

SENATE, No. 4182

STATE OF NEW JERSEY

219th LEGISLATURE

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Sponsored by:
Senator LINDA R. GREENSTEIN
District 14 (Mercer and Middlesex)

SYNOPSIS

Provides for establishment of New Jersey Water Infrastructure Center at institute of higher education designated by DEP; appropriates \$5 million.

CURRENT VERSION OF TEXT

As introduced.



1 **AN ACT** concerning the establishment of a water infrastructure
2 research, innovation, and data collection center in New Jersey,
3 supplementing Title 18A of the Revised Statutes, and making an
4 appropriation.

5
6 **BE IT ENACTED** *by the Senate and General Assembly of the State*
7 *of New Jersey:*

8
9 1. The Legislature finds and declares the following:

10 a. Human life, health, and prosperity is directly dependent on,
11 and affected by, water infrastructure systems for the daily
12 availability and accessibility of clean drinking water and the
13 effective and appropriate treatment and management of wastewater
14 and stormwater flows.

15 b. Although New Jersey has some well-run water infrastructure
16 systems, many of the State's water infrastructure systems are
17 inadequate, and all of its water systems face significant challenges
18 in ensuring their continued efficient and effective operations. These
19 challenges include, but are not limited to, the need to correct
20 unresolved legacy issues involving lead service lines and combined
21 sewer systems, the need to upgrade and replace aging water-related
22 infrastructure, the need to comply with new regulatory requirements
23 for emerging contaminants, and the need to address growing threats
24 arising from climate change, including increases in rainfall intensity
25 and harmful algal blooms (i.e., cyanobacteria infestations).

26 c. All residents depend on robust and reliable water systems,
27 but low-income populations and persons of color are more likely
28 than others to experience negative impacts associated with poor
29 water resource management in the State.

30 d. Many consumers in the State already find their water and
31 sewer bills to be unaffordable, which ultimately impedes the ability
32 of water suppliers and sewer service providers to establish rate
33 increases or engage in capital investment projects, thereby reducing
34 their ability to meet regulatory mandates and facilitate job creation
35 and economic stimulus in the community.

36 e. Significant investments in water infrastructure are now being
37 made by the federal and State governments, and the federal water
38 infrastructure spending proposals and availability of dedicated State
39 funding in this area is offering New Jersey a once-in-a-generation
40 opportunity to jumpstart not only new projects, but a new way of
41 doing water-related business in the State.

42 f. Based on the foregoing, it is both reasonable and necessary
43 for the State to establish a center for water infrastructure research,
44 innovation, and data collection, at an institution of higher education
45 in the State, to: engage in the cross-disciplinary study of the State's
46 water infrastructure systems and all water-related issues affecting
47 local governments, utilities, and consumers in the State; identify
48 critical improvements to the State's drinking water, wastewater, and

1 stormwater systems; and work cooperatively with stakeholders to
2 develop innovative solutions to the State's existing and emerging
3 water-related problems and help facilitate their implementation.

4
5 2. a. Within one year after the effective date of this act, the
6 New Jersey Water Infrastructure Center shall be established, and
7 shall commence operations, at a public institution of higher
8 education designated by the Department of Environmental
9 Protection, pursuant to subsection a. of section 3 of this act. The
10 purpose of the center shall be to:

11 (1) identify and promote policy and management methods to
12 facilitate the transformation of the State's water infrastructure
13 systems, as necessary to ensure that those systems are effectively
14 delivering quality drinking water, wastewater, and stormwater
15 services, throughout the State, at the lowest long-term cost; are
16 providing all residents of every community in the State with
17 quality, affordable, and clean drinking water; are adequately
18 funded; are operating efficiently and remain in a state of good
19 repair; and are providing multiple benefits to their host
20 communities, including, but not limited to, clean water and
21 waterways, local jobs, flood and climate change resilience,
22 economic growth, and healthier, safer neighborhoods;

23 (2) collect and bring together cross-disciplinary data, applied
24 research, and stakeholders to accelerate the development and
25 implementation of effective and innovative water infrastructure
26 policies, water resource management practices, and solutions to
27 problems facing water utilities and system owners and operators;
28 and

29 (3) ensure that all stakeholders, including, but not limited to,
30 consumers, local government officials, water infrastructure
31 departments and utilities, policymakers, regulators, and advocates,
32 have easy and transparent access to all available water-related data
33 and metrics generated by the center.

