



(Original Signature of Member)

118TH CONGRESS
1ST SESSION

H. R. _____

To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to authorize grants for smart water infrastructure technology, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

Mr. GALLEGO introduced the following bill; which was referred to the Committee on _____

A BILL

To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to authorize grants for smart water infrastructure technology, 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; TABLE OF CONTENTS.**

4 (a) SHORT TITLE.—This Act may be cited as the
5 “Water Infrastructure Modernization Act of 2023”.

6 (b) TABLE OF CONTENTS.—The table of contents for
7 this Act is as follows:

Sec. 1. Short title; table of contents.

Sec. 2. Purposes.

TITLE I—WASTEWATER INFRASTRUCTURE

Sec. 101. Smart wastewater infrastructure technology for treatment works.

TITLE II—DRINKING WATER INFRASTRUCTURE

Sec. 201. Smart water infrastructure technology for drinking water.

1 **SEC. 2. PURPOSES.**

2 The purposes of this Act are—

3 (1) to upgrade and modernize the drinking
4 water, wastewater, and stormwater systems of the
5 United States;

6 (2) to support the modernization of the publicly
7 owned treatment works of the United States to
8 maintain reliable and affordable water quality infra-
9 structure that addresses demand impacts, including
10 resiliency, to improve public health and natural re-
11 sources;

12 (3) to support the modernization of the drink-
13 ing water infrastructure and management systems of
14 the United States to maintain reliable, resilient, and
15 affordable drinking water infrastructure and ensure
16 the protection of public health; and

17 (4) to encourage the use of water-efficient tech-
18 nologies to address drought and prepare for the
19 growing strain that population growth and climate
20 change will have on over-allocated water supplies.

1 **TITLE I—WASTEWATER**
2 **INFRASTRUCTURE**

3 **SEC. 101. SMART WASTEWATER INFRASTRUCTURE TECH-**
4 **NOLOGY FOR TREATMENT WORKS.**

5 Title II of the Federal Water Pollution Control Act
6 (33 U.S.C. 1281 et seq.) is amended by adding at the end
7 the following:

8 **“SEC. 228. SMART WASTEWATER INFRASTRUCTURE TECH-**
9 **NOLOGY.**

10 “(a) GRANTS.—Subject to the availability of appro-
11 priations, the Administrator shall make direct grants to
12 owners and operators of publicly owned treatment works
13 for planning, design, construction, implementation, train-
14 ing, and operations relating to—

15 “(1) intelligent wastewater treatment and col-
16 lection systems and stormwater management oper-
17 ations, including technologies that rely on—

18 “(A) the use of real-time monitoring, man-
19 agement, analytics, and data collection tools,
20 embedded intelligence, and predictive mainte-
21 nance capabilities that improve the energy effi-
22 ciency, cost efficiency, reliability, and resiliency
23 of wastewater treatment systems;

24 “(B) real-time remote sensors that provide
25 continuous monitoring of water quality in

1 stormwater and wastewater treatment and col-
2 lection systems to support the optimization of
3 those stormwater and wastewater treatment
4 and collection systems; and

5 “(C) the use of artificial intelligence and
6 other intelligent optimization tools that—

7 “(i) reduce operational costs, includ-
8 ing operational costs relating to energy
9 consumption and chemical treatment; and

10 “(ii) improve decisionmaking;

11 “(2) innovative and alternative combined sewer
12 and stormwater control projects, including ground-
13 water banking, that rely on real-time data acquisi-
14 tion to support predictive aquifer recharge through
15 water reuse and stormwater management capabili-
16 ties; and

17 “(3) advanced digital design and construction
18 management tools relating to stormwater and waste-
19 water treatment and collection systems, including
20 advanced digital models.

21 “(b) PROGRAM IMPLEMENTATION.—

22 “(1) SELECTION.—

23 “(A) APPLICATION.—The owner or oper-
24 ator of a publicly owned treatment works seek-
25 ing a grant under subsection (a) shall submit to

1 the Administrator an application at such time,
2 in such manner, and containing such informa-
3 tion as the Administrator may require.

4 “(B) GUIDANCE.—Not later than 30 days
5 after the date of enactment of this section, the
6 Administrator shall issue guidance to owners
7 and operators of publicly owned treatment
8 works on how to submit an application under
9 subparagraph (A).

10 “(C) SELECTION.—Not later than 30 days
11 after the date on which the owner or operator
12 of a publicly owned treatment works seeking a
13 grant under subsection (a) submits an applica-
14 tion under subparagraph (A), the Administrator
15 shall determine whether to approve or deny the
16 application.

17 “(D) DEFICIENT APPLICATIONS.—If the
18 Administrator determines that an application
19 submitted under subparagraph (A) is deficient,
20 the Administrator shall—

21 “(i) advise the applicant of the defi-
22 ciency; and

23 “(ii) provide an opportunity for the
24 applicant to resubmit the application.

1 “(2) DISBURSEMENT.—If the Administrator
2 approves an application under paragraph (1)(C), the
3 Administrator shall disburse grant funds not later
4 than 60 days after the date of the determination.

