

107TH CONGRESS
1ST SESSION

S. 1593

To authorize the Administrator of the Environmental Protection Agency to establish a grant program to support research projects on critical infrastructure protection for water supply systems, and for other purposes.

IN THE SENATE OF THE UNITED STATES

OCTOBER 30, 2001

Mr. JEFFORDS (for himself, Mr. SMITH of New Hampshire, and Mr. CRAPO) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To authorize the Administrator of the Environmental Protection Agency to establish a grant program to support research projects on critical infrastructure protection for water supply systems, and for other purposes.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Water Infrastructure
5 Security and Research Development Act”.

6 **SEC. 2. DEFINITIONS.**

7 In this Act:

1 (1) ADMINISTRATOR.—The term “Adminis-
2 trator” means the Administrator of the Environ-
3 mental Protection Agency.

4 (2) CRITICAL INFRASTRUCTURE.—The term
5 “critical infrastructure” means a facility or service,
6 the disruption, incapacity, or destruction of which
7 would have a debilitating impact on the defense, se-
8 curity, health and safety, or long-term economic
9 prosperity of the United States, as determined by
10 the Administrator.

11 (3) RESEARCH INSTITUTION.—

12 (A) IN GENERAL.—The term “research in-
13 stitution” means a public or private entity
14 that—

15 (i) performs research to improve the
16 security of water supply systems; and

17 (ii) complies with any applicable laws
18 (including regulations) for the safe-
19 guarding of sensitive information.

20 (B) INCLUSION.—The term “research in-
21 stitution” includes a national laboratory.

22 (4) WATER SUPPLY SYSTEM.—

23 (A) IN GENERAL.—The term “water sup-
24 ply system” means a public water system (as
25 defined in section 1401 of the Safe Drinking

1 Water Act (42 U.S.C. 300f)) or a publicly
2 owned treatment works (as defined in section
3 212 of the Federal Water Pollution Control Act
4 (33 U.S.C. 1292)).

5 (B) INCLUSIONS.—The term “water supply
6 system” includes—

7 (i) a water source, including—

8 (I) surface water in a lake, res-
9 ervoir, or other impoundment;

10 (II) flowing water in a river; or

11 (III) ground water in an aquifer;

12 (ii) a system of aqueducts, tunnels,
13 reservoirs, or pumping facilities to convey
14 water from the water source;

15 (iii) a treatment facility;

16 (iv) a distribution system carrying fin-
17 ished water to users through a system of
18 mains and subsidiary pipes; or

19 (v) a wastewater collection and treat-
20 ment system.

21 **SEC. 3. WATER INFRASTRUCTURE SECURITY GRANT PRO-**
22 **GRAM.**

23 (a) IN GENERAL.—The Administrator may establish
24 a program under which the Administrator shall make
25 grants to and enter into cooperative agreements with re-

1 search institutions to improve the protection and security
 2 of public water supply systems by—

3 (1) carrying out eligible projects described in
 4 subsection (b) on technologies and processes that ad-
 5 dress physical and cyber threats to water supply sys-
 6 tems;

7 (2) improving information sharing and analysis
 8 efforts among research institutions; and

9 (3) providing technical assistance and training
 10 to research institutions.

11 (b) ELIGIBLE PROJECTS.—To be eligible for assist-
 12 ance under subsection (a), a project shall—

13 (1) assess security issues for water supply sys-
 14 tems by—

15 (A) conducting system-specific and system-
 16 wide assessments of the scope of and future im-
 17 plications of security issues for water supply
 18 systems; and

19 (B) developing and refining vulnerability
 20 assessment tools for water supply systems to
 21 identify—

22 (i) physical vulnerabilities, including
 23 biological, chemical, and radiological con-
 24 tamination; and

25 (ii) cyber vulnerabilities;

1 (2) protect water supply systems from a poten-
2 tial threat by—

3 (A) developing technologies, processes,
4 guidelines, standards, and procedures that
5 protect—

6 (i) the physical assets of water supply
7 systems, including protection from the im-
8 pact of biological, chemical, and radio-
9 logical contamination;

10 (ii) information systems, including
11 process controls and supervisory control
12 and data acquisition; and

13 (iii) cyber systems at water supply
14 systems;

15 (B) developing real-time monitoring sys-
16 tems to protect against biological, chemical, or
17 radiological attack; and

18 (C) developing educational and awareness
19 programs for water supply systems;

20 (3) develop technologies and processes for ad-
21 dressing the mitigation, response and recovery of bi-
22 ological, chemical, and radiological contamination of
23 water supply systems;

24 (4) implement the requirements of Presidential
25 Decision Directive 63 by refining and operating the

1 Information Sharing and Analysis Center to capture
2 and share threats, malevolent events, and best prac-
3 tices; and

4 (5) test and evaluate new technologies and
5 processes by—

6 (A) developing regional pilot facilities to
7 demonstrate upgraded security systems, assess
8 new technologies, and determine the effect of
9 enhanced security on operations and costs of
10 the water supply system; and

11 (B) study physical security and cyber secu-
12 rity at water supply systems.

13 (c) SELECTION CRITERIA.—

14 (1) IN GENERAL.—The Administrator, in con-
15 sultation with the water sector advisory group estab-
16 lished by the water sector coordinator on infrastruc-
17 ture security, shall establish guidelines, procedures,
18 and criteria for the award of grants and other forms
19 of financial assistance under subsection (a).

20 (2) REQUIREMENTS.—The Administrator shall
21 ensure that a project carried out under this Act re-
22 flects the needs of water supply systems of various
23 sizes and geographic areas of the United States.

24 (3) PUBLICATION.—The Administrator shall
25 publish the guidelines, procedures, and criteria es-

1 tablished under paragraph (1) in the Federal Reg-
2 ister.

3 (d) APPLICATION.—To be eligible for assistance
4 under subsection (a), a research institution shall submit
5 a grant application that—

6 (1) provides for collaboration between research-
7 ers, research institutions, and water system per-
8 sonnel, staff, and managers;

9 (2) includes a plan for satisfying the require-
10 ments established under subsection (b) and (c)(1);
11 and

12 (3) demonstrates compliance with Federal re-
13 quirements for safeguarding sensitive information.

14 (e) AMOUNT.—A grant to any 1 project carried out
15 under this Act shall not exceed \$1,000,000.

16 (f) COST-SHARING.—

17 (1) FEDERAL SHARE.—The Federal share of
18 the cost of carrying out a project under subsection
19 (b)(5) shall be 50 percent.

20 (2) NON-FEDERAL SHARE.—The non-Federal
21 share of the cost of carrying out a project under
22 subsection (b)(5) may be provided in the form of in-
23 kind goods or services.

24 (g) INFORMATION SHARING.—As soon as practicable
25 after the results of a project carried out under this Act

1 have been evaluated, the Administrator shall disseminate
2 to water supply systems information on the results of the
3 project through—

4 (1) the Information Sharing and Analysis Cen-
5 ter; or

6 (2) other appropriate means.

7 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

8 There is authorized to be appropriated to carry out
9 this Act \$12,000,000 for each of fiscal years 2002 through
10 2007, to remain available until expended.

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