

114TH CONGRESS
2D SESSION

H. R. 6116

To enable needed drinking water standards, reduce lead in drinking water, plan for and address threats from climate change, terrorism, and source water contamination, invest in drinking water infrastructure, increase compliance with drinking water standards, foster greater community right to know about drinking water quality, and promote technological solutions for drinking water challenges.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 22, 2016

Mr. PALLONE (for himself, Mr. TONKO, Mr. MCNERNEY, Mrs. CAPPS, Mr. CÁRDENAS, Mr. GENE GREEN of Texas, and Ms. DEGETTE) introduced the following bill; which was referred to the Committee on Energy and Commerce

A BILL

To enable needed drinking water standards, reduce lead in drinking water, plan for and address threats from climate change, terrorism, and source water contamination, invest in drinking water infrastructure, increase compliance with drinking water standards, foster greater community right to know about drinking water quality, and promote technological solutions for drinking water challenges.

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

1 **SECTION 1. SHORT TITLE; TABLE OF CONTENTS; FINDINGS.**

2 (a) SHORT TITLE.—This Act may be cited as the
3 “Safe Drinking Water Act Amendments of 2016”.

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

Sec. 1. Short title; table of contents; findings.

**TITLE I—REGULATING DANGEROUS DRINKING WATER
CONTAMINANTS**

Sec. 101. Enabling EPA to set standards for new drinking water contaminants.

Sec. 102. Deadlines for regulations on known dangerous contaminants.

TITLE II—REDUCING LEAD IN DRINKING WATER

Sec. 201. Reducing lead in drinking water.

Sec. 202. Drinking water fountain replacement for schools.

Sec. 203. Aligning definitions of lead free.

Sec. 204. Guidance for schools regarding lead in drinking water.

Sec. 205. School lead pipe replacement program.

Sec. 206. School remedial action program.

**TITLE III—CLIMATE RESILIENCY, SECURITY, AND SOURCE
WATER PROTECTION**

Sec. 301. Climate resiliency, security, and source water protection planning.

Sec. 302. Regulation of hydraulic fracturing.

Sec. 303. Risks of drought to drinking water.

TITLE IV—AQUA ACT

Sec. 401. Short title.

Sec. 402. Prevailing wages.

Sec. 403. Use of funds.

Sec. 404. Requirements for use of American materials.

Sec. 405. Data on variances, exemptions, and persistent violations.

Sec. 406. Assistance for restructuring.

Sec. 407. Priority and weight of applications.

Sec. 408. Disadvantaged communities.

Sec. 409. Administration of State loan funds.

Sec. 410. State revolving loan funds for American Samoa, Northern Mariana
Islands, Guam, and the Virgin Islands.

Sec. 411. Authorization of appropriations.

Sec. 412. Affordability of new standards.

Sec. 413. Focus on lifecycle costs.

Sec. 414. Best practices for administration of State revolving loan fund pro-
grams.

**TITLE V—INCREASING COMPLIANCE AND COMMUNITY RIGHT TO
KNOW**

Sec. 501. Streamlining reporting and enforcement.

Sec. 502. Consolidation.
 Sec. 503. Water violations inventory.
 Sec. 504. Improved consumer confidence reports.

TITLE VI—STUDIES AND TECHNOLOGY

Sec. 601. Real time monitoring technology research grants.
 Sec. 602. Presence of pharmaceuticals and personal care products in sources of drinking water.
 Sec. 603. Water loss and leak control technology.

1 (c) FINDINGS.—The Congress finds the following:

2 (1) The Safe Drinking Water Act has not been
 3 substantially amended in 20 years, during which
 4 time the challenges facing drinking water systems
 5 and customers have increased dramatically.

6 (2) Climate change, aging infrastructure, lead
 7 contamination, and emerging contaminants threaten
 8 the public health and economic viability of cities and
 9 towns nationwide.

10 (3) The drinking water standard-setting provi-
 11 sions put in place in 1996 have proven unworkable,
 12 preventing the Federal Government from regulating
 13 dangerous contaminants, including perchlorate,
 14 strontium, and volatile organic compounds.

15 (4) Compliance and enforcement with existing
 16 drinking water standards has fallen far short of
 17 what is needed and expected.

18 (5) Increased drinking water investment is
 19 needed to address a crisis in failing infrastructure.

1 **TITLE I—REGULATING DANGER-**
2 **OUS DRINKING WATER CON-**
3 **TAMINANTS**

4 **SEC. 101. ENABLING EPA TO SET STANDARDS FOR NEW**
5 **DRINKING WATER CONTAMINANTS.**

6 (a) IN GENERAL.—Section 1412(b) of the Safe
7 Drinking Water Act (42 U.S.C. 300g–1(b)) is amended—

8 (1) by amending paragraph (1)(A) to read as
9 follows:

10 “(A) GENERAL AUTHORITY.—The Admin-
11 istrator shall publish maximum contaminant
12 level goals and promulgate national primary
13 drinking water regulations for each contami-
14 nant (other than a contaminant for which a na-
15 tional primary drinking water regulation has
16 been promulgated as of the date of enactment
17 of the Safe Drinking Water Act Amendments of
18 2016) which, in the judgement of the Adminis-
19 trator, may have any adverse effect on the
20 health of persons and which is known or antici-
21 pated to occur in public water systems.”;

22 (2) in paragraph (1)(B)(ii)(I)—

23 (A) by striking “every 5 years” and insert-
24 ing “every 3 years”; and

1 (B) by striking “5 contaminants” and in-
2 serting “10 contaminants”;

3 (3) in paragraph (1)(B)(ii)(II)—

4 (A) by striking “on findings that the cri-
5 teria of clauses (i), (ii), and (iii)” and inserting
6 “on a finding that the criteria”; and

7 (B) by striking “Such findings” and in-
8 serting “Such finding”;

9 (4) in paragraph (1)(D)—

10 (A) by striking “ paragraph (4)(C), or
11 completing the analysis under paragraph
12 (3)(C),” and inserting “subparagraph (B)(ii)”;
13 and

14 (B) by striking “A determination for any
15 contaminant in accordance with paragraph
16 (4)(C) subject to an interim regulation under
17 this subparagraph shall be issued, and a com-
18 pleted analysis meeting the requirements of
19 paragraph (3)(C) shall be published, not later
20 than 3 years after the date on which the regula-
21 tion is promulgated and the regulation shall be
22 repromulgated, or revised if appropriate, not
23 later than 5 years after that date.”;

24 (5) by amending paragraph (3) to read as fol-
25 lows:

1 “(3) AUTHORIZATION.—There are authorized to
2 be appropriated to the Administrator, acting
3 through the Office of Ground Water and Drinking
4 Water, to conduct studies, assessments, and analyses
5 in support of regulations or the development of
6 methods, \$35,000,000 for each of fiscal years 2017
7 through 2022.”;

8 (6) in paragraph (4), by striking subparagraph
9 (C);

10 (7) by amending paragraph (6) to read as fol-
11 lows:

12 “(6) EXCEPTION FOR STANDARDS WITH NO
13 FEASIBLE TECHNOLOGIES.—

14 “(A) IN GENERAL.—Notwithstanding para-
15 graph (4), if the Administrator determines that
16 there is no feasible technology to meet a max-
17 imum contaminant level, the Administrator
18 may, after notice and opportunity for public
19 comment, promulgate a maximum contaminant
20 level for the contaminant that maximizes health
21 risk reduction benefits and can be met with fea-
22 sible technology.

23 “(B) JUDICIAL REVIEW.—A determination
24 by the Administrator that no feasible tech-
25 nology is available to meet a maximum contami-

1 nant level shall be considered an action per-
2 taining to the establishment of a national pri-
3 mary drinking water regulation and subject to
4 judicial review.”;

5 (8) in paragraph (12)(B)(ii), by inserting “(as
6 in effect on the day before the date of enactment of
7 the Safe Drinking Water Act Amendments of
8 2016)” after “paragraph (3)(B)”;

9 (9) in paragraph (13)(B)(i), by inserting “(as
10 in effect on the day before the date of enactment of
11 the Safe Drinking Water Act Amendments of
12 2016)” after “paragraph (3)”;

13 (10) in paragraph (13)(C), by inserting “(as in
14 effect on the day before the date of enactment of the
15 Safe Drinking Water Act Amendments of 2016)”
16 after “paragraph (3)(C)”.

17 (b) ADDITIONAL CONFORMING AMENDMENT.—Sec-
18 tion 1459 of the Safe Drinking Water Act (42 U.S.C.
19 300j–19) is amended—

20 (1) by striking subsection (c); and

21 (2) by redesignating subsection (d) as sub-
22 section (c).

1 **SEC. 102. DEADLINES FOR REGULATIONS ON KNOWN DAN-**
2 **GEROUS CONTAMINANTS.**

3 Section 1412(b)(2) of the Safe Drinking Water Act
4 (42 U.S.C. 300g-1(b)(2)) is amended by adding at the
5 end the following:

6 “(D) LEAD AND COPPER RULE.—

7 “(i) IN GENERAL.—Notwithstanding
8 any other deadline established in this sub-
9 section, not later than 9 months after the
10 date of enactment of the Safe Drinking
11 Water Act Amendments of 2016, the Ad-
12 ministrator shall issue revised national pri-
13 mary drinking water regulations for lead
14 and copper in accordance with this sub-
15 paragraph.

