Comptroller shall certify to
12 the Attorney-General for collection the names of the delinquents
13 and the amounts due from each, and the Attorney-General shall take
14 immediate steps to collect the same in the name of the State.

15 All sums received as herein provided shall be **[paid into the**
16 **General State Fund and the expenses of the administration of this**
17 **chapter shall be included in the annual appropriations bill]**
18 *deposited to the credit of the State and deemed as part of the*
19 *Environmental Services Fund. The Legislature shall annually*
20 *appropriate an amount equivalent to the amount anticipated to be*
21 *collected as sums charged under this section in support of the water*
22 *management programs.*

1 20. R. S. 58:2-4 is amended to read as follows:

2 58:2-4. In the case of the condemnation of subsurface, well or
3 percolating water supplies, there shall be charged by the State a
4 fee of \$1.00 per million gallons from that portion of the supply for
5 the acquisition of which the State's right of eminent domain is
6 exercised for all water diverted, which charge shall be certified to
7 the State Comptroller by the **[State Water Policy Commission]**
8 *department* and its collection shall be enforced in the same manner
9 as hereinbefore in this chapter provided in the case of excess
10 diversion of surface water supplies.

1 21. R. S. 58:2-5 is amended to read as follows:
 2 58:2-5. Nothing in this chapter shall be construed to confer upon
 3 any municipality, corporation or person, any franchise not already
 4 possessed by said municipality, corporation or person, but the
 5 approval of the [commission] *department* contained in its decision
 6 as provided in this chapter, shall constitute the assent of the State
 7 to the diversion of water as against the State in accordance with
 8 the terms of said decision.

1 22. Any rules and regulations promulgated pursuant to any
 2 statutes repealed by this act shall remain in effect until superseded
 3 by rules and regulations promulgated pursuant to this act. How-
 4 ever, all such rules and regulations shall be reviewed and revised
 5 where necessary by the department within 2 years of the enact-
 6 ment of this act.

1 23. The following are repealed:

2 R. S. 58:1-2 through R. S. 58:1-25;

3 R. S. 58:1-28 through R. S. 58:1-34;

4 R. S. 58:3-1;

5 R. S. 58:6-1 through R. S. 58:6-5;

6 P. L. 1942, c. 24 (C. 58:1-25.1 through 58:1-25.25);

7 P. L. 1963, c. 181 § 1-14, 16, 17 (C. 58:1-35 through 58:1-50);

8 P. L. 1947, c. 375 (C. 58:4A-1 through 58:4A-4);

9 P. L. 1945, c. 22, § 9 (C. 13:1A-9);

10 P. L. 1948, c. 448, § 49, 50 (C. 13:1B-49 to 50).

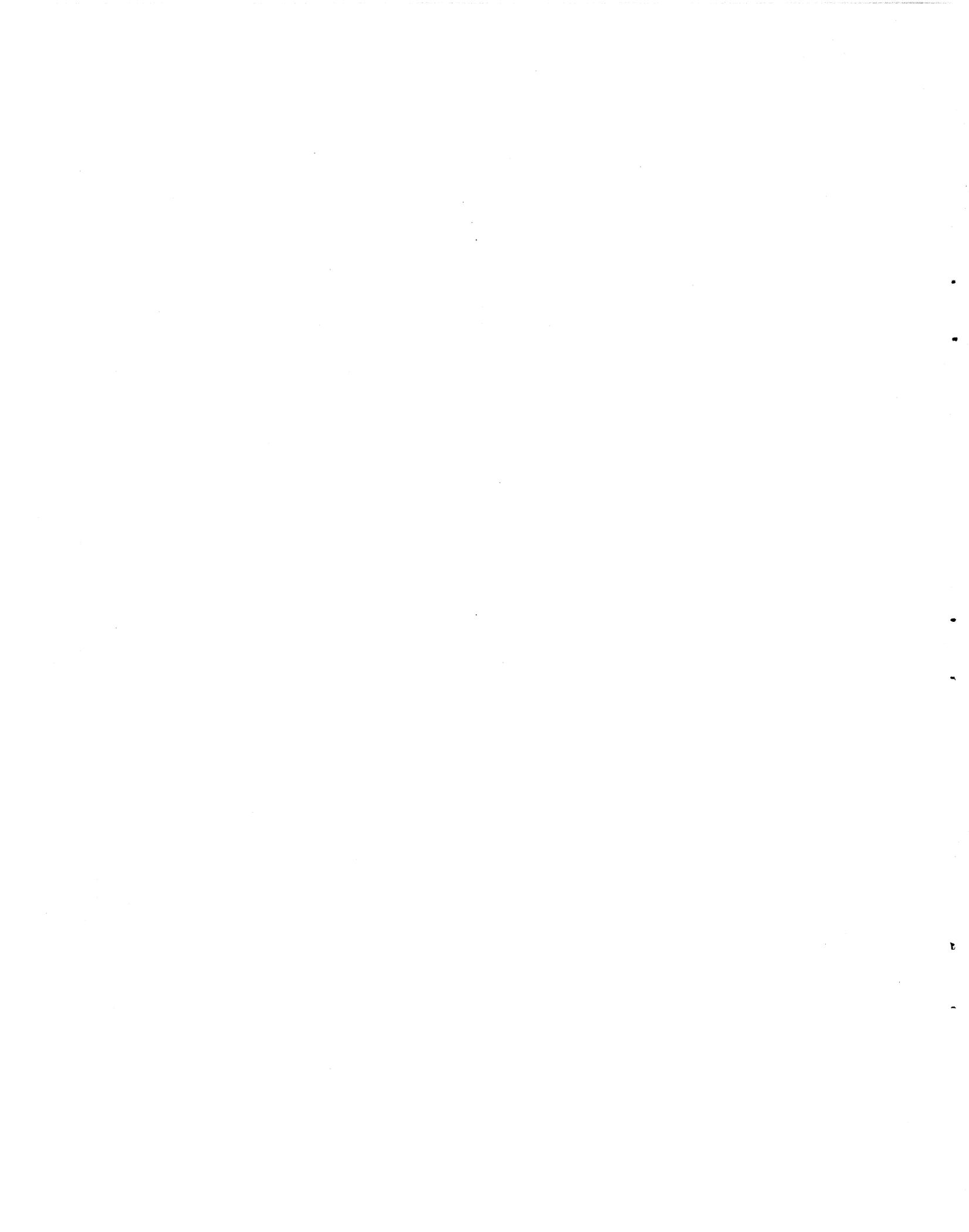
1 24. This act shall take effect immediately.

STATEMENT

Citizens of New Jersey face enormous problems in regard to the waters of the State. Existing potable water shortages in critical areas, compounded by ever-increasing discoveries of contamination of surface waters and ground waters, mandate the enactment of a comprehensive water supply management act. Lack of adequate emergency powers to alleviate periods of drought, additionally point out the need for revision of existing ineffective and archaic laws.

For these reasons, this bill authorizes the Department of Environmental Protection to establish a comprehensive water supply program which will ensure an adequate quantity and quality of water for the present and future citizens of the State. This program will include a uniform permit and fee system, procedures whereby holders or claimants of water diversion privileges are brought within the permit system, provisions to monitor the water

supply of the State to gather information for planning for the future and enforcing the present program, power to order diverters and water suppliers to take the actions necessary to provide an adequate quantity and quality of water, and the power to plan for emergencies and implement those plans when emergencies arise.



SENATE, No. 1612

STATE OF NEW JERSEY

INTRODUCED NOVEMBER 24, 1980

By Senator DODD

Referred to Committee on Energy and Environment

AN ACT creating a State Water Supply Utility empowered to acquire, finance, construct and operate water systems under certain circumstances upon the directive of the Department of Environmental Protection, authorizing the issuance of bonds of the utility, providing for the terms and security thereof, and making an appropriation therefor.

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

1 1. This act shall be known as and may be cited as the "State
2 Water Supply Utility Act."

1 2. The Legislature finds that a State utility should be established
2 to acquire, finance, construct and operate water systems pursuant
3 to the provisions of this act.

1 3. As used in this act:

2 a. "Utility" means the State Water Supply Utility created by
3 this act.

4 b. "Bonds" means bonds, notes, or other obligations issued or
5 authorized pursuant to this act.

6 c. "Compensating reservoir" means the structures, facilities
7 and appurtenances for the impounding, transportation and release
8 of water for the replenishment in periods of drought or at other
9 necessary times of all or a part of waters in or bordering the State
10 diverted into a project.

11 d. "Cost" as applied to a project means the cost of acquisition
12 and construction thereof, the cost of acquisition of lands, rights-
13 of-way, property rights, easements, and interests required by the
14 utility for acquisition and construction, the cost of demolishing or
15 removing any buildings or structures on land so acquired, including
16 the cost of acquiring any lands to which buildings or structures
17 may be moved, the cost of acquiring or constructing and equipping
18 an office of the utility, the cost of machinery, furnishings, and
19 equipment, financing expenses, reserves, interest prior to and dur-

20 ing construction and for no more than 6 months after completion
21 of construction, engineering, expenses of research and development
22 with respect to any project, legal expenses, plans, specifications,
23 surveys, estimates of cost and revenues, working capital, other
24 expenses necessary or incident to determining the feasibility or
25 practicability of acquiring or constructing a project, administra-
26 tive expense, and such other expense as may be necessary or inci-
27 dent to the acquisition or construction of the project.

28 e. "Construct" and "construction" means and includes acts of
29 construction, reconstruction, replacement, extension, improvement
30 and betterment of a project.

31 f. "Department" means the Department of Environmental Pro-
32 tection.

33 g. "Governmental agency" means any municipality, county, or
34 any agency thereof, the State Government and any instrumentality
35 or subdivision thereof.

36 h. "Person" means and includes corporations, companies, associ-
37 ations, societies, firms, partnerships, and joint stock companies,
38 as well as individuals, and political subdivisions of this State or
39 any agencies or instrumentalities thereof.

40 i. "Project" means a water system or any part thereof.

41 j. "Real property" means lands both within or without the State,
42 and improvements thereof or thereon, or any rights or interests
43 therein.

44 k. "Revenue" means all rents, fees and charges for water sold
45 from, or for the use and services of any project of the utility and
46 payments in respect of any loans or advances made to governmental
47 agencies pursuant to this act.

48 l. "Service charges" means water service charges established
49 or collected by the utility pursuant to this act.

50 m. "Water system" means the plants, structures and other real
51 and personal property financed, acquired, constructed or operated
52 or to be financed, acquired, constructed or operated by the utility
53 under this act or additions and improvements thereto, including
54 reservoirs, basins, dams, canals, aqueducts, standpipes, conduits,
55 pipelines, mains, pumping stations, water distribution systems,
56 compensating reservoirs, waterworks or sources of water supply,
57 wells, purification of filtration plants or other plants, equipment
58 and works, connections, rights of flowage or diversion, and other
59 plants, structures, boats, conveyances, and other real and personal
60 property and rights therein, and appurtenances necessary or use-
61 ful and convenient for the accumulation, supply, treatment or
62 distribution of water.

1 4. a. There is established in but not of the Department of
2 Environmental Protection a public body corporate and politic, with
3 corporate succession, to be known as the "State Water Supply
4 Utility." The utility is constituted as an instrumentality of the
5 State exercising public and essential governmental functions.

6 b. The utility shall consist of the Commissioner of Environmental
7 Protection, the State Treasurer, and the Commissioner of Labor
8 and Industry who shall be members ex officio, with full voting
9 power, and two members appointed by the Governor to represent
10 the public with the advice and consent of the Senate for terms of
11 2 years, provided that the members of the utility, other than the
12 ex officio members, first appointed by the Governor shall serve
13 for terms of 1 year and 2 years, respectively. Each member shall
14 hold office for the term of his appointment and until his successor
15 shall have been appointed and qualified. A member shall be
16 eligible for reappointment. Any vacancy in the membership oc-
17 curring other than by expiration of term shall be filled in the
18 same manner as the original appointment but for the unexpired
19 term only.

20 c. Each appointed member may be removed from office by the
21 Governor, for cause, after a public hearing, and may be suspended
22 by the Governor pending the completion of the hearing. Each
23 member before entering upon his duties shall take and subscribe
24 an oath to perform the duties of his office faithfully, impartially
25 and justly to the best of his ability. A record of these oaths shall
26 be filed in the office of the Secretary of State.

27 d. The chairman, who shall be chief executive officer of the
28 utility shall be the Commissioner of Environmental Protection, and
29 the members of the utility shall elect one of their number as vice
30 chairman thereof. The utility shall elect a secretary and a treasurer,
31 and the same person may be elected to serve both as secretary and
32 treasurer. The powers of the utility shall be vested in the members
33 thereof in office from time to time and four members of the utility
34 shall constitute a quorum at any meeting thereof. Action may be
35 taken and motions and resolutions adopted by the utility at any
36 meeting thereof by the affirmative vote of at least four members
37 of the utility one of which shall be the vote of the Commissioner of
38 Environmental Protection. No vacancy in the membership of the
39 utility shall impair the right of a quorum of the members to
40 exercise all the powers and perform all the duties of the utility.

41 e. Each member and the treasurer of the utility shall execute
42 a bond to be conditioned upon the faithful performance of the
43 duties of the member or treasurer, as the case may be, in such form

44 and amount as may be prescribed by the Comptroller of the
45 Treasury. The bonds shall be filed in the office of the Secretary
46 of State. At all times thereafter the members and treasurer of the
47 utility shall maintain these bonds in full force. The costs of the
48 bonds shall be borne by the utility.

49 f. The members of the utility shall serve without compensation,
50 but the utility shall reimburse its members for actual expenses
51 necessarily incurred in the discharge of their duties. No officer
52 or employee of the State shall be deemed to have forfeited or shall
53 forfeit his office or employment or any benefits or emoluments
54 thereof by reason of his acceptance of the office of ex officio member
55 of the utility.

56 g. Each ex officio member of the utility may designate an officer
57 or employee of his department to represent him at meetings of
58 the utility, and each designee may lawfully vote and otherwise act
59 on behalf of the member for whom he constitutes the designee. The
60 designation shall be in writing delivered to the utility and shall
61 continue in effect until revoked or amended by writing delivered
62 to the utility.

63 h. The utility may be dissolved by act of the Legislature on
64 condition that the utility has no debts or obligations outstanding
65 or that provision has been made for the payment or retirement of
66 debts or obligations. Upon a dissolution of the utility all property,
67 funds and assets thereof shall be vested in the State.

1 5. a. If the department has issued an order to a water supply
2 entity to construct or upgrade a water system and the recipient of
3 the order has not taken the action required by the order within
4 the time specified, the department may hold a public hearing in
5 the area affected to elicit testimony as to the proper future course
6 of action.

7 b. After a hearing has been held, the department shall review
8 the testimony presented and other relevant materials. Thereafter,
9 the department may extend the period of compliance with its order,
10 seek such relief as may be afforded by any statute, or issue a direc-
11 tive to the utility to undertake the necessary action required by
12 the order and such other additional action as may be required to
13 effectuate the purposes of the order. The utility shall proceed
14 in accordance with directive through the exercise of the powers
15 granted by this act.

1 6. a. The utility is authorized upon and only in accordance with
2 a and approval of the department to plan, initiate, acquire, con-
3 struct, maintain, repair and operate projects or cause the same to
4 be operated pursuant to a lease, sublease, or agreement with any

5 person or governmental agency, and to issue bonds of the utility
6 to finance these projects, payable from the revenues and other
7 funds of the utility.

8 b. The utility shall be subject to compliance with all State health
9 and environmental protection statutes and regulations and any
10 other statutes and regulations not inconsistent herewith.

11 c. The utility may, upon the request of a governmental agency,
12 enter into a contract to provide services for any project. The
13 contract shall be subject to the review and approval of the depart-
14 ment.

1 7. All water supply facilities, owned or operated by the State,
2 either now or hereafter, are transferred to the utility for purposes
3 of operation. The utility shall operate these facilities pursuant to
4 the statutory authorizations enabling the State to operate and
5 manage the facilities. The Delaware and Raritan Canal Transmis-
6 sion Complex, the Spruce Run-Round Valley Reservoir Complex
7 and all other facilities now or hereafter authorized to be designed,
8 constructed and operated pursuant to any past or future bond
9 issue are specifically included as State water supply facilities.

1 8. Except as otherwise limited by the act, the utility shall have
2 power:

3 a. To sue and be sued.

4 b. To have an official seal and alter the same at pleasure.

5 c. To make and alter bylaws for its organization and internal
6 management and for the conduct of its affairs and business.

7 d. To maintain an office at such place or places within the State
8 as it may determine.

9 e. To acquire, lease as lessee or lessor, rent, hold, use and dis-
10 pose of real or personal property for its purposes.

11 f. To borrow money and to issue its negotiable bonds and to
12 secure the same by a mortgage on its property or any part thereof
13 and otherwise to provide for and secure the payment thereof and to
14 provide for the rights of the holders thereof.

15 g. To fix and revise from time to time and charge and collect
16 rents, fees and charges for any of the services rendered by the
17 authority, which shall be equitably assessed.

18 h. To procure insurance against any losses in connection with
19 its property, operations or assets in such amounts and from such
20 insurers as it deems desirable.

21 i. Subject to any agreement with bondholders and the approval
22 of the department to invest moneys of the utility not required for
23 immediate use, including proceeds from the sale of any bonds, in
24 such obligations, securities and other investments as the utility
25 shall deem prudent.

26 j. To appoint and employ an executive director and such addi-
27 tional officers who need not be members of the utility and account-
28 ants, financial advisors or experts and such other or different offi-
29 cers, agents and employees as it may require and determine their
30 qualifications, terms of office, duties and compensation, all without
31 regard to the provisions of Title 11, Civil Service, of the Revised
32 Statutes.

33 k. To contract for and to accept any gifts or grants or loans of
34 funds or property or financial or other aid in any form from the
35 United States of America or any agency or instrumentality thereof,
36 or from the State or any agency, instrumentality or political sub-
37 division thereof, or from any other source and to comply, subject
38 to the provisions of this act, with the terms and conditions thereof.

39 l. Subject to the approval of the department, to acquire, hold,
40 rent, lease, use and dispose of real or personal property in the
41 exercise of its powers and the performance of its duties under
42 this act.

43 m. To acquire, subject to the provisions of any other statute and
44 the approval of the department, in the name of the utility by
45 purchase or otherwise, on such terms and conditions and in such
46 manner as it may deem proper, except with respect to property
47 owned by the State, by the exercise of the power of eminent domain,
48 any land and other property, which it may determine is reasonably
49 necessary for any of its projects and any and all rights, title and
50 interest in that land and other property, including, providing there
51 is no prudent and feasible alternative, public lands, reservations,
52 highways or parkways, owned by or in which the State or any
53 county, municipality, public corporation, or other political sub-
54 division of the State has any right, title or interest, or parts thereof
55 or rights therein and any fee simple absolute or any lesser interest
56 in private property, and any fee simple absolute in, easements upon
57 or the benefit of restrictions upon, abutting property to preserve
58 and protect the project.

59 n. To do and perform any acts and things authorized by the act
60 under, through, or by means of its officers, agents or employees or
61 by contracts with any person.

62 o. To establish and enforce rules and regulations for the use and
63 operation of its projects and the conduct of its activities, and
64 provide for the policing and the security of its projects.

65 p. To do any and all things necessary or convenient to carry out
66 its purposes in accordance with the powers given and granted in
67 the act.

1 9. Upon the exercise of the power of eminent domain, the com-
2 pensation to be paid thereunder shall be ascertained and paid in the
3 manner provided in P. L. 1971, c. 361 (C. 20:3-1 et seq.).

1 10. a. The utility authorized from time to time to issue its bonds
2 in such principal amounts as in the opinion of the utility shall be
3 necessary to provide sufficient funds for any of its corporate pur-
4 poses, including the payment, funding or refunding of the principal
5 of, or interest or redemption premiums on, any bonds issued by it
6 whether the bonds or interest to be funded or refunded have or have
7 not become due the establishment or increase of such reserves to
8 secure or to pay such bonds or interest thereon and all other costs
9 or expenses of the agency incident to and necessary to carry out its
10 corporate purposes and powers.

11 b. Except as may be otherwise expressly provided in the act or
12 by the utility, every issue of bonds shall be general obligations
13 payable out of and secured by any revenues or funds of the utility,
14 subject only to any agreements with holders of particular bonds
15 pledging any particular revenues or funds. The utility may issue
16 such types of bonds as it may determine, including, without limiting
17 the generality of the foregoing bonds as to which the principal
18 and interest are payable (1) exclusively from the revenues and
19 funds derived from or relating to the project or part thereof
20 financed with the proceeds of the bonds; (2) exclusively from
21 the revenues and funds derived from or relating to certain desig-
22 nated projects or parts thereof, whether or not the same are
23 financed in whole or in part from the proceeds of bonds; (3)
24 exclusively from certain designated funds of the utility; or (4)
25 from the revenues and funds of the utility generally. The bonds
26 may be additionally secured by a pledge of any grant, subsidy
27 or contribution from the United States of America or any agency
28 or instrumentality thereof or the State of New Jersey or any
29 agency, instrumentality or political subdivision thereof, or any
30 person, or a pledge of any income or revenues, funds or moneys
31 of the authority from any source whatsoever.

32 c. Whether or not the bonds are of such form and character as
33 to be negotiable instruments under the terms of Title 12A, Com-
34 mercial Transactions, New Jersey Statutes, the bonds are hereby
35 made negotiable instruments within the meaning of and for all the
36 purposes of said Title 12A, subject only to the provisions of the
37 bonds for registration.

38 d. Bonds of the utility shall be authorized by a resolution or
39 resolutions of the utility and may be issued in one or more series
40 and shall bear such date, or dates, mature at such time or times.

41 bear interest at such rate or rates of interest per annum, be in such
42 denomination or denominations, be in such form, either coupon or
43 registered, carry such conversion or registration privileges, have
44 such rank or priority, be executed in such manner, be payable from
45 such sources in such medium of payment at such place or places
46 within or without the State, and be subject to such terms of redemp-
47 tion, with or without premium, as such resolution or resolutions
48 may provide.

49 e. Bonds of the utility may be sold at public or private sale
50 at such price or prices and in such manner as the authority shall
51 determine. Every bond shall mature and be paid not later than 40
52 years from the date thereof.

53 f. Bonds may be issued under the provisions of the act without
54 obtaining the consent of any department, division, commission,
55 board, bureau or agency of the State, and without any other pro-
56 ceeding or the happening of any other conditions or other things
57 than those proceedings, conditions or things which are specifically
58 required by this act.

59 g. Bonds of the utility issued under the provisions of this act
60 shall not be in any way a debt or liability of the State or of any
61 political subdivision thereof other than the utility and shall not
62 create or constitute any indebtedness, liability or obligation of the
63 State or of the political subdivision or be or constitute a pledge
64 of the faith and credit of the State or of the political subdivision
65 but all such bonds, unless funded or refunded by bonds of the utility,
66 shall be payable solely from revenues or funds pledged or available
67 for their payment as authorized in the act. Each bond shall contain
68 on its face a statement to the effect that the utility is obligated to
69 pay the principal thereof or the interest thereon only from revenues
70 or funds of the utility and that neither the State nor any political
71 subdivision thereof is obligated to pay the principal or interest and
72 that neither the faith and credit nor the taxing power of the State
73 or any political subdivision thereof is pledged to the payment of the
74 principal of or the interest on the bonds.

75 h. All expenses incurred in carrying out the provisions of the act
76 shall be payable solely from revenues or funds provided or to be
77 provided under the provisions of the act and nothing in this act shall
78 be construed to authorize the utility to incur any indebtedness or
79 liability on behalf of or payable by the State or any political sub-
80 division thereof.

1 11. In any resolution of the utility authorizing or relating to
2 the issuance of any bonds the utility, in order to secure the pay-
3 ment of such bonds and in addition to its other powers, shall have

4 power, by provisions therein which shall constitute covenants by the
5 utility and contracts with the holders of the bonds:

6 a. To pledge all or any part of its rents, fees, tolls, revenues or
7 receipts to which its right then exists or may thereafter come into
8 existence, and the moneys derived therefrom, and the proceeds of
9 any bonds.

10 b. To pledge any lease or other agreement or the rents or other
11 revenues thereunder and the proceeds thereof.

12 c. To mortgage all or any part of its property, real or personal,
13 then owned or thereafter to be acquired.

14 d. To covenant against pledging all or any part of its rents, fees,
15 tolls, revenues or receipts or its leases or agreements or rents or
16 other revenues thereunder or the proceeds thereof, or against
17 mortgaging all or any part of its real or personal property then
18 owned or thereafter acquired, or against permitting or suffering
19 any lien on any of the foregoing.

20 e. To covenant with respect to limitations on any right to sell,
21 lease or otherwise dispose of any project or any part thereof or any
22 property of any kind.

23 f. To covenant as to any bonds to be issued and the limitations
24 thereon and the terms and conditions thereof and as to the custody,
25 application, investment, and disposition of the proceeds thereof.

26 g. To covenant as to the issuance of additional bonds or as to
27 limitations on the issuance of additional bonds and on the incurring
28 of other debts by it.

29 h. To covenant as to the payment of the principal of or interest
30 on the bonds, or any other obligations, as to the sources and meth-
31 ods of payment, as to the rank or priority of the bonds with respect
32 to any lien or security or as to the acceleration of the maturity of
33 the bonds.

34 i. To provide for the replacement of lost, stolen, destroyed or
35 mutilated bonds.

36 j. To covenant against extending the time for the payment of
37 bonds or interest thereon.

38 k. To covenant as to the redemption of bonds and privileges of
39 exchange thereof for other bonds of the utility.

40 l. To covenant as to the rates of toll and other charges to be
41 established and charged, the amount to be raised each year or other
42 period of time by tolls or other revenues and as to the use and
43 disposition to be made thereof.

44 m. To covenant to create or authorize the creation of special
45 funds or moneys to be held in pledge or otherwise for construction,
46 operating expenses, payment or redemption of bonds, reserves or

47 other purposes and as to the use, investment, and disposition of
48 the moneys held in those funds.

49 n. To establish the procedure, if any, by which the terms of any
50 contract or covenant with or for the benefit of the holders of bonds
51 may be amended or abrogated, the amount of bonds the holders of
52 which must consent thereto, and the manner in which the consent
53 may be given.

54 o. To covenant as to the construction, improvement, or mainte-
55 nance of its real and personal property, the replacement thereof,
56 the insurance to be carried thereon, and the use and disposition of
57 insurance moneys.

58 p. To provide for the release of property, leases or other agree-
59 ments, or revenues and receipts from any pledge or mortgage and
60 to reserve rights and powers in, or the right to dispose of, property
61 which is subject to a pledge or mortgage.

62 q. To provide for the rights and liabilities, powers and duties
63 arising upon the breach of any covenant, condition or obligation
64 and to prescribe the events of default and the terms and conditions
65 upon which any or all of the bonds of the utility shall become or
66 may be declared due and payable before maturity and the terms and
67 conditions upon which any such declaration and its consequences
68 may be waived.

69 r. To vest in a trustee or trustees within or without the State
70 such property, rights, powers and duties in trust as the utility may
71 determine, including the right to foreclose any mortgage, and to
72 limit the rights, duties and powers of the trustee.

73 s. To execute all mortgages, bills of sale, conveyances, deeds of
74 trust and other instruments necessary or convenient in the exercise
75 of its powers or in the performance of its covenants or duties.

76 t. To pay the costs or expenses incident to the enforcement of
77 such bonds or of the provisions of the resolution or of any covenant
78 or agreement of the utility with the holders of its bonds; and

79 u. To limit the rights of the holders of any bonds to enforce any
80 pledge or covenant securing bonds.

1 12. Any pledge of revenues, moneys, funds or other property
2 made by the utility shall be valid and binding from the time when
3 the pledge is made. The revenues, moneys, funds or other property
4 so pledged and thereafter received by the utility, unless other-
5 wise agreed, shall immediately be subject to the lien of the pledge
6 without any physical delivery thereof or further act, and the lien
7 of the pledge shall be valid and binding as against all parties
8 having claims of any kind in tort, contract or otherwise against the
9 utility, irrespective of whether the parties have notice thereof.

10 Neither the resolution nor any other instrument by which a pledge
11 of revenues, moneys or funds is created need be filed or recorded
12 except in the records of the authority and of the department.

1 13. Neither the members of the utility nor any person executing
2 bonds issued pursuant to this act shall be liable personally on
3 the bonds by reason of the issuance thereof.

1 14. The utility may establish such reserves, funds or accounts
2 as may be, in its discretion, necessary or desirable to further the
3 accomplishment of the purposes of the utility or to comply with
4 the provisions of any agreement made by or any resolution of the
5 utility.

1 15. The State of New Jersey pledges to and covenants and agrees
2 with the holders of any bonds issued pursuant to authority of the
3 act that the State will not limit or alter the rights or powers vested
4 in the utility to acquire, construct, maintain, improve, and repair
5 any project in any way that would jeopardize the interest of such
6 holders, or to perform and fulfill the terms of any agreement made
7 with the holders of the bonds, or to fix, establish, charge and collect
8 such rents, fees, rates or other charges as may be convenient or
9 necessary to produce sufficient revenues to meet all expenses of the
10 utility and fulfill the terms of any agreement made with the holders
11 of the bonds, together with interest thereon, with interest on any
12 unpaid installments of interest, and all costs and expenses in con-
13 nection with any action or proceedings by or on behalf of such
14 holders, until the bonds, together with interest thereon, are fully
15 met and discharged or provided for.

1 16. The State and all public officers, governmental units and
2 agencies thereof, all banks, trust companies, savings banks and
3 institutions, building and loan associations, savings and loan asso-
4 ciations, investment companies, and other persons carrying on a
5 banking business, all insurance companies, insurance associations
6 and other persons carrying on an insurance business, and all
7 executors, administrators, guardians, trustee and other fiduciaries,
8 may legally invest any sinking funds, moneys or other funds belong-
9 ing to them or within their control in any bonds issued pursuant to
10 the act, and such bonds shall be authorized security for any and all
11 public deposits.

1 17. Any governmental entity, notwithstanding any contrary pro-
2 vision of law, except any requiring notice or public hearing, and
3 subject to the approval of the department, is authorized to lease,
4 lend, grant or convey to the utility at its request upon such terms
5 and conditions as the governing body or other proper utility of such
6 governmental entity may deem reasonable and fair and without the

7 necessity for any advertisement, order of court or other action or
8 formality, other than the ordinance, resolution or regular action
9 thereof, any real property or interest therein which may be
10 necessary or convenient to the effectuation of the purposes of the
11 utility. No property of the State, other than meadowlands, riparian
12 lands or lands underwater and similar lands or interests therein re-
13 ferred to and whose disposition is controlled by the provisions in
14 Title 12, Commerce and Navigation, and Title 13, Conservation and
15 Development, of the Revised Statutes, shall be so granted, leased or
16 conveyed to the authority except upon the approval of the State
17 House Commission and the department and payment to the State of
18 such price therefor as may be fixed by the State House Commission.