34 b. The center shall have the duty to engage in critical analysis;
35 provide relevant information to, and encourage and facilitate
36 cooperation among, stakeholders; and develop new and innovative
37 strategies and solutions to address water-related problems in the
38 State, as may be necessary to effectuate the purposes outlined in
39 subsection a. of this section. The center shall, at a minimum,
40 provide the following programs and services, to the extent feasible
41 with available funds:

42 (1) a data collection and dissemination program that uses a
43 transparent, accessible, up-to-date online data dashboard to provide
44 stakeholders with water systems performance data, benchmarking
45 data, data on Statewide trends in water usage and supply, and other
46 relevant data and statistics relevant to water infrastructure, supply,
47 utilities, or resource management in the State;

1 (2) an applied research program that provides and facilitates
2 cross-disciplinary policy and management research and identifies
3 cutting-edge, data-driven solutions to problems affecting State-level
4 water policy development, water systems operators, and the design
5 of water systems. Focus areas may include, but need not be limited
6 to:

7 (a) the legal, financial, organizational, training, and capacity
8 constraints that prevent the adoption, by water system owners and
9 operators, of improved, state-of-the-art, or innovative approaches to
10 water system management;

11 (b) the means and methods to be used by water system owners
12 and operators in developing, implementing, and managing customer
13 affordability programs;

14 (c) public perspectives on water infrastructure issues; and

15 (d) the means and methods to be used in better integrating clean
16 drinking water into the State's communities, particularly those
17 communities that are stressed or are lacking sufficient access to
18 clean drinking water;

19 (3) a small grants program that provides financial assistance to
20 institutions of higher education in the State to enable those
21 institutions to fund independent research related to the State's water
22 supply, water infrastructure, or management of water resources;

23 (4) a stakeholder collaboration program that uses educational
24 newsletters and group meetings to help foster a constructive
25 dialogue among stakeholders on water-related issues; and

26 (5) a water service innovation program that facilitates active
27 engagement and cooperation among, and the development and
28 maintenance of connections and ongoing relationships between,
29 institutions of higher education and water system owners and
30 operators, planners, policymakers, regulators, and other relevant
31 parties, for the purpose of encouraging and better enabling the
32 collective development of new and innovative water management
33 and infrastructure strategies and solutions.

34 c. The center shall be authorized to seek additional funding
35 from State, federal, or other sources, beyond the funding
36 appropriated pursuant to section 5 of this act, as may be necessary
37 to strengthen and expand the center's programming. For example,
38 the center may seek additional funding to establish programs and
39 initiatives such as the following:

40 (1) a consumer connections program that facilitates engagement
41 and the development and maintenance of connections between
42 water service consumers and the owners and operators of the local
43 water systems that serve them;

44 (2) a technical assistance program to help at-risk water systems
45 implement cost-saving strategies, including, but not limited to,
46 regionalization strategies, climate resiliency strategies, water-
47 energy nexus strategies, and staff capacity-building strategies; and

1 (3) a water workforce training and connections program that
2 provides training courses and otherwise facilitates the creation of
3 employment pipelines between water systems, local communities,
4 and educational institutions in the State to effectuate an increase in
5 the State's water workforce.