16 “(ii) REQUIREMENTS.—The revised
17 regulations issued under clause (i) shall
18 ensure that—

19 “(I) corrosion controls are re-
20 evaluated anytime source water or
21 treatment is changed;

22 “(II) test results are valid, by
23 prohibiting techniques that artificially
24 lower lead levels, including flushing
25 before samples are taken;

1 “(III) monitoring includes school
2 sites for all public water systems serv-
3 ing schools (as defined in section
4 1461);

5 “(IV) notification of lead prob-
6 lems is clear and effective; and

7 “(V) lead service lines are fully
8 replaced on a set timetable and when-
9 ever contamination is detected.

10 “(iii) SCOPE OF LEAD LINE REPLACE-
11 MENT REQUIREMENTS.—Requirements to
12 replace lead service lines under the revised
13 regulations issued under clause (i) shall ex-
14 tend to all service lines controlled by public
15 water systems, regardless of ownership.

16 “(E) PERCHLORATE.—Notwithstanding
17 any other deadline established in this sub-
18 section, not later than 12 months after the date
19 of enactment of the Safe Drinking Water Act
20 Amendments of 2016, the Administrator shall
21 publish a maximum contaminant level goal and
22 promulgate a national primary drinking water
23 regulation for perchlorate.

24 “(F) PERFLUORINATED COMPOUNDS.—
25 Notwithstanding any other deadline established

1 in this subsection, not later than 2 years after
 2 the date of enactment of the Safe Drinking
 3 Water Act Amendments of 2016, the Adminis-
 4 trator shall publish a maximum contaminant
 5 level goal and promulgate a national primary
 6 drinking water regulation for perfluorinated
 7 compounds.

8 “(G) MICROCYSTIN TOXIN.—Notwith-
 9 standing any other deadline established in this
 10 subsection, not later than 2 years after the date
 11 of enactment of the Safe Drinking Water Act
 12 Amendments of 2016, the Administrator shall
 13 publish a maximum contaminant level goal and
 14 promulgate a national primary drinking water
 15 regulation for microcystin toxin.”.

16 **TITLE II—REDUCING LEAD IN** 17 **DRINKING WATER**

18 **SEC. 201. REDUCING LEAD IN DRINKING WATER.**

19 (a) DEFINITION OF LEAD SERVICE LINE.—Section
 20 1401 of the Safe Drinking Water Act (42 U.S.C. 300f)
 21 is amended by adding at the end the following new para-
 22 graph:

23 “(17) LEAD SERVICE LINE.—The term ‘lead
 24 service line’ means a service line that is not lead free
 25 (within the meaning of section 1417).”.

1 (b) REPLACING LEAD SERVICE LINES.—Section
2 1417 of the Safe Drinking Water Act (42 U.S.C. 300g–
3 6) is amended by adding at the end the following:

4 “(f) REPLACING LEAD SERVICE LINES.—

5 “(1) DEFINITIONS.—In this subsection:

6 “(A) ELIGIBLE ENTITY.—The term ‘eligi-
7 ble entity’ means—

8 “(i) an owner or operator of a public
9 water system;

10 “(ii) a qualified nonprofit organiza-
11 tion, as determined by the Administrator;
12 or

13 “(iii) a municipality or a State, inter-
14 state, or intermunicipal agency.

15 “(B) LEAD PIPE REPLACEMENT PRO-
16 GRAM.—The term ‘lead pipe replacement pro-
17 gram’ means a project or activity the primary
18 purpose of which is to eliminate lead in water
19 for human consumption by—

20 “(i) replacing lead service lines;

21 “(ii) testing, planning, or carrying out
22 other relevant activities, as determined by
23 the Administrator, to identify the location
24 and condition of lead service lines; or

1 “(iii) providing assistance to low-in-
2 come homeowners to replace privately
3 owned lead service lines.

4 “(C) LOW-INCOME HOMEOWNER.—The
5 term ‘low-income homeowner’ has such meaning
6 as may be given the term by the Governor of
7 the applicable State.

8 “(2) GRANT PROGRAM.—

9 “(A) ESTABLISHMENT.—Not later than
10 180 days after the date of enactment of this
11 subsection, the Administrator shall establish a
12 grant program to provide assistance to eligible
13 entities for lead pipe replacement programs.

14 “(B) EVALUATION.—In determining
15 whether to provide assistance to an eligible enti-
16 ty under this subsection, the Administrator
17 shall evaluate whether the eligible entity has—

18 “(i) a current inventory of lead service
19 lines in the applicable public water system;

20 “(ii) a plan to notify customers of
21 such public water system of the replace-
22 ment of any publicly owned portion of a
23 lead service line;

1 “(iii) a plan to replace the privately
2 owned portion of a lead service line at the
3 cost of replacement;

4 “(iv) a plan for a program of assist-
5 ance to low-income homeowners to replace
6 the privately owned portion of lead service
7 lines; or

8 “(v) a plan of recommended measures
9 to avoid exposure of the public to short-
10 term increases in lead levels following a
11 lead service line replacement.

12 “(C) PRIORITY APPLICATION.—In pro-
13 viding assistance under this subsection, the Ad-
14 ministrator shall give priority to an eligible en-
15 tity that—

16 “(i) will carry out a lead pipe replace-
17 ment program at a public water system
18 that has exceeded the lead action level es-
19 tablished by the Administrator at any time
20 during the 3-year period preceding the
21 date of submission of the application of the
22 eligible entity;

23 “(ii) will address lead levels in water
24 for human consumption at a school,
25 daycare, or other facility that primarily

1 serves children or subpopulations at great-
2 er risk as identified under section 1458(a);

3 “(iii) will include in the lead pipe re-
4 placement program a program to provide
5 assistance to low-income homeowners; or

6 “(iv) addresses such priority criteria
7 as the Administrator may establish, con-
8 sistent with the goal of reducing lead in
9 water for human consumption.

10 “(D) COST SHARING.—

11 “(i) IN GENERAL.—Subject to clause
12 (ii), the non-Federal share of the total cost
13 of a program funded by a grant provided
14 under this subsection shall be not less than
15 20 percent.

16 “(ii) WAIVER.—The Administrator
17 may reduce or eliminate the non-Federal
18 share required under clause (i) for reasons
19 of affordability, as the Administrator de-
20 termines to be appropriate.

21 “(E) LOW-INCOME HOMEOWNER ASSIST-
22 ANCE.—

23 “(i) IN GENERAL.—Subject to clause
24 (ii), an eligible entity may use a grant pro-
25 vided under this subsection to provide as-

1 sistance to low-income homeowners to re-
2 place privately owned lead service lines.

3 “(ii) LIMITATION.—The amount of as-
4 sistance provided to an individual low-in-
5 come homeowner under this subparagraph
6 shall not exceed \$10,000.

7 “(3) GUIDANCE.—Not later than 180 days
8 after the date of enactment of this subsection, the
9 Administrator shall, in cooperation with States and
10 qualified nonprofit organizations, develop guidance
11 for owners and operators of public water systems to
12 assist such owners and operators in the preparation
13 of an inventory of lead service lines in their public
14 water system.

15 “(4) AUTHORIZATION OF APPROPRIATIONS.—
16 There are authorized to be appropriated to carry out
17 this subsection \$100,000,000 for each of fiscal years
18 2017 through 2021.”.

19 **SEC. 202. DRINKING WATER FOUNTAIN REPLACEMENT FOR**
20 **SCHOOLS.**

21 (a) IN GENERAL.—Part F of the Safe Drinking
22 Water Act (42 U.S.C. 300j–21 et seq.) is amended by add-
23 ing at the end the following:

1 **“SEC. 1466. DRINKING WATER FOUNTAIN REPLACEMENT**
2 **FOR SCHOOLS.**

3 “(a) ESTABLISHMENT.—Not later than 180 days
4 after the date of enactment of this section, the Adminis-
5 trator shall establish a grant program to provide assist-
6 ance to local educational agencies for the replacement of
7 drinking water fountains manufactured prior to 1988.

8 “(b) USE OF FUNDS.—Funds awarded under the
9 grant program—

10 “(1) shall be used to pay the costs of replace-
11 ment of drinking water fountains in schools; and

12 “(2) may be used to pay the costs of monitoring
13 and reporting of lead levels in the drinking water of
14 schools of a local educational agency receiving such
15 funds, as determined appropriate by the Adminis-
16 trator.

17 “(c) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated to carry out this section
19 not more than \$5,000,000 for each of fiscal years 2017
20 through 2021.”.

21 (b) DEFINITIONS.—Section 1461(5) of the Safe
22 Drinking Water Act (42 U.S.C. 300j–21(5)) is amended
23 by inserting “or drinking water fountain” after “water
24 cooler” each place it appears.

1 **SEC. 203. ALIGNING DEFINITIONS OF LEAD FREE.**

2 Paragraph (2) of section 1461 of the Safe Drinking
3 Water Act (42 U.S.C. 300j–21(2)) is amended to read as
4 follows:

5 “(2) LEAD FREE.—The term ‘lead free’ has the
6 meaning given such term in section 1417.”.

