

[First Reprint]

ASSEMBLY, No. 1736

STATE OF NEW JERSEY

220th LEGISLATURE

PRE-FILED FOR INTRODUCTION IN THE 2022 SESSION

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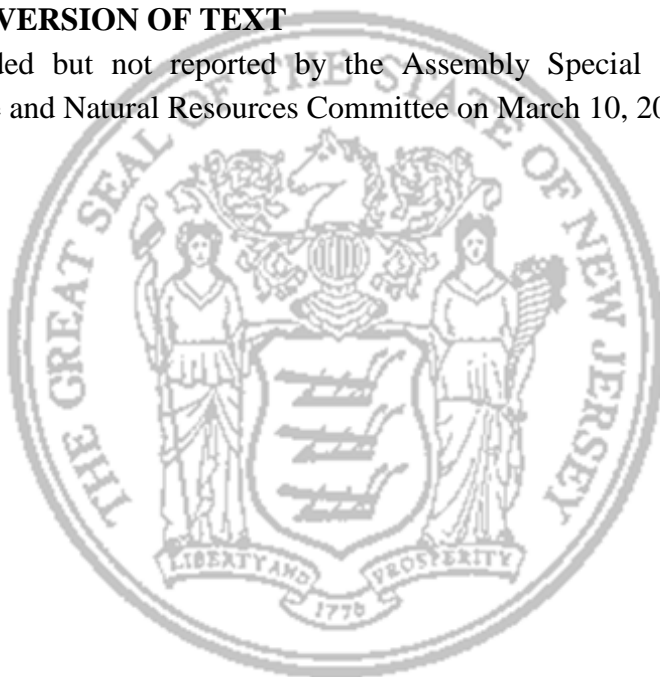
Assemblyman Calabrese

SYNOPSIS

Requires water purveyors to conduct, and report to DEP, water loss audits.

CURRENT VERSION OF TEXT

As amended but not reported by the Assembly Special Committee on Infrastructure and Natural Resources Committee on March 10, 2022.



(Sponsorship Updated As Of: 5/2/2022)

1 AN ACT concerning water loss in public water systems and
 2 amending and supplementing various parts of the statutory law.

3
 4 **BE IT ENACTED** by the Senate and General Assembly of the State
 5 of New Jersey:

6
 7 1. R.S.48:2-23 is amended to read as follows:

8 48:2-23. a. The board may, after public hearing, upon notice, by
 9 order in writing, require any public utility to furnish safe, adequate
 10 and proper service, including furnishing and performance of service
 11 in a manner that tends to conserve and preserve the quality of the
 12 environment and prevent the pollution of the waters, land and air of
 13 this State, and including furnishing and performance of service in a
 14 manner which preserves and protects the water quality of a public
 15 water **[supply]** system, and to maintain its property and equipment
 16 in such condition as to enable it to do so.

17 The board may, pending any such proceeding, require any public
 18 utility to continue to furnish service and to maintain its property and
 19 equipment in such condition as to enable it to do so.

20 The board, in requiring any public water utility to furnish safe,
 21 adequate and proper service, may require the public water utility to
 22 retain in its rate base any property which the board determines is
 23 necessary to protect the water quality of a public water **[supply]**
 24 system.

25 b. Each public water utility shall provide the board with a
 26 completed and validated water loss audit report pursuant to section
 27 7 of P.L. , c. (C.) (pending before the Legislature as
 28 this bill).

29 (cf: P.L.1988, c.163, s.5)

30
 31 2. Section 3 of P.L.1981, c.262 (C.58:1A-3) is amended to read as
 32 follows:

33 3. As used in the provisions of P.L.1981, c.262 (C.58:1A-1 et
 34 **[seq.] al.**), P.L.1993, c.202 (C.58:1A-7.3 et al.) and P.L.2003, c.251
 35 (C.58:1A-13.1 et al.):

36 "Aquaculture" means the propagation, rearing, and subsequent
 37 harvesting of aquatic organisms in controlled or selected
 38 environments, and the subsequent processing, packaging, and
 39 marketing, and shall include, but need not be limited to, activities to
 40 intervene in the rearing process to increase production such as
 41 stocking, feeding, transplanting, and providing for protection from
 42 predators. "Aquaculture" shall not include the construction of facilities
 43 and appurtenant structures that might otherwise be regulated pursuant
 44 to any State or federal law or regulation.

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

Matter underlined thus is new matter.

Matter enclosed in superscript numerals has been adopted as follows:

¹Assembly ANR committee amendments adopted March 10, 2022.