1 18. Every project, when constructed and placed in operation,
2 shall be maintained and kept in good condition and repaired by the
3 utility and shall be subject to all orders and applicable acts, rules
4 and regulations of the department. Every project shall be operated
5 by such operating employees as the utility may in its discretion
6 employ or pursuant to a contract or lease with a governmental
7 agency or person.

1 19. The utility may establish and alter rates and charges, and
2 collect rents, fees and charges for water sold from, and for the use
3 of services of any water system project and contract in the manner
4 provided in this section with one or more persons, one or more
5 governmental entities, or any combination thereof, receiving the
6 use or services of any project, and fix the terms, conditions, rents,
7 rates, fees and charges for such use or services. These rents, rates,
8 fees and charges shall be subject to supervision and regulation by
9 the Board of Public Utilities. The contract may provide for acquisi-
10 tion by such person or governmental agency of all or any part of the
11 project for such consideration payable over the period of the
12 contract or otherwise as the utility in its discretion determines to
13 be appropriate, but subject to the provisions of any resolution of
14 the utility authorizing the issuance of bonds or any trust agreement
15 securing the same. Any water supply entity which has the power to
16 construct, operate and maintain water management facilities may
17 enter into a contract or lease with the utility, subject to the approval
18 of the department, whereby the use or services of any project of the
19 utility will be made available to the entity and pay for the use or
20 services such rents, rates, fees and charges as may be agreed to by
21 the utility and the entity.

22 Any one or more public or private may cooperate with the utility
23 in the acquisition or construction of a project and shall enter into
24 such agreements with the utility as are necessary, with a view to

25 effective cooperative action and safeguarding of the respective
26 interests of the parties thereto, which agreements shall provide for
27 such contributions by the parties thereto in such proportion as may
28 be agreed upon and such other terms as may be mutually satis-
29 factory to the parties including without limitation the authorization
30 of the construction of the project by one of the parties acting as
31 agent for all of the parties and the ownership and control of the
32 project by the utility to the extent necessary or appropriate for
33 purposes of the issuance of bonds by the utility. Any governmental
34 agency may provide such contribution as is required under such
35 agreements by the appropriation of money or, if otherwise au-
36 thorized by law to issue bonds or levy taxes or assessments and
37 issue bonds in anticipation of the collection thereof, by the issuance
38 of bonds or by the levying of taxes or assessments and the issuance
39 of bonds in anticipation of the collection thereof, and by the pay-
40 ment of such appropriated money or the proceeds of the bonds to
41 the utility pursuant to such agreements.

1 20. On or before the last day of February in each year the utility
2 shall make an annual report of its activities for the preceding
3 calendar year to the Governor and to the Legislature. The report
4 shall set forth a complete operating and financial statement cover-
5 ing its operations during the year. The utility shall cause an audit
6 of its books and accounts to be made at least once in each year by
7 certified public accountants and the cost thereof shall be considered
8 an expense of the authority and a copy thereof shall be filed with the
9 Comptroller of the Treasury.

1 21. All officers, departments, boards, agencies, divisions and com-
2 missions of the State are authorized to render such services to the
3 utility as may be within the area of their respective governmental
4 functions as fixed by law, and as may be requested by the utility.
5 The cost and expense of the services shall be met and provided for
6 by the utility. The Attorney General shall serve as counsel to the
7 utility.

1 22. The utility is authorized to make and enter into contracts and
2 agreements necessary or incidental to the performance of its duties
3 and the execution of its powers. No contract on behalf of the utility
4 shall be entered into for the doing of any work, or for the hiring of
5 equipment or vehicles, where the sum to be expended exceeds the
6 sum of \$2,500.00 unless the utility shall first publicly advertise for
7 bids therefor, and shall award the contract to the lowest responsible
8 bidder; but advertising shall not be required where the contract to
9 be entered into is one for the furnishing or performing services of a
10 professional nature or for the supplying of any product or the
11 rendering of any service by a public utility subject to the jurisdic-

12 tion of the Public Utilities Commission and tariffs and schedules of
13 the charges, made, charged, or exacted by the public utility for any
14 such products to be supplied or services to be rendered are filed
15 with the commission. This section shall not prevent the utility from
16 having any work done by its own employees, nor shall it apply to
17 repairs, or to the furnishing of materials, supplies or labor, or the
18 hiring of equipment or vehicles, when the safety or protection of its
19 or other public property or the public convenience require, or the
20 exigency of the utility service will not admit of such advertisement.
21 In such case the utility shall, by resolution, passed by the affirma-
22 tive vote of a majority of its members, declare the exigency or
23 emergency to exist, and set forth in the resolution the nature
24 thereof and the approximate amount to be expended.

1 23. a. All projects and other property of the utility is declared
2 to be public property devoted to an essential public and govern-
3 mental function and purpose and shall be exempt from all taxes
4 and special assessments of the State or any political subdivision
5 thereof; provided, however, that when any part of the project site
6 not occupied or to be occupied by facilities of the project is leased
7 by the utility to another whose property is not exempt and the
8 leasing of which does not make the real estate taxable, the estate
9 created by the lease and the appurtenances thereto shall be listed
10 as the property of the lessee thereof and be assessed and taxed as
11 real estate. All bonds issued pursuant to this act are declared to be
12 issued by a body corporate and public of the State and for an
13 essential public and governmental purpose and these bonds, and the
14 interest thereon and the income therefrom, and all funds, revenues,
15 income and other moneys received or to be received by the utility
16 and pledged or available to pay or secure the payment of the bonds,
17 or interest thereon, shall be exempt from taxation except for
18 transfer, inheritance and estate taxes.

19 b. Any project constructed, maintained or operated by the utility
20 shall be exempt from compliance with local zoning regulations, but
21 the utility shall wherever practicable adhere to the regulations.

1 24. There is appropriated to the utility from the General State
2 Fund the sum of \$100,000.00, or so much thereof as may be neces-
3 sary, for the purposes of carrying out its function and duties pur-
4 suant to this act. This appropriation shall be repaid to the General
5 State Fund as soon as practicable out of the proceeds of the first
6 bonds issued by the authority or other available funds.

1 25. This act shall take effect immediately.

STATEMENT

This "State Water Supply Utility Act" establishes a State Utility empowered to plan, finance, acquire, construct, and operate water systems where the responsible public or private entity has failed to take action required by orders issued by the Department of Environmental Protection or where the Legislature has authorized any construction and operation of any water supply facility. The Delaware and Raritan Canal Transmission Complex, the Spruce Run-Round Valley Reservoir Complex and any water supply project authorized by any past or future bond issue shall be operated by this utility.



SENATE, No. 1613

STATE OF NEW JERSEY

INTRODUCED NOVEMBER 24, 1980

By Senator DODD

Referred to Committee on Energy and Environment

AN ACT subjecting the State, municipalities and counties and any agency formed by any one or more thereof owning or operating water supplies, to the jurisdiction, regulation and control of the Board of Public Utilities with respect to rates in certain cases, supplementing Title 48 of the Revised Statutes and repealing P. L. 1975, c. 184.

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

1 1. Whenever the State, any county or municipality, or any agency
2 thereof, formed by any one or more thereof owns or operates a
3 water supply, that entity shall, with respect to that service be
4 subject to the jurisdiction, regulation and control of the Board
5 of Public Utilities.

1 2. Nothing in this act shall be construed as declaring or defining
2 the State, or any county or municipality, or any agency thereof,
3 to be a public utility or subjecting it to the provisions of Title 48
4 of the Revised Statutes.

1 3. The board may require the State, any county or municipality,
2 or any agency thereof, to file with it complete schedules of every
3 classification employed and of every individual or joint rate or
4 charge made, charged or exacted by it for water or facilities or
5 extension of facilities supplied or service rendered within this
6 State.

1 4. The board may after hearing, upon notice, by order in writing
2 fix just and reasonable individual rates, joint rates or charges or
3 special rates which shall be imposed, observed and followed there-
4 after by the State, any county or municipality, or agency thereof,
5 whenever the board shall determine any existing individual rate,
6 joint rate or charge or schedule thereof or other special rate to be
7 unjust, unreasonable, insufficient or unjustly discriminatory or
8 preferential.

1 5. When the State, any municipality, county, or any agency
2 thereof shall increase any existing individual rates, joint rates,
3 charges or schedules thereof, or special rates, or change or alter
4 any existing classification, the board, either upon written complaint
5 or upon its own initiative, shall have power after hearing, upon
6 notice, by order in writing to determine whether the increase,
7 change or alteration is just and reasonable. The burden of proof
8 to show that the increase, change or alteration is just and reason-
9 able shall be upon the entity making the same. The board, pending
10 the hearing and determination, may order the suspension of the
11 increase, change or alteration until the board shall have approved
12 the same, not exceeding 4 months. If the hearing and determination
13 shall not have been concluded within the 4 months the board may
14 during the hearing and determination order a further suspension
15 for an additional period not exceeding 4 months. The board shall
16 approve the increase, change or alteration upon being satisfied
17 that the same is just and reasonable.

1 6. The board may either during the pendency of any rate pro-
2 ceeding, whether instituted by the board or any other party, or at
3 any time, even though no such proceeding is pending or proposed,
4 negotiate and agree with the State, any county or municipality
5 or agency thereof for the adjustment or fixing of individual rates,
6 joint rates, special rates, charges or schedules thereof. The adjust-
7 ment may be without limit of time or for a temporary period
8 specified by the board. No adjustment or fixing of rates under
9 this section shall be considered as contractual. The rates adjusted
10 or fixed pursuant to this section may be subject to change or elimi-
11 nation through proceedings provided for in this act or through
12 negotiation and agreement under this section. The board as a part
13 of any negotiation and agreement shall provide for the continuance,
14 suspension or other disposition of any hearing or proceeding then
15 pending.

1 7. The State, any county or municipality or any agency thereof,
2 may file with the board a written stipulation subject to the board's
3 approval at any time, extending the suspension periods provided
4 for in this act or waiving the effective date of any tariff or rate.

1 8. P. L. 1975, c. 184, § 1 (C. 40:62-85.2) is repealed.

1 9. This act shall take effect immediately.

STATEMENT

This bill authorizes the Board of Public Utilities to manage all State and local government water suppliers as self-sustaining utilities over the long run. This bill will provide self-sufficient, businesslike utility operations by State and local government water purveyors, as is now provided by investor-owned water purveyors, who are currently regulated by the Board of Public Utilities.



SENATE, No. 1614

STATE OF NEW JERSEY

INTRODUCED NOVEMBER 24, 1980

By Senator DODD

Referred to Committee on Energy and Environment

AN ACT concerning improvements to the facilities and services of
small water companies and supplementing Title 58 of the Revised
Statutes.

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

1 1. Whenever any small water company fails to comply with an
2 order of the Department of Environmental Protection to comply,
3 within a specified time period, with any law, rule or regulation
4 concerning the availability of water, the potability of water and the
5 provision of water at adequate volume and pressure, which the
6 department is authorized to enforce pursuant to Title 58 of the
7 Revised Statutes, the department, after consultation with the Board
8 of Public Utilities as to the financial implications of the order, and
9 after holding a public hearing, may order a capable proximate
10 public or private water company, or a municipal utilities authority
11 formed pursuant to P. L. 1957, c. 183 (C. 40:14B-1 et seq.) or the
12 municipality or any other suitable governmental entity within
13 which the small water company provides service, to acquire the
14 small water company and to make all improvements necessary to
15 assure the availability of water, the potability of the water and the
16 provision thereof at adequate volume and pressure. As used in this
17 act, "small water company" means any company, purveyor or
18 entity, other than a governmental agency, that provides water for
19 human consumption and which regularly serves less than 1,000
20 customer connections.

1 2. Compensation for this acquisition shall be determined: a. by
2 agreement between the parties subject the approval of the Board
3 of Public Utilities; b. if the parties refuse, or fail, to agree, by the
4 Board of Public Utilities in consultation with the Department of
5 Environmental Protection and after holding a public hearing, by
6 considering, among other factors, the original cost of the physical
7 property and the cost of contributed property of the small water

8 company less depreciation and without considering the good will or
9 franchise value of the small water company; and c. through use of
10 the power of eminent domain. Any entity which receives such an
11 order is authorized and directed to acquire the small water company
12 with or without the power of eminent domain.

1 3. Any water company, municipal utilities authority, municipality
2 or other suitable governmental entity which receives an order of the
3 Department of Environmental Protection pursuant to section 1 of
4 this act shall acquire the small water company and shall make the
5 necessary improvements to assure the availability of water, the
6 potability of the water and the provision of water at adequate
7 volume and pressure. The small water company shall immediately
8 comply with the order and shall facilitate its sale to the water
9 company, municipal utilities authority, municipality or other suit-
10 able governmental entity ordered to acquire the small water
11 company.

1 4. This act shall take effect immediately.

STATEMENT

This bill authorizes the Department of Environmental Protection to order water companies, municipal utilities authorities, municipalities or other suitable governmental entity to acquire and upgrade the facilities and services of small water companies providing inadequate service and serving less than 1,000 customers connections, in certain circumstances. It provides that compensation for such an acquisition shall be determined by one of several procedures, including a determination by the Board of Public Utilities considering certain capital expenditures, among other factors.

SENATOR FRANK J. DODD (CHAIRMAN): I will call the meeting to order. I would like to call on Edward Russo, President of the Chester City Council.

MR. RUSSO: Ladies and gentlemen, I would like to welcome you all here to West Morris High School. We would like to show our appreciation for the courtesy that is being offered to us today to allow us to be heard on this very serious issue. Again, I hope the dialogue is long and interesting and that our facts are listened to. Thank you very much and welcome.

SENATOR DODD: Okay, ladies and gentlemen, this is the Senate Energy and Environment Committee in conjunction with the Assembly Energy and Natural Resources Committee, chaired by Assemblyman Bob Hollenbeck. Also here are Assemblyman Tom Cowan and Assemblyman Elliott Smith. What we are going to do, ladies and gentlemen, we have a list of 15 witnesses that have registered to testify and, in addition, we have a list of some 20 odd additional names. We will get to as many people as humanly possible today. We are here to gather information on the five proposed bills. We are here on a two tiered level for the long range problems of our State and we are also looking for and anxiously and eagerly awaiting help on short-term problems. Assemblyman Hollenbeck, would you like to say anything.

ASSEMBLYMAN HOLLENBECK: Other than that, this is the third hearing that we've had on these particular four or five bills, none of which would put a drop of water into the reservoirs immediately. It is all for the long range planning and, for this reason, we have come out to get the input that the committee members require so that when we're finished, we will have some bills and possibly a bond issue that will meet the future needs of our State.

SENATOR DODD: I would also like to introduce Al Matisoska, who is the staff member from the Committee and also Katherine Crotty, the Assistant Director of the State Senate. I'm now going to call on Arnold Schiffman, the Director of Water Resources from the Department of Environmental Protection and I will ask him to give an overview on the five bills now pending which are sponsored by Assemblyman Hollenbeck and myself. The bill that affects your area we will go into depth, I'm sure, with the testimony, but first, we would like you to have an overview of the entire package. So, Mr. Schiffman, if you would.

ARNOLD SCHIFFMAN: Okay, I will go over these very, very briefly. First of all, I'm going to discuss the Water Supply Management Act. This is really a regulatory reform bill to deal with the allocation of both surface and ground water. We have existing laws that deal with the allocation of both surface and ground water. They are somewhat old and outdated. The purpose of the Water Supply Management Act is to update this law. There are some peculiarities to the system right now. There are old legislative grants that, in some cases, have given away the entire flow of rivers. Keep in mind that this is one of the original 13 colonies. These grants gave away virtually the entire flow of some rivers to public and private enterprise. Another similar fact or problem, this grandfather rights issue deals with ground water. With ground water, we have what people were using in the past, plus what they weren't using. If somebody had a well that pumped one million gallons a day and they were only using 100,000, they received, naturally and properly, a right to what they were using, plus an unallocated right of the additional 900,000. In some cases, these rights may exceed the amount of water that is in the ground. This has to be reformed in a fair and equitable manner.

In addition, the whole water supply program in the state has to be upgraded. There are very limited resources in that area. Basically, the authority to allocate water is now vested in an entity called the Water Policy and Supply Council. This is a lay body that has done yeoman's work in the past. But, their resources are very limited. People would be shocked to find out that the staff resources in the state for water supply do not amount to more than three people or so. So, there has to be a new effort in the area of water supply. Most of the effort now is in water pollution. This is one of the main purposes in the Water Supply Management Act.

There are a few other items, the emergency powers of the state which, unquestionably, deal with water shortages. There are going to be improvements in that area.

The next bill I'm going to discuss is the state Water Supply Utility Act. Basically, this is a proposal to establish a state utility that would have the capability of building water supply projects, operating them and dealing with inadequate, small water companies, if necessary. The best way, I think, to look at it is the court of last resort that would be a method to act for major water supply projects where there has been inaction.

Another bill would put--the best way to put this is that there are more water companies, water purveyors, in the State of New Jersey than there are towns and municipalities. Last time I counted, there were 618. Many of these systems are small, not capable of dealing with their needs in terms of capitalization, dollars and a proper rate structure. They are just too small. Better than 60% of these systems serve less than 1,000 connections. There are two problems with this. One is the fact that they are small and they are not viable entities. The second is that there are a lot of systems in the state that do not function as utilities in terms of putting money into a sinking fund for future purposes, all the things that are necessary for a proper business upgrade. We have both private water companies, privately owned, and public, municipal systems which are regulated differently. To deal with these two problems, there are two bills. One would put everyone under the Board of Public Utilities for a rate base. Only the private companies are under that now. This would put the publicly owned systems and the municipal systems under the Board of Public Utilities and then everybody would be operating in the same manner.

The other bill would deal with small water companies. It would provide mechanisms for an existing, viable water system to take over an inadequate or failing, small water company. This is a problem that has been a great concern of New Jersey. There has never been an easy way to deal with this problem.

The last bill, I think, is the one of most concern. That is the proposed bond act. I would like to read you all something. I'm going to read you all a statement. "There is an immediate need for a new, major supply of water to meet the present, acute water requirements in the northeastern, metropolitan counties and the Raritan Valley, areas that directly and indirectly affect the commerce and prosperity of the entire state. The existing water sources in the Hackensack, Passaic, Rockaway, Wanaque, and Pequannock Rivers have been and are now being developed to the limit of their capacity by the municipalities and water companies in the northeastern region of New Jersey. Well supplies in this region have also approached the limit of practical development. The Raritan River Basin is the only area with a large quantity of additional water which can be obtained immediately and economically to serve the northeastern, metropolitan counties, as well as the counties in the Raritan valley. This basin

is about equal in size to the Passaic River Basin, is wholly within the state, and is reasonably close to the counties needing water and has a virtually undeveloped water supply." What I just read from was the 1958 bond act that was passed by the voters of the State of New Jersey to develop the water in the Raritan Basin and build the two state reservoirs, Round Valley and Spruce Run. It is 23 years later now.

Now, I will briefly discuss the proposed Water Supply Bond Act of 1981. The basis of this bond act is \$345 million and it is broken up into several pieces. One part is \$65 million for grants and loans to public and private water purveyors for the rebuilding or repairs of antiquated or damaged water supply systems. We've estimated that it would take \$300 million or \$400 million, at least, to repair some of our older systems. They leak, they're falling apart, there are main breaks. In some cases, the leakage is horrendous, approaching 30% of the water. It is only a start. We have no illusion that this will solve all the problems, the \$65 million. \$10 million is allocated for the construction of a multiple extension for Great Notch. This is an area where several major pipelines of major water purveyors are virtually next to each other and there is no means of connecting them together. This would provide for inter-connection so that we can better utilize our water resources in that area of the northeast. \$85 million--and I think this is the project that is of most concern to this area--is allocated for the alignment analysis, design and construction of a pipeline to transfer water stored at Spruce Run and Round Valley Reservoirs to the areas of need in the Passaic valley. The reason I read you the 1958 bond act is because it has been a long time since the need was recognized. I would like to emphasize the word "alignment analysis and design." There is no alignment. That has been decided on. The way the state does business is that estimates are made, bond acts are passed and the dollars in the bond act are used to design the systems. In some cases in the past, what has been proposed has been radically changed after the money was made available to do the design and analysis.

Another project is \$40 million for the construction of the Manasquan Reservoir. This is a reservoir that is needed to relieve some of the excess pumpage that goes on in shore communities for ground water. They face problems of salt water intrusion.

\$55 million is allocated for the design and construction of the reservoir at the confluence of the north and south branches of the Raritan River and a force main pumping station at White House Station. This project, which has been around for a long time, would maximize the yield of the Raritan Basin in the State reservoirs. It would add, approximately, another 60 million gallons a day of capacity. This is a necessary project that is related to the other project, the \$85 million pipeline because right now Spruce Run and Round Valley have a surplus of about 70 million gallons a day, under drought conditions. Additionally, our ground water supplies are being threatened in many areas of the State. Middlesex County has a severe pollution problem. So, this would increase the safe yield of that system so that there would be plenty of water for both areas, the Passaic and Raritan.

\$90 million is allocated for the design and construction of the Hackettstown Reservoir. The Hackettstown Reservoir is not really water supply. It is low flow load limitation. The State of New Jersey exports out of basin to the D&R Canal and has right to 100 million gallons a day from the Delaware River. This is a very controversial issue among all the states that are in that basin because New Jersey takes out and doesn't put anything back and there have been many debates and there is a Supreme Court issue being involved now. It is part of New Jersey's

obligation to avoid an attack on its rights to take 100 million gallons a day out of the Delaware Basin and put water back out of the Hackettstown Reservoir. The Delanco surface intake would take water from the Delaware River--virtually across the River from where Philadelphia takes its water is the town of Delanco and the other side of the River is Torrsville in Philadelphia--for the Camden area, the Camden metropolitan area and not just the City of Camden. The Camden metropolitan area is overpumping its ground water supply and that overpumping is causing many problems including drawing pollution from industrial sources and possibly drawing the salt water that would come up the Delaware Bay.

That, in essence, are the five bills.

SENATOR DODD: Mr. Schiffman, it is our understanding that we have approximately a 50 to 55 day supply, counting the last rainfall that we had last week, and I understand also that it is going to rain today. It seems that every day we have a hearing, we make it rain. I don't know if the committee can take credit for that. Short run-long run, with the proposed transfer from Round Valley and Spruce Run to the Passaic, the long term, which would be built in what, three years?

MR. SCHIFFMAN: It would probably have to be done, if the drought continued, sooner than that.

SENATOR DODD: How quickly can we build that if we are indeed in a drought cycle?

MR. SCHIFFMAN: Conventional wisdom would say that the three year figure is correct. However, if you are being chased by the drought, New Jersey has excellent contractors who need the work. We have some of the major pipe manufacturers in the state and we would have to locate the pumps. I would say that if the drought continues, we would have to have some type of pipeline to take surplus waters to the reservoirs by next summer because, right now, the state is proposing and the Legislature has approved \$28 million for emergency projects that doesn't include this one, other than a study and evaluation to bring water into the northeast. That, hopefully, will get us through this summer. If the drought continues, if we're in a drought cycle, we will have to have an emergency pipeline of some sort. I couldn't even begin to tell you the alignment. It would have to be the shortest and quickest and we would have to have it by next summer.

SENATOR DODD: Could it be done for this summer if the drought, indeed, continues?

MR. SCHIFFMAN: No.

SENATOR DODD: Even under the best emergency conditions?

MR. SCHIFFMAN: I don't see how it could be constructed that fast.

SENATOR DODD: Above ground?

MR. SCHIFFMAN: Even above ground, the water would have to be taken from the Boonton Reservoir and put into the distribution system and that is a fairly long way. It is conceivable, but it hasn't been designed yet. It could be designed and built at the same time and it could be run up major highways like Route 287. We are counting on the other projects to get us through the summer. We are also counting on having some rainfall. We appreciate the committee holding its meeting and having it rain each time.

SENATOR DODD: It's the least we can do.

MR. SCHIFFMAN: With adequate rainfall, with the emergency projects

that the state is proposing, it can be done and can be built quickly. We think we can get through the summer. I forgot one other detail; with conservation far greater than we have already been able to achieve. So, those three things are needed, the emergency projects, rainfall somewhere, at least around average, which is about 14 inches from now until June 1, and conservation of 15% more than we've been doing. Those are the requirements and then we will be buying time so that we can deal with next summer. This is not the best way in the world to do business.

ASSEMBLYMAN HOLLENBECK: Well, I have to ask now some specific questions in reference to some of the past testimony that we've had, for informational purposes. The Round Valley line has been coming up into the system, proposed in the bond issue, is that to be a continuously operated line or just to be used in drought conditions?

MR. SCHIFFMAN: It is a drought occurrence type pipeline for two reasons. One is basically the water itself. Two is the Passaic River, which, under low flow conditions, is virtually all sewage, poorly treated sewage effluent. There have been many proposals to upgrade the sewage treatment plants on that river. The dollar situation is such that we will never be able to build, in my opinion, advanced waste water treatment. In addition the costs are extreme. The reason for that, the reason for the problem in the first place is that in the Passaic Basin all the water has been trapped in the reservoir, which are inadequate in the first place for water supply. So, there is little fresh water flow in the river. It is all held back in the reservoir under low flow conditions. The treatment plant on that river for water supply, the Passaic Valley Water Commission can take 75 million gallons a day. They are a very important part of that system. Because the water quality is so poor, they physically cannot treat that sewage. So, they lose supply. So, we would add water in to get supply, plus we would get water quality benefits so we would be able to build less expensive treatment plants, both to construct and operate. The water quality situation, forty percent of the time, it would be necessary for water quality. Water supply alone, much less than that, but figure forty percent of the time.

ASSEMBLYMAN HOLLENBECK: Just for the sake of time, because I'm just seeking information, you didn't answer the question.

MR. SCHIFFMAN: Forty percent of the time.

ASSEMBLYMAN HOLLENBECK: Forty percent of the time we will have a flow or 100% of the time, we will have 40% of the flow?

MR. SCHIFFMAN: No. 40% of the time, we would have a flow. It would not be needed the rest of the time and most of the reason would be water quality.

ASSEMBLYMAN HOLLENBECK: They are the key words. I just wanted to get them. Just going with that, Dunker Pond, what is that?

MR. SCHIFFMAN: That is an additional reservoir that has been proposed.

ASSEMBLYMAN HOLLENBECK: Located where?

MR. SCHIFFMAN: That is located in the Newark watershed, the northeastern part of the state. I would have to look up the exact location.

ASSEMBLYMAN HOLLENBECK: Longwood Valley?

MR. SCHIFFMAN: That is the area and that would be to increase the supply of the Newark reservoirs. The Newark reservoirs are very poor in the way that they fill up. The proposal has been around for a long time. This is a potential project. It would not solve the problem nor is it a substitute.

ASSEMBLYMAN HOLLENBECK: What about Longwood Valley?

MR. SCHIFFMAN: Longwood Valley is also a project that would not solve the problem, but it would get more reservoir storage.

ASSEMBLYMAN HOLLENBECK: Would it increase the watershed area?

MR. SCHIFFMAN: It would increase reservoir storage, yes.

ASSEMBLYMAN HOLLENBECK: Monksville?

MR. SCHIFFMAN: Monksville is a reservoir that is related to the Wanaque Reservoir and it too would provide some increase in storage. All of these projects would probably have to be done--Monksville for sure--because the original Two Bridges project, which would increase the yield in this area, was changed by the Water Policy Supply Council and Monksville would be required to bring its yield up from what was originally proposed.

ASSEMBLYMAN HOLLENBECK: Was that proposed in any of the bond issues, Monksville?

MR. SCHIFFMAN: This is half of a private project. It is both public and private and the funding was part of the Two Bridges project or the Wanaque South project, as it is now known, and the funding was never intended for the State. It is both for the local governments and the private water company, Hackensack, which will pay for about half the project.

ASSEMBLYMAN HOLLENBECK: That's Two Bridges?

MR. SCHIFFMAN: That's correct.

ASSEMBLYMAN HOLLENBECK: What about the reservoir?

MR. SCHIFFMAN: Monksville is part of that project.

ASSEMBLYMAN HOLLENBECK: All right, thank you.

SENATOR DODD: Thank you very much, Mr. Schiffman. We would now like to call Senator Jack Ewing, who was instrumental in bringing our dog and pony show on the road to your lovely area.

SENATOR JOHN EWING: Mr. Chairman, members of the Committee, I appreciate the opportunity to testify this morning. I would like to ask Mr. Schiffman, first. In the \$26 million that we passed the other day in the Legislature, wasn't there money in there for the Great Notch Connection?

SENATOR DODD: Mr. Schiffman, the \$26 million reallocation of bond money, was part of it for the Great Notch connection?

MR. SCHIFFMAN: No. The Great Notch interconnection--the best way to put it, there was some money for the Great Notch project, but not the whole thing. The reason is that the interconnection cannot be maximized without water in the systems and that's the major problem. There was part of the interconnection money approved for a certain amount of work. If you want the details, I will give you the details why. But, it was only for part of it.

SENATOR EWING: Then, the \$345 million bond issue was short because you are saying that that was going to do the interconnection, Great Notch, and you could just get part of the \$26 million, which you had not expected before.

MR. SCHIFFMAN: The amount of money is small. Out of the \$10 million you are dealing with less than \$1 million.

SENATOR EWING: It is still taxpayers' money, which a lot of you people forget.

SENATOR DODD: Senator Ewing, could you continue.

SENATOR EWING: Thank you. Northeastern New Jersey is becoming the center of a national concern as the present crisis for the water continues. As an important part of the industrialized part of this country, we in New Jersey bear grave responsibility to the economic wellbeing not only for ourselves, but for the totality of the free enterprise system.

At the same time, we must recognize the importance of maintaining an ecological balance when planning all public works projects. Thus, I am extremely concerned with the rapidity of movement on projects which have not gone through appropriate review procedures and for which all alternatives have been evaluated.

Using a crisis to push through poorly conceived projects will cost us dearly in the long term. Therefore, I strongly recommend that any capital intensive projects related to providing water supply be subjected to a thorough review economically and environmentally with maximum public participation response.

After much consideration, I believe that the best use of Round Valley-Spruce Run water is for the future development of the Raritan River Basin, as presented to this committee for Somerset and Middlesex Counties. National studies have over and over again shown that inter-basin transfers are costly and pursue a policy of robbing Peter to pay Paul. However, because of the great need in northeastern New Jersey, several alternatives should be evaluated, including the I-287 route, which is the latest version being discussed. Key elements in this route are energy questions, the impact on the Boonton Reservoir, and Jersey City's role in treating and distributing the water. Has DEP discussed these alternatives with the local institutions on whose shoulders additional responsibilities would fall, and how have they responded to them? We should know this publicly, not in private meetings that they may have. Many questions still have not been answered regarding the Raritan-Passaic pipeline which is the concern of many of my constituents. How will the route be determined? How will the pipeline be maintained? Will the water being transferred to the Passaic River Basin be needed here in the immediate future?