7 **SEC. 204. GUIDANCE FOR SCHOOLS REGARDING LEAD IN**
8 **DRINKING WATER.**

9 Part F of the Safe Drinking Water Act (42 U.S.C.
10 300j–21 et seq.), as amended, is further amended by add-
11 ing at the end the following new section:

12 **“SEC. 1467. GUIDANCE FOR SCHOOLS REGARDING LEAD IN**
13 **DRINKING WATER.**

14 “(a) GUIDANCE ON LEAD MONITORING.—Not later
15 than 180 days after the date of enactment of this section,
16 the Administrator shall publish revised guidance for school
17 officials seeking to reduce exposure to lead from drinking
18 water in schools.

19 “(b) REQUIREMENTS.—The Administrator shall in-
20 clude in the guidance published under subsection (a)—

21 “(1) testing protocols for schools to accurately
22 detect lead contamination in school drinking water
23 and its sources;

24 “(2) recommended actions to reduce or elimi-
25 nate such contamination, including lead service line
26 replacement where needed;

1 “(3) recommendations for maintaining or re-
 2 placing drinking water infrastructure, including
 3 pipes, pipe fittings, fixtures, solder, drinking water
 4 coolers, and drinking water fountains, when plan-
 5 ning for or undergoing renovations of school prop-
 6 erty; and

7 “(4) recommendations and forms for commu-
 8 nicating lead testing results, potential health risks,
 9 and response actions to students, staff, parents, and
 10 communities.”.

11 **SEC. 205. SCHOOL LEAD PIPE REPLACEMENT PROGRAM.**

12 Part F of the Safe Drinking Water Act (42 U.S.C.
 13 300j–21 et seq.), as amended, is further amended by add-
 14 ing at the end the following new section:

15 **“SEC. 1468. SCHOOL LEAD PIPE REPLACEMENT PROGRAM.**

16 “(a) **ELIGIBLE ENTITY.**—In this section, the term
 17 ‘eligible entity’ means—

18 “(1) a local educational agency; or

19 “(2) a public water system.

20 “(b) **GRANT PROGRAM.**—

21 “(1) **ESTABLISHMENT.**—Not later than 180
 22 days after the date of enactment of this section, the
 23 Administrator shall establish a grant program to as-
 24 sist eligible entities in carrying out programs to re-
 25 place lead service lines for schools and solder that is

1 not lead free used in the plumbing for schools. Such
 2 a program—

3 “(A) shall include replacing lead service
 4 lines and solder that is not lead free; and

5 “(B) may include testing, planning, or car-
 6 rying out other relevant activities, as deter-
 7 mined by the Administrator, to identify the lo-
 8 cation and condition of lead service lines and
 9 solder that is not lead free.

10 “(2) PRIORITY APPLICATION.—In providing as-
 11 sistance under this section, the Administrator shall
 12 give priority to proposed programs for schools for
 13 which, at any time during the 3-year period pre-
 14 ceding the date of submission of an application of
 15 the eligible entity, monitoring data has indicated ele-
 16 vated lead levels in the school drinking water.

17 “(c) AUTHORIZATION OF APPROPRIATIONS.—There
 18 are authorized to be appropriated to carry out this section
 19 \$50,000,000 for each of fiscal years 2017 through 2021.”.

20 **SEC. 206. SCHOOL REMEDIAL ACTION PROGRAM.**

21 (a) LEAD CONTAMINATION IN SCHOOL DRINKING
 22 WATER.—Section 1464(d) of the Safe Drinking Water
 23 Act (42 U.S.C. 300j–24(d)) is amended—

1 (1) in paragraph (1), by striking “Within 9
2 months after the enactment of this section, each
3 State shall” and inserting “Any State may”;

4 (2) in paragraph (2)—

5 (A) by striking “A copy” and inserting
6 “Any State establishing a program pursuant to
7 paragraph (1) shall make a copy”; and

8 (B) by striking “shall be”; and

9 (3) in paragraph (3)—

10 (A) by inserting “and fountains” after
11 “coolers” each place it appears;

12 (B) by striking “enactment of this sub-
13 section” and inserting “establishment of a pro-
14 gram under paragraph (1)”; and

15 (C) by inserting “or fountain” after “cool-
16 er”.

17 (b) FEDERAL ASSISTANCE FOR STATE PROGRAMS
18 REGARDING LEAD CONTAMINATION IN SCHOOL DRINK-
19 ING WATER.—Section 1465 of the Safe Drinking Water
20 Act (42 U.S.C. 300j–25) is amended—

21 (1) in subsection (a), by striking “States to es-
22 tablish” and inserting “States that establish”; and

23 (2) in subsection (c)—

24 (A) by striking “\$30,000,000” each place
25 it appears and inserting “\$100,000,000”;

1 (B) by striking “1989” and inserting
2 “2017”;

3 (C) by striking “1990” and inserting
4 “2018”; and

5 (D) by striking “1991.” and inserting
6 “2019.”.

7 **TITLE III—CLIMATE RESILIEN-**
8 **CY, SECURITY, AND SOURCE**
9 **WATER PROTECTION**

10 **SEC. 301. CLIMATE RESILIENCY, SECURITY, AND SOURCE**
11 **WATER PROTECTION PLANNING.**

12 Section 1433 of the Safe Drinking Water Act (42
13 U.S.C. 300i–2) is amended to read as follows:

14 **“SEC. 1433. CLIMATE RESILIENCY, SECURITY, AND SOURCE**
15 **WATER PROTECTION.**

16 **“(a) SOURCE WATER AND DISTRIBUTION SYSTEM**
17 **VULNERABILITY ASSESSMENTS.—**

18 **“(1) IN GENERAL.—**Not later than 24 months
19 after the date of enactment of the Safe Drinking
20 Water Act Amendments of 2016, each community
21 water system shall submit to the Administrator
22 source water and distribution system vulnerability
23 assessments.

1 “(2) IDENTIFICATION OF THREATS.—Assess-
2 ments submitted pursuant to paragraph (1) shall
3 identify—

4 “(A) threats to the community water sys-
5 tem’s source water from industrial activity,
6 pipelines and storage tanks, contaminated sites,
7 agricultural activity, and oil and gas explo-
8 ration;

9 “(B) threats to the community water sys-
10 tem’s source water and distribution system
11 from climate change, extreme weather, drought,
12 and temperature changes; and

13 “(C) threats to the community water sys-
14 tem’s source water and distribution system
15 from intentional acts, including intentional con-
16 tamination, sabotage, and theft of any chemical
17 of interest (as designated under Appendix A to
18 part 27 of title 6, Code of Federal Regulations,
19 or any successor thereto).

20 “(3) ASSESSMENT OF ALTERNATIVES.—Assess-
21 ments submitted pursuant to paragraph (1) shall in-
22 clude a comparison of the disinfection methods used
23 by the community water system and reasonably
24 available alternative disinfection methods, including
25 a determination of whether reasonably available al-

1 ternative disinfection methods could reduce the com-
2 munity water system’s vulnerability to the threats
3 identified pursuant to paragraph (2).

4 “(4) PERIODIC REVIEW AND RESUBMISSION.—
5 Each community water system submitting a vulner-
6 ability assessment pursuant to paragraph (1) shall
7 review, revise as necessary, and resubmit such as-
8 sessment not less often than every 5 years.

9 “(5) GUIDANCE.—Not later than one year after
10 the date of enactment of the Safe Drinking Water
11 Act Amendments of 2016, the Administrator shall
12 provide guidance to community water systems for
13 the preparation of vulnerability assessments under
14 this subsection.

15 “(b) SOURCE WATER AND DISTRIBUTION SYSTEM
16 PROTECTION PLANS.—

17 “(1) IN GENERAL.—Not later than 4 years
18 after the date of enactment of the Safe Drinking
19 Water Act Amendments of 2016, each community
20 water system shall submit to the Administrator
21 source water and distribution system protection
22 plans.

23 “(2) MITIGATION OF IDENTIFIED THREATS.—
24 Plans submitted pursuant to paragraph (1) shall
25 identify strategies and resources to mitigate the

1 threats identified in assessments prepared pursuant
2 to subsection (a).

3 “(3) EMERGENCY RESPONSE PLANNING.—
4 Plans submitted pursuant to paragraph (1) shall in-
5 clude specific emergency response plans for the
6 threats identified in assessments prepared pursuant
7 to subsection (a).

8 “(4) PERIODIC REVIEW AND RESUBMISSION.—
9 Each community water system submitting a plan
10 pursuant to paragraph (1) shall review, revise as
11 necessary, and resubmit such plan not less often
12 than every 5 years.

13 “(5) GUIDANCE.—Not later than one year after
14 the date of enactment of the Safe Drinking Water
15 Act Amendments of 2016, the Administrator shall
16 provide guidance to community water systems for
17 the preparation of plans under this subsection.

18 “(c) TECHNICAL ASSISTANCE AND GRANTS.—

19 “(1) IN GENERAL.—The Administrator shall es-
20 tablish and implement a program, to be known as
21 the Drinking Water Infrastructure Resiliency and
22 Sustainability Program, under which the Adminis-
23 trator may award grants in each of fiscal years 2017
24 through 2021 to owners or operators of community
25 water systems for the purpose of increasing the re-

1 siliency or adaptability of the community water sys-
2 tems to threats identified pursuant to subsection (a).

3 “(2) USE OF FUNDS.—As a condition on receipt
4 of a grant under this section, an owner or operator
5 of a community water system shall agree to use the
6 grant funds exclusively to assist in the planning, de-
7 sign, construction, implementation, operation, or
8 maintenance of a program or project consistent with
9 a plan developed pursuant to subsection (b).