5 “(c) COST-SHARE.—

6 “(1) IN GENERAL.—Except as provided in para-
7 graph (2), the non-Federal share of an activity car-
8 ried out using a grant under subsection (a) shall be
9 25 percent.

10 “(2) WAIVER.—The Administrator may waive
11 the cost-share requirement under paragraph (1) if
12 the Administrator determines that the cost-share re-
13 quirement would be financially unreasonable due to
14 the inability of a community being served by the
15 publicly owned treatment works for which the grant
16 is sought to comply with the cost-share requirement.

17 “(d) COMPLIANCE WITH BUY AMERICA.—Section
18 608 shall apply to grant funds under this section.

19 “(e) REPORT TO CONGRESS.—

20 “(1) IN GENERAL.—Not later than 180 days
21 after the date of enactment of this section, and not
22 less frequently than annually thereafter, the Admin-
23 istrator shall submit to Congress a report that—

24 “(A) describes—

1 “(i) the projects awarded grants
2 under subsection (a); and

3 “(ii) the improvements in the resil-
4 iency of publicly owned treatment works
5 that resulted from the grants awarded
6 under subsection (a); and

7 “(B) includes any recommendations of the
8 Administrator to improve the ability of grants
9 under subsection (a) to achieve the purposes de-
10 scribed in section 2 of the Water Infrastructure
11 Modernization Act of 2023.

12 “(2) INITIAL REPORT.—The initial report re-
13 quired under paragraph (1) shall include a descrip-
14 tion of the implementation of this section, including
15 a description of—

16 “(A) the projects approved for a grant
17 under subsection (a);

18 “(B) the projects denied a grant under
19 subsection (a); and

20 “(C) for the projects described in subpara-
21 graph (B), a description of the reasons for
22 which each project was denied a grant.

23 “(f) AUTHORIZATION OF APPROPRIATIONS.—

24 “(1) IN GENERAL.—There is authorized to be
25 appropriated to carry out this section \$25,000,000

1 for the period of fiscal years 2024 through 2028, to
2 remain available until expended.

3 “(2) SET-ASIDES.—

4 “(A) RURAL COMMUNITIES.—Of the
5 amounts made available under paragraph (1),
6 the Administrator shall use not more than 25
7 percent to make grants to owners and operators
8 of publicly owned treatment works that serve
9 communities with a population of not more
10 than 10,000 individuals.

11 “(B) TRIBAL COMMUNITIES.—Of the
12 amounts made available under subparagraph
13 (A), the Administrator shall use not less than
14 10 percent to make grants to owners and oper-
15 ators of publicly owned treatment works that
16 serve Indian Tribes.”.

17 **TITLE II—DRINKING WATER**
18 **INFRASTRUCTURE**

19 **SEC. 201. SMART WATER INFRASTRUCTURE TECHNOLOGY**
20 **FOR DRINKING WATER.**

21 Section 1452 of the Safe Drinking Water Act (42
22 U.S.C. 300j–12) is amended—

23 (1) in subsection (m)(1), by striking “sub-
24 sections (a)(2)(G) and (t)” and inserting “sub-
25 sections (a)(2)(G), (t), and (u)”; and

1 (2) by adding at the end the following:

2 “(u) SMART WATER INFRASTRUCTURE TECH-
3 NOLOGY.—

4 “(1) GRANTS.—Subject to the availability of
5 appropriations, the Administrator shall make direct
6 grants to the owners or operators of community
7 water systems for purposes of planning, design, con-
8 struction, implementation, training, and operations
9 relating to—

10 “(A) smart water network technologies
11 that—

12 “(i) can identify or reduce water
13 losses in a nondestructive or nondisruptive
14 manner, including through analytical soft-
15 ware, flow and pressure monitoring, or
16 acoustic data collection; and

17 “(ii) provide—

18 “(I) predictive and diagnostic in-
19 formation for informed decision-
20 making;

21 “(II) comprehensive data on
22 pipeline integrity that document the
23 presence of leaks or gas pockets; and

24 “(III) information on the extent
25 of such leaks or gas pockets, with an

1 emphasis on detecting weakness of,
2 vulnerability of, or damage to pipe
3 barrels, pipe joints, or other pipe fea-
4 tures;

5 “(B) real-time remote sensing technologies,
6 including the use of advanced data management
7 and analytics, that detect and alert operators to
8 water quality events, leakages, and pipeline
9 bursts on a real-time basis, including persistent
10 sensor networks capable of measuring—

11 “(i) acoustic signals;

12 “(ii) pressure transient;

13 “(iii) water quality; or

14 “(iv) water flow;

15 “(C) real-time decision support tech-
16 nologies that integrate sources of data about
17 water treatment systems and distribution net-
18 works to deliver common operations information
19 relying on data analytics that can improve oper-
20 ational decisionmaking, including nonrevenue
21 water loss, energy optimization, cost efficiency,
22 asset maintenance management, and water
23 quality improvement;

1 “(D) advanced metering infrastructure, in-
2 cluding meter data analytics and ratepayer
3 technology—