As additional alternatives, I support the reevaluation of the construction of headwaters reservoirs on land already owned by major water purveyors in the Passaic River Basin, as follows:

1. The Newark system: Dunker Pond, a capacity of 9.6 billion gallons
2. The Jersey City system: Longwood Valley, 6-10 billion gallons
3. North Jersey Water District: Monksville, 9 billion gallons

It is my understanding that this latter reservoir is necessary if the Two Bridges diversion project is to be effective.

In addition, the State must initiate land use constraint in municipalities which are situated in the high headwaters of a river system so that these reservoirs do not become excessively contaminated through non-point sources of pollution.

Furthermore, the State must enact a strong protective program for our ground water resources. In May of 1980, the U.S. Environmental Protection Agency designated the Buried Valley Aquifer as a "sole source" aquifer under Section 1424 (e) of the Safe Drinking Water Act of 1974. This was a result of a petition filed by the Passaic River Coalition and the City of East Orange. Were it not for this ground water resource, no liquid, if any, would be flowing into the Passaic River today.

In my efforts to determine how we in New Jersey have gotten to this terrible crisis, I have constantly heard that it is a management problem. Why do we continually permit development without a clear definition of water rights? Although a developer frequently required to show that he can obtain water from company "X", the nebulous nature of arriving at such a quantity with practical allowances for drought has not been followed through. The State's allocation procedure needs to be keyed into new development needs, and thus, I propose that any new development be required to buy water rights so that allocation of water is undertaken more precisely than

it has in the past. Finally, the State should establish a policy whereby funding for planning must be undertaken independent of engineering design and construction.

The Bond Issue under consideration lumps all three components into one. As a member of the New Jersey Senate, I want the Department of Environmental Protection to return to us with plans and justifications in hand so that we may review and evaluate such plans and then decide whether we want to spend any monies on such projects. Thank you. (Applause)

SENATOR DODD: The bills will not be passed with yeas or boos. So, we have the unfortunate task of writing and dealing with details. We are here to learn specifics. We have a package of five bills. The bills are not written in stone. We are looking for specific language on how to make them better; how to change them. The bills are 20 years old. During the last drought, when it rained, it was out of sight, out of mind, and perhaps that is a quirk of human nature, but we will not let this happen again. If it rains from now until June, we have to go through with the projects, whether you like the specific plans that have been proposed or if you don't. The only criteria that this Committee has is, you can be against something, but you have to give us an alternative. That is the only criteria and if anyone can quarrel with that, we will hear from you during the day. Now, the Chair would like to call Senator Wayne Dumont from Sussex County and, may I also add, the dean of the New Jersey State Senate.

SENATOR WAYNE DUMONT: Thank you very much, Mr. Chairman and members of both the Senate Energy and Environment Committee and the Assembly Energy and Natural Resources Committee. I am personally grateful to you for coming here today and giving a sort of common meeting ground between the area that would be very adversely affected by the Hackettstown Reservoir proposal and also the area that would be adversely affected by the proposed pipeline from the Raritan to the Passaic River Valley.

Let me say, first of all, that I'm not a neophyte in water supply problems. This is my 28th year in the Senate and I've been deeply concerned about water supply during all of those years. I was Chairman of the committee for a year and that's the time we spent in 1957 and 1958 reviewing how we can provide proper reservoir facilities in North Jersey that we did not have. Our proposal was the Spruce Run and Round Valley Reservoirs. We proposed seven pieces of legislation. The sponsorship of those bills was rotated between the Republicans and the Democrats so that we would have bi-partisan sponsorship and bi-partisan influence in the creation of the reservoir system. Two of my former colleagues who did a great deal of work on this, former Senator Donald Fox of Essex County and the late former Senator Robert Crane of Union County, and I spent a great many days on this problem in 1957 and 1958. We went out in the field and surveyed the Delaware River Basin, particularly in the northern portion thereof and we surveyed other parts of northern and central New Jersey, where there might be reservoir sites. To nobody's surprise, Spruce Run and Round Valley were selected because Round Valley is the finest natural reservoir site anywhere in the whole State of New Jersey. It has a capacity of 55 billion gallons. Spruce Run has a capacity of 11 billion gallons. They were constructed out of a bond issue that contained only \$46 million and that bond issue did some other things besides construct those two reservoirs. Today you couldn't do it for less than \$250 million. They have a capacity which is largely untapped. You heard Director Schiffman of the Division of Water Resources indicate that they are taking out of Round Valley some

80 to 90 million gallons a day because the prime purpose of Spruce Run is to provide water into the south branch of the Raritan so that water in turn can be pumped out of the south branch of the Raritan into Round Valley. You will also, if you ask Mr. Schiffman, find out that he estimates that Round Valley could supply up to 500 million gallons a day in maximum daily delivery capacity. Today, it supplies about 80 to 90 million. Now, with that pumping station, they could take out upwards of 160 million gallons a day, overall, leaving them, therefore, with a surplus at Round Valley, today, of some 70 to 80 million gallons, daily delivery capacity.

Now, we proposed, at the time that construction was being completed-- in fact, we proposed it even before the construction ever started--that if the maximum daily delivery capacity were to be taken out of Round Valley, the replenishing amounts of water would have to come from the Delaware River. There was no other source from which it could come. But, the way to do that would be to build a pipeline from the Delaware River at Frenchtown, Hunterdon County over to Round Valley, 12 miles away. Then, you could supply the maximum daily delivery capacity which could very easily take care of the needs not only of the Raritan Valley, but the northeastern counties, if necessary, in the future.

We recommended also--we did not provide any money for it at the time it was granted--that the North Jersey Water Supply Commission, a going agency, because that's the agency that was created about 50 years ago when the approval was granted for that commission to build the reservoir at Wanaque. Now, we did not put the State any farther into the raw water business except to say, "Here's the water. If you want it, you come and get it. You build your own pipeline or the North Jersey District Water Supply commission could build." We did not want to make the bond issue too large. Fortunately, because of its size, it passed without any great problem, but there was a great deal of spadework that was done to make sure that it would pass in 1958 in the general election.

Now, secondly, a few years later, the Delaware River Basin Commission was created. All of the four states concerned with that Commission, New Jersey, New York, Pennsylvania and Delaware, had to pass identical legislation to create it and Congress subsequently had to approve the compact, the federal-state compact. It was the first time in the history of the nation where the states could outvote the federal government because each state has one vote through the Governor of that state and the Secretary of the Interior represents the federal government. I sponsored the legislation in New Jersey in 1961, 20 years ago, so that we could help in our own state to create the Delaware River Basin Commission and I particularly went through the worst flood in the history of the river in 1955, in August, when over \$40 million worth of property damage was done which, translated into today's figures, would probably \$200 million or more, and when some fifty lives were lost, all of them on the tributaries of the river, it is true, but they could just as easily have been lost on the main stem of the river. I remember exactly and very vividly what happened in the course of those four days of particularly bad flooding.

Now, let me, first of all, define what I think has become a crisis because of the fact that there just hasn't been any planning. Droughts recur with regular frequency, every 15 or 20 years. The last one was in 1961 to 1965. It could have been readily foreseen by the state government that this drought would occur sometime, approximately when it has occurred or started. No one knows how long it may last and I think the committees are absolutely right that we don't want to get, someday, into another drought and be confronted with a crisis which could have been foreseen

and could have been prevented by proper planning. That's why we're in a crisis today, because that planning was not done, with the exception of the Round Valley and Spruce Run complex being constructed.

It was only a few years ago, about five to be exact, that the Governor of this state, for whom I have a lot of respect personally, but I think he's totally wrong on the water situation, came out and said that the Tock's Island project ought to be deferred indefinitely. As a result of his opposition to it, the governors of New York and Delaware followed his lead because the only governor of the four states at that time who had sufficient political courage to support that project was Governor Milton Shapp of Pennsylvania, who is not the governor of that commonwealth today. So, we're confronted with this crisis and let me now get to the specifics of some things that I don't like in this particular bond issue legislation. First of all, the project that I am particularly strongly opposed to is the Hackettstown Reservoir project which would not even be in Hackettstown at all. It would consist of the use of 400 acres of land in Allamuchy Township in Warren County, 500 acres of land in Byram Township in Sussex County and of 820 acres of land in Mount Olive Township in Morris County. This is land that is very badly needed for agricultural pursuits and for other things. The cost of it would be \$66 million. That is up \$11 million just since last Spring and only last Spring, the Capital Budgeting and Planning Commission of which I am a member knocked out the Hackettstown Reservoir proposal, which the Department endeavored to include in the \$145 million bond issue that you voted on just last November 4. It would have been a much larger bond project had the Hackettstown project been in there. We cut it down from a request by the Department of Environmental Protection of upwards of \$700 million down to the \$145 million that you ultimately voted upon. On Friday of this week, February 20, the Capital Budgeting and Planning Commission will be meeting in Trenton to make the final decision with respect to the various aspects of the proposed Bond Issue Act of 1981.

There are other reasons why I think the Hackettstown proposal is bad. You heard Mr. Schiffman indicate that it is not a water supply project at all. It is only for the purpose of putting compensating releases back into the river. Mr. Schiffman will tell you, if you question him, that no court--and that includes the United States Supreme Court--no court, no executive order and no administrative agency has ever yet required, to this day, the State of New Jersey to put any compensating releases back into the Delaware. Maybe some day, we will have to do that, but at this time, it is not required.

Thirdly, it would represent another drawdown on Lake Hapatcong. The Musconetcong River rises at Lake Hapatcong. Today, the Department of Environmental Protection--and we got word of this in meetings that I attended, among others, last Fall. Out of Lake Hapatcong would be taken 25 million gallons per day for 100 days and there was no guarantee that it would end after the 100 days. The unfortunate part of that is that that has been done through the winter, at a time when the ice on the lakes in northwestern New Jersey has been particularly thick. As that ice moves up and down, a great deal of damage is being done to the docks, the piers and the reservoirs of the property owners around the largest fresh water lake in the State. Don't be surprised if we are confronted with many damage claims in the Committee on Revenue, Finance and Appropriations, which starts work on the Governor's Budget message in just a couple of weeks, as a result of the drawdown of water in Lake Hapatcong. That drawdown which was to have occurred on a five year interval, and this would have been the year for it or rather last Fall would have been the year for it, should have been done

in the early Fall and not have been permitted to wait until Winter. Furthermore, that temporary pipeline is not temporary at all and the Department will be the first to admit that. So, if this project were to come about on the Musconetcong River, it would represent a dual takeout of water from Lake Hapatcong and the second takeout would not even be for water supply purposes at all.

In addition to that, \$10 million of this proposed \$66 million would be used to dike Waterloo Village and, as impressed as I am with Waterloo Village as a historic site, I'm not impressed to the extent of \$10 million of taxpayers' monies simply to protect it from being inundated because this proposal includes two sections: a reservoir north of Interstate 80 and one south of Interstate 80 to be interconnected with pipelines around the village.

Now, those are the reasons why I oppose the Hackettstown project and I have indicated very clearly to Commissioner English of the Department that should, by any chance--and I don't think it will be--but should, by any chance, this proposal be included in a bond issue for 1981, I shall oppose, publicly, the entire bond issue, regardless of the merits of some of the other parts of the bond issue. Now, secondly, I'm opposed to this pipeline to be extended from the Raritan to the Passaic River Valley. There is no reason to expend upwards of \$85 million on that. The Upper Raritan Watershed Association has very clearly enunciated an alternative to it. That's why Senator Ewing and his constituents from Bedminster and Peapack and Gladstone, from whom I have received many telegrams and letters also, have indicated their opposition to a pipeline which, according to the Department, should be at least 22 miles long and should cost upwards of \$85 million, because the Upper Raritan Watershed Association has indicated that a much better idea would be to have a pipeline only 7 miles long from the confluence of the North Branch and Lamington Rivers and Burnt Mills to the Dead River in Bernards Township. That would cost no more than \$10 million. In addition, it would have an elevational change of only 500 feet, as opposed to 850 feet for the route suggested by the Department and, thus, would require far less in pumping costs. Then, the construction of the Dunkers Pond Reservoir with Walkill River diversion, Dunkers Pond site being located in the Pequannock watershed with an estimated storage capacity of approximately 9 billion gallons. The interesting thing about this is that practically every reservoir proposal that I've heard of is located in the legislative district that I have the privilege of representing, either in Sussex or Warren or in the northwestern portion of Passaic County. Virtually no reservoir site is located or is proposed to be located outside of that legislative district. We are willing to share water with people who need it, but we are not willing to take it away from a growing population in our own area--and it is growing very rapidly--for a declining population in the northeastern counties. All you have to do to find out that that is a fact is to check your 1980 census population figures. Also--and this is something that Mr. Schiffman doesn't mention, but I brought it up during the six hours that we spent with the Department in our December and January meetings of the Capital Budgeting and Planning Commission reviewing with the Department their proposals so that we could get a pretty handle on them as to how we're going to vote on Friday with respect to them. The City of Newark, for some time, has been planning a housing development on top of its own watershed in West Milford Township in Passaic County. I know that because I represent West Milford Township and I have represented it for almost 8 years. We know that there has been a battle going on, the township trying to fight off the City of Newark on this particular proposal to gain money for the City of Newark, regardless of what destruction it might do to the watershed of the City. We don't have in this state a single watershed which

we can have the luxury of destroying, either in part or in whole, for money or for anybody. That's why it is important that that project be stopped. When I brought it up to the Commissioner, I got a two page reply from her which really didn't answer anything at all. Therefore, I am particularly not very happy with it. It simply says that once the litigation started by Newark against West Milford is completed the City will be in a position to resume discussions with the Department of Environmental Protection. My theory is, if the watershed is as important as the Department says it is, then, we ought to be stopping the City from going ahead with any such thing once and for all.

Now, these lakes are being taxed which, of course, are Lake Hapatcong, Lake Wawayanda, which is also in Sussex County and is state owned, and now the Department is about to tap Greenwood Lake. Frankly, I'm not sure that they have the legal authority to do so because of the fact that Greenwood Lake is half located in New York State and the other half is West Milford Township in our legislative district. I doubt very much that New York State has given its approval, unless it is getting something in return, to taking any water out of Greenwood Lake that might be damaging to New York State. They have water supply problems of their own at the moment. These lakes are just as important as economic assets to the northwestern counties of this state as are the beaches to the seashore counties of New Jersey, and that's something that the Legislature, as a whole, needs some education about because, always, the beaches have been emphasized over the lakeland areas, but as the population grows in the northwestern counties, the message is beginning to get across. They were never intended to be reservoirs. They have good water, that's true, and we're willing to share it with those that don't have enough, but we wish that they would do their planning better. I have indicated that Newark's planning is not very good and neither is Jersey City's, as far as that goes. That, of course, is the reason that Lake Hapatcong is being tapped today, to take water into the Rockaway River and into the Boonton Reservoir and then into Jersey City.

Senator Ewing mentioned the question of this \$26 million that we approved in the Legislature, in the Senate, and the Assembly did likewise just a few days ago. The point is that there hasn't been any evidence given to us that this bond issue of \$345 million, if it were to be placed on the ballot in that form--and I don't think it will be--or passed in that form--and I don't think that will happen either--is not being duplicated by some of that \$26 million which we passed upon last week. First of all, \$18 million of that came out of the sewage bond issue. Therefore, there will be \$18 million less for sewage projects than there otherwise would have been. The other \$8 million was part of a bond issue that you approved, as public question #1 last November 4, \$7.5 million for interconnection of existing reservoirs and \$.5 million for the planning and design of the Manasquan River Reservoir project. We want to be sure that there isn't duplication of monies in there.

In short, I would think, if the \$345 million bond issue were to go on the ballot in that form, it would be defeated. But, there are some good things in there, the \$10 million for the interconnection of the four existing water purveyors or suppliers that run through the Great Notch. They are Newark, Jersey City, the North Jersey District Water Supply Commission, and the Passaic Valley Water Commission. It would make it possible to get water to the areas in need of it much quicker and in greater supply than can be done today.

I have no objections to the Delanco Intake, except for its tie-in with the Hackettstown project, because the whole purpose there is to take water out

of Lake Hapatcong and down to the Delaware River so it can be taken out farther downstream at Delanco, Burlington County, ten miles northeast of Camden, to further the supply of the Camden City water wells. Just last night, incidentally, it was pointed out, as a matter of interest, that the salt water intrusion coming up the Delaware is still 32 miles south of Philadelphia, right now. So, it is not involving Camden at this point and we don't want it to. But, the releases can be better accomplished by the long range project on the river anyway than by attempting as short-term, as band-aid an approach as the Hackettstown proposal.

The question of whether or not the confluence river projects are going to be a part of the bond issue will depend largely on what the people in those areas have to say about those projects and what their legislators, in turn, reflect as to their thinking. I've been checking with my colleagues from those areas to find out exactly what they have in mind and, on the basis of that, will so vote on Friday. But, you can rest assured that I will oppose, as a member of Capital Budgeting and Planning, the Hackettstown Project and the pipeline as projected in the bills as they are now worded because I think there is a much better alternative in what the Upper Raritan Watershed Association has indicated is the answer.

Now, Round Valley and Spruce Run are an answer to the short-term, without any question. Whether or not that should be done still has to be resolved, but there is ample water in there that can be used and can still be replaced out of the South Branch of the Raritan. I might point out that the legislation says that no pumping will be done at Hamden between June 15 and September 15 of any year. We put that in the legislation initially because of the fact that that's the time of low flow in the South Branch and you could very easily, partially dry it up if pumping were to be permitted during those three months. The Department assures me that they are following that mandate of the of the legislation and not ignoring it.

Finally, as to the long-range, I think that you have to go back, we all have to go back to the Delaware River for the long-range answer to the problem. For over twenty years, I have supported with no deviation the Tocks Island project, ever since it was first proposed. It actually could have been more damaging to me as an office holder than anybody else because the full impact of it will come on Sussex and Warren Counties. But, at the same time, it represents the most sensible approach that's ever been proposed as to long-range water supply problems in New Jersey. First of all, it represents the best source of potable water anywhere in or around this state. Secondly, some 50,000 acres of land has been acquired by the federal government. The land acquisition procedures that were used were often so bad that the relative merits or demerits of the dam and the reservoir themselves were obscured by extremely bad, unfair and sometimes disgraceful land acquisition procedures, followed by the Department of the Interior and, particularly, the Army Corps of Engineers. I'm sorry I have to say that about a fellow branch of the Army, in which I spent so many years, but that happens to be the situation. The land is there. The Department of the Interior has been conducting, through the National Park Service, public hearings to figure out what to do with that land because they don't know what to do with it, now that it's there. The whole focus of the land acquisition was on the dam and the reservoir, not for recreation, but for construction of a dam and reservoir. I believe it should be modified, scaled down. It doesn't have to be nearly so large as the Army engineers proposed. It doesn't have to flood as much land. It is interesting to note that at least five gubernatorial candidates, out of approximately 20 thus far, who have taken a position, on both sides of the

fence they are, have taken a position in favor of going back to Tocks Island, publicly, a position, and looking it over. One of those is Congressman Robert Roe of the Eighth Congressional District in New Jersey, Passaic County, who overlaps part of our legislative district, who has indicated that he is going to have a series of public hearings in the northeastern states in the next few weeks of the sub-committee of which he is chairman. He specifically mentioned revival of the Tocks Island Project in his remarks just last week.

Now, in addition to that, it would be paid for by the people of the entire nation, not by the people of the State of New Jersey, because it would be funded by Congress. It is an interstate project and that's important. If this bond issue were to pass, you're not talking about \$345 million to be paid back by the people of this state over a period of thirty to thirty-five years. You're talking, even if those bonds could be marketed at 6 to 7%, and that's possible, no matter what the prime lending rate is because New Jersey has the best credit rate--and we're proud of that--of any state in the nation. We can usually market bonds at 6 to 7%, regardless of the prime lending rate. But, you're still talking about \$750 million, not \$345 million, by the time you pay off the interest. Even the editor of Analysis of Public Issues in Princeton, who is opposed to the Tocks Island Project, pointed out that the cost today would not exceed \$700 million. So, this bond issue, with the principal and interest, could cost more than the project itself on the river and the people of the whole nation would pay for it through broadening of the base, and what's wrong with that? In New Jersey, we pay more for federal taxes to get a dollar back from the federal government than any other state in the nation. We would be getting some of our money back. Some of our money went out to the Boulder or Hoover Dam and the Glen Canyon Dam on the Colorado River. Also, there is the Tennessee Valley Authority. We've constructed a lot of dams or helped to in the South and Southwest. There is no reason why other people can't help the Northeast.

Finally, you can resolve a half a dozen problems at one time, notably water supply which has always been and always will be the most important of all problems, the most serious. Secondly, there is flood control; thirdly the compensating releases to hold back the salt water intrusion, which otherwise would creep north on the Delaware River; hydro-electric power; recreation; the preservation of the oyster beds in the Delaware River Bay. All of these things can be accomplished with one dam on the river, far better than with one narrow purpose, low priority project located within the state, solely to be financed at the expense of the people of New Jersey only. All it takes to do all of that, frankly, is some political courage, nothing else, because, while I have great respect for environmentalists, and we all believe in clean air and clean water, we also have to have progress as well. The fact remains that while all of us would like to see the Delaware remain a free flowing stream, that may not always be possible. It reminds me of a young man that came up to me at the Sussex County Farm and Horse Show--and I've often told this story--about ten years ago. He didn't like my position on Tocks Island and a lot of people didn't like it. He said to me, "All we need to do to conserve water is to take fewer baths." He obviously hadn't had one for several days. So, if that represents, sometimes, the radical part of the situation, Governor Byrne himself, in his message to the Legislature just November 24, 1980, had this to say. He was discussing the Tocks Island Project at the time. "Because other smaller intra-state projects have not been part of the evaluative planning which led to the Tocks Proposal, the deferral of the Tocks Island Project in 1975 by the Delaware River Basin Commission left a void until a comprehensive planning effort could be completed." There is more to it than that, but that's why the project was deferred, primarily by

Governor Byrne and it was seconded, at that time, by the governors of New York and Delaware. So now, the time has arrived and we better start thinking in terms of long-range water supply as well as the short-term. I simply say to you that the best way to do that is to think about a scaled down version or modified version of the Tocks Island project once again and to do something about it. I intend to devote my efforts to try and do something about it, as well as to try to help, as we have tried to help, with the shorter term water supply assets that are available to us now, particularly in Round Valley and Spruce Run. That's all, Mr. Chairman. Thank you very much. (Applause) If there are any questions, I will be glad to try to answer them.

ASSEMBLYMAN SMITH: Senator Dumont, you mentioned that you are going to be voting on Friday on the final numbers and projects in this \$345 million bond issue?

SENATOR DUMONT: The \$345 million bond issue, we're supposed to vote on that finally and as you know, Assemblyman Smith, the vote of the Capital Budgeting and Planning Commission is very significant because the Legislature cannot, under our protocol, pass anything unless Capital Budgeting and Planning has first approved that, the majority of the 12 members on that Commission.

ASSEMBLYMAN SMITH: The reason I ask the question is this, we are, in our deliberations, here and previous to this, are hearing various alternatives. I'm wondering if the Capital Planning Commission is going to have the advantage of some of these alternatives at your Friday vote.

SENATOR DUMONT: Well, some people have already testified before us, both in December and January, with respect to specific portions of the bond issue, notably with respect to the so-called Hackettstown project, but also the pipeline. We haven't had much testimony, if any, with respect--well, we had a little, I guess, with respect to confluence, but very little with respect to the Manasquan River project, except that Assemblyman Van Wagner, as you probably know, is on Capital Budgeting and Planning and represents part of Monmouth County.

ASSEMBLYMAN SMITH: I just want to make sure that these other things are going to be in your thinking because we are hearing alternatives and I'm hoping that you are also going to be hearing them.

SENATOR DUMONT: As a matter of fact, I'm going to support some of the things that are in the bond issue. I want to make it clear on what things I'm not going to support.

ASSEMBLYMAN HOLLENBECK: Senator, you said that the matter of the Commission is required or is it a matter or protocol? My impression is that the protocol of it says, yes, but I'm not so sure that the approval is required.

SENATOR DUMONT: There was only one situation in the last five years--and it has been at least five to six years since Capital Budgeting and Planning was created. I wasn't on it in the beginning, but I've been on it for at least 3½ years now. There is only one situation that I can recall during my tenure on there where there was any deviation on that and that was when the Assembly, first of all, and then the Senate subsequently, included \$60 million for prison construction that was not favorably passed upon by Capital Budgeting and Planning first.

ASSEMBLYMAN HOLLENBECK: So, it is not required, but protocol.

SENATOR DUMONT: Well, it certainly is protocol, but on the other hand be a great advantage. If you are planning to sell any bond issue to the people, you had better be sure that you get all the support that you can for it because, believe me, you are going to get a lot of opposition.

ASSEMBLYMAN HOLLENBECK: I just wanted to clarify that.

SENATOR DUMONT: I just wanted to point that out, not by way of a threat or anything, but simply as a warning.

ASSEMBLYMAN HOLLENBECK: Well, that's a practicality.

SENATOR DUMONT: That's right.

SENATOR DODD: Thank you very much, Senator.

SENATOR DUMONT: Thank you, all of you.

(Hearing continued on next page)

SENATOR DODD: The Chair would like to call the Warren County Planning Director, Russell Myers.

MR. MYERS: Senator Dodd, I would like to defer in favor of our Freeholder Director, Mr. George Thompson.

SENATOR DODD: The Chair will honor that request.

G E O R G E T H O M P S O N: Senator Dodd and members of the panel, my name is George Thompson and I am the Freeholder Director in Warren County. I thank you for this opportunity to comment on this proposed legislation.

I would first like to comment on S-1610, which includes a proposal to authorize a bond issue that would provide the funds to construct a reservoir north of Hackettstown along the Musconetcong River. The Warren County Planning Board has gone on record in opposition to this reservoir unless and until it could be shown that there would be sufficient water supply within the reservoir to meet the needs of those within the service area of the Hackettstown Municipal Utilities Authority and that this water would be made available to the Hackettstown MUA on a continuous basis to meet the future needs of the area. According to the recent report from the Warren County Planning Director, there are now proposals to construct no less than 13 reservoirs in Warren County. I suggest, prior to any authorization of any funds to construct the Hackettstown Reservoir, a cost analysis of these various storage and distribution proposals be made to determine which are most appropriate, which should be discarded and, also, a priority list in order of importance should be established. We have no assurance that the Hackettstown project is of greater urgency than the Honeyrun project or the Shades of Death project, which are just two of many that are already proposed. In fact, it appears that the Hackettstown Reservoir is being considered for funding only because it has been on the drawing boards for a longer period of time, not because it is more important in terms of capacity or ability to meet the long-term needs of Warren County and the region.

I am opposed, also, to S-1611 because this legislation will, if enacted, place far too much authority in the hands of the State agency and will clearly erode those home rule concepts which the citizens of the state have cherished and protect so fiercely. If enacted, it is my perception that this could be used to override all efforts of communities to direct growth through municipal master plans and that, gentlemen, is a very serious consideration. The power to determine the extent and timing of water supply to various parts of the state is a potent force in the control of growth and not one which should be traded away by local governments. We in Warren County feel unusually fortunate to have a relatively abundant supply of high quality ground water. We feel, also, that it is our right to encourage the development of opportunities for housing, business and industry within the limits of our ground and surface water supplies. Any effort by the State of New Jersey to control the diversion of water supply by allocation to other parts of the state of water needed in Warren County to support our future growth will be regarded as an effort to undermine the home rule of the area and will be vigorously opposed.

After a review of S-1612 and S-1614, I must also oppose these bills or, at least, those sections of the legislation which will diminish the home rule power and transfer the authority to the State. Although it is recognized that certain circumstances do not require the financial resources of the State of New Jersey, it is questionable whether the broad language of these bills is necessary to accomplish

that purpose. I also wonder whether there are not sufficient legal remedies in the existing statutes and case law to meet the circumstances presented. When a small water system is unwilling or unable to meet water quality or water quantity standards, I question whether it is equitable to force an existing, financially sound company to take over and be required to upgrade an inefficient, archaic and inadequate water system.

I do recognize the urgency of this water shortage which is now facing the State, particularly in the northeastern portion, but I also understand that these circumstances have been fairly predictable based on known water consumption rates and rainfall patterns. However, I urge you not to make hasty, ill-considered decisions which would not be in the best interests of the citizens and will not, in the long run, serve to provide the greatest amount of water, at the least cost, to the customer.

I also urge, before the legislation is introduced, the New Jersey Department of Environmental Protection, Division of Water Resources, be given the opportunity to complete the Water Supply Plan, on which it has been working for more than two years and that the citizens of the State have an opportunity to review and comment on that plan at a series of public hearings throughout the State. Then, on the basis of that plan, legislation could be introduced to implement the proposals which have finally been agreed upon. Thank you very much for the opportunity to speak.

SENATOR DODD: Thank you, Mr. Thompson. Donald Martin, Mayor of Hopatcong Borough?

D O N A L D M A R T I N: Mr. Chairman, I am Donald Martin, Mayor of Hopatcong and, if I may, I would like to defer to the Mayor Maller from Mount Arlington.

SENATOR DODD: Very Good. Mayor Maller, Mayor of Mount Arlington?

R O G E R M A L L E R: Thank you Mayor Martin, Senator Dodd, panel. We heard from our DEP representative, Arnold Schiffman. He talks about the 1958 bond act which identified Round Valley and Spruce Run. In 1965, from 1961 through 1965, we come up with a similar problem where we have a drought condition. What was implemented? It was a minor pipeline which was placed in Lake Hopatcong. When I say minor, the pipeline eroded away after an expense to the State. Here we are in another drought condition and we can call it a crisis, but the crisis right now is being used to push this bond issue. I concur with Senator Ewing and with Senator Dumont that the State has not done its job in proper planning.

In 1958, when it was identified that we should be using Spruce Run and Round Valley, the alternative that they came up with was placing a pipeline in Lake Hopatcong. When that pipeline was placed in Lake Hopatcong, none of the area mayors or residents were notified as to what this pipeline would do. The mayors did come forth and requested from the State, at least, an environmental impact study so we would be able to understand what would happen to the lakeland area. We never got the assurances and it is only now that you are reading it in the paper that after 100 days the State continued to pump the water, which is approximately 25 billion gallons of water out of Lake Hopatcong. After this 100 days, again, we do not have before us an environmental study. We do not know what is going to happen to the lake area. It was mentioned by Senator Dumont about liability. We talk about the lake going down. The lake is approximately down 3½ feet now. My concern is that

we do have fire companies surrounding the lake. We do not have fire hydrants such as Jersey City or the larger cities. Our fire departments depend on lake water. It is my understanding of the statement that was made today from Mr. Schiffman that there is approximately \$128 million emergency appropriation monies available. I question the DEP. What happens in this emergency if a fire does happen and we lose lives because of the continuation of lowering the lake and our fire apparatus that we have available to us now cannot meet the demands? Do we have funds, gentlemen, to turn around now to appropriate new types of funding for a different type of fire technique? If we're considering putting all these pipelines into the lakes, I think we have to start looking at budgets and a different form of budgets because I know that our town--and we are a very small community and being controlled by the 5% cap-- does not have the capability of going out to raise the money at this point in time to maintain the health, the welfare and the safety surrounding our community.