10 “(3) PRIORITY.—

11 “(A) WATER SYSTEMS AT GREATEST AND
12 MOST IMMEDIATE RISK.—In selecting grantees
13 under this subsection, the Administrator shall
14 give priority to applicants that are owners or
15 operators of community water systems that are,
16 based on the best available research and data,
17 at the greatest and most immediate risk of fac-
18 ing significant negative impacts due to threats
19 described in subsection (a)(2).

20 “(B) GOALS.—In selecting among appli-
21 cants described in subparagraph (A), the Ad-
22 ministrator shall ensure that, to the maximum
23 extent practicable, the final list of applications
24 funded for each year includes a substantial
25 number that propose to use innovative ap-

1 proaches to meet one or more of the following
2 goals:

3 “(i) Promoting more efficient water
4 use, water conservation, water reuse, or
5 water recycling.

6 “(ii) Using decentralized, low-impact
7 development technologies and nonstructur-
8 al approaches, including practices that use,
9 enhance, or mimic the natural hydrological
10 cycle or protect natural flows.

11 “(iii) Reducing stormwater runoff or
12 flooding by protecting or enhancing nat-
13 ural ecosystem functions.

14 “(iv) Modifying, upgrading, enhance-
15 ing, or replacing existing community water
16 system infrastructure in response to
17 changing hydrologic conditions.

18 “(v) Improving water quality or quan-
19 tity for agricultural and municipal uses, in-
20 cluding through salinity reduction.

21 “(vi) Providing multiple benefits, in-
22 cluding to water supply enhancement or
23 demand reduction, water quality protection
24 or improvement, increased flood protection,
25 and ecosystem protection or improvement.

1 “(4) COST-SHARING.—

2 “(A) FEDERAL SHARE.—The share of the
3 cost of any activity that is the subject of a
4 grant awarded by the Administrator to the
5 owner or operator of a community water system
6 under this subsection shall not exceed 50 per-
7 cent of the cost of the activity.

8 “(B) CALCULATION OF NON-FEDERAL
9 SHARE.—In calculating the non-Federal share
10 of the cost of an activity proposed by a commu-
11 nity water system in an application submitted
12 under this subsection, the Administrator shall—

13 “(i) include the value of any in-kind
14 services that are integral to the completion
15 of the activity, including reasonable admin-
16 istrative and overhead costs; and

17 “(ii) not include any other amount
18 that the community water system involved
19 receives from the Federal Government.

20 “(5) REPORT TO CONGRESS.—Not later than 3
21 years after the date of the enactment of the Safe
22 Drinking Water Act Amendments of 2016, and
23 every 3 years thereafter, the Administrator shall
24 submit to the Congress a report on progress in im-

1 plementing this subsection, including information on
 2 project applications received and funded annually.

3 “(6) AUTHORIZATION OF APPROPRIATIONS.—

4 To carry out this subsection, there are authorized to
 5 be appropriated \$50,000,000 for each of fiscal years
 6 2017 through 2021.”.

7 **SEC. 302. REGULATION OF HYDRAULIC FRACTURING.**

8 (a) HYDRAULIC FRACTURING.—Section 1421(d)(1)
 9 of the Safe Drinking Water Act (42 U.S.C. 300h(d)(1))
 10 is amended by striking subparagraph (B) and inserting
 11 the following:

12 “(B) includes the underground injection of
 13 fluids or propping agents pursuant to hydraulic
 14 fracturing operations related to oil, gas, or geo-
 15 thermal production activities; but

16 “(C) excludes the underground injection of
 17 natural gas for purposes of storage.”.

18 (b) DISCLOSURE OF HYDRAULIC FRACTURING
 19 CHEMICALS; MEDICAL EMERGENCIES; PROPRIETARY
 20 CHEMICAL FORMULAS.—Section 1421(b) of the Safe
 21 Drinking Water Act (42 U.S.C. 300H(b)) is amended by
 22 adding at the end the following:

23 “(4)(A) Regulations included under paragraph
 24 (1)(C) shall include the following requirements:

1 “(i) A person conducting hydraulic
2 fracturing operations shall disclose to the
3 State (or the Administrator if the Adminis-
4 trator has primary enforcement responsi-
5 bility in the State)—

6 “(I) prior to the commencement
7 of any hydraulic fracturing operations
8 at any lease area or portion thereof, a
9 list of chemicals intended for use in
10 any underground injection during
11 such operations, including identifica-
12 tion of the chemical constituents of
13 mixtures, Chemical Abstracts Service
14 numbers for each chemical and con-
15 stituent, material safety data sheets
16 when available, and the anticipated
17 volume of each chemical; and

18 “(II) not later than 30 days after
19 the end of any hydraulic fracturing
20 operations, the list of chemicals used
21 in each underground injection during
22 such operations, including identifica-
23 tion of the chemical constituents of
24 mixtures, Chemical Abstracts Service
25 numbers for each chemical and con-

1 stituent, material safety data sheets
2 when available, and the volume of
3 each chemical used.

4 “(ii) The State or the Administrator,
5 as applicable, shall make the disclosure of
6 chemical constituents referred to in clause
7 (i) available to the public, including by
8 posting the information on an appropriate
9 Internet Web site.

10 “(iii) Whenever the State or the Ad-
11 ministrator, or a treating physician or
12 nurse, determines that a medical emer-
13 gency exists and the proprietary chemical
14 formula of a chemical used in hydraulic
15 fracturing operations is necessary for med-
16 ical treatment, the person conducting the
17 hydraulic fracturing operations shall, upon
18 request, immediately disclose the propri-
19 etary chemical formula or the specific
20 chemical identity of a trade secret chemical
21 to the State, the Administrator, or the
22 treating physician or nurse, regardless of
23 whether a written statement of need or a
24 confidentiality agreement has been pro-
25 vided. The person conducting the hydraulic

1 fracturing operations may require a writ-
 2 ten statement of need and a confidentiality
 3 agreement as soon thereafter as cir-
 4 cumstances permit.

5 “(B) Subparagraphs (A)(i) and (A)(ii) do
 6 not authorize the State (or the Administrator)
 7 to require the public disclosure of proprietary
 8 chemical formulas.”.

9 **SEC. 303. RISKS OF DROUGHT TO DRINKING WATER.**

10 Part E of the Safe Drinking Water Act (42 U.S.C.
 11 300j et seq.) is amended by adding at the end the fol-
 12 lowing new section:

13 **“SEC. 1459A. DROUGHT RISK ASSESSMENT AND MANAGE-**
 14 **MENT.**

15 “(a) STRATEGIC PLAN.—

16 “(1) DEVELOPMENT.—Not later than 90 days
 17 after the date of enactment of this section, the Ad-
 18 ministrator shall develop and submit to Congress a
 19 strategic plan for assessing and managing the risks
 20 of drought to drinking water provided by public
 21 water systems. The strategic plan shall include steps
 22 and timelines to—

23 “(A) evaluate the risks posed by drought
 24 to drinking water provided by public water sys-
 25 tems;

1 “(B) compile a comprehensive list of the
2 effects of drought on drinking water provided
3 by public water systems which the Adminis-
4 trator determines may have an adverse effect
5 on human health;

6 “(C) summarize—

7 “(i) the known adverse human health
8 effects resulting from the effects of
9 drought on drinking water included on the
10 list established under subparagraph (B);

11 “(ii) factors that cause drought; and

12 “(iii) factors that exacerbate the ef-
13 fects of drought on drinking water pro-
14 vided by public water systems;

15 “(D) with respect to the effects of drought
16 on drinking water included on the list compiled
17 under subparagraph (B), determine whether
18 to—

19 “(i) establish guidance regarding fea-
20 sible analytical methods to quantify such
21 effects; and

22 “(ii) establish guidance regarding the
23 frequency of monitoring necessary to de-
24 tect such effects;

1 “(E) recommend feasible treatment op-
2 tions, including procedures, equipment, and
3 source water protection practices, to mitigate
4 such effects; and

5 “(F) enter into cooperative agreements
6 with, and provide technical assistance to, af-
7 fected States and public water systems, as iden-
8 tified by the Administrator, for the purpose of
9 managing risks associated with the effects of
10 drought on drinking water.

11 “(2) UPDATES.—The Administrator shall, as
12 appropriate, update and submit to Congress the
13 strategic plan developed under paragraph (1).

14 “(b) INFORMATION COORDINATION.—In carrying out
15 this section the Administrator shall—

16 “(1) identify gaps in the Agency’s under-
17 standing of the effects of drought on drinking water
18 provided by public water systems, including—

19 “(A) the human health effects of drought;
20 and

21 “(B) methods and means of testing and
22 monitoring for the effects of drought on source
23 water of, or drinking water provided by, public
24 water systems;

25 “(2) as appropriate, consult with—

1 “(A) other Federal agencies that—
 2 “(i) examine or analyze drought; or
 3 “(ii) address public health concerns
 4 related to drought;
 5 “(B) States;
 6 “(C) operators of public water systems;
 7 “(D) multinational agencies;
 8 “(E) foreign governments;
 9 “(F) research and academic institutions;
 10 and
 11 “(G) companies that provide relevant
 12 drinking water treatment options; and
 13 “(3) assemble and publish information from
 14 each Federal agency that has—
 15 “(A) examined or analyzed drought; or
 16 “(B) addressed public health concerns re-
 17 lated to drought.
 18 “(c) FEASIBLE.—For purposes of this section, the
 19 term ‘feasible’ has the meaning given such term in section
 20 1412(b)(4)(D).”.

