

119TH CONGRESS
1ST SESSION

S. 2388

To amend the Federal Water Pollution Control Act to reauthorize the pilot program for alternative water source projects, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 23, 2025

Mr. GALLEGO (for himself and Mr. CURTIS) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

A BILL

To amend the Federal Water Pollution Control Act to reauthorize the pilot program for alternative water source projects, 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 Modernization Act of 2025”.

6 **SEC. 2. INTELLIGENT WATER INFRASTRUCTURE TECH-**
7 **NOLOGY.**

8 Section 220 of the Federal Water Pollution Control
9 Act (33 U.S.C. 1300) is amended—

(1) in subsection (b), by adding at the end the following:

“(3) INTELLIGENT WATER INFRASTRUCTURE TECHNOLOGY.—The term ‘intelligent water infrastructure technology’ means—

“(A) intelligent wastewater treatment and collection systems and stormwater management operations, including technologies that rely on—

“(i) the use of real-time monitoring, management, analytics, and data collection tools, embedded intelligence, and predictive maintenance capabilities that improve the energy efficiency, cost efficiency, reliability, and resiliency of wastewater treatment and collection systems;

“(ii) real-time remote sensors that provide continuous monitoring of water quality to support optimization; and

“(iii) the use of artificial intelligence and other intelligent optimization tools that—

“(I) reduce operational costs, including operational costs relating to

1 energy consumption and chemical
2 treatment; and

3 “(II) improve decisionmaking;

4 “(B) innovative and alternative combined
5 sewer and stormwater control projects, includ-
6 ing groundwater banking, that rely on real-time
7 data acquisition to support predictive aquifer
8 recharge through water reuse and stormwater
9 management capabilities;

10 “(C) advanced digital design and construc-
11 tion management tools, including advanced dig-
12 ital technologies;

13 “(D) technology that can identify or re-
14 duce water losses in a nondestructive or non-
15 disruptive manner, including through analytical
16 software, flow and pressure monitoring, or
17 acoustic data collection;

18 “(E) predictive and diagnostic tools for in-
19 formed decisionmaking;

20 “(F) technology that can provide com-
21 prehensive data on pipe integrity to identify the
22 presence of leaks or gas pockets;

23 “(G) technology that can provide informa-
24 tion on the extent of leaks or gas pockets, with
25 an emphasis on detecting weakness of, vulner-

ability of, or damage to pipe barrels, pipe joints, or other pipe features;

“(H) real-time remote sensing technologies, including the use of advanced data management and analytics, that detect and alert owners and operators to wastewater and water supply treatment facilities operations, including leakages, and pipe bursts on a real-time basis, including persistent sensor networks capable of measuring—

“(i) acoustic signals;

“(ii) pressure transient;

“(iii) water quality; or

“(iv) water flow;

“(I) advanced metering infrastructure, including meter data analytics and ratepayer technology—

“(i) to improve end-user conservation;

and

“(ii) in support of disadvantaged communities;

“(J) resilient water supply projects that may provide real-time monitoring of weather patterns and weather-related impacts on water

1 quality and flood protection reservoirs and
2 dams that enhance operations, including—

3 “(i) improved water supply reliability
4 and management;

5 “(ii) protection of natural resources,
6 including fisheries; and

7 “(iii) temperature control;

8 “(K) innovative and alternative water sup-
9 ply projects, including groundwater banking,
10 that rely on real-time data acquisition to sup-
11 port predictive aquifer recharge through water
12 reuse and stormwater management capabilities;

13 “(L) artificial intelligence and other intel-
14 ligent optimization tools that—

15 “(i) reduce operational costs, includ-
16 ing costs relating to energy consumption
17 and chemical treatment of wastewater and
18 stormwater; and

19 “(ii) improve decisionmaking; and

20 “(M) advanced digital design and construc-
21 tion management technologies and tools relating
22 to water treatment systems and distribution
23 networks the development of advanced digital
24 models.”;

(2) by striking subsection (f) and inserting the following:

“(f) USES OF GRANTS.—

“(1) IN GENERAL.—Amounts from grants received under this section may be used for engineering, design, construction, and final testing of alternative water source projects designed to meet critical water supply needs.

“(2) PROHIBITION.—Amounts from grants received under this section may not be used for planning, feasibility studies, operation, or maintenance.

“(3) INTELLIGENT WATER INFRASTRUCTURE TECHNOLOGIES.—

“(A) IN GENERAL.—Amounts from grants received under this section may be used for engineering, design, construction, implementation, training, and operations relating to the adoption and use of intelligent water infrastructure technology.

“(B) APPLICABILITY.—For purposes of paragraph (2), any costs with respect to intelligent water infrastructure technology shall not be considered operation or maintenance costs.”;

(3) by striking subsection (h) and inserting the following:

1 “(h) REPORTS.—

2 “(1) IN GENERAL.—Not later than 180 days
3 after the date of enactment of the Water Infrastruc-
4 ture Modernization Act of 2025, and not less fre-
5 quently than annually thereafter, the Administrator
6 shall submit to Congress a report that—

7 “(A) describes—

8 “(i) the projects awarded grants for
9 the purposes described in subsection (f)(3);
10 and

11 “(ii) the improvements in the resil-
12 iency that resulted from grants awarded
13 under this section; and

14 “(B) includes any recommendations of the
15 Administrator to improve the ability of grants
16 under this section to achieve the uses described
17 in subsection (f).

18 “(2) INITIAL REPORT.—In the initial report re-
19 quired under paragraph (1), the Administrator shall
20 include a description of the implementation of this
21 section, including a description of—

22 “(A) the projects for which a grant was
23 sought under this section for the purposes de-
24 scribed in subsection (f)(3) that were denied;
25 and

1 “(B) for each of the projects described in
2 subparagraph (A), the reasons for which the
3 grant was denied.”; and
4 (4) in subsection (i)(1)—
5 (A) by striking “\$25,000,000” and insert-
6 ing “\$50,000,000”; and
7 (B) by striking “2026” and inserting
8 “2028”.

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