I am truly opposed to all these bills until proper planning is done by the State. I thank you.

SENATOR DODD: I cannot apologize for the way that pipeline was done. Basic courtesy says that you should have been notified as, indeed, every municipality affected by the lake should have been. For that, I do apologize. I don't know whether our committee can do that officially, but I believe I have told you that before.

MR. MALLER: Yes, you did.

SENATOR DODD: Now, the amount of water that is being drawn down, it is our understanding that the lake itself is being replenished quicker than it was anticipated.

MR. MALLER: That's not true, sir. Because we had a rainfall--I think the way they are gauging the measurement now is up at the state park. Up at the state park I think it is down approximately 1.9 inches, which is representing somewhere around 3.5 feet. By calculation, the rainfall did represent, I think, somewhere around 3 inches and now the lake is back down again to below the 3.5 feet.

SENATOR DODD: Just so we're talking about apples to apples, as opposed to apples to oranges, Mr. Schiffman, would you reply to that?

MR. SCHIFFMAN: I don't think this would be an appropriate time to get into a debate on this.

SENATOR DODD: It is not a debate but to clarify it for this committee.

MR. SCHIFFMAN: The level has dropped around two feet. Before the pumping started, the lake was down around a foot below the highest elevation.

SENATOR DODD: Isn't there a seasonal drop to begin with?

MR. SCHIFFMAN: Normally, there is a drop in the lake. There are always seasonal ups and downs.

SENATOR DODD: Now, I also hear about the ice on the lake. Basic math would tell me that the ice would go down with the water.

MR. SCHIFFMAN: The problem that we have is to assure that the water level stays down. If the water level was to be raised suddenly, with the ice, you would get a lifting force on the docks and you could pull them out. We have tried to maintain the pumping to keep that level from rising. Normally, you do have ups and downs.

SENATOR DODD: Now, you say it is down two feet and the mayor says 3.5 feet. Are you two measuring this at different places or what?

MR. SCHIFFMAN: The amount of the withdrawal by the State is about 2 feet. The amount that it is down--I believe that is what you are referring to--

is approximately 3 feet or maybe a little more because it was down from its original level before the pumping started.

MR. MALLER: Senator, it is very obvious. Anyone looking at the lake and looking at any one of our docks, you could see that the lake is down approximately 3.5 feet at this present time. There are two types of measurements that are being done. One is--yes, obviously, up at the state park, there is a measurement guide. When the dam is opened up every five years, they have this guide, but it does not actually interpret the level of the water because we go back to measuring water by the optical eye looking across the water. The water is not like a table. When you are looking at the water, there is an up and down balance. So, if they are measuring at a high point and we're at a low point, you can see that the water is down in different areas because, again, you're not in a bathtub. They're at a high point at which they are measuring the water.

ASSEMBLYMAN HOLLENBECK: The water is at different levels in the lake?

MR. MALLER: That's not what I'm saying. I'm saying to you, when you look at the water level, there are different points at which you can look at these levels from; let's say the docks, the docks being built at a higher level. So, what you are actually looking at in certain areas, because one area is higher, if you look at the recession of the water, you will see that the water has receded greater.

ASSEMBLYMAN HOLLENBECK: I think I understand what you are saying. You are saying that where the water is not quite as deep, you will see the drop of one foot more rapidly and more visually, is that correct?

MR. MALLER: That's correct. The question that I think should be put to Mr. Schiffman is, now, at the end of the 100 days, has the State come up with an impact study because no one knows. No one has experienced in excess of 100 days that the lake was ever drawn down beyond that point.

SENATOR DODD: Let me rephrase that. Does the State have intentions of continuing?

MR. SCHIFFMAN: Yes, we have commitments and this Saturday there will be a meeting.

SENATOR DODD: But, you will meet with the representatives of the communities affected?

MR. SCHIFFMAN: Yes, it is this Saturday.

SENATOR DODD: Okay, thank you very much.

MR. MALLER: Thank you, Mr. Chairman.

ASSEMBLYMAN HOLLENBECK: Russ Diana, Deputy Mayor, Township of Roxbury?

R U S S D I A N A: Thank you. Following Senator Dumont and Roger up here, most of what I wanted to speak about has already been said. So, I won't belabor it a second time.

However, I do want to echo some of Roger's words. We in the lakeland area have said from the beginning that we are willing to share our water. We want to share our water. We recognize that there is a crisis. We just want some assurances that we're not going to be left holding the bag. I think that anyone in any area affected is going to feel that way. If you want these bills to go through, if you want them passed, you are going to have to create some credibility and I'll tell you now that the DEP has no credibility in this part of the state, as far as I'm concerned.

(Applause) We were told that we would have regular meetings to keep us informed, the four mayors or their representatives, and we would have regular meetings. We have had one meeting, one scheduled meeting since October to keep us informed. We have been told via the media, by two people who I consider competent, that they have already decided to pump beyond the 100 days and they did not come to the representatives as was promised. I said from the very beginning, as sure as God made green apples, that the DEP is going beyond 100 days and that the 100 days was a con job and I still believe that to be true.

What I wanted to say is that you have poured these millions of dollars into the hands of the same people who have exhibited such short-sightedness and incompetency thus far, if you do that, I think you are going to have a tough time getting that money. Thank you.

ASSEMBLYMAN HOLLENBECK: Thank you. Daryl Caputo, Upper Raritan Watershed Association?

D A R Y L C A P U T O: Thank you, Assemblyman Hollenbeck. I would like to refocus the issue back to the proposed Raritan-Passaic transfer. In response to Senator Dodd's request as to specific language changes you might include in the proposed \$345 million bond issue, I would like to suggest that you remove the \$85 million for construction money and instead replace it with one or two million dollars for planning and analysis for the transfer of water. I think that is the appropriate way to proceed. How many people here are here because they are concerned with this proposed pipeline?

ASSEMBLYMAN HOLLENBECK: We're not going to have that here. We're here to testify. We're not going to play that game. Just testify please.

MR. CAPUTO: The point I wanted to make is that there are a lot of people here that are concerned and we're glad that you decided to hold the hearing up here so that you can hear some of their concerns. I would like to just give you an illustration as to what we mean about 140 million gallons a day. That is a major transfer of state resources. It is approximately 1½ times the total amount of water used in Bergen County. It is four times the daily water use for the City of Trenton. It is two times the total daily water use of the City of Newark. It is 15% of the entire state's total daily water use. If you utilized tractor trailer trucks to carry this water, you would need 2,600 tractor trailer trucks. If you put those trucks together, touching one another, they would extend from this location to 42nd St. in New York City. We are talking about a major shift of state resources which shouldn't be taken lightly.

I would like to point out the fact that it appears, since this pipeline, as we have all said in the past, won't provide any water for the existing crisis, that DEP is really attempting to use the existing crisis to push this project through, without having done adequate homework. Now, the state has said that they have not chosen any specific route. That may or may be the case. I would like to refer you to a document entitled, "Water Supply Construction Projects," which was given to the Capital Budgeting and Planning Commission in the Legislature in December. The Capital Budgeting and planning Commission specifically received that on December 12. In that, on the first page, is the Raritan-Passaic pipeline. That is a description of the route of that pipeline, which will go through the Bedminster fire hills, Peapack, the Mendham area, further south in Somerset County. Now, if they haven't chosen a specific route, then why are they asking for \$85 million? Where does the \$85 million

come from? I think that the DEP will admit that it is their estimate to build this specific pipeline route which is identified in that document. So, we are really talking about routes. I'm glad the state is baking off and saying that we will use the money to evaluate different routes. However, we think it would be more prudent for the state to figure out why, when, where, how they want to build something and then come back to the Legislature and ask for the funds that will be required in order to build that. To not do so is really not good public fiscal responsibility. There are some major issues here which have to be looked at prior to committing the state to the expenditure of \$85 million for such a large-scale, massive water transfer of state resources.

I would like to articulate what some of those issues are. Perhaps we ought to be looking at in-basin solutions and when I say in-basin, I mean inside the Passaic River basin. Some of those in-basin solutions have been identified. DEP has not provided us any information or any analysis of those in-basin solutions. Those in-basin solutions could be adequate. They could meet the projected long-term need, saving Round Valley water for development and areas of need in the future.

As we pointed out before, the state's \$85 million proposal is completely inconsistent with the recommendations of the consultants who prepared the Statewide Water Supply Master Plan and I suggest that this committee investigate that and further information.

Another thing is that the state has not given us any documentation whatsoever on this pipeline. There has not been one single sheet of paper given out publicly as to the need or the justification of the pipeline. Obviously, if they are running against the grain of their consultant's own recommendations, they should be coming forth with the statistics and information to show that their consultants were wrong and that they are right. Nothing has been developed by the state.

We have to look at the impact on the Lower Raritan basin before we make a decision to transfer this amount of water out. Some of those impacts would include the loss of 140 million gallons a day of their water, perhaps increasing the level of salt water encroachment in the Lower Raritan Bay, reducing the natural recharge which occurs from the Raritan River, into the underlying aquifers which Middlesex County depends very heavily upon. What is the loss of 140 million gallons a day going to do to the economic and industrial growth of Middlesex County? In fact, we are told that Middlesex County, the Middlesex area accounts for 13% of the total state employment and 12% of the state's total population. Don't those people deserve, at least, the consideration of an analysis of what the impacts will be on them, prior to our committing \$85 million to take their water away?

We're saying that we're going to withdraw 140 million gallons a day to put into the Passaic River because the Passaic River, in essence, is all sewage now and I think the State will admit that the Passaic River is anywhere between 75% and 90% sewage. Are we going to change the Lower Raritan River, by taking out this much water, into exactly what the Passaic is now, that is, a river predominantly of sewage? That has to be really looked at.

The pipeline appears to be in direct conflict with local master plans, county master plans and even the State Development Guide Plan. Also, it appears to be in conflict with 208 planning in this area and also 201 Waste Water Treatment Facility Plans. These plans were done at tremendous public expense. If this pipeline runs counter to those plans, does that really mean that we're going to ignore all those plans and the tremendous public resources that went into the formulation

of those plans? At least, we're saying that they ought to be considered before construction money is given and the state is committed into a course of action.

Also, another factor that we haven't really identified is the engineering fact that if you put 140 million gallons a day into the Passaic River, you're not going to get 140 million gallons a day out in potalbe water supply and usage. Our engineers--and I think the state engineers would agree--think that, because of dilution factors and other factors, you're lucky if you're going to pull out 70 million gallons a day. What's going to happen to the other 70 million gallons? It is going to go out to the ocean. Through this system, we stand to lose 70 million gallons a day of pure Raritan system water, much of it from Spruce Run and Round Valley, out into the ocean. That is a valuable resource which we cannot afford to waste to the order of 70 million gallons a day. This, clearly, ought to be evaluated before construction monies are given and the state is committed to such a transfer. We ought to wait, as I said before, until the completion of the Statewide Water Supply Master Plan. It is scheduled to be completed in six months. That, obviously, ought to be completed and we can use that as the basis for making our long-term water resource decisions.

What about the cost efficiency of this proposed pipeline? The question is: Can that much water be delivered in a cost efficient manner? We don't know because we haven't seen any documentation and done the study. The state is saying, "Give us the construction money and we'll do the studies." We're saying, "We'll give you money because the Legislature ought to give the DEP money to do the studies" and based upon the studies, then they ought to come back to the Legislature with the exact request, the amount of dollars it would take to build what they suggest ought to be built.

Are there other alternatives which are more cost efficient? We're talking about moving 140 million gallons a day. What is going to be the eventual price per gallon as a result of building this pipeline? Are there more cost efficient solutions? That ought to be looked at. You ought to look at the question of who is going to pay for this and who is going to benefit. The State's taxpayers are going to pay for this and obviously everybody is going to benefit, but who is going to benefit directly? It is obviously going to be the water purveyors in the Passaic River Basin who are going to utilize this as a source of water and they are going to sell it to the people throughout the Passaic Basin area. In essence, they are going to pay twice. They are going to pay once as a result of paying off the bond issue for the construction of the project and, two, they are going to pay as a result of paying to the water companies for the delivery of water. That ought to be investigated.

Now, as to the reason for the pipeline, we're somewhat confused. The consultant said that they needed the Round Valley water for future development throughout the western Morris County area. The State came back with a pipeline proposal included in the bond issue, the one that we're talking about now, that we're going to need 140 million gallons a day for the purpose of augmenting the low flow in the Passaic River Basin. The State is also talking about an emergency pipeline up 287 to put water into the Boonton Reservoir, which would put it directly into the distribution system. The question is, what does the State want to do? Do they want to put water into a distribution system? Do they want to augment low flow in the Passaic? I don't believe the State knows what they want to do and the conflicting reports we get out of Trenton clearly indicate that. Once again, it is premature to give construction monies when the State doesn't even know the purpose of the pipeline.

What about the question of terminal storage? 140 million gallons a day, as we said, is a lot of water. It is a pipe nine feet high. They propose terminating this pipeline, as they have indicated in their description of the route, into the headwaters of the Whippany River. Now, that would be fine providing that there was some kind of storage mechanism up there to hold that much water. There is the proposed Washington Valley Reservoir. However, remember that that project is not funded. There is no request for funding for that project on the horizon. How are they going to discharge this amount of water? The Whippany River, into which they propose discharging this water, is two feet wide in the hills of Mendham. There is no conceivable way that they could put this project in without having a storage capability and as we see it, there are no funds being requested for that.

What about the energy costs? They certainly ought to be investigated and, in fact, there will be an engineer who will testify a little later on as to what they estimate some of the pumping costs will be to move that much water and I would just like to highlight that. They estimate that, if the State goes along the route that they defined in the report to the Capital Budget and Planning Commission, that when the pipeline is in operation, it will cost \$575,000 per month to pump that much water. When the pipeline is not in operation, when it is not being used, assuming that it is used at least once a year, then the energy costs, because they have to allow the electric company to have the excess capacity to provide energy when it is needed, the cost is going to be on the order of \$94,000 per month. Clearly, this ought to be evaluated in light of non-pipeline alternatives. There has been no such evaluation, no documentation on any of these issues. How can any legislator agree to give them \$85 million for construction money without evaluating these issues.

Then, the question becomes: Why is the State so committed to building a pipeline without doing their homework--and indeed they are committed? I would just like to speculate on what some of those reasons might be. Those reasons may be political.

140 million gallons of water a day into the Passaic system is a tremendous amount of water. It is going to significantly lower treatment costs throughout the Passaic Basin. When I say treatment costs, I mean three categories of treatment costs. Number one is treating a potable water supply, taking the water out of the river, treating it, giving it to people as a source of water. You would reduce that expense. Number two is treating sewage and discharging sewage into the stream. It would reduce their expense significantly because those plants will have to go to a higher level of treatment and I might add, as the Passaic River Coalition has indicated, the costs of ongoing projects now in the Passaic River Basin for waste water treatment is \$350 million. We're talking about big potatoes here. The other thing has to do with the industrial discharges and the pre-treatment program which the State is scheduled to come out with at any time now, which requires industry to pre-treat their waste. Now, those costs would be reduced significantly as a result of increasing the flow into the Passaic River Basin. Could it be that we want to put water into the Passaic River Basin to reduce treatment costs because this is a gubernatorial election year? Candidates from that area may want to solidify political support from that area. It is a good way of doing it. When you take water out of the Raritan and put it into the Passaic, you are lowering the amount of water in the Raritan Basin and you are increasing, as a result of reducing flows, treatment costs in the Raritan Basin. All of their costs are going to go up significantly. We have been informed that the North Jersey District Water Supply Commission has a pipeline right-of-way secured from

two bridges on the Passaic River into the Hackensack Meadowlands. Now, the question becomes: Why hasn't the Hackensack Meadowlands developed more rapidly in the past? Well, the answer is clearly that they haven't had enough water to make ice cubes up there. You can't even get a vodka martini on the rocks because they don't have enough water to make the ice cubes. Could some of this water potentially be diverted off to support the development of the Hackensack Meadowlands? That is a possibility. There are some other reasons which we will articulate later.

The question that I have is: How can any legislator, particularly in an election year, justify an \$85 million giveaway program of public funds based solely on--as DEP themselves will admit--a desktop analysis without any real documentation for a project that is so hastily and ill conceived? Such an action would be a violation of the public trust vested in our legislators by the taxpayers of the State of New Jersey. We recommend no construction money, but give DEP planning money. Thank you.

ASSEMBLYMAN HOLLENBECK: I would like to ask some questions. Where are the 140 million gallons a day now from Spruce Run going? Where is that water now going?

MR. CAPUTO: I think DEP can give you an answer on that.

ASSEMBLYMAN HOLLENBECK: I want you to give me the answer because you know what the answer is.

MR. CAPUTO: There is some water from Round Valley being released into the Raritan System which Elizabethtown Water Company picks up and distributes.

ASSEMBLYMAN HOLLENBECK: If there is an excess capacity in those reservoirs now, where is that water going?

MR. CAPUTO: That water isn't going anywhere. It is staying in the reservoir.

ASSEMBLYMAN HOLLENBECK: No. The reservoirs are now at capacity. If they're at capacity, where does the water go?

MR. CAPUTO: If the reservoirs are filled, it bypasses the reservoir and goes downstream.

ASSEMBLYMAN HOLLENBECK: So, we do have excess capacity now in these reservoirs?

MR. CAPUTO: That's correct.

ASSEMBLYMAN HOLLENBECK: So, the water is going out to sea and out to the Raritan Bay?

MR. CAPUTO: Some of it, that's correct.

ASSEMBLYMAN HOLLENBECK: The population of the area that they were trying to bring the water to, you know what it is in this particular area, do you know what it is there?

MR. CAPUTO: Well, it is probably the majority of the population of the State of New Jersey.

ASSEMBLYMAN HOLLENBECK: It is 40% of the population with 55% of the employment. Now, the question is here, under those kind of specifics, if we have an excess of water going from one basin and going out to sea in a period where we can lose the employment, the majority of the employment of the State could be affected, if we could transfer that water from one basin to the other without impacting the initial basin, would it be wise?

MR. CAPUTO: We don't know whether or not it would impact the basin. I think it would be wise if we had the information as to whether or not it would impact

the first basin, but we don't have that information.

ASSEMBLYMAN HOLLENBECK: But, we know right now that there is an excess capacity in that particular basin?

MR. CAPUTO: That's correct.

ASSEMBLYMAN HOLLENBECK: Now, are we talking about 140 million gallons a day or are we really talking somewhere around 56 million gallons a day?

MR. CAPUTO: No, the state proposal is for 140 million gallons a day.

ASSEMBLYMAN HOLLENBECK: Well, that's the maximum capacity. I asked the question whether it would be 100% and he said that most of the time it would be 40% of the flow.

MR. CAPUTO: Well, that's the time period for running the pipe. When you have a nine foot diameter pipe, you have to push through a head of nine feet of water. Otherwise, you are pushing air. You can't push the pipe being only 40% full. You have to push the pipe being fully full.

ASSEMBLYMAN HOLLENBECK: It's not based on fullness of the pipe. Isn't it based on the pressure?

MR. CAPUTO: That is correct, but you still cannot push a partially pipeline with water.

ASSEMBLYMAN HOLLENBECK: Because that is a pressure main. That's not a gravity feed main, is that correct?

MR. CAPUTO: That's correct.

ASSEMBLYMAN HOLLENBECK: So, in other words, the pipe would be filled 100% of the time, but the head being pumped would be reduced, is that correct?

MR. CAPUTO: That could be correct.

ASSEMBLYMAN HOLLENBECK: I'm just trying to get everything straight here so we get our information straight. So, actually, if the water was put into the Upper Passaic somewhere and gone down and water was taken out, it was water that was just actually being converted around and it still ends up in the Raritan Bay, is that correct?

MR. CAPUTO: It would go down that direction toward the Atlantic Ocean, that's correct.

ASSEMBLYMAN HOLLENBECK: But, if we divert it, we give the potential of saving some employment in a particular area?

MR. CAPUTO: Yes, but this pipeline is not going to provide any water for the immediate crisis.

ASSEMBLYMAN HOLLENBECK: But, I'm talking long-range now.

MR. CAPUTO: In terms of long-range projects, let's get the data first. Let's find out what the impacts will be on both basins before we commit the State to building the project.

ASSEMBLYMAN HOLLENBECK: The question dealing with the original Round Valley and Spruce Run was that everyone anticipated that they would have to have a line off of them to move from basin to basin.

MR. CAPUTO: Absolutely, and the first suggestion was that a pipeline be built from Round Valley following Routes 22 and 78 into the Newark area.

ASSEMBLYMAN HOLLENBECK: So, you concur that there should be some water moved from basin to basin?

MR. CAPUTO: The two reservoirs were built with public funds to meet the water needs of the citizens of New Jersey and, in fact, we have no problem with that being done.

ASSEMBLYMAN HOLLENBECK: The people who get water from Round Valley and Spruce Run, do they pay for it?

MR. CAPUTO: Customers of Elizabethtown, they certainly do.

ASSEMBLYMAN HOLLENBECK: So, in other words, if a line was built also delivering water from Round Valley and Spruce Run and it goes up the Passaic River Basin and the people from there take the water from it, they would also be paying for that water?

MR. CAPUTO: That is absolutely correct. I think that is a key pricing question that ought to be addressed.

ASSEMBLYMAN HOLLENBECK: So, the statement that we're paying here for what they're going to be using down there is not a correct statement.

MR. CAPUTO: Not entirely. I think the question of who benefits and who pays has not been addressed and ought to be addressed.

ASSEMBLYMAN HOLLENBECK: So, in other words, the people who will benefit from it will also pay for it.

MR. CAPUTO: Of course. You see, your questions are key questions. The fact of the matter is that the State has not developed answers to these questions and other questions. Therefore, it is premature to give \$85 million for the construction of a pipeline without having the answers to these questions.

ASSEMBLYMAN HOLLENBECK: That's why we're having a hearing. Thank you.

MR. CAPUTO: Thank you. (Applause)

SENATOR DODD: I would like to call John Smith from the Borough of Peapack and Gladstone.

J O H N C. S M I T H: Thank you very much, Senator Dodd. We are certainly having a good time here. At this particular point, there have been so many points made and questions raised that actually what I have is a small collection of questions that have already been covered in part. I know that the panel is as confused as the audience is right now.

SENATOR DODD: We just appear that way.

MR. SMITH: I think we should give the panel a chance to ask the audience some questions as well. Last summer, I did have the opportunity visit Round Valley and Spruce Run Reservoirs just to see for myself what was going on. This was toward the end of the summer and I did talk to some of the people in the offices down there and it was clear that in a matter of about two months, the water level had been lowered about twenty feet. Now, these are just rough, rough figures that I've been given. It would seem--and this is based on taking out approximately 60 million gallons a day--this water was used partly as a request to fill up what was the empty river flowing further south toward the Elizabethtown water basin. Now, I don't think I have any argument that in normal rainfall conditions the reservoir will have a surplus of water. However, I do feel that in all my conversations with the watershed association and other interested persons, we do need to be shown that this is truly the case. It is my understanding that Round Valley was originally built as a recreation area and never really built as a reservoir. I think we're all led to believe that it is. Actually, as you know, it is a reservoir that has been built up in the air. There are no rivers or streams flowing into it. It is simply depending upon pipelines to supply it with water. It was very interesting for me to learn that the water that is there now has been in the reservoir for the last fifteen years, since it was originally built, and it was only this past summer, for the first time, that any water has been taken out of there.

Now, I see Senator Dumont shaking his head. I'm not fully familiar with it.

SENATOR DODD: Mr. Smith, Round Valley and Spruce Run were built as reservoirs, not recreation facilities.

MR. SMITH: I'm not referring to Spruce Run. I'm referring only to Round Valley. It was just my understanding that it was more a recreational use than a reservoir use. I stand corrected.

I think my main reason for wanting to comment is the same as Daryl Caputo's remarks that we simply don't have the information. When I say we, I mean the people in the river basin of the Raritan River. It seems like a very easy solution to spot a large lump of water, you might say, and another dry spot and very simply draw a straight line across the state and put a pipeline in that general direction. It does seem to me that water is a precious commodity right now and, therefore, everyone is going to be grabbing for the little bit of water that's left. I'm rather concerned about the supplies further downstream on the Raritan and what this will mean if some of their potential water supply is tapped.

It is interesting to see, also, when you consider the Raritan River, it has a flow of between 10 or 12 million gallons a day, I believe, on a normal day and the pipeline that we're talking about is the equivalent of about ten or twelve Raritan Rivers. It is one thing to run water through a pipe, but it is another thing to empty it into an existing tributary of a small basin. It would, in effect, create a flood condition and it would really rip the devil out of any river basin or river route. So, the problem of moving this water and then storing it at the upper end is definitely a major concern of mine.

From a practical standpoint, I'm also concerned about the proposed route of the pipeline, going along the Raritan River, exactly where, we still do not know. However, if and when we have a flood such as Doria, any newly constructed pipeline or wide swath that would have been cut through the river route would be virtually destroyed by heavy water. Now, I live on the Raritan River and I'm fully aware of what Doria did to the river and when I think of having a fifty foot right of way, removing the trees, and constructing the pipe, it would seem only logical that the pipe would be literally washed out and left hanging. It is difficult to understand how such a pipe would be built and it would actually last. So, it is really a matter of destroying the river versus supplying the water. I would like to take the position of not being against moving water, if water is available, to the Passaic and the Whippany River Basin. It is just a matter of how and where we go.

I would like to know what Senator Dumont's better suggestion than the 8 to 10 mile pipeline would be and whether or not that would have been following the alignment of Route 287. This is a suggestion that I thought of at one particular time, bringing water from the 78-287 intersection, following Route 287 on up to just prior to Morristown and somehow getting it up over the same hill and ending up in the same area as this \$85 million pipeline. It would be about 2/3 the length and, technically, it should be about 2/3 the cost. I would like to know if the Department of Environmental Protection has given that some weight.

The only other thing I would like to mention would be just my personal inner frustration. My own business is a landscape architect and my business is preserving and conserving land and beautifying the land. I find it very frustrating that the Department of Environmental Protection has in its responsibilities, one, to protect our natural rivers and open lands, including green acres and open space, and, at the same time is charged with the responsibility of moving water. Obviously, they have

an inner conflict that they have to wrestle with. So, I'm sure that within their own ranks there is a lot of confusion.

These are some of the things that I would like to see addressed as well. That's about all I have to say. Thank you.

SENATOR DODD: I would like to call on Mike McCormack, Chester Township Environmental Commissioner.

M I C H A E L M C C O R M A C K: Thank you, Senator Dodd. With regard to the Raritan-Passaic pipeline, the Environmental Protection Commission of Chester Township feels that it is inappropriate to commit \$85 million for design and construction of a pipeline of questionable value, unspecified route, and indeterminable environmental impact. With the current drought situation in mind, we would support a project that could be quickly implemented and would alleviate the water shortage in the areas that are really affected. The pipeline that is proposed here would appear to have little or no such value. In that regard, we recommend that the State be funded to study the impacts and costs of the various alignments and designs so that they can come up with a plan that will attract the support of the people for adequate construction funding. Thank you.

SENATOR DODD: Mr. McCormack, do you have an alternate route? I meant to ask Mr. Smith this before he left. Do you have a better plan, which, again, is the criteria for us being here? I'm assuming that the Engineering Division within the Department of Environmental Protection, giving the devil his due, that they have done some homework and have some degree of expertise in this. Now, they have proposed a rough area. There is no specific route. But, you and Mr. Smith and others are going on the assumption that no forethought has been given to this and that the pipeline will be laid willy nilly and with complete disregard for any environmental considerations. Do you have any answer to that?

MR. McCORMACK: Well, a number of possible routes have been suggested, even one that would be much shorter in length than the one that is proposed for \$85 million and, as far as routes go, we don't object necessarily to one going through Chester Township, in particular, if it was shown to be of value and to be well worth the price and if it would benefit the people at one end and not harm the people at the other end of the pipeline. But, the major point is that the case for the State really hasn't been proven. What they are asking for is money in order to go back and then make a case. They haven't made a case for the money yet.

SENATOR DODD: Well, going on the basic assumption that we do have to do something, again, these bills are twenty years old. If we had done these things twenty years ago, we wouldn't be sitting here today. If it rains from now until June, will we then be here twenty years from now discussing virtually the same bills?

MR. McCORMACK: Right. We're in the awkward situation now of dealing with twenty years of poor planning and trying to do something in a very short period of time. I'm not sure how efficient DEP or the rest of the State government can be, but certainly, I think something could be said for allocating a smaller amount, maybe a few million dollars, for further planning of the route of the pipeline, to see if it can be well laid out so that when you come back to the people, there is a definite plan.

SENATOR DODD: We did, last week, allocate the better part of \$26 million, a small part of which will be used for actual design, engineering and planning of the proposed route. But, you do agree that there is a need for a route somewhere,

and I would certainly agree with you that it would seem to be cheaper if there was a shorter run, again, with elevations taken into consideration and with energy needed to pump it upgrade; that costs money, as opposed to gravity feed, which is the ideal situation. I'm assuming--and maybe I'm assuming too much--that they will take those factors into consideration, that taking the longer route, the more expensive route, the \$85 million route, if there would a better way, a shortcut, logic would assume that they would do that.

MR. McCORMACK: Well, I'm not quite as confident of them as you are.

Thank you.

SENATOR DODD: Would you identify yourself please?

MR. GIMELLO: Yes. I'm Rich Gimello and I work for the Department of Environmental Protection. Senator, I can't say it any better than you've said it yourself. We've stressed, since the first meeting on this package of legislation, that we weren't tied to a route. The peculiarities of having to go before the Capital Budget and Planning Commission and having to have some sort of scenario to back up the request for money has led people to believe that we're tied to a route and that is just not the case. Mr. Schiffman and other members of the Division of Water Resources have tried, as the Senator did just recently, to stress that since these hearings have begun, not only Mr. Caputo and the water supply coalition and various watershed associations, but others also, have given us alternatives which will be and are presently being examined. I think it unique, Senator, that wherever the route is proposed, there will be a group in opposition today. The job of having to decide lies with the State. They are charged with that and that is what we are concerned with and it is fair to say that they are not going to do it in a willy nilly fashion. These hearings, I think, will assure that at least the routes that are presented here as alternatives to the DEP will be examined.

SENATOR DODD: Fifteen years ago, when I first went into the Legislature, I was in the Assembly at the time, they had just completed plans for the routing of Route 280 which took approximately \$100 million worth of ratables out of a part of my district, with no compensation. I, along with all of my constituents in the three towns, we tried to scheme and connive and think of all different routes that Route 280 should go, and we came out with great reasons. They were perfectly logical to us as to why it shouldn't go through Montclair or why it shouldn't go through Irvington, except that it was a straight line and it happened to go through my three towns. We didn't like it, but that's where it went. Now, if we could apply similar logic to this pipeline, what we're looking for today and throughout these hearings and our future deliberations as a joint committee will be for people to come up with very specific, graphic, intelligent, well thought out presentations of why the pipeline should not go through Chester or Mendham or any other town.