6 d. One year after the center is established pursuant to this act,
7 and annually thereafter, it shall submit to the Governor and,
8 pursuant to section 2 of P.L.1991, c.164 (C.52:14-19.1), to the
9 Legislature, a written report describing the programs the center has
10 implemented and activities it has undertaken pursuant to this act;
11 the actual and anticipated effects of those programs and activities
12 on the State's water systems, drinking water supply, and water
13 consumers; the center's priorities for the upcoming year; and the
14 additional resources, if any, that the center needs to properly
15 effectuate its mission. Each report prepared pursuant to this
16 subsection shall also be published on the Internet websites of the
17 Department of Environmental Protection and the institution of
18 higher education that is hosting the center.

19

20 3. a. Not more than six months after the effective date of this
21 act, the Department of Environmental Protection shall designate,
22 through a competitive selection process, an institution of higher
23 education to host the New Jersey Water Infrastructure Center
24 established pursuant to this act.

25 b. The Department of Environmental Protection shall
26 additionally:

27 (1) provide advice and assistance to guide the operations of the
28 center;

29 (2) provide relevant data and research assistance to the center,
30 upon request, as may be necessary for the center to perform its
31 duties and implement its programs;

32 (3) identify topics of concern and research areas that should be
33 addressed, through the center's programs, services, and activities, to
34 the extent feasible given existing funding and ongoing research
35 efforts; and

36 (4) identify, and provide for the center to implement, new
37 programs, services, or activities, not already identified in this act,
38 which are related to water infrastructure, water resource
39 management, or drinking water quality or supplies in the State.

40

41 4. The New Jersey Water Infrastructure Center shall be
42 authorized, in effectuating its duties pursuant to this act, to consult,
43 coordinate, and collaborate with all relevant stakeholders, as well as
44 with the Board of Public Utilities; the Water Supply Advisory
45 Council; the New Jersey Clean Water Council; the New Jersey
46 Climate Change Alliance at Rutgers, the State University; the Water
47 Resources Program at Rutgers, the State University; the New Jersey
48 Water Resources Research Institute at Rutgers, the State University;

1 the New Jersey Center for Water Science and Technology at
2 Montclair University; the New Jersey Water Science Center at the
3 United States Geological Survey; Jersey Water Works and the
4 Jersey WaterCheck data hub; and any other entity that: provides
5 research, analysis, or education on water infrastructure, water
6 quality, or other water-related issues; develops solutions to water
7 infrastructure, water supply, or water resource management
8 problems; compiles or consolidates water-related data or metrics; or
9 provides assistance in the development or effective implementation
10 of water data hubs.

11

12 5. There is appropriated, from the General Fund to the
13 Department of Environmental Protection, the sum of \$5,000,000 for
14 the purposes of financing the establishment and operations of the
15 New Jersey Water Infrastructure Center pursuant to this act.

16

17 6. This act shall take effect immediately.

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19

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STATEMENT

21

22 This bill would provide for the establishment of a New Jersey
23 Water Infrastructure Center (center) at a public institution of higher
24 education designated by the Department of Environmental
25 Protection (DEP). The bill would require the DEP's designation to
26 be made pursuant to a competitive selection process and not more
27 than six months after the bill's effective date, and it would further
28 require the center to commence its operations within one year after
29 the bill's effective date.

30 The three-fold purpose of the center would be to: (1) identify
31 and promote policy and management methods to facilitate the
32 transformation of the State's water infrastructure systems, as
33 necessary to ensure that these systems are effectively delivering
34 quality drinking water, wastewater, and stormwater services at the
35 lowest long-term cost; are providing all residents of every
36 community in the State with quality, affordable, and clean drinking
37 water; are adequately funded; are operating efficiently and remain
38 in a state of good repair; and provide multiple benefits to their host
39 communities, including, but not limited to, clean water and
40 waterways, local jobs, flood and climate change resilience,
41 economic growth, and healthier, safer neighborhoods; (2) collect
42 and bring together cross-disciplinary data, applied research, and
43 stakeholders to accelerate the development and implementation of
44 effective water infrastructure policies, water resource management
45 practices, and solutions to problems facing water utilities and
46 system owners and operators; and (3) ensure that all stakeholders,
47 including, but not limited to, consumers, local government officials,
48 water infrastructure departments and utilities, policymakers,

1 regulators, and advocates, have easy and transparent access to all
2 available water-related data and metrics generated by the center.