21 **TITLE IV—AQUA ACT**

22 **SEC. 401. SHORT TITLE.**

23 This title may be cited as the “Assistance, Quality,
 24 and Affordability Act of 2016”.

1 **SEC. 402. PREVAILING WAGES.**

2 Subsection (e) of section 1450 of the Safe Drinking
3 Water Act (42 U.S.C. 300j-9) is amended to read as fol-
4 lows:

5 “(e) LABOR STANDARDS.—

6 “(1) IN GENERAL.—The Administrator shall
7 take such action as the Administrator determines to
8 be necessary to ensure that each laborer and me-
9 chanic employed by a contractor or subcontractor in
10 connection with a construction project financed, in
11 whole or in part, by a grant, loan, loan guarantee,
12 refinancing, or any other form of financial assistance
13 provided under this title (including assistance pro-
14 vided by a State loan fund established under section
15 1452) is paid wages at a rate of not less than the
16 prevailing wages for the same type of work on simi-
17 lar construction in the immediate locality, as deter-
18 mined by the Secretary of Labor in accordance with
19 subchapter IV of chapter 31 of title 40, United
20 States Code.

21 “(2) AUTHORITY OF SECRETARY OF LABOR.—

22 With respect to the labor standards specified in this
23 subsection, the Secretary of Labor shall have the au-
24 thority and functions established in Reorganization
25 Plan Numbered 14 of 1950 (5 U.S.C. App.) and sec-
26 tion 3145 of title 40, United States Code.”.

1 **SEC. 403. USE OF FUNDS.**

2 Section 1452(a)(2) of the Safe Drinking Water Act
3 (42 U.S.C. 300j–12(a)(2)) is amended—

4 (1) by striking “Except as otherwise” and in-
5 serting the following:

6 “(A) IN GENERAL.—Except as otherwise”;

7 (2) by striking “Financial assistance under this
8 section” and inserting the following:

9 “(B) PERMISSIBLE EXPENDITURES.—Fi-
10 nancial assistance under this section”;

11 (3) by striking “The funds may also be used”
12 and inserting the following:

13 “(D) CERTAIN LOANS.—Financial assist-
14 ance under this section may also be used”;

15 (4) by striking “The funds shall not be used”
16 and inserting the following:

17 “(E) LIMITATION.—Financial assistance
18 under this section shall not be used”;

19 (5) by striking “Of the amount credited” and
20 inserting the following:

21 “(F) SET-ASIDE.—Of the amount cred-
22 ited”;

23 (6) in subparagraph (B) (as designated by
24 paragraph (2)) by striking “(not” and inserting
25 “(including expenditures for planning, design, siting,
26 and associated preconstruction activities, for replac-

1 ing or rehabilitating aging treatment, storage, or
2 distribution facilities of public water systems, or for
3 producing or capturing sustainable energy on site or
4 through the transportation of water through the
5 public water system, but not”; and

6 (7) by inserting after such subparagraph (B)
7 the following:

8 “(C) SALE OF BONDS.—If a State issues
9 revenue or general obligation bonds to provide
10 all or part of the State contribution required by
11 subsection (e), and the proceeds of the sale of
12 such bonds will be deposited into the State loan
13 fund—

14 “(i) financial assistance made avail-
15 able under this section may be used by the
16 State as security for payment of the prin-
17 cipal and interest on such bonds; and

18 “(ii) interest earnings of the State
19 loan fund may be used by the State as rev-
20 enue for payment of the principal and in-
21 terest on such bonds.”.

1 **SEC. 404. REQUIREMENTS FOR USE OF AMERICAN MATE-**
2 **RIALS.**

3 Section 1452(a) of the Safe Drinking Water Act (42
4 U.S.C. 300j–12(a)) is amended by adding at the end the
5 following new paragraph:

6 “(4) REQUIREMENTS FOR USE OF AMERICAN
7 MATERIALS.—

8 “(A) IN GENERAL.—Notwithstanding any
9 other provision of law, none of the funds made
10 available by a State loan fund as authorized
11 under this section may be used for a project for
12 the construction, alteration, maintenance, or re-
13 pair of a public water system unless all of the
14 iron and steel products used in such project are
15 produced in the United States.

16 “(B) WAIVER.—Upon request, the Admin-
17 istrator shall waive application of subparagraph
18 (A) in any case in which the Administrator (in
19 consultation with the Governor of the State)
20 finds that—

21 “(i) applying subparagraph (A) would
22 be inconsistent with the public interest;

23 “(ii) iron and steel products are not
24 produced in the United States in sufficient
25 and reasonably available quantities and of
26 a satisfactory quality; or

1 “(iii) inclusion of iron and steel prod-
2 ucts produced in the United States will in-
3 crease the cost of the overall project by
4 more than 25 percent.

5 “(C) REQUESTS FOR WAIVER.—If the Ad-
6 ministrator receives a request for a waiver
7 under this paragraph, the Administrator shall—

8 “(i) make available to the public, on
9 an informal basis, a copy of the request
10 and information available to the Adminis-
11 trator concerning the request;

12 “(ii) make the request and accom-
13 panying information available by electronic
14 means, including on the official public
15 Internet site of the Environmental Protec-
16 tion Agency; and

17 “(iii) allow for informal public input
18 on the request for at least 15 days prior to
19 making a finding based on the request.

20 “(D) CONSISTENCY WITH INTERNATIONAL
21 AGREEMENTS.—This paragraph shall be applied
22 in a manner consistent with United States obli-
23 gations under international agreements.

24 “(E) DEFINITION OF IRON AND STEEL
25 PRODUCTS.—In this paragraph, the term ‘iron

and steel products’ means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.”.

SEC. 405. DATA ON VARIANCES, EXEMPTIONS, AND PERSISTENT VIOLATIONS.

Section 1452(b)(2) of the Safe Drinking Water Act (42 U.S.C. 300j–12(b)(2)) is amended—

(1) in subparagraph (B), by striking “and” at the end;

(2) in subparagraph (C), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(D) a list of all public water systems within the State that have in effect an exemption or variance for any national primary drinking water regulation or that are in persistent violation of the requirements for any maximum contaminant level or treatment technique under a national primary drinking water regulation, including identification of—

1 “(i) the national primary drinking
2 water regulation in question for each such
3 exemption, variance, or violation; and

4 “(ii) the date on which the exemption
5 or variance came into effect or the viola-
6 tion began.”.

7 **SEC. 406. ASSISTANCE FOR RESTRUCTURING.**

8 (a) DEFINITION.—Section 1401 of the Safe Drinking
9 Water Act (42 U.S.C. 300f), as amended, is further
10 amended by adding at the end the following:

11 “(18) RESTRUCTURING.—The term ‘restruc-
12 turing’ means changes in operations (including own-
13 ership, management, cooperative partnerships, joint
14 purchasing arrangements, consolidation, and alter-
15 native water supply).”.

16 (b) RESTRUCTURING.—Clause (ii) of section
17 1452(a)(3)(B) (42 U.S.C. 300j–12(a)(3)(B)) is amended
18 by striking “changes in operations (including ownership,
19 management, accounting, rates, maintenance, consolida-
20 tion, alternative water supply, or other procedures)” and
21 inserting “restructuring”.

22 **SEC. 407. PRIORITY AND WEIGHT OF APPLICATIONS.**

23 (a) PRIORITY.—Section 1452(b)(3) of the Safe
24 Drinking Water Act (42 U.S.C. 300j–12(b)(3)) is amend-
25 ed—

1 (1) in subparagraph (A)—

2 (A) in clause (ii), by striking “and” at the
3 end;

4 (B) in clause (iii), by striking the period at
5 the end and inserting “; and”; and

6 (C) by adding at the end the following:

7 “(iv) improve the ability of public
8 water systems to protect human health and
9 comply with the requirements of this title
10 affordably in the future.”;

11 (2) by redesignating subparagraph (B) as sub-
12 paragraph (D);

13 (3) by inserting after subparagraph (A) the fol-
14 lowing:

15 “(B) AFFORDABILITY OF NEW STAND-
16 ARDS.—For any year in which enforcement be-
17 gins for a new national primary drinking water
18 standard, each State that has entered into a
19 capitalization agreement pursuant to this sec-
20 tion shall evaluate whether capital improve-
21 ments required to meet the standard are afford-
22 able for disadvantaged communities (as defined
23 in subsection (d)(3)) in the State. If the State
24 finds that such capital improvements do not
25 meet affordability criteria for disadvantaged

1 communities in the State, the State’s intended
2 use plan shall provide that priority for the use
3 of funds for such year be given to public water
4 systems affected by the standard and serving
5 disadvantaged communities.