4 “(i) to improve end user conservation;
5 and

6 “(ii) in support of disadvantaged com-
7 munities;

8 “(E) resilient water supply projects that
9 may provide real-time monitoring of weather
10 patterns and impacts on water supply and flood
11 protection reservoirs and dams that enhance op-
12 erations, including—

13 “(i) improved water supply reliability
14 and management;

15 “(ii) protection of natural resources,
16 including fisheries; and

17 “(iii) temperature control;

18 “(F) innovative and alternative water sup-
19 ply projects, including groundwater banking,
20 that rely on real-time data acquisition to sup-
21 port predictive aquifer recharge through water
22 reuse and stormwater management capabilities;

23 “(G) artificial intelligence and other intel-
24 ligent optimization tools that—

1 “(i) reduce operational costs, includ-
2 ing operational costs relating to energy
3 consumption and chemical treatment; and

4 “(ii) improve decisionmaking; and

5 “(H) advanced digital design and construc-
6 tion management tools relating to water treat-
7 ment systems and distribution networks, includ-
8 ing the development of advanced digital models.

9 “(2) PROGRAM IMPLEMENTATION.—

10 “(A) SELECTION.—

11 “(i) APPLICATION.—The owner or op-
12 erator of a community water system seek-
13 ing a grant under paragraph (1) shall sub-
14 mit to the Administrator an application at
15 such time, in such manner, and containing
16 such information as the Administrator may
17 require.

18 “(ii) GUIDANCE.—Not later than 30
19 days after the date of enactment of this
20 subsection, the Administrator shall issue
21 guidance to owners and operators of com-
22 munity water systems on how to submit an
23 application under clause (i).

24 “(iii) SELECTION.—Not later than 30
25 days after the date on which the owner or

1 operator of a community water system
2 seeking a grant under paragraph (1) sub-
3 mits an application under clause (i), the
4 Administrator shall determine whether to
5 approve or deny the application.

6 “(iv) DEFICIENT APPLICATIONS.—If
7 the Administrator determines that an ap-
8 plication submitted under clause (i) is defi-
9 cient, the Administrator shall—

10 “(I) advise the applicant of the
11 deficiency; and

12 “(II) provide an opportunity for
13 the applicant to resubmit the applica-
14 tion.

15 “(B) DISBURSEMENT.—If the Adminis-
16 trator approves an application under subpara-
17 graph (A)(iii), the Administrator shall disburse
18 grant funds not later than 60 days after the
19 date of the determination.

20 “(3) COST-SHARE.—

21 “(A) IN GENERAL.—Except as provided in
22 subparagraph (B), the non-Federal share of an
23 activity carried out using a grant under para-
24 graph (1) shall be 25 percent.

1 “(B) EXCEPTION.—The Administrator
2 may waive the cost-share requirement under
3 subparagraph (A) if the grant recipient is or
4 serves a disadvantaged community (as defined
5 in subsection (d)(3)).

6 “(4) COMPLIANCE WITH BUY AMERICA.—Sub-
7 section (a)(4) shall apply to grant funds under this
8 subsection, without regard to the fiscal year limita-
9 tion in subparagraph (A) of that subsection.

10 “(5) REPORT TO CONGRESS.—

11 “(A) IN GENERAL.—Not later than 180
12 days after the date of enactment of this sub-
13 section, and not less frequently than annually
14 thereafter, the Administrator shall submit to
15 Congress a report that—

16 “(i) describes the projects awarded
17 grants under paragraph (1) during the ap-
18 plicable reporting period; and

19 “(ii) includes any recommendations of
20 the Administrator to improve the ability of
21 grants under paragraph (1) to achieve the
22 purposes described in section 2 of the
23 Water Infrastructure Modernization Act of
24 2023.

1 “(B) INITIAL REPORT.—The initial report
2 required under subparagraph (A) shall include
3 a description of the implementation of this sub-
4 section, including a description of—

5 “(i) the projects approved for a grant
6 under paragraph (1);

7 “(ii) the projects denied a grant under
8 paragraph (1); and

9 “(iii) for the projects described in
10 clause (ii), a description of the reasons for
11 which each project was denied a grant.

12 “(6) AUTHORIZATION OF APPROPRIATIONS.—

13 “(A) IN GENERAL.—There is authorized to
14 be appropriated to carry out this subsection
15 \$25,000,000 for the period of fiscal years 2024
16 through 2028, to remain available until ex-
17 pended.

18 “(B) SET-ASIDES.—

19 “(i) RURAL COMMUNITIES.—Of the
20 amounts made available under subpara-
21 graph (A), the Administrator shall use not
22 more than 25 percent to make grants to
23 owners and operators of community water
24 systems that serve a population of not
25 more than 10,000 individuals.

1 “(ii) TRIBAL COMMUNITIES.—Of the
2 amounts made available under subpara-
3 graph (A), the Administrator shall use not
4 less than 10 percent to make grants to
5 owners and operators of community water
6 systems that serve Indian Tribes.”.