MEMBER OF AUDIENCE: At least one member of this audience has such a proposal, a concrete proposal to make. I'm on the list to speak, along toward the end. If you want to bring me on now, I will say what I have to say and save us a lot of time.

SENATOR DODD: We have some basic courtesies that we still observe, sir. We will go in order. I would like to call on Ernest Gere, National Association of Water Companies, New Jersey Section.

W A L T E R B R A D Y: Mr. Chairman and members of the Committee, Mr. Gere is unfortunately sick and can't make it this morning. So, I've been asked to stand in his place. My name is Walter Brady, Legislative Chairman, New Jersey Chapter of the National Association of Water Companies. The National Association of Water Companies serves about 3 million people in the State of New Jersey and consists of 23 major companies.

This proposed legislation are comprehensive and extensive proposals concerning the water supply for the State of New Jersey, as well as the regulation of the municipal and private companies which are involved in water supply. Since the changes that are recommended are substantial and far-reaching, it is important that all of the proposals be given a detailed and orderly review in order to insure that they do not create more problems than they solve. We note that although the present water shortage highlights the need for serious consideration of water legislation, these proposals would not result in any meaningful addition to the State's water supply for at least another three to five years. Therefore, knowing that the proposed legislation will not solve today's crisis, the review of these proposals should be completed in an atmosphere of orderliness and completeness. The present crisis can be minimized by inter-connections, restrictions and other State actions which are presently in progress.

In addition to the detailed comments which have been made by some of our member companies, the New Jersey Chapter has the following comments:

On Senate bill 1610, the Department of Environmental Protection has commissioned the preparation of a statewide water supply master plan, which is in the final steps of preparation. This water supply has been formulated at considerable public expense with input from all interested parties in water supply throughout the State. The Legislature should have the opportunity to study the conclusions of this master plan during the course of considering this proposed legislation, since there are several areas which differ in considerable measure and it is in the public interest that the legislation and the master plan be reconciled. Also, payments to water systems should be in the form of loans rather than grants since all utilities should be self-sustaining and a loan basis would be the only fair and equitable way for this fund to operate.

Senate bill 1611--This legislation as drafted allow the Department to impose limitations, modifications and conditions upon existing diversion rights, but does not set reasonable standards for such action. Also, there is no provision for compensation for a loss or dimunition of these existing diversion rights.

Senate bill 1612--It should be clear that a water supply utility is solely for the purpose of supplying water wholesale for resale, and that it would be in the retail water business. The utility should be limited to large water supply projects which are beyond the means of other water service entities in the State, either public or private. This utility should also operate under meaningful supervision of the Legislature and the Executive branch of the State government.

Senate bill 1613--This legislation palces all public water suppliers under the supervision of the Board of Public Utilities. This proposal would place unreasonable staffing demands upon the Board of Public Utilities which would require substanti funds to administer. It would also require additional members of the staff of the Department of the Public Advocate, Division of Rate Counsel, as well as increase the requirements for the staff of the Office of Administrative Law. All of these

increased staffing requirements would have to be paid for by the water consumers and/or the taxpayers. A meaningful analysis should be made to determine whether this legislation is necessary in view of the fact that in many instances the water rates within a municipality are controlled by the municipal governing body, which is elected by the voters who are also the water consumers. Presently, those outside the municipal boundaries, who do not have such political controls are already protected, in most cases, by the rate regulation of the Board of Public Utilities. Regulation should not be imposed where it is not required by the public interest.

Senate bill 1614--There are constitutional problems with this legislation as well as regulatory problems of insuring that the acquiring entity is compensated promptly for the acquisition and operating expenses in its rates.

This proposed legislation is of recent introduction, and there is considerable detailed comment that could be made if time allowed. We understand that some of our member companies of the New Jersey Chapter will participate in that detailed review before your committees and the Legislature. Certainly legislation as comprehensive as proposed deserves thoughtful, careful and orderly review to see that it presents the best possible solutions to New Jersey's water supply problems.

The investor-owned water companies of the State of New Jersey have in the past provided superior service to its customers in normal times, and in many instances, extraordinary service in times of crisis. The member companies of the New Jersey Chapter of the National Association of Water Companies stand ready to continue to render safe, adequate and proper water service to their customers and to assist, in whatever way may be appropriate, the Legislature of the State of New Jersey in formulating the appropriate legislation for the management of the long-term water supply problems of the State. I would like to thank you for the opportunity to speak to the Joint Committee.

SENATOR DODD: The testimony that was brought out at an earlier hearing regarding the municipally owned water companies, especially the urban municipally owned water supply companies, it was likened to rewarding them for their inefficiency or for lack of reinvestment in capital equipment.

MR. BRADY: Well, from what I understand--and I'm not an expert on it--we feel that if you put municipalities under the State Board of Public Utilities that the staffing demands would be tremendous.

SENATOR DODD: What about some type--and I'm not pre-supposing what our final disposition would be on this--but, what sort of coordination can we impose on municipalities that do not maintain and upgrade their systems, as the private companies do for the profit incentive, of course?

MR. BRADY: In my opinion, if a municipality or a small investor-owned water company cannot maintain an adequate service, someone has to take the brunt of that, but the person or entity taking the brunt of that has to have compensation for that.

ASSEMBLYMAN HOLLENBECK: Just to go a little further on that, because this is one of the key questions on this, where you have a small municipal utility dealing with water that is an old system that does not finance through its user rates adequate to create sinking funds, etc., for the maintenance and capital improvements to its system, how do we have control that they do that so that we don't waste water and so we can guarantee that there will be a good supply to those customers?

MR. BRADY: Mr. Hollenbeck, I don't have that answer. I don't know who here has it.

ASSEMBLYMAN HOLLENBECK: You see, that's one of the key questions. You see, if it goes to the Public Utility Commission, they, within setting their allowable rates, could set up then the funding mechanism to make sure that their rates do cover those circumstances. Now, I can understand the reluctance of a lot of municipal companies not wanting to do it, but what is the mode that we can get to guarantee that they will do it? Now, there could be ways, of course, dealing through the local governments in this state also, through the budget procedures. But, you're trying to find a mode so that we guarantee that we have that such as we have in the large city systems. We've heard testimony about as high as 30% and 40% leakage and yet, they have no monies appropriated to repair that leakage and the water is being wasted.

SENATOR DODD: And, the water rates have been kept artificially low.

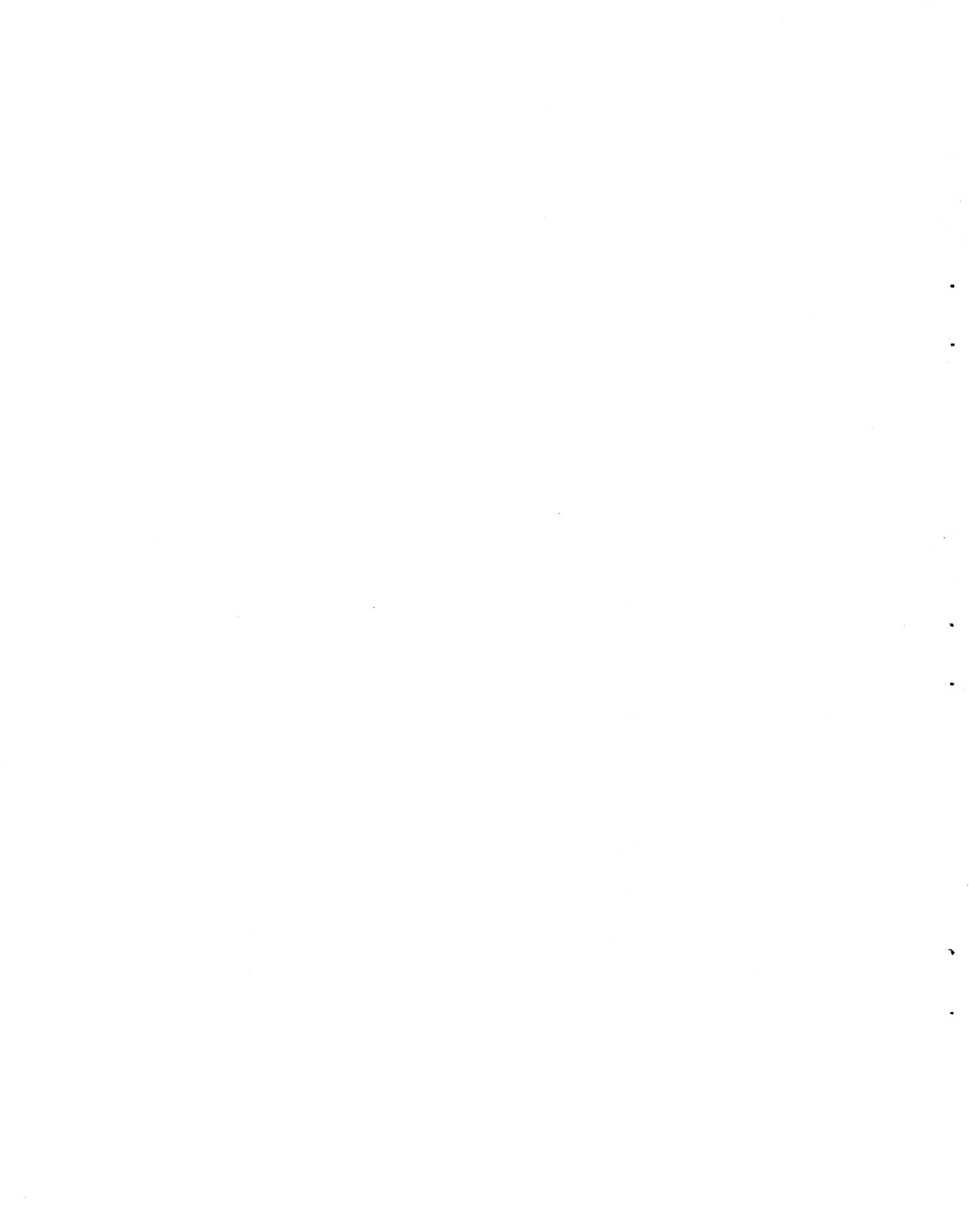
MR. BRADY: Well, our Association is composed of investor-owned water companies. As such, we are governed by the Board of Public Utilities and, as such, have to supply adequate and good service to our customers. Also, we have to supply the rates that will cover that.

SENATOR DODD: If you can bring back one message to your members, somewhere we are trying to get the investor owned and the municipally owned to interface. That is our problem. Now, I'm not saying that the bill that we are considering will solve that, especially with the PUC and all the attendant problems that go along with that. But, somehow, perhaps from private industry, which we have a great deal of faith in, more faith, in many cases, than the public sector, we have to come up with a workable solution where the private and public can work together.

MR. BRADY: Well, in past hearings, two that I have recently attended, members of our Association from Hackensack Water Company and Elizabethtown Water Company and Middlesex Water Company, they have spoken before this committee and I'm sure, if there is any way that our Association or member companies can help, we will. Thank you.

SENATOR DODD: Thank you, Mr. Brady. We will now recess for approximately one hour for lunch, ladies and gentlemen.

(at which time a lunch recess was taken)



AFTER LUNCH

SENATOR DODD: The Chair would like to call Jim Gaffney. We would also like to make note that Congresswoman Millicent Fenwick has a representative in the audience, and she has sent us correspondence regarding her thoughts on the matter. I would just like that put in the record.

J A M E S G A F F N E Y: Senator Dodd, Senator Hollenbeck, members of the Joint Committee, my name is Jim Gaffney, and I am here today as Chairman of the New Jersey Water Supply Coalition to present the viewpoint of 14 environmental organizations on the proposed 1981 Water Supply Bond Act.

In earlier public meetings held by the two committees, representatives of the Coalition have recommended that any legislation dealing with the chronic institutional and regulatory deficiencies of water supply management, as well as projected deficits not of an emergency nature, should be based on an adopted water resources management plan. The revised Summary of Consultants' Findings distributed at your February 10th meeting in Trenton is not an adopted plan. To qualify as such, it must be reviewed by the public, revised by the DEP, with a rationale provided to explain changes, and reviewed again by the public. The Consultants' Findings provide a wealth of information about water supply management, in theory and in practice in New Jersey. Passing the legislation prior to adoption of a plan which has taken three years and millions of dollars to create would debase the process and make a mockery of any plan adopted "after the fact."

The Coalition has completed a review of all five bills, introduced by the Governor last Fall. Should your two committees decide to act on the legislation prior to passage of the master plan, we would be happy to furnish you with copies of our comments.

The 1981 Water Supply Bond Act contains a package of construction projects which, although well intentioned, are exemplary of the piecemeal approach to water supply problems which has caused trouble for the state in the past. In the haste to construct dams, build pipelines, and install booster pumps, it seems we have forgotten some basic principles of managing our natural water systems. We have allowed engineering solutions, readily visible to the eye, to blind us to the importance of nonstructural measures to insure adequate supplies of water into the future. We have rooted our attention on surface water systems, forgetting the ground water so important to a sizeable portion of our population and essential for maintaining flows in streams and rivers during dry periods. We have forgotten that underground aquifers are a storage source of water every bit as important as reservoirs. Yet, the Bond Act provides no funding for protecting the vital land areas whose soil and geologic conditions allow the aquifers to be replenished in times of rain. When we allow these recharge areas to be built upon and paved over, we effectively block the replenishment process by channeling water into storm drains, streams, and rivers, where it courses into the ocean. At this point, it becomes economically unrecoverable.

To pass the Water Supply Bond Act prior to adoption of a statewide water resources management plan is to run the risk that the funds may underwrite projects that are not needed, inordinately expensive, and environmentally destructive. Comments on the specific proposals are as follows:

Multiple Exchange Facility at Great Notch -- This project to allow transfers of water among purveyors who have experienced the most acute water shortages was

recommended in the Consultants' Findings and is long overdue. This project should proceed, we believe, if necessary by emergency appropriations, to forestall adverse consequences of a prolonged drought.

Repair of Pipes, pumps and Interconnections -- Unaccounted for water accounts for anywhere between twenty to fifty percent of the total water which passes through the aging systems of major water purveyors in the north. Loans should be made available to water companies to repair leaks, instal or repair meters, and improve interconnections. A payback provision is essential, as state funds should be used to subsidize private enterprise which has failed to maintain its capital investment.

The Delanco Intake -- The well contamination problem in the Camden area is very real and well documented. An alternative source of water is needed. Whether Delaware river water is the best solution depends on the answers to some important questions:

First, are Camden area residents willing to pay the bill for constructing the water treatment plant, which is not part of the Bond Act? Can less expensive water be obtained by tapping into the lines of the City of Philadelphia?

Second, will that area's waste treatment plants continue to provide the return flows required by the Delaware River Basin Commission, and can the effluent be used to help recharge the ground water?

It should be noted that the Delanco project is not related to the Hackettstown reservoir project, although both utilize the Delaware River. As the Intake will not constitute a consumptive use, its flows need not be compensated by a flow augmentation project elsewhere in New Jersey.

Hackettstown Reservoir -- The Coalition supports, in concept, the construction of a surface water impoundment in New Jersey to augment flows on the Delaware. Although the 1954 Supreme Court decision does not require construction of a project by New Jersey, good faith negotiations among the four states on the Commission leave no doubt that New Jersey must in some way compensate for its 100 million gallon a day allocation from the River. Thus far, we have not lived up to our obligations. Failure to do so may jeopardize the existing allotment as well as foreclose any possibility of additional withdrawals at some future date.

The Coalition is unalterably opposed to the construction of Tocks Island Dam, viewed by some as an "easy out" of our water supply dilemma. Tocks Island Dam is not a viable solution to our chronic water shortages. Arguments raised against the project in 1975 retain validity today:

1. The project would be more expensive for New Jersey than the combined nine in-state projects proposed as an alternative. New Jersey's bill for Tocks Island in 1975 dollars came to \$321.5 million. The nine alternative projects would cost \$206.5 million in 1975 dollars. It should be noted that the bill for Tocks does not include the cost of building highways to the reservoir which would be used by visitors in the pursuit of recreation.

2. Construction of Tocks Island Dam would bring irreversible change to a highly prized portion of the State, thereby incurring environmental costs that far exceed those of the nine alternative projects.

3. Premature construction of the dam at this time would likely lead to "pressure for sales of much of the supply to consumptive users in the Delaware River Basin, leaving little or nothing for diversion to Northeast New Jersey."

There is therefore a question as to whether the northeastern part of the state would actually benefit from the water supply that dam would provide.

With Tocks we run a serious risk of overbuilding capacity, perhaps of inducing growth in more rural portions of the state, and of burdening ourselves with costs that are greater than need be.

The Manasquan Reservoir project -- A surface water impoundment appears to be the best solution to Monmouth County's emerging water shortage as once reliable ground water supplies continue to be drawn down to alarmingly low levels. However, Monmouth County's problems, and this solution to the problems is a textbook example of a piecemeal approach that ignores a larger pervasive problem in that area. The over-stressed ground water sources require replenishment. This will not occur simply by shifting consumption to a surface water source. There is no plan in effect to protect important recharge areas in the upper reaches of the Manasquan River system. At this time, a proposed treatment plant of the Manasquan River Regional Sewerage Authority has not been designed to make maximum reuse of its treated water. Rather than applying land spraying techniques to increase recharge of the aquifer, treated effluent will be piped to a point below the Allaire Dam, where it will be effectively lost for water supply purposes. A sanitary landfill in the upper reaches of the basin, which has been known to leach chemicals harmful to human health, has been virtually ignored in the rush to build the reservoirs. The Lone Pine Landfill must be removed prior to constructing the reservoir. It is not on DEP's priority list of projects undertaken with current funding. Will its removal be paid for out of Bond Act funds?

The Raritan-Passaic River Pipeline -- Of all methods for providing additional water supplies, interbasin transfers are the least desirable. They tend to be expensive and high users of energy for providing boosting power. If other in-basin alternatives prove to be environmentally or economically unfeasible, then such transfers may be necessary as a last resort. The Coalition supports the procurement of study money to assess the most realistic projects for providing additional water to areas of need in the urban northeast. No commitment of funds for construction a pipeline between the two basins to supply untreated water should be made until more information is available about downstream effects in the Raritan system and true needs in the Passaic system are, in fact, updated.

We will not know, for instance, what minimum passing flows are needed in the Raritan system to prevent salt water intrusion into wells of communities located inland from the Raritan Bay. We will not know, for instance, what risks we run in lowering flows during drought and contaminating a major aquifer that presently serves as a discharge source for the Raritan River.

What would the revised estimates of water requirements in the northeast actually be were the appropriate regulatory and management agencies to adopt a number of proposals that have been suggested, including:

1. Pursuing an aggressive campaign to promote water conservation among residential and industrial users?
2. Utilize unused allocations of water?
3. To make repairs to leaky pipes and interconnections?
4. To more effectively wheel water following construction of the Great Notch multiple exchange facility?
5. To provide for greater quantities of finished water by expansion of the Elizabethtown boosting capacity into Newark?

6. To increase reuse of existing water, including treated effluent and separate potable from non-potable water uses?

How much water is actually needed in the Passaic to provide low flow augmentation for water quality purposes once the already planned sewerage treatment plants are completed?

Finally, given recent census figures which show less growth in the urbanized northeast and moderately high growth in Middlesex County are the real needs likely to be met by such a transfer?

If we are to build additional capacity to hold water for normal and drought needs, construction projects should be based on a comprehensive plan which addresses all the causes of our current and projected deficits. We recommend the joint committee to defer consideration of all projects, except the Great Notch interconnector and the repair of infrastructure until a plan has been adopted. I thank you.

ASSEMBLYMAN HOLLENBECK: I believe the Coalition testified in reference to capital projects until the Master Plan was adopted, yet you are now recommending two of the projects that are part of the Master Plan, at least in the summary of its recommendation.

MR. GAFFNEY: Okay. I would like to make a distinction between those two projects, since we have come out in favor of them before. These are essentially hardware projects, which allow for improvements to the water purveyor systems themselves, which are very badly in need of repair in many cases. We feel that these projects can be undertaken and completed in the near term future and must be separated from the other projects, which address the more long term needs.

In the case of the repair of any structure, we feel that prior to any major transfer of water, the systems into which the water is going to be converted should be as leak proof as possible to avoid losing half the water we transfer.

ASSEMBLYMAN HOLLENBECK: You also agree then about the Manasquan Reservoir, which was also part of the recommendation.

MR. GAFFNEY: Well, the point I was making with the Manasquan Reservoir was that before any commitment of funds is made for the construction of that reservoir, the three problem areas that I identified need to be addressed, and they have not been addressed. Our fear is that that basin is not perceived as a comprehensive hole. If we look at rainfall from the time it strikes the ground until the time it enters the ocean, we would be looking at only one part of the problem and not the recharge of water, which we feel is extremely important.

So, what I am saying there is that we recognize that a surface water impoundment may be necessary and that the landfill problem, the problem of the treatment, and the setting aside of recharge areas is extremely important in that area.

ASSEMBLYMAN HOLLENBECK: If the data for the diversion of water from Raritan Shed to the Passaic Shed proved environmentally sound, and there was no other alternative, you would agree with it?

MR. GAFFNEY: The Coalition really hasn't gotten to the point where we are recommending that if there are no other products in the area to be found, including some of the reservoir products that were mentioned this morning, there may be no other recourse. But, we are not sure that enough information is available to make that assessment.

Our feeling on the pipeline is that we may be going over capacity

because we are doing a number of things simultaneously, both in terms of construction projects and in terms of managing the users of water. There is a feeling that perhaps if all of these were done simultaneously, the needs would be far less than had been estimated in the past.

ASSEMBLYMAN HOLLENBECK: In other words, you feel that the studies done by the Consultants for the Master Plan were inadequate in so far as they dealt with environmental matters?

MR. GAFFNEY: The deficit figures for the northeast, as well as the deficit figures for other parts of the state, are based on no assumption about water conservation or what the comparison infrastructure would feel in terms of increased needs, and they had to, perhaps, make that assumption in planning it; it is an unknown.

ASSEMBLYMAN HOLLENBECK: I am just trying to clarify the Coalition's positions. I think you will agree there are a lot of areas of agreement.

You testified during Tocks Island, and we had some testimony this morning from Senator Dumont dealing with Tocks Island. If Tocks Island could be reactivated, I guess there would be an extended period of time before anything could actually be constructed which would take care of anything. Have you any idea what that would be?

I know there are some problems with the Delaware being put in Scenic Rivers, which is a federal program. It is very difficult, once you put them in, to take them out. That would require, I imagine, major legislative changes.

MR. GAFFNEY: One of the most frustrating aspects of the water supply problem is the reliance on variables which you don't have and you can't put a figure on. That decision would probably hinge on litigation that might be raised by people who feel that it should not be drawn from the river system. I may be wrong on this, but I think that up to this time no river which has received that designation has been withdrawn from the system, and I suspect because of its present nature it may result in protracted litigation. I don't know. That is the variable that probably leads all the others along. Once that decision is made it becomes a political problem.

ASSEMBLYMAN HOLLENBECK: So, really, when we start talking about Tocks Island, to have it deauthorized as a scenic river would probably take a great deal of litigation, legislative changes, and then it would have to go through the normal construction type, etc., to reactivate it. That would be an extended period of time.

MR. GAFFNEY: There was a feeling in the Consultants' Report that the process of getting the river, having its status changed, and having it set aside for the Tocks Island project would probably lead us into a period of twenty or thirty years from now. Their thinking was that this might be considered as a long term need in the twenty first century, and would not be realistic at this time. We are talking about a long process, but I can't give you an exact number of years.

ASSEMBLYMAN HOLLENBECK: That is my feeling too. Thank you very much.

SENATOR DODD: Just a point of information. You mentioned ground water, which is something that we all take for granted, but even under normal rain conditions, the ground water - if I can give you an example - is replenished at the rate of four inches per month, and that is under normal conditions. We draw six to eight inches a month from ground water. So, there is a limit, especially under drought

conditions when there is no replenishment. We are just simply drawing on something that does have an end. So, it does not come from some mysterious place; it is in direct relationship to the rain water. The better part of using the ground water, of course, is a lack of operation, as we have with surface containments.

Mr. Guy Calcerano, New Jersey Water Supply Coalition.

By the way, we will attempt to get to everyone at the hearing today, but if anyone has a prepared statement, we will record it and it will be read into the record. That will also go beyond the hearing, so if you do not have anything prepared and you want to give us a prepared statement to be read into the record some time between now and the time we end the public portion of our hearings in Vineland next week, please submit them, or at least get the address of our committee aide so you can send them in. Guy, proceed.

G U Y C A L C E R A N O: I am here on behalf of the New Jersey Public Interest Research Group and the Water Supply Coalition. I would like to state that I agree wholeheartedly with the golden rule of this committee, as you stated it: Don't show up unless you have brought a solution. I think I have brought a solution. I think it is one we need.

First of all, I see that we are facing two very distinct kinds of problems. One is a long-range water supply management problem. We have heard a lot about that. But, we are also more pressingly faced with an immediate drought problem. There is a possibility that this summer people will be out of work in this state because we do not have enough water to operate all the industries. That, as I define it, is the most crucial problem that is facing New Jersey right now, and I have come to talk about that problem -- the immediate drought crisis.

Reservoir construction will not affect that crisis. It can do nothing. If you build a reservoir today, you are not going to get getting any water out of that for three to five years, at the earliest.

Pipeline construction will not help you with any immediate crisis. Pipelines move water from point A to point B. We are going to face a very severe drought in this state this summer. There is going to be a water shortage in all the basins, and you will not be able to pay Paul without robbing Peter, and vice versa.

The monumental problem with trying to meet the with our current water use patterns, and our current water use infrastructure, is that you provide water and you waste it. You waste as much water as you provide to be efficiently used to help people. Waste is the largest water consumer in this state, and we can no longer afford to feed that habit. We must look for ways that we can provide additional supplies of water to be used to benefit people, not provide additional supplies of water to be wasted. There is one way to do that: water conservation. Water conservation actually provides us with more water for human needs. Saving a gallon of water by remedying a gallon waste is the only way that this state can, short term, provide additional supplies. fortunately, it is possible for us to take action to achieve substantial water conservation in this state. If this committee is serious about doing something now to head off the water supply disaster that is developing now, water conservation programs are the only alternative. Water conservation works. There is absolutely no doubt about that. There are dozens of programs that are functioning right now in the United States that demonstrate that water conservation does work.

Hamilton Township, right outside of Trenton, has a model water conservation program that can be a constructive example to us. Using only simple, readily-

available water conservation devices, Hamilton Township was able to realize a permanent water use reduction of over 18%. They hope to improve that to 25% over the next couple of years. To achieve this saving, the citizens of Hamilton Township did not have to undergo any change in their lifestyle or their water use patterns. The 18% reduction that they achieved is equal to the greatest single day water use reduction that this State achieved in the month of January, and it is two and one-quarter times the average water use reduction for the state in the month of January.

Using generally available reference sources, New Jersey PERG has calculated that if the Hamilton Township type of program were applied throughout this state, the potential savings are remarkable. This could be done through the installation of three simple, readily-available water conservation devices. They are toilet dams, low-flow shower heads, and sink aerators. New Jersey could save over 127 million gallons a day through the use of these three simple devices. This figure assumes that only 75% of households in the state cooperate with the installation of these devices. The 75% citizen compliance rate was the lowest citizen compliance rate achieved for any types of housing in the Hamilton Township program.

Let's put this 127 million gallon a day saving in perspective. That figure is greater than the combined daily pumpage of both the Hackensack and the Commonwealth water companies. It is 50% greater than the yield of the two bridges project. It is greater than the combined yields of the proposed Manasquan, Hacketts-town, and Delanco Intake. This 127 million gallon a day saving results from the use of just three simple, in-residence devices. It assumes no change in peoples' water consumption habits. If other industrial, commercial, and residential water conservation techniques would also figure into a comprehensive water conservation program, the total saving would be much larger. If the citizens of New Jersey were conditioned to install these devices and asked to use water less wastefully, the total savings would be much greater.

In addition water conservation is much less expensive an alternative than water facility construction. The devices are inexpensive and, as I said earlier, they are readily available; their installation is easy.

Water conservation also produces a number of secondary benefits. Perhaps the one that concerns most people in this room is that it obviates the necessity for water facility construction, particularly pipeline and reservoir construction.

Most important, savings from a water conservation program are available starting tomorrow, before it is too late to help the people of this state. If the Legislature is serious about reducing the threat that this drought poses to New Jersey, it should be concentrating on water conservation legislation. The Legislature must stand ready to appropriate money for the Department of Environmental Protection to undertake a full-scale, statewide water conservation program.

At a minimum, this program would include the following steps:

1. We must start a vigorous public education campaign. There should be television commercials showing New Jersey's citizens how to cut a plastic bottle and install it in their toilet tank. Water conservation techniques should be trumpeted in front page newspaper and magazine stories, and ads if necessary. Education programs should be started in every elementary and high school in the state.

2. We must start a massive drive to install emergency residential water conservation devices in as many New Jersey homes as possible. Flow restrictors, like this little dime-sized flow restrictor I have in my hand, should be mailed

out to all New Jersey businesses and residents in their next water bill, or by first class mail if necessary. The DEP should start an advertising campaign to encourage their installation. Those with older plumbing that will not accept the standard dime-sized flow restrictor that you just saw, should be provided with rubber cap-type sprinkler heads for their sinks. Low-flow shower heads must be made available.

3. A program for water system leak detection and repair must be undertaken immediately with emergency funding, not bond funding. We can no longer afford to wait for a bond issue that could not even be passed before next November. This program is most needed in the Northeast, but other municipal systems are in need of repair, such as Atlantic City, Camden, and Trenton in the south and west of this state.

4. We need a vigorous industrial conservation program in all industries, large and small. Industries capable of using grey-water for their industrial processes should be ordered to do so immediately. All industries using groundwater for non-contact cooling water should be ordered to retain the water on-site for other uses. Industrial water recycling must be started wherever practical. We recognize that some of the large industries in this state have already instituted some of these techniques, but we feel that there should be more cooperation in the business community to see that those medium and small sized firms which do not have the staff to come up with these solutions could be helped by the larger firms of the state.

These four steps are only the start of a comprehensive water conservation program for this state. There are other techniques which could help New Jersey.

The New Jersey Public Interest Research Group and the members of the Water Supply Coalition stand ready to help the Department and help this committee draft bills that will meet the immediate need for water conservation.

Do you have some questions? I threw some figures at you there, and if you would like me to explain them further, I would be glad to.

ASSEMBLYMAN HOLLENBECK: I am pretty familiar with the Hamilton Township one, but that was not done for water conservation. It was done for sewerage capacity. They didn't have the sewerage capacity, so they wanted to cut their water flow down.