1 "Aquatic organism" means and includes, but need not be limited
2 to, finfish, mollusks, crustaceans, and aquatic plants which are the
3 property of a person engaged in aquaculture.

4 **【a.】** "Commissioner" means the Commissioner of **【the**
5 Department of**】** Environmental Protection or the commissioner's
6 designated representative **【;】**.

7 **【b.】** "Consumptive use" means any use of water diverted from
8 surface or ground waters other than a nonconsumptive use as defined
9 in this section **【;】**.

10 "Data validity score" means the assessment of the quality of data
11 used in a water loss audit report in accordance with the data validity
12 scoring system of the American Water Works Association's most
13 current edition of the "Water Audits and Loss Control Programs,
14 Manual M36" and its associated Free Water Audit Software.

15 **【c.】** "Department" means the Department of Environmental
16 Protection **【;】**.

17 **【d.】** "Diversion" means the taking or impoundment of water from
18 a river, stream, lake, pond, aquifer, well, other underground source, or
19 other water body, whether or not the water is returned thereto,
20 consumed, made to flow into another stream or basin, or discharged
21 elsewhere**【;】**.

22 "Level one validation" means the process whereby a water
23 purveyor interacts with a technical expert who did not participate in
24 compiling the water loss audit to review and confirm the basis of all
25 data entries in the water purveyor's water loss audit report and to
26 appropriately characterize the data validity score of the reported data.

27 **【e.】** "Nonconsumptive use" means the use of water diverted from
28 surface or ground waters in such a manner that it is returned to the
29 surface or ground water at or near the point from which it was taken
30 without substantial diminution in quantity or substantial impairment of
31 quality **【;】**.

32 **【f.】** "Person" means any individual, corporation, company,
33 partnership, firm, association, owner or operator of a **【water supply**
34 **facility】** public water system, political subdivision of the State and any
35 state, or interstate agency or Federal agency **【;】**.

36 ¹"Public community water system" means the same as that term is
37 defined in subsection l. of section 3 of P.L.1977, c.224 (C.58:12A-3).¹

38 "Public water system" means ¹【a system for the provision to the
39 public of water for human consumption through pipes or other
40 constructed conveyances, if such system has at least 15 service
41 connections or regularly serves an average of at least 25 individuals
42 daily at least 60 days out of the year. "Public water system" includes:
43 (1) any collection, treatment, storage and distribution facilities under
44 control of the operator of such system and used primarily in
45 connection with such system; and (2) any collection or pre-treatment
46 storage facilities not under such control which are used primarily in

1 connection with such system] the same as that term is defined in
2 section 3 of P.L.1977, c.224 (C.58:12A-3)¹.

3 [g. "Waters" or "waters of the State" means all surface waters and
4 ground waters in the State;

5 h.] "Safe or dependable yield" or "safe yield" means that
6 maintainable yield of water from a surface or ground water source or
7 sources which is available continuously during projected future
8 conditions, including a repetition of the most severe drought of record,
9 without creating undesirable effects, as determined by the department
10 [;].

11 [i. "Aquaculture" means the propagation, rearing and subsequent
12 harvesting of aquatic species in controlled or selected environments,
13 and the subsequent processing, packaging and marketing, and shall
14 include, but need not be limited to, activities to intervene in the rearing
15 process to increase production such as stocking, feeding, transplanting,
16 and providing for protection from predators. "Aquaculture" shall not
17 include the construction of facilities and appurtenant structures that
18 might otherwise be regulated pursuant to any State or federal law or
19 regulation;

20 j. "Aquatic organism" means and includes, but need not be
21 limited to, finfish, mollusks, crustaceans, and aquatic plants which are
22 the property of a person engaged in aquaculture;

23 k.] "Six Mile Run Reservoir Site" means the land acquired by the
24 State for development of the Six Mile Run Reservoir in Franklin
25 Township, Somerset County, as identified by the Eastern Raritan
26 Feasibility Study and the New Jersey Statewide Water Supply Plan
27 prepared and adopted by the department pursuant to section 13 of
28 P.L.1981, c.262 (C.58:1A-13).

29 "Water loss" means the difference between the annual volume of
30 water entering a water distribution system and the annual volume of
31 metered and unmetered water taken by registered customers, the water
32 purveyor, and others who are implicitly or explicitly authorized to do
33 so pursuant to a permit issued by the department, and includes the
34 annual volume lost through breaks, leaks, and overflows on mains,
35 service reservoirs, and service connections, up to the point of customer
36 metering, in addition to unauthorized consumption, metering
37 inaccuracies, and systemic data handling errors.