3 The center would have the duty to: engage in critical analysis;
4 provide relevant information to, and encourage cooperation among
5 stakeholders; and develop new strategies and solutions, as may be
6 necessary to effectuate its purposes. The center would be required
7 to provide, at a minimum, the following programs and services, to
8 the extent feasible with available funds:

9 (1) a data collection and dissemination program that uses an
10 accessible, up-to-date online data dashboard to provide stakeholders
11 with water systems performance data, benchmarking data, data on
12 Statewide trends in water usage and supply, and other relevant data
13 and statistics relevant to water infrastructure, supply, utilities, or
14 resource management in the State;

15 (2) an applied research program that provides and facilitates
16 cross-disciplinary policy and management research and identifies
17 cutting-edge, data-driven solutions to problems affecting State-level
18 water policy development, water systems operators, and the design
19 of water systems;

20 (3) a small grants program that provides financial assistance to
21 institutions of higher education in the State, in order to enable those
22 institutions to fund independent research related to the State's water
23 supply, water infrastructure, or management of water resources;

24 (4) a stakeholder collaboration program that uses educational
25 newsletters and group meetings to help foster a constructive
26 dialogue among stakeholders on water-related issues; and

27 (5) a water service innovation program that facilitates active
28 engagement and cooperation among, and the development and
29 maintenance of connections and ongoing relationships between,
30 institutions of higher education and water system owners and
31 operators, planners, policymakers, regulators, and other relevant
32 parties, for the purpose of encouraging and better enabling the
33 collective development of new and innovative water management
34 and infrastructure strategies and solutions.

35 The bill would appropriate \$5 million from the General Fund for
36 the purposes of financing the establishment and operations of the
37 center.

38 The bill would further authorize the center to seek additional
39 funding, from State, federal, or other sources, as may be necessary
40 to strengthen and expand the center's programming. For example,
41 the center would be authorized to seek additional funding to
42 establish programs and initiatives such as the following:

43 (1) a consumer connections program that facilitates engagement
44 and the development and maintenance of connections between
45 water service consumers and the owners and operators of the local
46 water systems that serve them;

47 (2) a technical assistance program to help at-risk water systems
48 implement cost-saving strategies, including, but not limited to,

1 regionalization strategies, climate resiliency strategies, water-
2 energy nexus strategies, and staff capacity-building strategies; or

3 (3) a water workforce training and connections program that
4 provides training courses and otherwise facilitates the creation of
5 employment pipelines between water systems, local communities,
6 and educational institutions in the State to effectuate an increase in
7 the State's water workforce.

8 One year after the center is established, and annually thereafter,
9 it would be required to submit a written report, to the Governor and
10 Legislature, describing: the programs the center has implemented
11 and the activities it has undertaken; the actual and anticipated
12 effects of those programs and activities on the State's water
13 systems, drinking water supply, and water consumers; the center's
14 priorities for the upcoming year; and the additional resources, if
15 any, that the center needs to properly effectuate its mission. Each
16 report would also be published on the Internet websites of the
17 Department of Environmental Protection and of the institution of
18 higher education that is hosting the center.

19 The bill would require the Department of Environmental
20 Protection to: (1) provide advice and assistance to guide the
21 operations of the center; (2) provide relevant data and research
22 assistance to the center, upon request, as may be necessary for the
23 center to perform its duties and implement its programs; (3) identify
24 topics of concern and research areas that should be addressed,
25 through the center's programs, services, and activities, to the extent
26 feasible given existing funding and ongoing research efforts; and
27 (4) identify, and provide for the center to implement, new programs,
28 services, or activities, not already identified in the bill, which are
29 related to water infrastructure, water resource management, or
30 drinking water quality or supplies in the State.