6 “(C) WEIGHT GIVEN TO APPLICATIONS.—
7 After determining priority under subparagraphs
8 (A) and (B), an intended use plan shall provide
9 that the State will give greater weight to an ap-
10 plication for assistance if the application con-
11 tains—

12 “(i) a description of measures under-
13 taken by the public water system to im-
14 prove the management and financial sta-
15 bility of the public water system, which
16 may include—

17 “(I) an inventory of assets, in-
18 cluding a description of the condition
19 of the assets;

20 “(II) a schedule for replacement
21 of assets;

22 “(III) an audit of water losses;

23 “(IV) a financing plan that fac-
24 tors in all lifecycle costs indicating
25 sources of revenue from ratepayers,

1 grants, bonds, other loans, and other
2 sources to meet the costs; and

3 “(V) a review of options for re-
4 structuring;

5 “(ii) a demonstration of consistency
6 with State, regional, and municipal water-
7 shed plans;

8 “(iii) a water conservation plan con-
9 sistent with guidelines developed for such
10 plans by the Administrator under section
11 1455(a); and

12 “(iv) a description of measures under-
13 taken by the public water system to im-
14 prove the efficiency of the public water sys-
15 tem or reduce the public water system’s
16 environmental impact, which may in-
17 clude—

18 “(I) water efficiency or conserva-
19 tion, including the rehabilitation or re-
20 placement of existing leaking pipes;

21 “(II) use of reclaimed water;

22 “(III) actions to increase energy
23 efficiency;

24 “(IV) actions to generate or cap-
25 ture sustainable energy on site or

1 through the transportation of water
2 through the public water system;

3 “(V) actions to protect source
4 water;

5 “(VI) actions to mitigate or pre-
6 vent corrosion, including design, selec-
7 tion of materials, selection of coating,
8 and cathodic protection; and

9 “(VII) actions to reduce disinfec-
10 tion byproducts.”; and

11 (4) in subparagraph (D) (as redesignated by
12 paragraph (2)) by striking “periodically” and insert-
13 ing “at least biennially”.

14 (b) GUIDANCE.—Section 1452 of the Safe Drinking
15 Water Act (42 U.S.C. 300j–12) is amended—

16 (1) by redesignating subsection (r) as sub-
17 section (t); and

18 (2) by inserting after subsection (q) the fol-
19 lowing:

20 “(r) SMALL SYSTEM GUIDANCE.—The Administrator
21 may provide guidance and, as appropriate, tools, meth-
22 odologies, or computer software, to assist small public
23 water systems in undertaking measures to improve the
24 management, financial stability, and efficiency of the pub-

1 lic water system or reduce the public water system’s envi-
 2 ronmental impact.”.

3 **SEC. 408. DISADVANTAGED COMMUNITIES.**

4 (a) ASSISTANCE TO INCREASE COMPLIANCE.—Sec-
 5 tion 1452(b)(3) of the Safe Drinking Water Act (42
 6 U.S.C. 300j–12(b)(3)), as amended, is further amended
 7 by adding at the end the following:

8 “(E) ASSISTANCE TO INCREASE COMPLI-
 9 ANCE.—A State’s intended use plan shall pro-
 10 vide that, of the funds received by the State
 11 through a capitalization grant under this sec-
 12 tion for a fiscal year, the State will, to the ex-
 13 tent that there are sufficient eligible project ap-
 14 plications, reserve not less than 6 percent to be
 15 spent on assistance under subsection (d) to
 16 public water systems included in the State’s
 17 most recent list under paragraph (2)(D).”.

18 (b) ASSISTANCE FOR DISADVANTAGED COMMU-
 19 NITIES.—Section 1452(d) of the Safe Drinking Water Act
 20 (42 U.S.C. 300j–12(d)) is amended—

21 (1) in paragraph (1), by adding at the end the
 22 following: “Such additional subsidization shall di-
 23 rectly and primarily benefit such community.”; and

24 (2) in paragraph (3), by inserting “, or portion
 25 of a service area,” after “service area”.

1 (c) AFFORDABILITY CRITERIA.—Section 1452(d)(3)
 2 of the Safe Drinking Water Act (42 U.S.C. 300j–
 3 12(d)(3)) is amended by adding at the end: “Each State
 4 that has entered into a capitalization agreement pursuant
 5 to this section shall, in establishing affordability criteria,
 6 consider, solicit public comment on, and include as appro-
 7 priate—

8 “(A) the methods or criteria that the State
 9 will use to identify disadvantaged communities;

10 “(B) a description of the institutional, reg-
 11 ulatory, financial, tax, or legal factors at the
 12 Federal, State, or local level that affect identi-
 13 fied affordability criteria; and

14 “(C) a description of how the State will
 15 use the authorities and resources under this
 16 subsection to assist communities meeting the
 17 identified criteria.”.

18 **SEC. 409. ADMINISTRATION OF STATE LOAN FUNDS.**

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

21 (1) in paragraph (2)—

22 (A) in the first sentence, by striking “up
 23 to 4 percent of the funds allotted to the State
 24 under this section” and inserting “, for each
 25 fiscal year, an amount that does not exceed the

1 sum of the amount of any fees collected by the
 2 State for use in covering reasonable costs of ad-
 3 ministration of programs under this section, re-
 4 gardless of the source, and an amount equal to
 5 the greatest of \$400,000, $\frac{1}{5}$ of one percent of
 6 the current valuation of the State loan fund, or
 7 6 percent of all grant awards to the State loan
 8 fund under this section for the fiscal year,”;

9 (B) in subparagraph (D), by striking
 10 “1419,” and inserting “1419.”; and

11 (C) in the matter following subparagraph
 12 (D)—

13 (i) by striking “if the State” and all
 14 that follows through “1993.”; and

15 (ii) by striking “2 percent” and in-
 16 serting “4 percent”; and

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

18 “(5) TRANSFER OF FUNDS.—

19 “(A) IN GENERAL.—The Governor of a
 20 State may—

21 “(i) reserve for any fiscal year not
 22 more than the lesser of—

23 “(I) 33 percent of a capitaliza-
 24 tion grant made under this section; or

1 “(II) 33 percent of a capitaliza-
 2 tion grant made under section 601 of
 3 the Federal Water Pollution Control
 4 Act; and

5 “(ii) add the funds so reserved to any
 6 funds provided to the State under this sec-
 7 tion or section 601 of the Federal Water
 8 Pollution Control Act.

9 “(B) STATE MATCHING FUNDS.—Funds
 10 reserved under this paragraph shall not be con-
 11 sidered for purposes of calculating the amount
 12 of a State contribution required by subsection
 13 (e) of this section or section 602(b) of the Fed-
 14 eral Water Pollution Control Act.”.

15 **SEC. 410. STATE REVOLVING LOAN FUNDS FOR AMERICAN**
 16 **SAMOA, NORTHERN MARIANA ISLANDS,**
 17 **GUAM, AND THE VIRGIN ISLANDS.**

18 Section 1452(j) of the Safe Drinking Water Act (42
 19 U.S.C. 300j–12(j)) is amended by striking “0.33 percent”
 20 and inserting “1.5 percent”.

21 **SEC. 411. AUTHORIZATION OF APPROPRIATIONS.**

22 Subsection (m) of section 1452 of the Safe Drinking
 23 Water Act (42 U.S.C. 300j–12) is amended to read as
 24 follows:

25 “(m) AUTHORIZATION OF APPROPRIATIONS.—

1 “(1) IN GENERAL.—There are authorized to be
2 appropriated to carry out this section—

3 “(A) \$3,130,000,000 for fiscal year 2017;

4 “(B) \$3,600,000,000 for fiscal year 2018;

5 “(C) \$4,140,000,000 for fiscal year 2019;

6 “(D) \$4,800,000,000 for fiscal year 2020;

7 and

8 “(E) \$5,500,000,000 for fiscal year 2021.

9 “(2) AVAILABILITY.—Amounts made available
10 pursuant to this subsection shall remain available
11 until expended.

12 “(3) RESERVATION FOR NEEDS SURVEYS.—Of
13 the amount made available under paragraph (1) to
14 carry out this section for a fiscal year, the Adminis-
15 trator may reserve not more than \$1,000,000 per
16 year to pay the costs of conducting needs surveys
17 under subsection (h).”.

18 **SEC. 412. AFFORDABILITY OF NEW STANDARDS.**

19 (a) TREATMENT TECHNOLOGIES FOR SMALL PUBLIC
20 WATER SYSTEMS.—Clause (ii) of section 1412(b)(4)(E)
21 of the Safe Drinking Water Act (42 U.S.C. 300g–
22 1(b)(4)(E)) is amended by adding at the end the following:
23 “If no technology, treatment technique, or other means
24 is included in a list under this subparagraph for a category
25 of small public water systems, the Administrator shall pe-

1 riodically review the list and supplement it when new tech-
2 nology becomes available.”.

3 (b) ASSISTANCE FOR DISADVANTAGED COMMU-
4 NITIES.—

5 (1) IN GENERAL.—Subparagraph (E) of section
6 1452(a)(1) of the Safe Drinking Water Act (42
7 U.S.C. 300j–12(a)(1)) is amended—

8 (A) by striking “except that the Adminis-
9 trator may reserve” and inserting “except
10 that—

11 “(i) in any year in which enforcement
12 of a new national primary drinking water
13 standard begins, the Administrator may
14 use the remaining amount to make grants
15 to States whose public water systems are
16 disproportionately affected by the new
17 standard for the provision of assistance
18 under subsection (d) to such public water
19 systems;

20 “(ii) the Administrator may reserve”;
21 and

22 (B) by striking “and none of the funds re-
23 allotted” and inserting “; and

24 “(iii) none of the funds reallocated”.