38 "Water purveyor" means any person that owns ¹[or operates] ¹a
39 public ¹community ¹water system ¹with more than 500 service
40 connections¹.

41 "Waters" or "waters of the State" means all surface waters and
42 ground waters in the State.

43 (cf: P.L.2003, c.251, s.1)

44
45 3. Section 9 of P.L.1981, c.262 (C.58:1A-9) is amended to read
46 as follows:

1 9. The Board of **Regulatory Commissioners** Public Utilities
2 shall fix just and reasonable rates for any public water **supply**
3 system subject to its jurisdiction, as may be necessary for that
4 system to comply with an order issued by the department or the
5 terms and conditions of a permit issued pursuant to P.L.1981, c.262
6 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.).
7 (cf: P.L.1993, c.202, s.8)

8
9 4. Section 14 of P.L.1981, c.262 (C.58:1A-14) is amended to
10 read as follows:

11 14. a. **When** Whenever the department determines that the
12 developed water supply available to a water purveyor is inadequate
13 to service its users with an adequate supply of water under a variety
14 of conditions, the department may order the water purveyor to
15 develop or acquire, within a reasonable period of time, additional
16 water supplies sufficient to provide that service.

17 b. The Division of Local Government Services in the
18 Department of Community Affairs shall, when reviewing the annual
19 budget of any municipality, county, or agency thereof which
20 operates a public water **supply** system, certify that an amount
21 sufficient to cover the cost of any order issued to the **municipality,**
22 **county or agency thereof** water purveyor pursuant to subsection a.
23 of this section is included in that annual budget.

24 (cf: P.L.1981, c.262, s.14)

25
26 5. Section 15 of P.L.1981, c.262 (C.58:1A-15) is amended to
27 read as follows:

28 15. The department may:

29 a. Perform any and all acts and issue such orders as are
30 necessary to carry out the purposes and requirements of P.L.1981,
31 c.262 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.);

32 b. Administer and enforce the provisions of P.L.1981, c.262
33 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.) and rules,
34 regulations and orders adopted, issued or effective thereunder;

35 c. Present proper identification and then enter upon any land or
36 water for the purpose of making any investigation, examination or
37 survey contemplated by P.L.1981, c.262 (C.58:1A-1 et al.) or
38 P.L.1993, c.202 (C.58:1A-7.3 et al.);

39 d. **Subpena** Subpoena and require the attendance of
40 witnesses and the production by them of books and papers pertinent
41 to the investigations and inquiries the department is authorized to
42 make under P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993, c.202
43 (C.58:1A-7.3 et al.), and examine them and those public records as
44 shall be required in relation thereto;

45 e. Order the interconnection of public water **supply** systems,
46 whether in public or private ownership, whenever the department
47 determines that the public interest requires that this interconnection

1 be made, and require the furnishing of water by means of that
2 public water system to another public water system, but no order
3 shall be issued before comments have been solicited at a public
4 hearing, notice of which has been published at least 30 days before
5 the hearing, in one newspaper circulating generally in the area
6 served by each involved public water **【supply】** system, called for
7 the purpose of soliciting comments on the proposed action.

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

13 g. Enter into agreements, contracts, or cooperative
14 arrangements under such terms and conditions as the department
15 deems appropriate with other states, other State agencies, federal
16 agencies, municipalities, counties, educational institutions,
17 **【investor-owned water companies, municipal utilities authorities,】**
18 water purveyors, or other organizations or persons;

19 h. Receive financial and technical assistance from the federal
20 government and other public or private agencies;

21 i. Participate in related programs of the federal government,
22 other states, interstate agencies, or other public or private agencies
23 or organizations;

24 j. Establish adequate fiscal controls and accounting procedures
25 to assure proper disbursement of and accounting for funds
26 appropriated or otherwise provided for the purpose of carrying out
27 the provisions of P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993,
28 c.202 (C.58:1A-7.3 et al.);

29 k. Delegate those responsibilities and duties to personnel of the
30 department as deemed appropriate for the purpose of administering
31 the requirements of P.L.1981, c.262 (C.58:1A-1 et al.) or P.L.1993,
32 c.202 (C.58:1A-7.3 et al.);

33 l. Combine permits issued pursuant to P.L.1981, c.262
34 (C.58:1A-1 et al.) or P.L.1993, c.202 (C.58:1A-7.3 et al.) with
35 permits issued pursuant to any other act whatsoever whenever that
36 action would improve the administration of those acts;

37 m. Evaluate and determine the adequacy of ground and surface
38 water supplies and develop methods to protect aquifer recharge
39 areas.