SENATOR DODD: And they did it.

ASSEMBLYMAN HOLLENBECK: Yes, and they did it. It was a good idea at the time.

MR. CALCERANO: Waste water treatment is one of the secondary benefits as a result of water conservation.

SENATOR DODD: The educational part -- Assemblyman Hollenbeck and myself sponsored the Joint Resolution where one and one-half million school children in the State of New Jersey will be given a solid hour of conservation instruction, with material, and then they are going to come home and pester the hell out of the rest of us.

MR. CALCERANO: That is an excellent start. If we look at the programs that were instituted in Illinois, California, and San Diego make the efforts that have taken place in this state look puny by comparison, quite frankly. For example, in San Diego, every single resident was contacted at least twice - every single resident - to institute their water conservation campaign, and they weren't in a drought emergency at the time. They were doing it as a tax saving measure.

SENATOR DODD: Thank you for an excellent presentation.

Mr. Robert Graff.

R O B E R T G R A F F: Senator Dodd, Assemblyman Hollenbeck, members of the Committee, ladies and gentlemen: My name is Robert Graff. I live in Bedminster. I am a Trustee and past President of the Upper Raritan Water Association. I want to discuss briefly things I have heard this morning. The speech I had prepared - the few thoughts - has already been covered in most specifics.

What brings us here today is the conflict between short term politics and the long term needs of New Jersey's citizens. We meet in an election year, at a moment of temporary exhaustion of certain natural resources. We meet within a planning process that in itself deserves careful public scrutiny. Today, once again, the triple whammy of the New Jersey planning process has produced a crisis. The whammy consists, in this specific case, of three things: a public problem, which is the temporary lack of water; a too little, too late, top-down planning process that is itself part of the problem; and a lack of two-way communication from state leaders to their citizens, and from the citizens to their leaders, so that many citizens, to whom I listen, have come to believe that the state government, essentially, is afraid of them, ludicrous as that may seem. I wonder if the state officials, especially the departmental bureaucracies, are as all-knowing as they wish to appear.

The usual results of New Jersey's present planning process is what we are experiencing a little bit today: confrontation rather than communication; second-best compromises, rather than informed, negotiated, more optimal results; anger and frustration, rather than a shared sense of accomplishment and well-being in overcoming what is the social challenge for all of us.

The facts, I believe, are these: The present shortage of water is partly a temporary situation and partly the result of long-term neglect. It can best be addressed by two parallel thrusts, one immediate, and one over the next few years.

Two, the media blitz about New Jersey's water crisis may be deliberately designed to stampede the public into accepting a short-term solution with long-term, inappropriate and extremely costly consequences. A serious waste of public monies and public resources may be involved.

Three, the State' pipeline proposal that we are discussing has changed twice already in less than six months of public scrutiny and discussion. As far as the Water Shed Association can determine, the two present alternatives are not, either of them, justified by any data made available to the public. Where are the figures? May we see the analysis of the alternatives?

Four, the Association's own professional investigation into the present water shortage in Northern New Jersey suggests that lack of water transfer among existing private companies and public reservoirs is probably a chief source of the present crisis. There is also the extraordinary condition of waste, described a moment ago, and it is our tentative conclusion that there probably is enough water available where it should be, without scouring the entire countryside.

Five, the State's present water policy appears to be based on skewed population figures and a design to support a level of population in northern New Jersey that is not there now and may never be there. These questionable population figures are the result of their becoming political footballs rather than facts.

Six, we urge caution in overcoming the present shortage of water by

means of unnecessary, permanent construction. As we see it, at best these huge pipelines and pumping stations offer hidden financial assistance to taxpayers in one area at the expense of taxpayers in other areas of the state. At worst, the costly construction may become redundant within a decade. This may be popular politics, but it is poor resource management for the benefit of all the state's citizens. The proposed pipeline is not part of the state's present policy, or water supply Master Plan Policy, which is still to be discussed.

So, we in the Association feel that to provide for resolving a temporary shortage of water and to provide the state with a politically-stable water policy that will maximize our future possibility, there are perhaps six things to do:

First, separate the momentary problem from the long-range task, and attack each immediately in a coordinated fashion.

Second, solve the shortage quickly, within months or years, and we believe perhaps at least cost, by building a temporary above ground pipeline that has been discussed, along Route 78, ten miles long.

Third, funds to pay the estimated ten million dollar cost for this above-ground pipeline could come from the \$26 million that presently exists as a water quality allocation by the legislature from proceeds of the 1978 and the 1980 bond issues. No further monies need be voted, at least not now.

Fourth, attack immediately the institutional problem of emergency inter-company water transfer establishing a transfer grid that would function in time of crisis, as now.

Fifth, continue the long-range water planning process, utilizing the Task Force composed of state, county, and local officials, plus necessary consulting support. The draft statewide plan we are discussing in part can serve as the basis of discussions, but its obvious vulnerability and questionable public support suggests there is additional work to be done.

Sixth, as part of this planning process, establish a network of local, county, and regional panels and meetings, and encourage two-way communications bringing a flow of information, ideas, and critical views, all with the support of building public commitment and support for the water policies that emerge from the process. Massachusetts, Hawaii, California, Colorado -- many states -- have successfully employed this approach to land use and to other basic long-range planning. New Jersey, in my point of view, needs to do the same. We need fresh water protective planning. We need legislation. And, we need an improved waste water reuse planning and legislation, more than we need reservoir and pipeline construction at this moment, before we have a Master Plan.

We need to insure that we attain a desirable and an acceptable water quality, land use policy, and state development policy, all of which are intertwined, obviously, not only for northern New Jersey but also for the Pine Barrens of southern New Jersey, and indeed for all of New Jersey.

I appreciate your courtesy, gentlemen, and if there are any questions within my ability I will be happy to answer them.

ASSEMBLYMAN HOLLENBECK: You made a few statements here which are erroneous, and which deal with the bond issue and other people paying for water. Of course, I think you understand that if you deliver water like that, they pay. It is charged. So, that is not a true statement.

Of course, I think we prefaced every hearing by saying that this was supposed to be long-range. We are not trying to attack the immediate problem.

That is not the basis for this legislation. Hopefully, that is coming from other areas.

You did mention something that I think might also be erroneous, and that dealt with the \$26 million that we had appropriated fairly recently -- last week -- for some of the problems, because that of course is dealing with immediate problems. Of course, you are proposing it as a transfer, but those monies are also being used for other purposes, and that is to deal with the temporary pipe and the Fairlawn Interceptor, and the George Washington Bridge line, which is a temporary line for getting the water from the New York Aquaduct, which is basically Delaware River water. So, those are actually in construction projects right now -- temporary projects.

MR. GRAFF: Does that use up the \$26 million?

ASSEMBLYMAN HOLLENBECK: A great deal of it is going into that, yes. There were a couple of other planning monies involved there, and a couple of other interconnections we have to beef up, where we do have a minor interconnection dealing with the Elizabethtown system with Raritan Valley Water going up into the lower end of Newark. It is rather old, but we can try to beef it up temporarily. So, that is what those monies are going for.

SENATOR DODD: One point: hindsight is always twenty-twenty, and there is more than enough blame to go around for all of us.

MR. GRAFF: Well, we will take some of it.

SENATOR DODD: All of us, really. After the last drought was over and the reservoirs were filled up, these very same bills, essentially, were before us 20 years ago, and you couldn't have passed a \$100 bond issue. So, we do make clear at the beginning of every hearing and at our deliberations that what we are attempting to do will not add a drop of water. But, groups and organizations that do come in with helpful hints - and we do focus the water crisis and the conservation effort as much as we can - we do not pretend to that these bills will solve anybody's problems tomorrow.

MR. GRAFF: Well, Senator Dodd, I think the thrust of my remarks may be a bit misconstrued. We recognize, just as you do, that New Jersey needs a very serious examination of its water policy. It needs other facilities than we presently have. What we are saying is that the reason the bond issue - or at least I am saying it - is defeated repeatedly is that despite this true need that everyone in this room understands, when it comes up and when the public is presented with it, the way it has been, with this "here it is; take it or leave it" business, they don't buy it. Now, I don't propose that the public's judgment is any better than the government's judgment, but I do propose that the interchange of the best ideas from informed members of the public and the members of the state government, bureaucratic and elected, will guarantee, a, that we get a water policy which is absolutely appropriate to the needs of the state, as perceived by the electorate, and, b, that they will support the bond issue.

SENATOR DODD: Mr. Graff, that is exactly why we are conducting these hearings.

MR. GRAFF: Well, I commend you for that.

SENATOR DODD: We are trying to get the public input. But, we can only deal in specifics. We deal in very specific language when drafting bills.

MR. GRAFF: I understand that.

SENATOR DODD: They have precise peaks and valleys. We can't put philosophies

on paper and make them law.

MR. GRAFF: I wouldn't want you to.

SENATOR DODD: That's why we have our maps and our experts. We are laymen.

MR. GRAFF: So are we.

SENATOR DODD: So, when one in-governmental entity tells us, as a legislative body, that this is the way we perceive to solve the problem and you come along and philosophically disagree - which you are absolutely right to do, and we appreciate it - you must give us other precise information to refute what they are telling us.

MR. GRAFF: I am suggesting precise information.

SENATOR DODD: We are referees, if you will. We want to come out with the absolute best product that will solve our problem and have a bond issue that will pass. It doesn't do anything to our egos to issue a package of bills. That's all make-believe. That doesn't solve any problems. We don't need the jobs that bad, believe me.

MR. GRAFF: Forgive me. I think that we have come here today, we are all spending a day out of our lives because we share the feeling that something needs to be done. I don't think that any comment that I have heard this morning by anyone is addressed other than to the problem. The specifics that you request, I believe, are being requested within a framework which in my humble opinion is too small to resolve the problem that you, as legislators, have set for yourselves.

What I am trying to express in as simple as possible terms is that unless the planning process which brought you the technical background, or the memorandum on which the bill was drawn, is opened up, you are constantly, as legislators, going to find yourselves fighting your own constituents about something you both agree to. So, please hear me; that is a specific recommendation. I have also suggested that you, in effect, not deal with all the heavy construction that is suggested in the bond issue, not until - as so many other speakers here have said - the draft plan has been ventilated and everyone has agreed that that is the right draft plan. That process alone will get the bond issue passed.

SENATOR DODD: We will be hearing from the Master Plan people who did the work. There are many who we will deal with in our committee deliberations; we will be seeking specifics.

ASSEMBLYMAN HOLLENBECK: I am not sure that the adoption of the plan itself, judging from some of the testimony - not necessarily yours - is being used as the excuse. Sometimes I get that feeling. I hear opposition to the plan, and yet there are ideas in the plan that they agree with. So, I am not so sure that we don't hear, "You don't have an adopted State Master Plan, so we should do nothing" as really an excuse.

MR. GRAFF: If you will forgive me, the specific proposal is that you seriously consider legislation dealing with fresh water protection, flood plains, recharge basins -- all those things. The second thing is that you find legislation that deals with industrial and other use of ground water. The third thing is the conservation program, which has been eloquently outlined just a moment ago. And, the fourth thing is that the legislature itself examine what I have just suggested as a possible cause, and consider whether there is any reality to it. If not, forget it and thank you for your courtesy.

ASSEMBLYMAN SMITH: I just have one comment, Mr. Graff. I certainly,

as a member of this Joint Committee, share the frustrations that our constituents do. We have been faced with this particular problem-- All of us weren't here 20 years ago in these particular seats, but there were still people here representing you at that point in time. And, just what we have been through in the last several weeks -- lack of rainfall, then the proposed bills that we have before us, the \$26 million in transfer of sewerage funds to various water projects, the Executive Branch seeking federal funds, and the interaction of all of these things as to where we are going to be with our long term proposals versus what is happening in the short term and how these are all going to interact or overlap--

I sit here and I listen, and I want to find out what the feelings of my constituents are, but really it is a very big problem, as you have outlined, and I feel hopeful about that problem because I know it is there and we have to do something about it. It is long term, but we are having all the other things thrown at us short term. It is really a planning process. I think Assemblyman Hollenbeck said that was going to be an excuse. I can't agree with him wholeheartedly on that. I know that we have had some benefit of the planning process. We are going to have to go more in-depth into it before we are going to be able to decide what we are going to do here. As you heard Senator Dumont say this morning, they are going to vote on Friday as to what projects there will be and how much it will cost. So, here is another facet that is being thrown into this, and we still haven't gotten the overall picture in grasp yet. I think moderation in speed might be of help in this particular instance -- sorting things out and getting into proper perspective.

MR. GRAFF: I concur. I guess it is simply an issue that, for whatever reason in the State of New Jersey, we do not bring ourselves along to accomplish a task that some of us - wherever they are - find necessary, and there is a structural reason for that; I have said it three times. Thank you very much, sir.

SENATOR DODD: Thank you. Mr. Rossney Smyth.

R O S S N E Y S M Y T H: My name is Rossney Smyth, S-M-Y-T-H, no E. That is the Irish and the correct way to spell Smyth; the bloody English put the E in it. (laughter)

I speak as a concerned citizen--

SENATOR DODD: I like you already.

MR. SMYTH: I speak as a concerned citizen of Chester Township. I am a consulting economist and investment advisor, and I have a full panoply of degrees and academic credentials, and 35 years on Wall Street, which is necessary to get into the economists' union. I also have been, and continue to be, deeply involved in a project that Chester Township is endeavoring to undertake in acquiring a small reservoir property, owned by the Borough of Peapack-Gladstone, which lies in Chester Township, and in the course of this we get into all sorts of expert testimony.

I ask the committee's indulgence for a moment to review a couple of background experiences that we have encountered with people from DEP in Trenton. Mr. Graff referred, a few moments ago, to the earlier proposal for a pipeline and the fact that there was a public hearing held last Spring. At that meeting, two very high-powered officials of DEP in Trenton were present. I can give you their names if you wish. Mr. Caputo from the Upper Raritan Watershed Association had prepared a large, wall-sized blow-up map, giving some detail of this proposed pipeline which was going to run right up the middle of the north branch of the Raritan

River and through to Green Lake. When these gentlemen came into the meeting, they claimed that they had never seen any such map. They did not know of any such map. They were unaware of any such proposed route for the pipeline. Nothing of that type had been discussed in their offices. And, yet, the fact is, gentlemen, that that map was taken and very carefully blown up from a report put out by the very office of the people who were there. This occurred in the presence of a good many people here in this room today. These two gentlemen from the DEP came up and told 350 people a bold-faced, deliberate lie.

Now, I am sure that those of you gentlemen who have had legal experience will agree with me that if you have a witness who deliberately lies at a public hearing, you would have big difficulty giving him or anyone associated with him very much credence in the future.

Chester Township is involved, along with Washington Township, in a major hassle with a private operation, known as Cull Landfill. I am sure you gentlemen must be aware of it.

Of the 195 odd acres of that landfill property, about 125 or 135 acres of it are wetlands; they are swamp, a bog. Out of that wetland arrives Tanners Brook and Trout Brook. One flows to the north and the other to the south. They become two of the largest single tributaries to the Black River, which, in turn and in conjunction with the Wallington is the single largest tributary to the north branch of the Raritan.

Our townships have been struggling so far - and I am sorry to say this - in vain to prevent this landfill operator from invading those wetlands and violating the stream regulations and laws. As of last Thursday, the landfill operators put their bulldozers in there, knocked down ten acres of wetland woodland, and are proceeding to rip open a big ditch where they are proposing to starting dumping garbage and solid waste.

Under an alleged grandfather clause, going back to a previous owner of the property, the landfill claims that it is exempt from the requirement to put liners in new cells as they open them up. There will be litigation on that. But, at the moment they are opening up cells in this wetland without liners, and garbage is being dumped in it right now, as we stand here. There is nothing that can possibly stop the effluent from that garbage disposal from running directly into Tanners Brook and Trout Brook, and from there right into the north branch of the Raritan, from which points farther south a water company pumps it back out and sends it back up to Somerville and the other communities along the line.

We have been in frantic, repeated attempts at communication with the appropriate people in DEP to get this monstrosity stopped. We get the most outrageous piece of buck passing that has ever come to my attention.

Over the past year, I personally have written several letters to Commissioner English, and two committees on which I have served have written letters to Commissioner English from the DEP. As of today, we have not even received the courtesy of an acknowledgement, let alone a substantive response. Now, it may well be there could possibly be a few very small children and some very senile old people who might still give credence to anything they hear from the DEP, but I assure you that the citizens and residents and taxpayers of this part of the State have no confidence whatsoever because as far as we are concerned, DEP has completely lost its credibility.

Now they come back to us with a proposal for a new pipeline, and the

more you examine it, the more preposterous it becomes. The reason I have to use this map-- What is the nature of the problem? First of all, we have water here, Spruce Run and Round Valley. We don't need it here; we need it here. The problem is to get the water from there to there in the shortest time, and in the shortest distance possible. This proposed pipeline comes up and goes around the back end of this and ends up somewhere between Mendham and Morristown, in a wooded, hilly area called Washington Valley. Now, if they did have the pipeline built and installed, what are they going to do with the water coming out of the end of the pipeline? There is nothing in the bond issue about this \$85 million proposed pipeline that has anything to do with that. They are then going to have to build a reservoir to put the water in for God knows how many millions of more dollars. And, of course, once they have the pipeline in place, the Legislature is not going to have much of an alternative but to give them the additional money to build the reservoir to dump the pipeline into.

Now, where are they going to take it from there? They say they want to put this water into the Passaic system. How? The output of that reservoir would flow into a little stream called the Whippany River. At that point, and for several miles further down the stream, the Whippany River is called a river only by courtesy. We used to call it a creek or a brook. A reasonably agile person could jump across it. It simply will not take that amount of output from that reservoir, and, indeed, every spring it overflows. It gradually wanders down along its course, picking up the sulfuric acid outpour from the Whippany Paper Company and ultimately finds its way into the Passaic River.

In the course of building this pipeline, if they follow the route proposed, or anything remotely resembling the route they propose, they are going to rip through one of the most scenic and at the same time ecologically and environmentally sensitive areas in this part of northern New Jersey. Now, I don't think there is too much debate that we do have surplus water in the Spruce Run and Round Valley reservoir systems. The question is, how do we get it where we need to use it now? And, the answer, gentlemen, is very simple. This has been proposed by the Raritan Watershed Association, but I have a few modifications to make. It seems from the record that I may have been the guy that first suggested this at a public meeting. Route 78 passes within sight and walking distance of both those reservoirs. The grading has already been done. The rights of way are already owned at huge expense. You could bring a pipeline, picking up from both of those reservoirs, moving eastward along Interstate 78, and if you wish to run off to the northeast, you could at the junction of 78 and 287 simply put in a wide branch in your pipeline and run it that way, and you could bring part of it right into the Boonton Reservoir because if you are driving a car on 287, you could spit out the window into the Boonton Reservoir. You could also swing off and follow Route 280, which will take you right down into Newark. It is almost water level all the way. There is very little grade.

Now, the proposed pipeline is going to have to push water at one point over 800 feet up. The energy cost of pumping that much water that high is absolutely mind boggling.

Now, the Round Hill Reservoir is, in a manner of speaking, an above-ground reservoir. We have had that brought out. No streams run into it. Every drop of water that is in there, except rainfall, has had to be pumped up into it from Spruce Run, at enormous cost. If you were to follow the proposed suggestion

along 78 and/or 287, you would start out with a tremendous head of gravity feed and you would need only a few booster pump stations along the way.

Now, if you look at your map - and I think you probably have some diagrams here - as you come past the southern Millington over into the Berkeley Heights area, the Passaic River in its big loop - the extreme southern extremity of that loop - passes within sight of Route 287. At that point, the Passaic River is well below its flood plain area and the Great Swamp. The Whippany River feeds in above that. Now, it would be possible, it seems to me - and while I am not a practicing engineer, I was an engineering major in college - you could build a temporary pipeline along the rights of way that the State already owns. You own rights of way on both sides of the paved right of way that would more than accommodate this -- not above ground; you could dig. I think it could be trenched in with very little disruption to existing traffic. That will take it from where it is and put it where you want it to go, and at several points along that kind of system, you could hook into all the various municipal water systems as well.

Why, therefore, having already acquired these rights of way - mostly at federal expense too, if I recall, since it is an interstate highway-- The damage, the economic and financial damage, the ecological and environmental damage of constructing those roads through the central part of New Jersey has already been done a number of years ago. The wounds have healed. Even the scar tissue is beginning to disappear. Why, in the name of heaven, is anybody in his right mind proposing that we are now going to carve up another great, long, 25 mile, running, bloody sore through the best part of the state to accomplish less than we can do using what we already have. I think if there may be a few places where you might need a little extra right of way 78 and 287, I can't believe if there is an adjoining property that the owner wouldn't be delighted to sell you an extra 25 feet. His property has already been invaded.

It seems to me that this is a pretty immediate solution to the problem. It could probably be underway in a matter of a couple of months. In 90 days we would be putting water, in large quantities, into the Passaic River, at points where the Passaic River can accommodate that kind of flow, and above the points where the major industrial and sewerage pollution of the Passaic now occurs.

I cannot conceive why the state would consciously consider acquiring new rights of way through some of the most valuable land in this part of the country at today's inflated real estate costs when they already own more than adequate rights of way.

Now, you asked for some constructive suggestions or alternatives to the proposal. I submit that here are a set of constructive operationally useful proposals that could be put into effect in very short order and at minimum cost. At least the taxpayers won't have to pay for the acquiring of another 25 miles of right of way. I thank you.

ASSEMBLYMAN HOLLENBECK: I don't agree with what you were saying in reference to the additional right of way. Of course, being legislators we don't deal with the setting of the actual location of anything. We just deal with an overall plan. However, I do know one thing, I believe we might have a slight error, and that is in the drawing of the water from Raritan Valley as a supply. I know one of the problems would have to be that it has to come from the Raritan, rather than directly from Raritan Valley, because although the Raritan Valley is up nice and high, it does not have its own watershed. We have to pump the

water up there now, so it makes no difference. We are pumping the water up there now and storing it up in Raritan Valley, and at some periods when we need it, they would release it back into the Raritan. But, to use continually from Round Valley would be a waste of money because it just takes money to put it up there.

MR. SMYTH: That is a technical engineering detail. It might be desirable to establish the beginning of such a pipeline at the bottom, somewhere along the confluence of the Rockaway, the Lamington, or the Raritan Rivers now. But, say we have a pipeline of say some 14 miles, we would have to go past the Dead River connection. That is about a mile and one-half past the Dead River. the proposal to put it into the Dead River is not operational. I have fished and canoed in the Dead River and that is another one of these things that ten out of eleven months of the year you can step across; the rest of the time it is over its banks. It is about this deep at the maximum and very, very low. That is not a good idea. If you go about another mile and one-half further down and there is the Passaic right there.

ASSEMBLYMAN HOLLENBECK: I am sure we will find the answer to your proposal and the questions you raise. We will hear the other side about why it is not being proposed. As I said, we don't deal with the exact location of these types of things; we just deal with the overall problem.

MR. SMYTH: Mr. Hollenbeck, may I add a little addendum? At the meeting that I referred to earlier, where 350 people from the community were deliberately misled - and I use that as the softer euphemism rather than say lied to - by a couple of people from DEP, I had advanced the suggestion of using I-78 and I-287, and as far as anybody knows, that is the first time it was advanced at a public meeting. The two gentlemen there in what probably was an unguarded moment, confessed that they had never thought of it and that as far as they knew, it had never been discussed or included in any of the consulting papers or inter-office memorandum in DEP.

ASSEMBLYMAN HOLLENBECK: Well--

MR. SMYTH: If there are any other questions--

ASSEMBLYMAN HOLLENBECK: I just want to make an observation. I have been thinking of about 120 legislators that have been misled, or have had their position misinterpreted by the DEP - we have had our problems with them also--

SENATOR DODD: You are not alone.

ASSEMBLYMAN HOLLENBECK: You are not alone.

MR. SMYTH: There seems to be an unwritten law that they are not permitted to communicate within their own departments. Now, if this proposal that I made had any validity at all--

SENATOR DODD: They thought that was a secret.

MR. SMYTH: If the kind of proposals we are making here today, about using the right of way along 287 and 78 have any validity at all, this is going to require a quantum leap upward in bureaucratic maneuvering because it would require the DEP and the DOT to get together and talk. I don't know whether there is an unwritten law in Trenton that prevents that or not, but it doesn't ever seem to happen.

SENATOR DODD: Your observations are on target.

MR. SMYTH: I thank you, sir.

SENATOR DODD: Mr. Smyth, thank you very much.

The Chair would like to call Peter Vermuelen.

P E T E R V E R M U E L E N: I would like to thank the Committee for allowing me the privilege of addressing you. My comments will be impromptu. They will be taken from notes which have been changed from time to time, having sat through this morning's discussions. I would imagine, or it is my hope that the Joint Committee's original concept of this legislation will also be changed as a result of this hearing. That is why we are here.

I would like to take the bills as they progress numerically, 1610. Perhaps I should backtrack a minute for the stenotypist here. I am Peter Vermuelen and I represent myself as a citizen of New Jersey, and also I am here as a businessman in the nursery profession. I also represent the Somerset County Board of Agriculture, of which I am a member and past President. I also sit on the State Board of Agriculture. I am not representing them officially, for the record.

Getting on to 1610, my first observation of that, when I read the bill, was that it was good. It is immediately addressing a problem. But then, getting down into the finer print, and having heard the testimony this morning, I can see that to approve of the entire bill as it is presented would be a disservice to the citizens of this state. There are parts of the bill that I still feel are good. There are parts of it that I feel are not good because of the inadequate planning that seems to have gone into them, which has not taken advantage of the due processes of hearing that should be accorded our citizenship.

I would suggest to the Committee, with due respect, and to the introducers of the bills, that perhaps to prevent a stalemate or to have nothing done on the immediate issue - getting water from where it is in "surplus" to where it is needed - that you separate the six bond issues and present them to the electorate separately as separate issues, and perhaps even to have separate hearings on each particular proposal. This probably would not let the whole thing go down, and perhaps parts of the plans that are good and acceptable could then be salvaged.

Addressing 1611, this is the one that I necessarily had to spend the most time with because of not only specifics but a philosophy. Senator Dodd has temporarily left the room, but he did mention earlier that it is difficult to put philosophy on paper. I am afraid that is what is happening here in this bill when we take and read the following: "The legislature finds and declares that the water resources of the state are public assets of the state held in trust for its citizens, and further that ownership of these assets is in the state as trustee of the people." I would like to ask the committee to take another look at that statement and you are not beholden to tell me what you tell the citizenship -- just where the state has found the privilege and the prerogative of being trustee for the people. It seems to me that our constitution says that the government is of, for, and by the people, and does not unilaterally act for it without due process of hearing the checks and balances that are built into our constitution by the three branches of it: the Legislature, the Executive, and the Judicial. Unfortunately, we now have a fourth branch of government, the bureaucracy which is not responsive to an electorate and which is protected by the Civil Service law. I am sure you are well aware of that because you have said it in your discussions here this morning.

I feel it is necessary for me to call your attention to the fact that water is a natural resource, as we all know, and I would have to question what makes water any different than natural gas or oil or coal or other natural resources that are mined or taken from the earth, and I would like to ask the question as

to why the agricultural community, which is perhaps one of the larger users of land - they are stewards of the land, legally holding it, I suppose - is not given the rights to that water? I would like to ask the question: Does the State, as "trustees" have the right to come in and take it away from them to give it to someone else? I am not suggesting that the agricultural community is selfish with this water. I think we give more than we take, and I would hope that perhaps sometime soon we could find out just how much water is collected for the citizens of this state by the farmers who hold the green acres and keep them open for the rest of the state to enjoy?

There is another broad philosophy within 1611 that reads from paragraph to paragraph and section to section and that is the philosophy of power. I think we find that power was determined to be an item to be concerned about. Our forefathers drafted our original constitution, and as I previously said, provided for the concentration of power to be preempted for personal gain or to be used for other than what it should be used for. Power will corrupt and this bill is going beyond the original concept by putting in the hands of a few people the power of life and death, actually, with water. I think we are working now under a philosophy, as was said this morning, of crisis, and it is very difficult in a situation like this to keep calm cool heads and come up with a good plans. I appreciate the opportunity of this hearing to perhaps do that, and I would suggest that we continue and slow this pace down and have more hearings. I think everyone in this room practically is asking for more time. I think if we do that we might solve their problem and not create a monster.

This bill and the companion bills with it are concentrating power in the hands of a department which, as we have heard, holds little credence throughout the state, and I would say throughout the Legislature as well. This does not mean that I am picking on any person in the Department of Environmental Protection personally, saying that they are purposely using this power to their own advantage. But, they say power corrupts, and it's there and it is difficult for a person to rise above that and that gets back to the philosophy again.

Now, let's get onto some specifics here on 1611. On page 2 we call for some definitions so that when we later discuss the bill or we read it, we will know what we are talking about. I would ask that the authors of the bill get back to this particular paragraph three and define for later use the terms: "adequate water supplies," "water resources," "emergency circumstances," "water quality emergencies," and "water supply emergencies." There are probably others that I think perhaps you should look at when you look through the bills and define them when they are not defined, because they are used in certain areas of the bill rather loosely and I would say rather broadly. In other words, the Department of Environmental Protection is given the authority under emergency circumstances, or when water quality emergencies exist, or when water supply emergencies arise, to do certain things without recourse to the Legislature, without recourse to a public hearing, without recourse even to gubernatorial action. They have that authority, according to this bill -- or these bills -- and I think it is necessary that those circumstances be properly defined. If they are defined in other places, I am not aware of it. I think perhaps for the purpose of the bill they should be defined here.

On page six of the bill - and I won't read it because time is moving along and there are others that want to speak - I call your attention to the

property rights of people, with the DEP given authority to enter anyone's property in any emergency that they see, or they declare. In other words, the DEP is given the authority to declare an emergency, and then because it is an emergency, they have the right to go into private property. I don't think that is what the people of this democratic country want to see happen. We are not a police state, and I don't think we want to see people acting the way we are.

ASSEMBLYMAN HOLLENBECK: Where are you reading that from on page 6?

MR. SMYTH: Paragraph 7, page 6, subparagraph f, where it says: "Every permit issued pursuant to this act shall include provisions:"-- Okay, one of these provisions is allowing the Department to enter the diverter's facilities or property to inspect and monitor the diversion. And, in f, "allowing the department to modify the permit during water supply or water quality emergencies"--

ASSEMBLYMAN HOLLENBECK: Let me hear that again. What page are you on?

MR. SMYTH: Okay. We are on 6, paragraph 7. Now, I just have a copy here; I don't have a printed copy.

ASSEMBLYMAN HOLLENBECK: That's the problem.

MR. SMYTH: Unless the paragraphs have been changed, I guess we should refer to it then-- So that we don't take up more time, I will get together with you after and see that you have this particular issue properly defined, if that is okay with you.

I am going to refer also to page 7 of my copy and page 9, which refer also to rule changes to permit holders. That does not allow, to my reading, for proper hearings before the changes are made; there again, under emergency conditions. They can make the changes without the proper hearing. So, that I think is something that we want to address.