25 (2) ELIMINATION OF CERTAIN PROVISIONS.—

1 (A) Section 1412(b) (42 U.S.C. 300g–
 2 1(b)) of the Safe Drinking Water Act is amend-
 3 ed by striking paragraph (15).

4 (B) Section 1415 (42 U.S.C. 300g–4) of
 5 the Safe Drinking Water Act is amended by
 6 striking subsection (e).

7 (3) CONFORMING AMENDMENTS.—

8 (A) Subparagraph (B) of section
 9 1414(c)(1) of the Safe Drinking Water Act (42
 10 U.S.C. 300g–3(c)(1)(B)) is amended by strik-
 11 ing “, (a)(2), or (e)” and inserting “or (a)(2)”.

12 (B) Section 1416(b)(2) of the Safe Drink-
 13 ing Water Act (42 U.S.C. 300g–5(b)(2)) is
 14 amended by striking subparagraph (D).

15 (C) Section 1445(h) of the Safe Drinking
 16 Water Act (42 U.S.C. 300j–4(h)) is amended—

17 (i) by striking “sections
 18 1412(b)(4)(E) and 1415(e) (relating to
 19 small system variance program” and in-
 20 serting “section 1412(b)(4)(E)”; and

21 (ii) by striking “guidance under sec-
 22 tions 1412(b)(4)(E) and 1415(e)” and in-
 23 serting “guidance under section
 24 1412(b)(4)(E)”.

1 **SEC. 413. FOCUS ON LIFECYCLE COSTS.**

2 Section 1412(b)(4) of the Safe Drinking Water Act
3 (42 U.S.C. 300g–1(b)(4)) is amended—

4 (1) in subparagraph (D), by striking “taking
5 cost into consideration” and inserting “taking
6 lifecycle costs, including maintenance, replacement,
7 and avoided costs, into consideration”; and

8 (2) in subparagraph (E)(ii), in the matter pre-
9 ceding subclause (I), by inserting “taking lifecycle
10 costs, including maintenance, replacement, and
11 avoided costs, into consideration,” after “as deter-
12 mined by the Administrator in consultation with the
13 States,”.

14 **SEC. 414. BEST PRACTICES FOR ADMINISTRATION OF**
15 **STATE REVOLVING LOAN FUND PROGRAMS.**

16 Section 1452 of the Safe Drinking Water Act (42
17 U.S.C. 300j–12) is amended by inserting after subsection
18 (r), as added by section 407(b), the following:

19 “(s) BEST PRACTICES FOR PROGRAM ADMINISTRA-
20 TION.—The Administrator shall—

21 “(1) collect information from States on admin-
22 istration of State programs with respect to State
23 loan funds, including—

24 “(A) efforts to streamline the process for
25 applying for assistance through such programs;

1 “(B) programs in place to assist with the
2 completion of application forms;

3 “(C) incentives provided to systems that
4 partner with small public water systems for the
5 application process; and

6 “(D) techniques to ensure that obligated
7 balances are liquidated in a timely fashion;

8 “(2) not later than 3 years after the date of en-
9 actment of the Assistance, Quality, and Affordability
10 Act of 2016, disseminate to the States’ best prac-
11 tices for administration of such programs, based on
12 the information collected pursuant to this sub-
13 section; and

14 “(3) periodically update such best practices, as
15 appropriate.”.

16 **TITLE V—INCREASING COMPLI-**
17 **ANCE AND COMMUNITY**
18 **RIGHT TO KNOW**

19 **SEC. 501. STREAMLINING REPORTING AND ENFORCEMENT.**

20 (a) ENFORCEMENT.—

21 (1) ADVICE AND TECHNICAL ASSISTANCE.—

22 Section 1414(a)(1) of the Safe Drinking Water Act
23 (42 U.S.C. 300g–3(a)(1)) is amended—

24 (A) in subparagraph (A), in the matter fol-
25 lowing clause (ii), by striking “and provide such

1 advice and technical assistance to such State
2 and public water system as may be appropriate
3 to bring the system into compliance with the re-
4 quirement by the earliest feasible time”; and

5 (B) by adding at the end the following:

6 “(C) At any time after providing notice of a violation
7 to a State and public water system under subparagraph
8 (A), the Administrator may provide such advice and tech-
9 nical assistance to such State and public water system as
10 may be appropriate to bring the system into compliance
11 with the requirement by the earliest feasible time. In de-
12 ciding whether the provision of advice or technical assist-
13 ance is appropriate, the Administrator may consider the
14 potential for the violation to result in serious adverse ef-
15 fects to human health, whether the violation has occurred
16 continuously or frequently, and the effectiveness of past
17 technical assistance efforts.”.

18 (2) ADDITIONAL INSPECTIONS.—

19 (A) IN GENERAL.—Section 1414 of the
20 Safe Drinking Water Act (42 U.S.C. 300g-3) is
21 amended—

22 (i) by redesignating subsections (d)
23 through (i) as subsections (e) through (j),
24 respectively; and

1 (ii) by inserting after subsection (c)
2 the following:

3 “(d) ADDITIONAL INSPECTIONS FOLLOWING VIOLA-
4 TIONS.—

5 “(1) IN GENERAL.—The Administrator shall,
6 by regulation, and after consultation with the States,
7 prescribe the number, frequency, and type of addi-
8 tional inspections to follow any violation requiring
9 notice under subsection (c). Regulations under this
10 subsection shall—

11 “(A) take into account—

12 “(i) differences between violations
13 that are intermittent or infrequent and vio-
14 lations that are continuous or frequent;

15 “(ii) the seriousness of any potential
16 adverse health effects that may be in-
17 volved; and

18 “(iii) the number and severity of past
19 violations by the public water system; and

20 “(B) specify procedures for inspections fol-
21 lowing a violation by a public water system that
22 has the potential to have serious adverse effects
23 on human health as a result of short-term expo-
24 sure.

1 “(2) STATE PRIMARY ENFORCEMENT RESPONSIBILITY.—Nothing in this subsection shall be construed or applied to modify the requirements of section 1413.”.

5 (B) CONFORMING AMENDMENTS.—

6 (i) Subsections (a)(1)(B), (a)(2)(A),
7 and (b) of section 1414 of the Safe Drinking
8 Water Act (42 U.S.C. 300g–3) are
9 amended by striking “subsection (g)” each
10 place it appears and inserting “subsection
11 (h)”.

12 (ii) Section 1448(a) of the Safe
13 Drinking Water Act (42 U.S.C. 300j–7(a))
14 is amended by striking “1414(g)(3)(B)”
15 and inserting “1414(h)(3)(B)”.

16 (b) ELECTRONIC REPORTING OF COMPLIANCE MONITORING DATA TO THE ADMINISTRATOR.—

18 (1) REQUIREMENT.—Section 1414 of the Safe
19 Drinking Water Act (42 U.S.C. 300g–3), as amended,
20 is further amended by adding at the end the following:
21

22 “(k) ELECTRONIC REPORTING OF COMPLIANCE
23 MONITORING DATA TO THE ADMINISTRATOR.—The Administrator shall by rule establish requirements for—
24

1 “(1) electronic submission by public water sys-
2 tems of all compliance monitoring data—

3 “(A) to the Administrator; or

4 “(B) with respect to public water systems
5 in a State which has primary enforcement re-
6 sponsibility under section 1413, to such State;
7 and

8 “(2) electronic submission to the Administrator
9 by each State which has primary enforcement re-
10 sponsibility under section 1413 of all compliance
11 monitoring data submitted to such State by public
12 water systems pursuant to paragraph (1)(B).”.

13 (2) FINAL RULE.—Not later than 12 months
14 after the date of the enactment of this Act, the Ad-
15 ministrator of the Environmental Protection Agency
16 shall issue a final rule to carry out section 1414(k)
17 of the Safe Drinking Water Act, as added by para-
18 graph (1).

19 **SEC. 502. CONSOLIDATION.**

20 (a) MANDATORY ASSESSMENT AND CONSOLIDA-
21 TION.—Subsection (i) of section 1414 of the Safe Drink-
22 ing Water Act (42 U.S.C. 300g–3), as redesignated by
23 section 501(a)(2), is amended by adding at the end the
24 following:

1 “(3) AUTHORITY FOR MANDATORY ASSESSMENT
2 AND MANDATORY CONSOLIDATION.—

3 “(A) MANDATORY ASSESSMENT.—A State
4 with primary enforcement responsibility or the
5 Administrator (if the State does not have pri-
6 mary enforcement responsibility) may require
7 the owner or operator of a public water system
8 to assess options for consolidation, or transfer
9 of ownership of the system, as described in
10 paragraph (1), if—

11 “(i) the public water system has re-
12 peatedly failed to comply with one or more
13 national primary drinking water regula-
14 tions;

15 “(ii) such consolidation or transfer is
16 feasible; and

17 “(iii) such consolidation or transfer
18 could result in greater compliance with na-
19 tional primary drinking water regulations.

20 “(B) MANDATORY CONSOLIDATION.—A
21 State with primary enforcement responsibility
22 or the Administrator (if the State does not have
23 primary enforcement responsibility) may require
24 the owner or operator of a public water system
25 to submit a plan for consolidation, or transfer

1 of ownership of the system, as described in
2 paragraph (1), and complete the actions re-
3 quired under such plan if—

4 “(i) the owner or operator of the pub-
5 lic water system completed the assessment
6 required under paragraph (A), but did not
7 complete consolidation or transfer of own-
8 ership;

9 “(ii) since completing such assess-
10 ment, the public water system has failed to
11 comply with one or more national primary
12 drinking water regulations; and

13 “(iii) such consolidation or transfer is
14 feasible.