40 (cf: P.L.1993, c.202, s.9)

41
42 6. (New section) a. No later than 18 months after the date of
43 enactment of P.L. , c. (C.) (pending before the Legislature as
44 this bill), the department shall adopt, pursuant to the "Administrative
45 Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), rules and
46 regulations concerning water loss audits. The rules and regulations
47 shall be based on the most current edition of the American Water

1 Works Association's "Water Audits and Loss Control Programs,
2 Manual M36" and its associated Free Water Audit Software.

3 ¹b.¹ The rules and regulations ¹adopted pursuant to this section¹
4 shall include, but need not be limited to ¹rules and regulations
5 governing¹:

6 (1) the conduct of annual standardized water loss audits by water
7 purveyors;

8 (2) ¹~~the~~ process for level one validation of a water loss audit
9 report prior to its submittal to the department;

10 (3) ¹~~the~~ technical qualifications required of a person to engage in
11 level one validation;

12 ¹~~the~~ (4) the certification requirements for a person selected by a
13 water purveyor to provide level one validation of its own water loss
14 audit report;

15 (5) ¹~~(3)~~ the method and process for submittal of a water loss audit
16 report to the department;

17 ¹~~(6)~~ (4) a requirement to notify the water purveyor's customers
18 of the water loss reported in the water audit, on or with the water
19 purveyor's next annual consumer confidence report delivered after the
20 water audit is submitted, or on or with the next bill the customer
21 receives after the water audit is submitted; and

22 ¹~~(7)~~ (5) procedures for the voluntary submittal of a water loss
23 audit report by a water purveyor who regularly serves fewer than
24 ¹~~3,300 individuals~~ 500 service connections¹.

25 ¹~~b.~~ The department shall update the rules and regulations
26 adopted pursuant to subsection a. of this section no later than one year
27 after the release of any subsequent editions of the American Water
28 Works Association's "Water Audits and Loss Control Programs,
29 Manual M36."¹

30

31 7. (New section) a. (1) No later than ¹~~24~~ 36¹ months after the
32 date of enactment of P.L. , c. (C.) (pending before the
33 Legislature as this bill), each water purveyor ¹~~who~~ regularly serves
34 3,300 or more individuals¹ shall submit to the department a
35 completed and validated water loss audit report for the previous
36 calendar year as prescribed by the department pursuant to the rules and
37 regulations adopted pursuant to section 6 of
38 P.L. , c. (C.) (pending before the Legislature as this bill).

39 (2) Annually thereafter, each water purveyor required to submit a
40 water loss audit report pursuant to paragraph (1) of this subsection
41 shall submit a completed and validated water loss audit report covering
42 the previous calendar year on or before July 1, or such earlier date as
43 may be established by the department.

44 b. Each water loss audit report submitted to the department shall:

45 (1) include the name and technical qualifications of the person
46 who conducted the level one validation;

(2) be ¹~~["attested"]~~ certified¹ to by the ¹~~["chief financial officer, chief engineer, or general manager of the water purveyor"]~~ licensed operator or professional engineer of the public water system and the responsible corporate officer of the public water system, if privately held, by the executive director, if an authority, or by the mayor or chief executive officer of the municipality, if municipally owned, as applicable¹; and

(3) be accompanied by information, in a form specified by the department, identifying the steps taken by the water purveyor in the preceding year to reduce the volume of apparent and real water losses.

c. The department shall deem incomplete and return to a water purveyor any water loss audit report found by the department to be incomplete, not validated, unattested, or incongruent with known characteristics of water system operations. A water purveyor shall resubmit to the department a revised water loss audit report within 90 days after an audit has been returned by the department pursuant to this subsection.

d. The department shall post all validated water loss audit reports on its internet website in a manner that allows for comparisons across water purveyors. The department shall make the validated water loss audit reports available for public viewing in a timely manner after their receipt.

8. (New section) No ¹~~["sooner than 36 months and no"]~~¹ later than 48 months after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the department, taking into consideration the level one validated water loss audit reports received by the department, shall ¹~~["adopt, pursuant to the "Administrative Procedure Act," P.L.1968, c.410 (C.52:14B-1 et seq.), rules and regulations"]~~ publish, on its Internet website, recommendations setting forth¹:

a. ¹~~["specifying"]~~¹ a minimum data validity score or a specific level of yearly improvement in the data validity score of future annual water loss audit reports; and

b. ¹~~["setting forth"]~~¹ performance standards to be met by a water purveyor concerning the volume of water losses ¹~~that the department publishes on its website~~¹.