On page 7 we talk about the subpoena powers of the department, and there again I think that is something that I as a citizen am quite afraid of.

I am going now on to 1612. In 1612, there again, comes right back to a basic philosophy of a democratic existence in this country which has made us strong, and that is the separation of government from private enterprise. We are here asking the government to get into the water business, and I think most of the people I know would object to that also. I don't think the government has demonstrated an ability to operate a business properly and economically and adequately. I think the private sector can do that better with government help and with government encouragement, and perhaps deregulation.

On page 3 of that bill, we are referring now to the utility commission, as it is constituted. There again, the reference might not be the same as mine, but we call for the commissioner of the Department of Environmental Protection, and the commissioner of the Department of Labor and Industry to be members of the commission and then there should be two appointees by the Governor. And, I would suggest that you seriously consider the Secretary of Agriculture as a member of that utility. The agricultural industry in this state is the second largest in the State, it and its food processing, second only to the petro-chemical industry, as far as its contributions to the economic wellbeing of our state and a large user of water. As I mentioned previously, it is also a large provider of water through the maintaining of the river basin, the catch basins, and the various watersheds. It is only right that the Secretary of Agriculture should be seated on that utility.

On page 4 of that bill also, we find - I think I had better read that one because we find here that DEP is becoming sole judge and jury. That is in paragraph 5: "If the department has issued an order to a water supply entity to construct or upgrade a water system and the recipient of the order has not taken the action required by the order within the time specified, the department may" - and this is semantics - "hold a public hearing" - it doesn't say it shall - "in the area affected to elicit testimony as to the proper future course of action."

Subparagraph b of Paragraph 5 says: After a hearing has been held, the department shall review the testimony presented and other relevant materials." What we have here is a department that is issuing an order that may hold a public hearing, and after it holds a public hearing it will make the determination. I think what we are doing here is we are giving them permission to be sole judge and jury of a situation that is bad to say the least.

Okay. Here we go on to 1613. I think this has already been addressed by many people, more eloquently than I can. I just want to add my comment here about home rule. I think this actually is another concentration of power, away from the source where the power is needed, and the further we get away from the need of action, the more difficult that action becomes in making it proper and suitable for the action that needs to be taken. Our concept of home rule in this country I think is being negated by this particular bill.

1614, likewise, I think results in confiscation of property without remuneration, and that also has already been addressed, and I would ask that you seriously consider this as something that you just cannot accept. We need to address ourselves to this.

I think that is about as much as I have to say at the moment. Again, I thank you for the opportunity to speak. If you have any questions, I will be glad to answer them.

SENATOR DODD: Peter, thank you very much.

Tracy Tobin is our next witness.

T R A C Y T O B I N: Senator, I am sure that at this point the Joint Committee is not going to hear anything they have not heard already. But, out of sheer stubbornness, having taken off a day from work, I do want to go in to some of these comments.

I think you have heard expressed here a rather poor feeling this end of the State has about N. J. DEP. Mr. Smyth in particular pointed out some specific occurrences. Our township has had difficulties where letters went unanswered for six weeks at a time, and we finally went to our legislators just to get a response to the questions. And, frankly, most of the time the answers are, "We are sorry, we can't help you because of lack of staff, lack of money, and I have to question the logic in putting something as serious and wide ranging as water management in the hands of a Department that is struggling to handle the responsibility it has now.

I share concerns with the gentleman that just spoke, in terms of the amount of power that you are putting in the hands of the DEP and also moving away from bodies that have public input. I would be more concerned, or more in favor - in terms of the popular recommendation - of the legislature setting up a regional planning body with representation from the various areas of the State. So that we would feel that if indeed water is a statewide resource, that there is statewide input into how that water is used. The agricultural areas we are trying to preserve in Warren seems to be coming out on the short end of the various bills that are here.

In particular, exemption for fees and permits starts to take effect is unreasonably low in terms of agricultural occupation; it requires irrigation, and it is just not going to do anything for a truly active farm operation. The water process, the control process you are talking about now is really a statewide growth plan, because the ability to determine where water will go and where it can be used is really going to be an ultimate control over growth. And, we have seen already conflicting positions between state development guide plans and legislative ideas in terms of urban revitalization, and still other State agencies suing for broke, and demanding that all areas take shares of providing needed housing in the State.

I am afraid that you are going to come up with still one more body pursuing its own idea of what growth should be and where it should take place without coordination within the State. I understand that there is a Water Policy Board now and that it fails to function at least as far as the requirements the Legislature feels necessary. I have to question why that Board fails to function properly. Is it constituted incorrectly? Does it fail to have a statewide representation? Are the wrong people being appointed? I think you should really address those questions before we decide to concentrate powers in the hands of the DEP.

I understand how difficult it is for you to sit up here and take the input hour after hour in various locations, but I think it all comes down to one basic point, recognizing that there is a problem - not a crisis - and determining if the long-term solutions that are being proposed in the bills are really going to wind up with solutions to the problems and not create further ones in the future. And, almost consistently through five or six hours of testimony here the people who have come out have said to you they are concerned that along with solutions to some of the problems, there are going to be a great many more created, and I would really ask the Legislature

consider long and hard before they concentrate power in the DEP without providing an adequate mechanism for public input. I am sorry that hearings such as these do not provide that function when you start getting down to detailed plans. Because a bureaucracy does not have to respond to the people speaking out as elected legislators must. They do not feel that same kind of pressure. Thank you. (Applause)

SENATOR DODD: If I could give you an example, hearings like this are extremely important. As you said, this is your only chance. You cannot go down to the DEP and get a public hearing and express yourself the way you have done here today. That is why we are here. We write the laws. They can only function - they being DEP or any other State agency - under the statutory provisions that we provide the legislature. We only provide statutory language when we have your support, or at least basic agreement.

Last year was probably the classic example when DEP handed me a bill on toxic waste siting. They said, "Here, Dodd, you sponsor them. They will be in your Committee. You might as well get the blame for it anyway." So, we took the bills and at our very first public hearing, out of several hundred people, not one person liked the bill. I didn't like it, but I said this was a starting point, and there are a few people in this room who participated in that process. We erased essentially everything under the number 1300, and we proceeded with a task force made up of environmentalists and industry representatives, and local and county officials, and toxic waste disposal industry representatives. Over a seven month period through public hearings, committee meetings, detailed staff work, we came out with a bill that just recently passed the Senate with the virtual support of everyone, so it does work. I am not saying that every agency and every Committee, and every part of the public government, including yours, which is a local--- I am not saying that it works all the time, and you do not always agree or get agreement. But, you must have public dialogue. We must hear from you, and you have to hear our side, our problems. So, with all the problems, it is still the best system in the world.

MR. TOBIN: Senator, I am not disagreeing with hearings such as this. What I am saying is, when I read the proposed legislation - I am sorry your name is on it, because it may sound personal - it sounded like this legislation was going to cut off that opportunity, because you are handing it over to an agency that does not have that need to respond, and in fact our experience has been that they do not respond. I want to keep you gentlemen and lady, I am sorry, involved in this process so we can talk to you, because quite frankly we feel that our elected legislators do respond, whereas an insulated bureaucracy does not.

SENATOR DODD: Perhaps what I didn't explain in the hazardous waste siting bill was that it was to be owned, operated, and policed by DEP. That was the beginning of the bill. The finished product, DEP has nothing to do with it, and we have no compunctions on this package of bills as well, and it was well pointed out that if they do not have the manpower or respect to answer a letter, how are they expected to manage an entire water system throughout the State. The point is not lost on us.

ASSEMBLYMAN SMITH: Senator Dodd, the other point that I would like to add, too, is that the Legislature because of the experience it has had with

the various bureaucratic departments in the State Government, Executive Branch. It is not in their best interest to add oversight provisions to much of the legislation and I would think in this particular case - I know I feel this way about it, and I think probably the other members of the Committee will feel the same, as we deliberate on what the final product is going to look like - that we will certainly provide legislative oversight provisions in this particular piece of legislation.

I know from my own experience on the Municipal Government Committee, the Uniform Construction Code as you well know has been very controversial throughout the State. The Legislature does have oversight provisions. We sit down almost of late on a bi-monthly basis with the Department of Community Affairs on various problems that have come to our attention, and keeping them on their toes on that Uniform Construction Code and it has helped. Certainly this is the same type of thing we would like to profess in this piece of legislation that we do have oversight. We may not be here, but some member of the Legislature way down the road someplace when this happens, certainly, is going to be in a position where they can look out and say, "Well, this is not the original intent of the legislation."

We have seen this with DEP particularly with the septic tank requirements. You recall that scenario. We had actually passed legislation to rescind that. We also just overrode the Governor's veto of a bill which provided this type of oversight for rules and regulations by the Legislature either up or down in thirty or forty-five days. If the Legislature doesn't act, the rules become operable. So, this is the type of thing we are looking at. It makes a lot of work for us, but if we can't depend on our bureaucrats to do the things we intended to do, we would have to do it.

SENATOR DODD: Also, with the oversight provision, as Elliott well said, it imposes an enormous amount of work on the legislature and our limited staff. But if we spend more time making sure that laws we enact work, as opposed to going out and dreaming up new things to get a headline occasionally, that is really what I think we get paid for.

MR. TOBIN: Thank you.

SENATOR DODD: Mr. Ernest Hiesener.

ERNEST HIESENER: Senator Dodd, members of the Committee, I am Ernest Hiesener, from Apgar and Associates in Far Hills, New Jersey. I was asked to come here today to read a letter directed to Darryl Caputo of the Upper Raritan Watershed Association prepared by Robert Fox, Professional Engineer associated with Apgar Associates.

The letter is dated February 13, 1981, "Mr. Darryl F. Caputo, Executive Director of the Upper Raritan Watershed Association, Re: Proposed Raritan-Passaic Pipeline - Energy Requirements.

"Dear Mr. Caputo:

In accordance with your request we have performed a preliminary study to determine the energy requirements to pump 130 million gallons of water per day (130 MGD) from the Raritan River near Bound Brook to the Passaic River Basin in Mendham. Two routes were studied. For each route a determination was made of the length of the pipeline and the elevation difference between the Raritan River and the termination point in the Passaic Basin. The routes are shown on the attached map and are described as follows:

Route A. Beginning at the confluence of the Millstone and Raritan rivers and running in a westerly direction to the confluence of the North Branch, thence in a northerly direction to Bedminster, Peapack and the Ralston area, thence easterly along Route 24 to the westerly end of the proposed Washington Valley Reservoir.

Length: 165,000 feet, or 31.25 miles

Elevation Difference: 325 feet

Route B. Same as Route A except from the Ralston area running northerly and easterly to Cold Hill Road near Mountainside Road and thence along Cold Hill Road to the Clyde Potts Reservoir.

Length: 159,000 feet, or 30.11 miles

Elevation Difference: 650 feet.

Pumping Requirements - It is our understanding that it is proposed to pump from 120 MGD to 140 MGD through a 108" diameter (9 foot) pipe. For the purpose of this study a flow rate of 130 MGD was assumed. Loss of head in the pipe due to friction was computed on the basis of a Manning coefficient of $n=0.012$.

The friction head loss (H_f) along each route was computed using the following parameters:

$$Q = 130 \text{ MGD} = 201 \text{ cfs} = 90,300 \text{ gpm}$$

$$\text{Dia.} = 108 \text{ in.} = 9 \text{ ft.}$$

$$A = \pi R^2 = (4.5)^2 = 63.6 \text{ sq. ft.}$$

$$V = \frac{Q}{A} = \frac{201}{63.6} = 3.16 \text{ fps}$$

For Route A:

$$H_f = 36.3 \text{ ft.}$$

For Route B:

$$H_f = 35.0 \text{ ft.}$$

The total pumping head (H_p) for each route is defined as follows:

$$H_p = \text{Elev. Head} + \text{Friction Head} + \text{Minor Losses}$$

For Route A:

$$H_p = 325 + 36.3 + 3.7 = 365 \text{ ft.}$$

For Route B:

$$H_p = 650 + 35.0 + 5.0 = 690 \text{ ft.}$$

Energy Requirements

A pump efficiency of 82% was assumed. It was also assumed that the pumps would be driven by electric motors having an efficiency of 94%. Thus total motor horsepower (MHP) requirements are defined as shown below:

$$MHP = \frac{wQH_p}{550} \times \frac{1}{0.82} \times \frac{1}{0.94}$$

where $w = 62.4 \text{ Lb/ft}^3$

$Q = 201 \text{ cfs}$

$H_p =$ Pumping Head

For Route A:

MHP = 10,800 Horsepower

This is equivalent to 8053 KW of electricity.

For Route B:

MHP = 20,400 Horsepower

This is equivalent to 15,212 KW of electricity.

Energy Costs - Energy costs are based on current Jersey Central Power and Light rates for Service Classification GT - General Service Transmission. A copy of the rate schedule filed with the Board of Public Utilities on May 15, 1980 is attached.

The basic charges are as follows:

Rate per month:

Customer Charge \$175.00

Demand Charge:

\$6.70 per KW during months of June - October

5.70 per KW during months of November - May

Energy Charge:

\$0.0216 per KWh

Kilovolt-Ampere Charge:

\$0.40 per KVz in excess of 115% of the KW of demand

Energy Adjustment Clause:

\$0.022169 per KWh

For the purpose of this study an average demand charge of \$6.20 per Kw has been used.

Energy costs per month when pumping continually

$$= (\$175) + (\$6.20 \text{ KW}) + (0.043769 \text{ KWh} \times 24 \times 30)$$

For Route A:

$$\text{Energy Costs} = \$175 + \$6.20 (8053) + 0.043769(24)(30) \times 9053$$

$$= \$303,883.26 \text{ per month}$$

For Route B:

$$\text{Energy Costs} = \$175 + \$6.20 (15212) + 0.043769(24)(30)(15212)$$

$$= \$573,857.50 \text{ per month}$$

Energy Cost per month when not pumping = (\$175) + (\$6.20KW)

(Assume pumps are in operation one month out of twelve months.)

For Route A:

Energy Costs = \$175 + \$6.20 (8053)
Energy Costs = \$50,103.60 per non-pumping month

For Route B:

Energy Costs = \$175 + \$6.20 (15212)
Energy Costs = \$94,489.40 per non-pumping month

Summary - It can be seen that a great amount of energy will be consumed to transfer water by pumping from the Raritan River to the Passaic Basin in the Mendham area. This is primarily due to the large difference in elevation between the areas. Energy required for friction losses over both routes is relatively small by comparison with the energy required for the elevation head. Thus, consideration should be given to alternate routes terminating at other locations in the Passaic Basin. A comprehensive study of alternate routes is essential to determine economic feasibility and should be performed prior to obtaining construction monies. Long range projections of energy costs may significantly alter the project feasibility.

It is important to understand that the energy requirements shown in this report are strictly for pump energy, and that there are other power requirements associated with operating a pumping station.

Very truly yours,

APGAR ASSOCIATES

Robert H. Fox, P.E."

Are there any questions? It is a little technical. It does show that there is going to be a cost after the system is constructed which will be a continual cost throughout the life of the system, which could be expected to be, hopefully, fifty years or one hundred years.

SENATOR DODD: Mr. Hiesener, is there any continuation, as opposed to using the proposed Washington Valley Reservoir, as opposed to the Clyde-Potts Reservoir? Where your figures leave off, are there any compensating benefits that would offset the energy used figures?

MR. HIESENER: Clyde-Potts Reservoir is there. It exists today, okay. Washington Valley Reservoir does not. Based on our figures it would cost not quite double on a daily basis to pump to Clyde Potts; however, it is there. Now, we have not done a study---

SENATOR DODD: On the capital costs?

MR. HIESENER: Yes, versus the cost of a reservoir. Obviously, the reservoir is going to cost a lot of money to build. If you have one there now, it will cost more to get there on a daily basis, but it is there. However, there are other routes which could be considered, because the primary cost is not distance. If you have to pump, it is the elevation which you must pump when you are talking about pipes of the size of nine feet in diameter. You can do an engineering study, a detailed economic study on the most practical way to go, considering the variables of pipe sizes and location.

ASSEMBLYMAN SMITH: The demand charges that are incurred here when you are not pumping are an important thing to consider. You are transporting water, and you are doing a service. That is fine. But, the down time charges are what is significant, at about \$100,000 a month.

MR. HIESENER: If you read the Jersey Central Power figures, you will find that the demand charges for the highest fifteen minute period in any month. So, if you were running those pumps for a fifteen minute period for a month, you would get maximum figures at the maximum charge, and then you have a kilowatt charge on top of that. If you don't run the pumps at all, or they are shut down totally for any preceding eleven months, your charge fully for the demand, not the use, but just the demand is about \$50,000 a day. And, that is a continual charge that will go up like all other energy.

SENATOR DODD: Thank you for your very comprehensive report. I would like to call Sandy Millspaugh.

S A N D Y M I L L S P A U G H: Senator Dodd, what you and your Committee did with the toxic waste bill was exemplary. We hope that you will follow suit with respect to this proposed legislation.

I am Sandy Millspaugh, a member of the Board of Trustees of the Upper Raritan Watershed Association, and a member of the Board of Trustees, and Past President of the New Jersey Conservation Foundation, and I am here today as a private citizen.

My remarks are basically repetitious with those of Darryl Caputo, Mr. Graff, and with respect to the pipeline along I-78 with Mr. Smyth, so I will be brief. I asked that this Committee separate the short-term problem from the long-term problem and ask that the Committee's focus be directed to the alternate proposed suggested pipeline along I-78 to meet the short-term problem, as I believe you mentioned at the outset of the hearings, Senator Dodd, absent rain and absent the conservation measures such as we discussed here, we are due to run out of water in 55 days. The I-78 temporary pipeline should be in a position to meet those emergency needs if in fact we do run out of water by this summer.

With respect to the long-term problem, the major transfer of water, 140 million gallons a day from one area of the State to another area of the State is a question of water supply management, which we feel should await deliberate action on the part of the State Government. The DEP's own consultants at this time, as I understand it, are in the process of developing a master plan. At least this Committee and the Legislature should await the completion of that master plan and the airing of that master plan with all segments of the State. That question is so important to my own judgement to the water supply and management. It is one of the major questions in the State in the 1980's. I don't think the problem is going away, as it did after the drought of the sixties.

The solution to this long-term problem needs a deliberate approach that was evidenced in the toxic waste process, which your Committee took the lead. What we are asking is restraint with respect to the long-term problem, the restraint of deliberation. I recognize the political pressure that is present, and I recognize how easy it would be to ride the current crisis to obtain what seems or is perceived to be a long-term solution to the State's

water supply system. But, I submit that it would be wrong to act on the proposal to appropriate \$85 million for the design construction of a pipeline from Round Valley to the Passaic Valley, until the kind of deliberate process that you undertook in the toxic waste management bill has been completed. I thank you very much.

SENATOR DODD: Just for a point of clarification. During lunch today we had one of the DEP representatives sit in with us, and we asked, how can there be such a huge discrepancy between an \$85 million proposal and other estimates for \$10 million proposal? And they said, "Well, we always plan for the worst."

So, the legislature does not intend to give out blank checks for the worst --- (Applause)

We would kind of like to know where the change goes. You know, you talk about \$1 million here, and \$1 million there, and the next thing you know, you are talking about some big money.

MR. MILLSPAUGH: Well, Senator Dodd, I suspect that at least part of the funds, the difference is that with I-78 you have the right of way as Mr. Smyth pointed out. It pipeline is shorter. If you take an alternate route--- I am not talking about an alternate route at this point in time you have to acquire the rights of way and I doubt the estimate of Mr. Schiffman this morning that the rights of way to be acquired and the engineering done and so forth within three years, not on the basis of any detailed knowledge of the engineering aspects of this particular project, but just out of experience as to the difference between early projections of time acquired for major development projects in the past, and the actual time expended. I doubt that even if the Legislature adopted the \$85 million proposal that the water would be available for the foreseeable future in terms of five to ten years. You are probably talking closer to ten. I thank you very much.

SENATOR DODD: Thank you. Charles Greidanus.

S. C H A R L E S G R E I D A N U S: My name is Charles Greidanus. I am a member of the Mendham Township Environmental Commission, and I have asked to speak briefly as a member and spokesman of the Mendham Township Environmental Commission. We accept our responsibility as directed by the State establishing such commissions to monitor and protect our local environment to the best of our ability. It is disconcerting to us to learn of the proposal of the DEP to destroy the valley in which the north branch of the Raritan River flows. It seems to us that the DEP by its very nature should be diametrically opposed to such an action. Possibly the originators of this proposed pipeline location have never seen this area and are unfamiliar with its topography. Those who have seen it will, I am sure, agree with us that it should remain intact. The northern part of the north branch which we call Indian Brook has been designated as a drought production area due to the purity which is essential to such a classification - as a brook flows southward and flows through a variety of landscapes, sometimes through open fields and sometimes close to houses, and a major portion flows through forested areas or deciduous or evergreen trees.

It is suggested to the recipients of effluent at various points along the route, however, tests have shown that its flow is sufficiently swift to enable it to purify itself in a relatively short distance and retain a high

amount of dissolved oxygen. The nature of the north branch in this area through which it flows is certainly a precious asset which the State should help us to preserve. Thank you very much. (Applause)

SENATOR DODD: Thank you. Andrew Marckwald.

A N D R E W M A R C K W A L D: Senator Dodd, members of the panel, my name is Andrew Marckwald. I live in Mendham Township, and I am speaking here as a member of the Concerned Citizens' Committee, regarding this pipeline. My property is located on the north branch, and it is a beautiful piece of land, and has been designated by the Mendham Planning Board as a Green Acres spot, where, as far as I know, no private citizen can do anything to alter without getting permission of the Township Planning Board.

It seems to me that you gentlemen are asking for some trouble politically when you back a bill to build a pipeline when all the facts and the answers are not in as to what it will do to the general area that is concerned, and I would think that you would be much better advised to wait until the master plan is developed, and then make your moves after the plan has been developed, and has been talked over by the citizens who are involved and get them behind you in such a project, rather than have most of the citizens who have talked here today on the other side of the fence. That is all I have to say.

SENATOR DODD: Thank you very much. Mike Ruth.

M I K E R U T H: I am here today representing an international conservation organization called Trout Unlimited. Before I read the short prepared position paper we have for you, I would like to take exception to an earlier statement that you made about the purpose of this hearing. The responsibility for formulating alternatives and their review and their subsequent recommendations are not upon the citizenry. It is incumbent upon our public agencies, and we are here to reflect our concerns. Each of you on this Committee must not address yourself to the things important to your respective constituencies. By virtue of your role on this Committee, you have in fact as a real constituency all the people affected by these decisions. It will take courage for you to make decisions which may not be exclusively responsive to your normal constituency.

The showing here today is obviously concerned with the fact that priorities may be misplaced. We in Trout Unlimited ultimately feel that any solution must be linked to a transformation of our attitude toward water use with recognition of its finite status and our wasteful habits. I wish to continue with our brief prepared statement.

SENATOR DODD: Mike, would you tell us what Trout Unlimited is.

MR. RUTH: It is an international conservation organization non-profit created for the purpose of preserving and enhancing cold weather resources, normally the habitat of trout and salmon.

It is the position of Trout Unlimited that there exists an abundance of input of all the right people concerning the technical, economical, social and environmental implications of the proposed pipeline, determining a solution that would best serve the interests of most people, which we must assume is the objective, is possible only when all factors have been examined and appropriate weight given to each.

We all know personally that when a single issue is avoided or resisted, it assumes a disproportionate amount of importance. When that issue is brought out into the open, and all considerations about it are acknowledged, the

previously consealed access and energy are dissipated, allowing all the factors to be held in realistic perspective to the point we feel there is such an issue, that being the political- not to be construed in this case as a dirty word.

Mr. Dodd, to his undeniable credit, feels qualified and compelled to seek the office of the Governor of the State of New Jersey. His willingness to take on a larger job is inspiring, however, his constituency would then include all counties, not just Essex. We welcome his aggressive pursuit of this most powerful office, and recognize the importance of establishing a large base of political and economic support---

SENATOR DODD: Is that an endorsement?

MR. RUTH: I had a feeling that you would ask me that. I said exactly what I meant, sir.

With regard to the pipeline, there is a great deal of wisdom in taking water from an area of abundance to an area of need, especially if the area of abundance is in a relatively rural area, and the area of need is in the most densely populated portion of the most densely populated State, especially if that water would lower the treatment cost for potable water and industrial discharge, especially if it would some day make possible the lucrative development of the Hackensack Meadowlands, especially when it appears that so many would be served at the inconvenience of so few.

There is no question about the gratitude of Essex and Bergen Counties that would be a product of such a pipeline, nor the importance of that gratitude toward an aspiring Gubernatorial candidate. It would be foolish to belittle the political significance of the proposed pipeline. We certainly did not intend to demean Mr. Dodd or the Committee. We simply wish to bring the political value to light, and actually acknowledge its genuine political importance, so that a proportionate amount of weight may be given it, and allow all factors to be reviewed in realistic perspective.

With apologies to Chairman Hollenbeck who has left, our closing remark is directed to Chairman Dodd. Your integrity which has served you so well to date would be in evidence again were you to view the merits of the proposed pipeline and its alternatives from the point of view of the Governor as opposed to another person running for the position. Thank you.

ASSEMBLYMAN SMITH: I would just like to make one comment. I think we are very fortunate in the State of New Jersey to have a Committee system in our legislature and I am fortunate enough to be the representative from this area and the rural areas you are talking about, so I think we have, I feel, a good checks and balances despite some comments you might have made.

MR. RUTH: Well, I appreciate those remarks, Assemblyman Smith. Were the Committee made up of a fairly weighted group from all people concerned, then there would be no basis to take issue with anything, however, this is a much smaller Committee, made up--- I don't know how it is that you actually came about being on this Committee. But, that is beside the point.

The fact that it is much smaller, I see, puts incumbent upon you a choice, or an absolute onus on you to divorce yourself as it were from those things exclusive to your constituency, your normal constituency. That when it is your are looking out for something with impact over so many more people, you must wear another hat, and in fact have to make decisions wearing that

other hat that may not be popular with the people in the area in which you are located.

ASSEMBLYMAN SMITH: As a legislator, I take that responsibility and revere it, because I feel that I do have to represent my own constituents, but I have to also look at the broad perspective of what is good for the State of New Jersey as a whole, the economic life of it, the environmental life of it, and right now the water life. I think it is something that I take very seriously, and I know that many other legislators do also.

MR. RUTH: I thank you for that. Our organization wishes you whatever to empower you to make a decision which you have to make.

ASSEMBLYMAN SMITH: And I am not running for Governor.

SENATOR DODD: Mike, the makeup of the Committee is reflected by the make-up of the State. It is called the one man one vote principle that people are serving in the legislature and indeed Congress based on population, and that is what we represent. We don't believe - I don't care what side of the political aisle you are from - or run your operation or your votes based on your single constituency. It is for the good of New Jersey. That is how we all function - whether it happens to be this bill--- I think I probably have four or five hundred bills over my legislative career that have become law. And, that is not because I am running for Governor. I need this package of bills like I need another hole in my head, to run for Governor, but this is part of my job.

I could think of a lot of other things, motherhood, apple pie, those type bills--- This has to be done. Unfortunately, or fortunately, it comes before our joint committees. That is why we are here. Whether you like the results, or you don't like the results, that is our position.

MR. RUTH: The frustration that is felt by many people, I think, comes from the fact that you state now that you are divorcing yourself from any gubernatorial chances in relating to the matters at hand, that we feel that the issues out here are so obviously lopsided opposed to the \$85 million pipeline, that why any further consideration would be given to it causes us great concern.

I find it personally hard to see how it is that you can have any further thoughts on the matter with all the evidence that has been presented, and that you do give further thought to it leads me to not believe what you said, that you have divorced yourself from the politics involved.

SENATOR DODD: Mike, you make my very point. Without the bills being introduced we wouldn't be having a dialogue today. It is a starting point. That is what we are doing, and I am still not sure whether that was an endorsement you gave me. Thank you.

Marion Wysong.

M A R I O N W Y S O N G: I am Marion Wysong of the Mendham Township Committee. Menham Township has about six miles of Route 24 which will be affected by the pipeline. Now our road is heavily traveled by commuters and shoppers from the surrounding area. It would cause a disasterous traffic jam to lay pipe along Route 24. The road is not wide enough for any construction of the magnitude that is represented as one way for the pipeline. I do not know if you are aware that there are national communication lines through the Mendhams,

along the old Rockabye Railroad right of way, there is a coaxial cable of AT&T. The southside of Route 24 carries the underground long lines of the telephone company and the northside of Route 24 carries the main distribution line of the gas line. The Mendhams have many 18th Century homes on Route 24. Like many old homes, they are built close to the road. We would like to know, will the bond issue cover the cost of repairing the roads, the reconnection of existing utilities that have been disturbed? Will our countryside be put back the way we love it?

We all know water is the staff of life and is a precious commodity. I have looked at "topo" maps of the whole area for the placement of the pipeline. To use the Route 78 plan is more feasible and would be the cheapest way to bring water to the Passaic River by way of the Dead River and I have heard today it is better to go beyond. It would be the shortest distance for the pipe. It could eliminate one large pump. To come to the Washington Valley Reservoir, it would take more than sixteen miles of pipe and more pumping stations. The north branch of the Raritan River should be preserved as it is. To destroy this lovely stream with a pipeline is like destroying one of the seven wonders of the world. This area in normal times has many resources for water. If the county fills the reservoir, which is the Washington Valley Reservoir, on the land they purchased in the sixties, our county would be cared for. If the State built a dam on the land Jersey City offered, I think it was last week, to them in Jefferson Township it would help all of north Jersey. The use of natural assets by damming is far better than a pipeline. Thank you.

SENATOR DODD: Thank you. Charles M. Menagh.

C H A R L E S M. M E N A G H: Good afternoon, Senator, and members of the Committee. My name is Charles Menagh. I am a resident and taxpayer of Basking Ridge, New Jersey.

With regard to the Apgar Associates comments on their pumping, I can add one thought. If the water is pumped up to Round Valley and then run down, it is possible to install a unit that would generate electricity on the downside. That has been done by a company I have at the Metropolitan Hospital in New York City. They take the water out of the Hudson and pump it up to the hospital and then let it run down. It generates electricity.

SENATOR DODD: It is pumped up at low use periods.

MR. MENAGH: Yes.

SENATOR DODD: So it does not interfere.

MR. MENAGH: Correct. More to the point, I look at this whole project from a slightly different view, and that is that the one thing we have in the world is mostly water, and the land we have the least of, so it just doesn't make sense to take the substance we have the most of, and put it on the land where we have the least. Building reservoirs is not a wise use of land. It is a cost that we can't afford. Actually, the most economical use in the long-run would be to de-salt the oceans. We are going to come to this sooner or later, and these funds that are being set aside for studies should concentrate de-salting salt water.