15 “(C) REGULATIONS.—Not later than 2
16 years after the date of enactment of the Safe
17 Drinking Water Act Amendments of 2016, the
18 Administrator shall promulgate regulations to
19 implement this paragraph.

20 “(4) FINANCIAL ASSISTANCE.—Notwithstand-
21 ing section 1452(a)(3), public water systems under-
22 taking consolidation or transfer of ownership pursu-
23 ant to this section may receive assistance under sec-
24 tion 1452 to carry out such consolidation or trans-
25 fer.

1 “(5) PROTECTION OF NON-RESPONSIBLE SYS-
2 TEM.—

3 “(A) IDENTIFICATION OF LIABILITIES.—

4 An owner or operator of a public water system
5 submitting a plan pursuant to this section shall
6 identify as part of such plan—

7 “(i) any potential liability for damages
8 arising from each specific violation identi-
9 fied in the plan of which the owner or op-
10 erator is aware or should be aware; and

11 “(ii) any funds or other assets avail-
12 able to satisfy such liability that are avail-
13 able, as of the date of submission of such
14 plan, to the public water system that com-
15 mitted such violation.

16 “(B) RESERVATION OF FUNDS.—A public
17 water system that has completed consolidation
18 with another public water system pursuant to a
19 plan approved or required pursuant to this sec-
20 tion shall not be liable in a civil action for any
21 damages arising from a specific violation identi-
22 fied in such plan, except to the extent to which
23 funds or other assets are identified pursuant to
24 subparagraph (A)(ii) as available to satisfy such
25 liability.”.

1 (b) RETENTION OF PRIMARY ENFORCEMENT AU-
2 THORITY.—

3 (1) IN GENERAL.—Section 1413(a) of the Safe
4 Drinking Water Act (42 U.S.C. 300g-2(a)) is
5 amended—

6 (A) in paragraph (5), by striking “; and”
7 and inserting a semicolon;

8 (B) by redesignating paragraph (6) as
9 paragraph (7); and

10 (C) by inserting after paragraph (5) the
11 following new paragraph:

12 “(6) has adopted and is implementing proce-
13 dures for requiring public water systems to assess
14 options for, and complete, consolidation or transfer
15 of ownership, in accordance with the regulations
16 issued by the Administrator to implement section
17 1414(i)(3); and”.

18 (2) CONFORMING AMENDMENT.—Section
19 1413(b)(1) of the Safe Drinking Water Act (42
20 U.S.C. 300g-2(b)(1)) is amended by striking “of
21 paragraphs (1), (2), (3), and (4)”.

22 **SEC. 503. WATER VIOLATIONS INVENTORY.**

23 Section 1414 of the Safe Drinking Water Act (42
24 U.S.C. 300g-3), as amended, is further amended by add-
25 ing at the end the following new subsection:

1 “(1) EPA MANAGEMENT OF DATA.—

2 “(1) ESTABLISHMENT OF INVENTORY.—Not
3 later than one year after the date of enactment of
4 the Safe Drinking Water Act Amendments of 2016,
5 the Administrator shall establish and maintain in a
6 computer data base an inventory based on data sub-
7 mitted to the Administrator under this section re-
8 garding violations and exceedances. The Adminis-
9 trator shall make these data publicly accessible and
10 searchable by zip code and county, and available in
11 appropriate languages.

12 “(2) REPORT ON HOT SPOTS AND DISPROPOR-
13 TIONATE IMPACTS.—Not later than 2 years after the
14 date of enactment of the Safe Drinking Water Act
15 Amendments of 2016, and annually thereafter, the
16 Administrator shall submit to the Committee on En-
17 ergy and Commerce of the House of Representatives
18 and the Committee on Environment and Public
19 Works of the Senate a report on any dispropor-
20 tionate impacts on communities of particular demo-
21 graphic categories as shown by the data in the in-
22 ventory under paragraph (1).”.

1 **SEC. 504. IMPROVED CONSUMER CONFIDENCE REPORTS.**

2 Section 1414(c)(4) of the Safe Drinking Water Act
3 (42 U.S.C. 300g-3(c)(4)) is amended by adding at the end
4 the following new subparagraph:

5 “(F) REVISIONS.—Not later than 24
6 months after the date of enactment of the Safe
7 Drinking Water Act Amendments of 2016, the
8 Administrator, in consultation with the groups
9 identified in subparagraph (A), shall promul-
10 gate revisions to the regulations issued pursu-
11 ant to subparagraph (A) to increase the effec-
12 tiveness and understandability of consumer con-
13 fidence reports.”.

14 **TITLE VI—STUDIES AND**
15 **TECHNOLOGY**

16 **SEC. 601. REAL TIME MONITORING TECHNOLOGY RE-**
17 **SEARCH GRANTS.**

18 (a) GRANT PROGRAM.—Not later than 1 year after
19 the date of enactment of this Act, the Administrator of
20 the Environmental Protection Agency shall establish a
21 grant program to provide funds to projects to develop
22 technology for real-time monitoring of drinking water con-
23 taminants. Grants awarded under this section shall be
24 awarded on a competitive basis after solicitation and eval-
25 uation of proposals.

1 (b) PROJECTS.—Projects eligible for funding under
2 the grant program established under this section include
3 projects for the—

4 (1) development of new hardware and tech-
5 nology, or improvement of existing hardware or tech-
6 nology, that monitors contaminants in drinking
7 water in real-time; and

8 (2) development of software that assists in real-
9 time monitoring of contaminants in drinking water.

10 (c) REPORT TO CONGRESS.—Not later than 3 years
11 after the date of enactment of this Act, the Administrator
12 shall submit to the Committee on Energy and Commerce
13 of the House of Representatives and the Committee on
14 Environment and Public Works of the Senate a report de-
15 scribing the projects funded under the grant program es-
16 tablished under this section and the technology that has
17 been developed as a result of such projects.

18 (d) AUTHORIZATION OF APPROPRIATIONS.—There
19 are authorized to be appropriated \$10,000,000 for fiscal
20 year 2017 to carry out this section, which shall remain
21 available until expended.

1 **SEC. 602. PRESENCE OF PHARMACEUTICALS AND PER-**
2 **SONAL CARE PRODUCTS IN SOURCES OF**
3 **DRINKING WATER.**

4 Subsection (a) of section 1442 of the Safe Drinking
5 Water Act (42 U.S.C. 300j-1) is amended by adding at
6 the end the following:

7 “(11) PRESENCE OF PHARMACEUTICALS AND PER-
8 SONAL CARE PRODUCTS IN SOURCES OF DRINKING
9 WATER.—

10 “(A) STUDY.—The Administrator shall carry
11 out a study on the presence of pharmaceuticals and
12 personal care products in sources of drinking water,
13 which shall—

14 “(i) identify pharmaceuticals and personal
15 care products that have been detected in
16 sources of drinking water and the levels at
17 which such pharmaceuticals and personal care
18 products have been detected;

19 “(ii) identify the sources of pharma-
20 ceuticals and personal care products in sources
21 of drinking water, including point sources and
22 nonpoint sources of pharmaceutical and per-
23 sonal care products;

24 “(iii) identify the effects of such pharma-
25 ceuticals and personal care products on hu-

1 mans, the environment, and the safety of drink-
2 ing water; and

3 “(iv) identify methods to control, limit,
4 treat, or prevent the presence of such personal
5 care pharmaceuticals and products.

6 “(B) CONSULTATION.—The Administrator shall
7 conduct the study described in subparagraph (A) in
8 consultation with the Secretary of Health and
9 Human Services (acting through the Commissioner
10 of Food and Drugs), the Director of the United
11 States Geological Survey, the heads of other appro-
12 priate Federal agencies (including the National In-
13 stitute of Environmental Health Sciences), and other
14 interested stakeholders (including manufacturers of
15 pharmaceuticals and personal care products and
16 consumer groups and advocates).

17 “(C) REPORT.—Not later than 4 years after
18 the date of the enactment of this paragraph, the Ad-
19 ministrator shall submit to the Congress a report on
20 the results of the study carried out under this para-
21 graph.

22 “(D) DEFINITIONS.—In this paragraph:

23 “(i) The term ‘personal care product’ has
24 the meaning given the term ‘cosmetic’ in section

1 201 of the Federal Food, Drug, and Cosmetic
2 Act.

3 “(ii) The term ‘pharmaceutical’ has the
4 meaning given the term ‘drug’ in section 201 of
5 the Federal Food, Drug, and Cosmetic Act.”.

6 **SEC. 603. WATER LOSS AND LEAK CONTROL TECHNOLOGY.**

7 Part E of the Safe Drinking Water Act (42 U.S.C.
8 300j et seq.), as amended, is further amended by adding
9 at the end the following:

10 **“SEC. 1459B. WATER LOSS AND LEAK CONTROL TECH-**
11 **NOLOGY.**

12 “The Administrator shall—

13 “(1) not later than 5 years after the date of en-
14 actment of this section, develop criteria for effective
15 water loss and leak control technology to be used by
16 public water systems; and

17 “(2) implement a program through which a
18 manufacturer of such technology may apply, on a
19 voluntary basis, for certification of compliance with
20 such criteria.”.

○