9. (New section) For each of the two fiscal years beginning after the date of enactment of P.L. , c. (C.) (pending before the Legislature as this bill), the department, in consultation with the New Jersey Infrastructure Bank created pursuant to section 4 of P.L.1985, c.334 (C.58:11B-4), shall, within the limits of funds appropriated or otherwise made available to it, establish a grant program to assist water purveyors in procuring water loss audit report validation.

1 ¹10. (New section) a. The department shall provide technical
2 assistance to instruct water purveyors concerning:

3 (1) the American Water Works Association's "Water Audits and
4 Loss Control Programs, Manual M36" methodology, data tracking,
5 and use of the associated Free Water Audit Software; and

6 (2) the development and implementation of water loss reduction
7 programs, including, but not limited to, metering techniques
8 including testing, repair, and replacement, pressure management
9 techniques, condition-based assessment techniques for transmission
10 and distribution pipelines, and active leak detection.

11 b. The department shall establish a technical advisory
12 committee, which shall include representatives of nonprofit civic
13 and professional organizations, to assist with the implementation of
14 P.L. , c. (C.) (pending before the Legislature as this
15 bill).¹

16

17 ¹11.1 10.¹ Section 7 of P.L.2017, c.133 (C.58:31-7) is
18 amended to read as follows:

19 7. a. Beginning no later than 18 months after the effective date
20 of **[this act]** P.L.2017, c.133 (C.58:31-1 et seq.) , every water
21 purveyor shall implement an asset management plan designed to
22 inspect, maintain, repair, and renew its infrastructure consistent
23 with standards established by the American Water Works
24 Association. The asset management plan shall include:

25 (1) a water main renewal program designed to achieve a 150-
26 year replacement cycle, or other appropriate replacement cycle as
27 determined by a detailed engineering analysis of the asset condition
28 and estimated service lives of the water mains serving the public
29 water system;

30 (2) a water supply and treatment program designed to inspect,
31 maintain, repair, renew, and upgrade wells, intakes, pumps, and
32 treatment facilities in accordance with all federal and State
33 regulations, standards established by the American Water Works
34 Association, and any mitigation plan required pursuant to section 5
35 of **[this act]** P.L.2017, c.133 (C.58:31-5) ; and

36 (3) any other programs, plans, or provisions as may be required
37 by the department pursuant to rules and regulations adopted
38 pursuant to the "Administrative Procedure Act," P.L.1968, c.410
39 (C.52:14B-1 et seq.).

40 Each water purveyor shall dedicate funds on an annual basis to
41 address and remediate the highest priority projects as determined by
42 its asset management plan. A water purveyor that is subject to the
43 requirements of section 7 of P.L. , c. (C.) (pending before
44 the Legislature as this bill) shall consider the findings of its annual
45 water loss audit report when determining which projects shall
46 receive highest priority in its asset management plan pursuant to
47 this subsection.

1 All asset management plans and system condition reports shall
2 be certified to by the licensed operator or professional engineer of
3 the public water system and the responsible corporate officer of the
4 public water system, if privately held, executive director, if an
5 authority, or mayor or chief executive officer of the municipality, if
6 municipally owned, as applicable. The replacement cycle shall be
7 determined by dividing the miles of water main located in the
8 public water system by 150 or other appropriate demonstration set
9 forth in the certified asset management plan prepared pursuant to
10 this section.

11 b. At least once every three years, each water purveyor shall
12 provide to the department and the board, if applicable, a report
13 based on its asset management plan prepared pursuant to subsection
14 a. of this section identifying the infrastructure improvements to be
15 undertaken in the coming year and the cost of those improvements,
16 as well as identifying the infrastructure improvements completed in
17 the past year and the cost of those improvements. A municipal
18 water department or municipal water authority shall also submit the
19 report required pursuant to this subsection to the Division of Local
20 Government Services in the Department of Community Affairs.

21 c. The department, the board, and the Department of
22 Community Affairs shall create a centralized portal allowing for
23 electronic submittal of the report required pursuant to subsection b.
24 of this section. The lack of a centralized portal pursuant to this
25 subsection shall not negate the requirement for a water purveyor to
26 submit a report pursuant to subsection b. of this section.

27 (cf: P.L.2017, c.133, s.7)

28

29 ¹**[12.]** 11.¹ This act shall take effect immediately.