Much effort has been done. There are successful plants in various parts of the world. That I would like to see really taken seriously. It

is crises such as this that we are now in that brings this to the fore. Therefore, I would like to recommend a concentrated effort - a committee be set up, and funded to look into this cost. Thank you.

SENATOR DODD: Mr. Menagh, we do have some statistics in the works in the pipeline, if you will, on desalinization plants. A rough estimate--- It would be approximately eight to ten times the cost of water now, and the technology aside, as far as New Jersey is concerned, the practicality is just not there from just the first blush. But, we do take your advice, and we are actively seeking desalinization on a large scale.

MR. MENAGH: I would like to suggest also that it is a one-time cost, whereas these are ongoing costs that we are getting into.

SENATOR DODD: No, no, desalinization is an ongoing cost, because it is constantly running the machinery. As a matter of fact, we have several ships on standby - Navy ships - that we are ready to bring into our harbors if that is necessary in a worse case drought situation. So, it is not a major--- Where you can talk about tens of millions of gallons, it can help in degrees, and possibly along our Atlantic border. But, in the long range, I am afraid that it is not our answer. I am afraid that is not our answer. We are looking into it, and we should look into it more. Your point is well taken.

Arthur L. Reuben, Assistant Director, Somerset County Planning Board.

A R T H U R L. R E U B E N: My name is Arthur L. Reuben, Assistant Director of the Somerset County Planning Board. I am here today to present the official positions taken by the Somerset County Planning Board.

The County Planning Board has been involved with the question of water resources over the past three decades, and we also have played a leading role in securing municipal support for a six-mile run, and confluence reservoir process as the State now owns both these sites.

We are not opposed to sharing the water resources in the Raritan Basin and must express the following concerns regarding the flurry of hastily conceived water crisis legislation. Here we are speaking about the termination to reduce the guaranteed low flow legislation at Boundbrook from ninety million gallons a day to seventy million gallons a day.

That ninety million gallons per day was an assurance to the people in the Raritan Basin at the time in the 1958 Water Bond Issue. I think to go away from that assurance is incorrect. By the same token, the 1958 Water Bond Issue has indicated that the people were willing to share the Raritan resource with the urban areas to the east.

I think that some of this legislation that has come about is in relation to a rather hasty approach upon the part of the Governor, and the State Legislature, and we would hope that it would be deliberate speed on the part of the legislature, rather than hasty legislation. At this point in time, for instance, about half of the water of that ninety million gallons per day would be effluent at Boundbrook. So a reduction in the guaranty to seventy million gallons very significantly affects the quality of the Raritan Valley.

We might also point out the question of the population shift in the State of New Jersey where the five more urbanized counties lost approximately a quarter of a million people, and the three counties Hunterdon, Middlesex, and Somerset gained a total of 30,000 people. I think if you would include

Morris, you would also see that there was a gain in population, so that we suggest to the Joint Committee that you take this into consideration.

We endorse the Raritan Confluence Reservoir, the pumping station, and force main, subject to all terms and conditions agreed to by prior Commissioners in consultation with Hillsborough, Branchburg, and Bridgewater Township officials and with the Somerset County Planning Board and with the Park Commission. We are concerned with the Raritan and Passaic water supply interconnections, in that no transfer of volumes are definitely indicated, and the future demand of the Passaic Basin has not been proven. Alternatives in the Passaic Basin have not been fully explored.

The future water supply and the water quality in the Raritan Basin, a growth area, must be assured. To this end, a system of monitoring the water quality and quantity in the lower Raritan must be maintained. A matter of equitable charges for such costly pumped water must also be assured. Once the matters above are resolved, if a diversion force main is still deemed necessary, the affected municipalities and counties must be consulted regarding routing and designing details.

To meet the impending emergency, the Somerset County Planning Board endorses the installation of a temporary diversion - such as the Lake Hopatcong diversion - from the Raritan Basin to the Passaic Basin from the Lamington/North Branch along I-78 to the Passaic Basin.

We strongly urge the inclusion of the Six Mile Run Reservoir in this bond issue. The State already owns this site and it can be built promptly and insure the total use of the Delaware and Raritan Canal. Other new reservoirs - such as Hackettstown, and Manasquan - are not likely to come on line in the 1980's based upon past experience and current environmental laws.

Finally, before any new reservoirs are built, we insist that the Legislature and Administration adopt a firm policy of protecting reservoir headwaters areas and to go clearly on record to such a policy so that the judiciary will take such policy into account when rendering zoning decisions. Silted and polluted reservoirs do not guarantee a safe and adequate future water supply. Until the above matters are thoroughly investigated and considered, the Somerset County Planning Board cannot endorse S-1610 in its present form.

In regard to S-1613, the County Planning Board endorses this bill.

In regard to S-1612, the Somerset County Planning Board endorses the concept of a State Water Supply Utility but objects to the political nature of the membership which guarantees a lack of continuity and commitment to project completion, as witness the ill-fated water planning of the last two decades. This State Water Supply utility should be freed from the Department of Environmental Protection and given independent status under the Governor and Legislature. If this is done the provisions of S-1611 and S-1614 could be placed under the State Water Supply Utility which would then be the single responsible agency for Water Supply Planning - current and long range.

The State of New Jersey can ill afford the on-again/off-again water supply "crisis" planning as witness the current sad state of affairs.

Just a personal comment, I have learned a lot from the different speakers who have appeared before the Committee and from the Committee's comments. One comment also with respect to the question of conservation is that we have

been going through a period in the last six months or so of what I like to call arm-pit conservation. We should try to move into a period where we really analyze and identify those areas where we could come up with more conservation efforts that might eliminate some of the need of these expenditures. What I am particularly talking about is that under the cities of Passaic, Paterson, a lot of the urban areas were built upon rather low lying land, much of it was swamp land that was filled in. The water tables in these areas are relatively high. There is no reason that wells - even rather shallow wells - could not be sunk in these areas, and the water utilized for non-potable purposes.

For instance, the New Jersey Transit Corporation presently isn't washing any of its buses, and the ability to sink shallow wells for purposes such as that and for many industrial and commercial purposes is there.

SENATOR DODD: Most people didn't even notice.

MR. REUBEN: Just one other final comment, thank you very much for your patience in listening to all of this.

SENATOR DODD: Just for a point of clarification, on the statutory relaxation of the 90 million gallons to 70 million gallons. That is discretionary on the Commissioner's part by statute. Rather than lose 20 million gallons a day to the ocean in high flow times, when it is not needed, that particular provision was relaxed.

MR. REUBEN: Well, I am just concerned that we not get into the position in the Raritan Basin that we are presently in the Passaic River Basin.

SENATOR DODD: No, but in high flow times, it would certainly make sense not to have to reach ninety million gallons a day. But, we did because of statutory law.

MR. REUBEN: Yes, I understand your position. But, I think sometimes these crutches can be permanently built into the institutions.

ASSEMBLYMAN SMITH: I would just like to comment, Mr. Reuben, that those are some of the questions that I asked on the floor at the time this bill came before us. It came before us rather hurriedly, but we did ask those questions about water quality and about flow, and we asked them what our staff was concerned about, as well as the DEP staff. They indicated that they felt that the discretionary procedures would be utilized, but not in the detrimental effect to water quality and stream flow. So, we are trying to protect ourselves. Now it is up to our people and up to the Departments and so forth to monitor and make sure it works.

SENATOR DODD: Thank you, Mr. Reuben. Phyllis Anderson.

P H Y L L I S A N D E R S O N: Senator Dodd, Assemblyman Smith, members of the Joint Committee, my name is Phyllis Anderson. I am the manager of the Sussex County Soil Conservation District. I represent my organization on the New Jersey Water Supply Coalition and I also own lakefront property on Lake Hopatcong. Our district officials congratulate the sponsors of the bills being considered today. While your goals are shared by all, there are some of us who prefer that the bills be re-written with a platform similar to the one used by you, Senator Dodd, in the re-writing of S-1300.

Just for the record, I know there are not too many people here now, but I would like to attest to the fact that I was one of the people who gave my summer up re-writing the hazardous waste facilities siting act. Senator Dodd did listen, and it was direct input by me as liaison between the

Environmental Groups and my county freeholder that above storage of hazardous waste was put into the bill, and I feel very proud of that.

SENATOR DODD: Explain that to Mr. Ruth.

MS. ANDERSON: I wish I could have stood up and said it before. We encourage both committees to continue to try and find solutions to the States' water supply dilemma, and offer our assistance to both Committees whenever possible.

As a member of the New Jersey Water Supply Coalition, I regretfully requested that Mr. Gaffney delete Sussex County Soil Conservation District's name from his testimony today. The District is presently in the process of evaluating the environmental, health, and economic impact of both the Tocks Island and Hackettstown Dam Projects. We believe it would be irresponsible for us to endorse or condemn either of the projects until studies have been completed. However, we fully endorse all of the other statements that Mr. Gaffney has submitted to you today.

Sussex County is the headwaters of the Delaware, Passaic, and Hudson Rivers. We are also fortunate to have 110 lakes and streams located within our borders. For the past 30 years, the Soil Conservation District has tried to motivate landusers to conserve their limited natural resources including their water resources. We have tried to make water walk, not run, down the hillsides, thereby recharging groundwater for future use. We have also supplied farmers with the technical assistance needed to construct impoundments to hold waters during peak flows for use in periods of short supply. In other words, landusers throughout Sussex County have been encouraged to manage their lands through the use of good conservation practices.

Because of the efforts such as ours, most of our waters are good enough to drink. In fact, the water contained in beautiful Lake Hopatcong, located in one of the most densely populated areas of our county, has been confiscated twice for the residents of Jersey City to drink.

We encourage both committees to include monies in the proposed legislation for land use management programs that will help municipalities that are located in highland areas of the State to write ordinances and master plans that will include low density development and proper stormwater management. Most municipalities are fearful to enact such legislation because they feel they will be brought to court on charges similar to the Mount Laurel decision. If the State were to designate municipalities located in water supply areas for low density development, those municipalities would not be afraid to enact the proper legislation. Remember, if the headwaters of the State are covered with asphalt, the reservoirs that are only holes in the ground will go dry.

Another means to keep water in the watershed where it is needed is through the land treatment of sewage. Sewage effluent should not be shipped out of water supply areas by streams and rivers only to end up in the ocean. Septic systems in good repair should also be encouraged. If this is not possible in critical areas, waterless toilets should be considered.

Our agricultural industries have provided the people of New Jersey with a great deal of open space. This space is needed to supply clean waters to reservoirs. We must provide a voluntary program to improve water quality on farms that will not put the farmer out of business. Monies must be appropriated for a State cost-sharing program for the installation of water quality improvement

practices on farmlands.

Most importantly, a consumer's water conservation program must be implemented so that the consumer will not use one drop of water that is not needed. Only water saving toilets, showers, and similar devices should be offered for sale within New Jersey.

Water conservation also means fixing all those leaky pipes located between the reservoir and the consumers, an issue that you gentlemen have addressed in your proposed legislation.

The water saving measures that we have submitted today will not cost the taxpayer a great deal of money, but if implemented will probably increase the State's water supply by at least 30%.

If these measures prove useful, do us a favor and please, oh please, don't let them take anymore water out of Lake Hopatcong.

Finally, we believe that only emergency water supply programs should be implemented at this time - programs that will relieve pressures in water starved areas of the State. All other water supply issues should be addressed in the Water Supply Master Plan and should not be implemented until the Master Plan has been discussed at all appropriate public meetings, amended, and signed into law.

Thank you for giving me this opportunity today to present comment on such important proposed legislation.

SENATOR DODD: Thank you, Phyllis. Ladies and gentlemen, that concludes our broadcasting day. I would like to thank you. You really hung until the end with us. Again, we don't sit here and pretend to have the answers. I hope we got the message to you that the bills we are working on are just that. We are working on them. I thank you for your input today.

(Hearing concluded)

For Appendix

INTRODUCTION: SENATOR DODD, MEMBERS OF THE COMMITTEE, LADIES & GENTLEMEN

MY NAME IS GRAY BRYAN, A RESIDENT OF BEDMINSTER AND PRESIDENT OF THE UPPER RARITAN WATERSHED ASSOCIATION.

THE UPPER RARITAN WATERSHED HAS BEEN CALLED AN ENVIRONMENTAL GROUP AND MAY HAVE PICKED UP THE TYPICAL LABEL ATTACHED TO MANY ENVIROMENTAL GROUPS OF BEING AGAINST PROGRESS. FOR THE RECORD, WE DO NOT FALL INTO THIS DEFINITION. THE UPPER RARITAN WATERSHED IS FOR ECONOMIC GROWTH AND IS FOR THE DEVELOPMENT OF OUR NATURAL RESOURCES. WE ARE FOR PROGRESS IN EVERY POSSIBLE WAY THAT PROMOTES BETTER LIVING STANDARDS FOR US ALL. WE ARE FOR PLANNED GROWTH WHICH ENHANCES OUR WAY OF LIFE AND PROTECTS THE NECESSARY OPEN SPACES, OUR ENVIRONMENT AND OUR NATURAL RESOURCES. DEVELOPMENT AND CONSERVATION ARE COMPATIBLE.

TWENTY YEARS AGO THE NORTH EAST WAS HIT WITH THREE YEARS OF BELOW NORMAL RAINFALL. IN THE TRUE SENSE OF THE WORD WE HAD A DROUGHT. IN 1980 WE HAD FOUR MONTHS OF BELOW NORMAL RAINFALL. THIS IS NOT A NATURAL DROUGHT, BUT A MAN-MADE DROUGHT, CAUSED BY POOR PLANNING, OR MORE TO THE POINT, NO PLAN AT ALL TO CONTROL AND DEVELOP THIS LIFE-SUSTAINING LIQUID - "WATER".

WE ARE IN A CRISIS. SOLUTIONS MUST BE FOUND IMMEDIATELY. TO RUN OUT OF WATER WOULD BE CATASTROPHIC - FAR WORSE THAN AN OIL SHORTAGE.

THE STATE HAS PROPOSED NUMEROUS PROJECTS - PIPELINES, NEW RESERVOIRS AND THE INTERCONNECTING PIPES TO TRANSPORT WATER FROM ONE PLACE TO ANOTHER. NONE OF THESE PROPOSALS MEET OUR IMMEDIATE NEEDS. THEY MAY MEET OUR NEEDS IN THE FUTURE, BUT TO DATE, WE HAVE NOT SEEN THE NECESSARY DOCUMENTATION TO PROVE THAT THESE PLANS ARE BASED ON SOUNDLY DEVELOPED POPULATION FIGURES OR THE NUMEROUS OTHER DATA REQUIRED TO MAKE SOUND JUDGMENT.

THE UPPER RARITAN WATERSHED IS OPPOSED TO ANY MAJOR EXPENDITURE FOR ANY PROJECT AT THIS TIME. TO BE MORE SPECIFIC, WE UNEQUIVOCALLY OPPOSED ~~AS~~ ANY PIPELINE CONSTRUCTION THROUGH THE UPPER RARITAN WATERSHED. THIS WATERSHED HELPS TO SUPPLY OVER A MILLION PEOPLE WITH THEIR DAILY WATER NEEDS. WE CAN TAKE NO CHANCE OF DESTROYING THIS FACILITY. WE ARE STRONGLY IN FAVOR OF THE CONSTRUCTION OF A TEMPORARY ABOVE-GROUND PIPELINE FROM THE SPRUCE RUN-ROUND VALLEY COMPLEX TO THE DEAD RIVER. THIS PROJECT WILL DELIVER WATER TO WHERE IT IS MOST NEEDED AT LOW COST AND WITHIN 30 to 60 DAYS.

WE SUPPORT THE CONCEPT OF APPROPRIATING FUNDS TO MAKE AN IN-DEPTH STUDY OF OUR WATER NEEDS FOR THE NEXT 25 YEARS AND THE DEVELOPMENT OF A MASTER PLAN TO MEET THESE NEEDS

WE ARE OPPOSED TO ANY APPROPRIATION OF FUNDS FOR THE CONSTRUCTION OF ANY PROJECT UNTIL THESE STUDIES ARE COMPLETED.

WE ARE FOR THE FORMATION OF A STATE-WIDE TASK FORCE, FORMED FROM THE LOCAL GOVERNMENT AND BUSINESS LEVELS WHO HAVE A BETTER UNDERSTANDING OF LOCAL NEEDS AND PROBLEMS. WE URGE THAT THIS TASK FORCE BE FORMED AT ONCE AND BE INSTRUCTED TO PROCEED WITH ALL HASTE TOWARD THE COMPLETION OF THE STUDY AND ITS RECOMMENDED SOLUTION.

THE UPPER RARITAN WATERSHED IS READY AND WILLING TO HELP REACH AN INTELLIGENT SOLUTION FOR OUR WATER CRISES.

THANK YOU SENATOR DODD, AND YOUR COMMITTEE, FOR GRANTING ME THIS OPPORTUNITY TO SPEAK



Testimony of Guy Calcerano

Representing the New Jersey Public Interest Research Group before

A Joint Session of

The New Jersey Senate Energy and Environment Committee and

The New Jersey Assembly Energy and Natural Resources Committee

on February 17, 1981

Good morning. My name is Guy Calcerano. I am Research Director for the New Jersey Public Interest Research Group's Water Project. New Jersey PIRG is a non-profit, politically non-partisan public interest and advocacy organization funded and controlled by 25,000 college and graduate students in the state. New Jersey PIRG's staff of twenty full-time professionals is active in the fields of environmental protection, energy conservation, higher education, consumer protection, and equal rights. PIRG's Water Project has been active in water pollution control and water resource policy development for the past nine years. PIRG's Water Project is the recognized leader in citizen field monitoring for violation of pollution laws in New Jersey.

There will be a disaster in this state this summer unless there is a significant change in either the weather or state policy or both.

New Jersey is currently experiencing the worst drought in twenty years. No one disputes this fact.

If the drought continues into this summer without a change in our

attitudes and actions, disaster will strike in two ways. First, there will be an economic disaster. Businesses and plants will be forced to close, New Jersey's productive capacity will lay idle, and people will be thrown out of work. Second, there will be a social disaster. As the temperatures soar, water-consumptive air conditioning will be shut off and people will not be able to seek relief in community pools or even an open fire hydrant. In short, there will be a human disaster as the twin miseries of drought and unemployment combine to make New Jersey the tinder box state rather than the garden state.

Everyone that has appeared before this committee recognizes the urgency of this situation. Unfortunately there is some confusion about how to effectively counter this threat. The bills before you reflect this confusion. This is not surprising considering the process by which these bills were drafted.

I appeared before this joint committee three weeks ago in Lyndhurst to say that the long-range water management provisions in these bills should await the rational planning process inherent in the completion of the state-wide water supply master plan. This situation has not changed. I also stated that the majority of the bond issue projects in S 1610 could not significantly help ease the immediate water deficit. This too has not changed.

Reservoir construction will not help ease the effects of the drought this summer. If we started today these reservoirs would not be ready for two to five years and even then we would need rainfall to fill them. Pipeline construction can only be of minimal help. At best, pipelines can only move water from one location to another. Since New Jersey faces a water shortage this summer there will be a need for water in all basins and we will not be able to pay Paul without robbing Peter. Worst of all, if these water supply schemes are instituted without changes in the way water is used they will provide water to be wasted as much as they would provide water to be used.

Each day as much water is wasted in New Jersey as is efficiently used to benefit people. Water is sent through leaky municipal water systems that only deliver half of what is put into them. Water is poured out of fixtures that were never designed to efficiently use water to accomplish a simple job like washing hands or dishes or disposing of human waste. Industries still use water for a single clean process and then pour it down the drain. Waste is the largest single water user in the state.

Fortunately it is possible to take emergency action to turn this situation around. It is possible to retrofit plumbing fixtures to do the jobs for which they were designed while using much less water. We can repair leaky water systems so that they deliver water with less loss. Industries can institute emergency recycling and reuse of water. These and other water conservation techniques are simple, cheap and effective. Most importantly, a program of water conservation starts to provide results from the moment that the program is initiated.

If this committee is serious about doing something now to head off the water supply disaster that is developing now, a water conservation program is the best and perhaps the only effective alternative.

Water conservation works. There is no doubt about that. Dozens of communities across this country have instituted successful, economical water conservation programs. In the Goletta Valley, west of the city of Santa Barbara, California, a reduction in total annual water use of almost 14% has been achieved since 1971. This was accomplished at the same time that the population of the area was expanding. In Westminster, Colorado, a per capita water use reduction of 7.5% was achieved in one year.⁽¹⁾ Marin County California, Seattle, Washington, and several smaller communities in Ohio all have successful water conservation programs.

But we do not have to look to California or Ohio to see that water conservation programs can and do work. Hamilton Township, right outside of Trenton, has a model water conservation program that should be an example to us. The Hamilton Township program was started in response to a sewer hookup moratorium, but there is no reason that this idea should not be used to get New Jersey through the current drought.

Using only simple and readily available water conservation devices, Hamilton Township was able to realize a permanent water use reduction of over 18%.⁽²⁾ To achieve this savings the citizens of Hamilton Twp. did not have to undergo any hardship or change in their lifestyle. They were not asked to take shorter showers. They were not asked to flush their toilets less often than they thought necessary. They were not asked to stop watering their lawns or washing their cars. And they still achieved a water use reduction of more than 18%. This is equal to the greatest single day water use reduction that this state achieved in the last month. It is two and a quarter times the average water use reduction for the state in the month of January.⁽³⁾

If a similar program was introduced state-wide in New Jersey the potential water savings is tremendous.

Through the installation of three simple and readily available water conservation devices, toilet dams, low-flow shower heads, and sink aerators, this state could save over 127 million gallons of water a day. This savings breaks down in the following way:

sink aerators save over 24 million gallons/day

toilet dams save over 43 million gallons/day

low-flow shower heads save over 58 million gallons/day⁽⁴⁾

(The figures used to calculate this savings are available in the United States

1980 preliminary census figures, and the consultants' documents that are part of the development process for the state-wide water master plan. The figures were plugged into the water consumption formula developed by the Middlesex County Planning Board.) These figures assume that only 75% of the households in the state cooperate with the installation of these devices. A 75% citizen compliance rate was the lowest cooperation rate achieved for any type of dwelling during the Hamilton Township program. (5)

Let's put this 127 million gallon-a-day savings in perspective: 127 million gallons per day is greater than the combined daily pumpage of the Hackensack and Commonwealth Water Companies. 127 million gallons is 50% greater than the yield of the Two Bridges Project. It is greater than the combined yields of the proposed Manasquan and Hackettstown Reservoirs and the Delanco Intake as they have been proposed in S 1610.

This 127 million gallon-a-day savings results from the use of just three simple devices. It assumes no change in peoples' water use habits.

If other industrial, commercial and residential water conservation techniques were also figured into a comprehensive water conservation program the total savings would be much larger. If the citizens of New Jersey were asked to use water less wastefully in addition to installing these devices the total savings would be much greater.

In addition, this water conservation method for meeting the current drought is much less expensive than any other proposed methods of meeting the current crisis. The necessary devices are themselves inexpensive. Their installation is cheap and easy. The savings that result are permanent.

Water conservation also produces a number of secondary benefits. Water conservation results in lower-cost, more efficient waste water treatment. Water conservation also results in substantial energy savings all along the distribu-

tion, use and waste water treatment chain. Water conservation also obviates the necessity of building environmentally destructive water supply facilities, thus preserving New Jersey's dwindling reserves of open space and its recreational opportunities. Finally, a water conservation strategy for meeting New Jersey's water supply crisis will result in capital investment in New Jersey's urban areas, and will create employment and entrepreneurial opportunities for those most in need of these opportunities.

Most importantly, this savings of water is available starting tomorrow. We do not have to wait for the pouring of concrete. We do not have to wait for the promulgation of regulations. We can begin tomorrow, before it is too late, before people are out of work, before New Jersey runs dry.

Of course, water conservation is not a magic solution. We must recognize that not every gallon of the 127 million gallon savings mentioned earlier is available immediately. A program to achieve the 75% installation rate for the three devices will take some time. However, it is possible to start tomorrow and realize significant water savings this week.

If the Legislature is serious about reducing the threat that this drought poses to New Jersey, it should be concentrating on water conservation legislation. The Legislature must stand ready to appropriate money for the Department of Environmental Protection to undertake a full-scale, state-wide water conservation program. At a minimum this program would include the following steps.

1. We must start a vigorous public education campaign. There should be television commercials showing New Jersey's citizens how to cut a plastic bottle and install it in their toilet tank. This is almost as effective as installing the toilet dams mentioned earlier. Water conservation techniques should be trumpeted in front page newspaper and magazine stories, and ads if

necessary. Education programs should be started in all schools to get New Jersey's young people behind the water conservation effort. Children have been effective as water conservation deputies in New York.

2. We must start a massive drive to install emergency residential water conservation devices in as many New Jersey homes as possible. Flow restrictors for showers and sinks should be mailed out to all New Jersey homeowners in their next water bill or by first class mail. The DEP should start an advertising campaign to encourage their installation. Those with older plumbing that will not accept the standard dime-sized flow restrictor should be provided with rubber cap-type sprinkler heads for their sinks. Low-flow shower heads must be made available either through private companies or the state.

3. A program for water system leak detection and repair must be undertaken immediately with emergency funding from the legislature. We can no longer afford to wait for a bond issue that could not even be passed before next November. Some of the larger municipal systems in this state waste 70% of the water put into them before a single drop is used. This program is most needed in the Northeast but must include other municipal systems in need of repair, such as Atlantic City, Camden and Trenton.

4. We need a vigorous industrial conservation program in all industries, large and small. Industries capable of using grey-water for their industrial processes should be ordered to do so immediately. All industries using ground-water for non-contact cooling water should be ordered to retain the water on-site for other uses. Industrial water recycling must be started wherever practical. The business community in this state will surely cooperate in helping small and medium sized firms install water saving measures which have been pioneered by some larger firms.

These four steps are only the start of a comprehensive water conserva-

tion program for this state. There are other techniques which could help New Jersey through the current crisis.

New Jersey FIRG stands ready to work with this joint committee and with the Department of Environmental Protection to develop water conservation bills that will meet the immediate needs of this state. This must be our first priority.

New Jersey is facing a water supply disaster now. Only water conservation can head off this disaster. We must act now to institute an effective, state-wide water conservation program. If we do not it may be too late even for water conservation to help us.

- (1) McGhee, R., Reardon, M., and Shulman, A.; Readings in Water Conservation; National Association of Counties Research, Inc.; 1978; pp. 625 & 330.
- (2) Ricci, J.F., and Julian, A.J.; "A Drop in the Bucket"; Government Purchasing; February 1978; p. 19.
- (3) Brown, P.B.; "Storm provides a drop in the bucket"; The Newark Star-Ledger; 3 February 1981; p. 1.

(4) United States Census preliminary 1980 New Jersey population count

NJ population -----	7,335,808
NJ housing units --	2,768,767
People per housing unit -----	2.7

Water Use Formuli from the Middlesex County Planning Board

Showering

before: 7 gpm ave. x 7 min. x 2.7 people/unit ÷ 2(1 every 2 days) = 66.1 gpd
 after: 4 " " " " " " " " " " = 37.8 gpd

Toilet Use

before: 5 g/flush x 14 flush/day = 70 gpd
 after: 3.5 " " " " " " " " = 49 gpd

Sink Use

before: 5 g/min. x 13, 843,835 min/day tot. = (see below)
 after: 2.6 " " " " " " " " = " "

Total NJ Water Use Before and After Conservation Program

Showers

before: 183,015,498
 after: 104,659,392
 savings 78,356,106

Toilet Use

before: 193,813,690
 after: 135,669,583
 savings: 58,144,107

Sink Use

before: 69,219,175
 after: 35,993,971
 savings: 33,225,204

Total Estimated Savings -----169,725,417

Estimated Savings If 75% Compliance Is Achieved

Showers : 58,767,079

Toilet Use; 43,608,080

Sink Use: 24,918,903

Total -----127,294,062

- (5) Ricci and Julian; op. cit..

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TOWNSHIP OF CLINTON

HUNTERDON COUNTY



Township Council
Hermia N. Lechner, Mayor
A. Jay Lindabury
George H. Fekas
Don R. Gosch
Archie Magliochetti

Township Clerk
Ruth Nordfors
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February 19, 1981

Honorable Frank J. Dodd, Chairman
Senate Committee on Energy and Environment
The State House
Trenton, New Jersey 08625

Dear Senator Dodd:

Please make the following part of the official hearing record.
Thank you.

In listening to testimony at West Morris, two public concern trends emerged.

1. Go ahead with the manmade tinkering projects -- Great Notch interconnection and the infra-structure repairs. These are strictly pipe distribution systems and can be reversed, changed, modified with no external or long lasting impacts.

2. Move most considerably on projects that would "tinker" with the earth's basic plumbing system. This system has been millions of years developing, is complex as to inter-relationships of ground and surface water, land use patterns, etc. First, understand the system. Tinker thoughtfully only after identifying all other water resource issues related to the proposed project.

Manmade impacts can and have disrupted the basic water resources irrevocably. It is next to impossible to reverse impacts such as inter-basin transfers, paving over aquifer recharge areas, losing water through already constructed sewer systems and uncontrolled urban stormwater runoff. Mr. Gaffney pointed this out precisely in his comments on the proposed Manasquan reservoir project. The reservoir is needed and probably viable PROVIDED all the other related issues are addressed.

The best service the legislature could render the State would be to direct DEP not only to (1) complete the Master Water Supply Plan but in

February 19, 1981

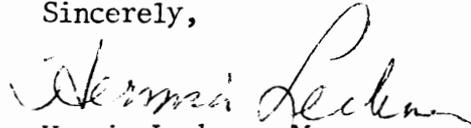
doing so (2) do a natural resource inventory related to the water resources of the State (most of the municipalities in the Raritan watershed already have this information) and (3) develop a holistic approach toward water supply project planning by taking the lead to see that plans and goals of the Departments of Economic Development, Transportation and Community Affairs are compatible with the capabilities and protection of the State's water resources (for instance, the DCA Land Use Plan shows a growth area over a buried aquifer). What happens on the land is the most important aspect of water quantity and quality management. Even the most dedicated municipalities cannot prevail for protection of water resources when State land use and other plans run at counter purposes. LET'S STOP SCRAMBLING.

DEP needs power in times of emergencies to adequately direct the use of available water.

(1) Mandatory installation of simple water saving devices, etc.

(2) Transfer of water supplies among systems. Example: City of Newark was getting up to 20 MGD Raritan water from Elizabethtown Water Company early in this drought. As soon as the Hopatcong line was in place Newark endeavored to cancel 10 MGD of Raritan water. Hopatcong water was less costly to Newark.

Sincerely,



Hermia Lechner, Mayor
Mayor, Clinton Township
Member State Water Policy and
Supply Council since 1966

HL:eb

cc:

Senators; Caulfield
Skevin
Laskin
Parker

Assemblymen: Hollenbeck, Chairman Committee on Energy & Natural Resources
Cowan
Fortunato
Stockman
Franks
Bennett
Smith

