

115TH CONGRESS
1ST SESSION

H. R. 3275

To provide drought relief through innovation, increased water supply, and regional adaptation and self-sufficiency, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 17, 2017

Mr. MCNERNEY introduced the following bill; which was referred to the Committee on Energy and Commerce, and in addition to the Committees on Natural Resources, Transportation and Infrastructure, Agriculture, Science, Space, and Technology, Ways and Means, and Foreign Affairs, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

A BILL

To provide drought relief through innovation, increased water supply, and regional adaptation and self-sufficiency, 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 referred to as
5 the “Water and Energy Sustainability through Technology
6 Act”.

- 1 (b) TABLE OF CONTENTS.—The table of contents for
 2 this Act is as follows:

Sec. 1. Short title; table of contents.

TITLE I—WATER INNOVATION THROUGH ENERGY-WATER NEXUS TECHNOLOGY AND DATA

Subtitle A—Energy-Water Nexus Technology and Data

- Sec. 1111. DOE energy-water nexus findings, sense of Congress, and definition.
- Sec. 1112. National energy-water nexus database.
- Sec. 1113. Energy-water nexus technology R&D program.
- Sec. 1114. Smart energy and water efficiency program.
- Sec. 1115. State energy-water technology services program.
- Sec. 1116. Energy-water efficient buildings and power plants.
- Sec. 1117. Energy-water nexus data for power plants.
- Sec. 1118. Reclamation water conservation and energy savings.
- Sec. 1119. Rural water utilities energy and water efficiency program.

Subtitle B—Improved Data, Technology, and Education

- Sec. 1221. DOI groundwater information system.
- Sec. 1222. EIA water consumption data collection in the residential and commercial sectors.
- Sec. 1223. USGS water consumption analysis survey.
- Sec. 1224. Innovations at the nexus of food, energy, and water systems.
- Sec. 1225. USDA and DOI coordinated water conservation efforts.
- Sec. 1226. Agricultural technology centers.
- Sec. 1227. Efficient irrigation technical assistance grant program.
- Sec. 1228. United States-Israel Water Cooperation Working Group.

TITLE II—INCREASED WATER SUPPLY AND REGIONAL SELF-SUFFICIENCY

- Sec. 2001. WaterSMART reauthorization.
- Sec. 2002. Amendment to competitive grant program for water recycling and reuse projects.
- Sec. 2003. Recycling standards assistance.
- Sec. 2004. Stormwater management and technical assistance.
- Sec. 2005. Groundwater management technical assistance.
- Sec. 2006. Groundwater recharge program.
- Sec. 2007. Community water enhancement.
- Sec. 2008. Water system mitigation and adaptation grants.
- Sec. 2009. WaterSense program.
- Sec. 2010. State residential water efficiency and conservation incentives program.
- Sec. 2011. Appropriative water rights charitable tax deduction.
- Sec. 2012. Storage.

TITLE III—IMPROVED INFRASTRUCTURE

- Sec. 3001. Water leak control technology study.
- Sec. 3002. Water main break data clearinghouse.
- Sec. 3003. Sustainable Water Loss Control Program.
- Sec. 3004. Tax-exempt facility bonds.

Sec. 3005. Improving green infrastructure and community water systems through State revolving loan funds.

Sec. 3006. Best practices for administration of State revolving loan fund programs.

TITLE IV—REPEAL CERTAIN TAX PREFERENCES FOR ENERGY AND NATURAL RESOURCE-BASED INDUSTRIES

Sec. 4001. No expensing for intangible drilling and development costs for oil and gas wells.

Sec. 4002. Repeal of percentage depletion.

TITLE V—SAVINGS CLAUSE

Sec. 5001. Savings clause.

1 TITLE I—WATER INNOVATION 2 THROUGH ENERGY-WATER 3 NEXUS TECHNOLOGY AND 4 DATA

5 Subtitle A—Energy-Water Nexus 6 Technology and Data

7 SEC. 1111. DOE ENERGY-WATER NEXUS FINDINGS, SENSE 8 OF CONGRESS, AND DEFINITION.

9 (a) FINDINGS.—Congress finds the following:

10 (1) Water and energy are essential resources
11 that are inherently linked and interconnected.

12 (2) In 2010, the U.S. water system consumed
13 approximately 12.6 percent of the Nation’s energy
14 according to a study by the University of Texas at
15 Austin.

16 (3) The Nation’s wastewater plants and drink-
17 ing water systems expend approximately \$4 billion
18 per year on energy to treat water.

1 (4) Water and wastewater facilities account for
2 approximately 4 percent of U.S. electricity consump-
3 tion.

4 (5) California water systems together consume
5 approximately 19 percent of the State's electricity.

6 (6) If water and wastewater utilities could re-
7 duce energy use by just 10 percent using demand
8 management and cost-effective investments in energy
9 efficiency, it would save about \$400 million annu-
10 ally.

11 (7) The energy-water nexus is integral to com-
12 bating and mitigating the effects of climate change
13 and enhancing energy and water security.

14 (8) The Government Accountability Office has
15 issued several reports calling for improved informa-
16 tion and coordination from the Department of En-
17 ergy with respect to the energy-water nexus, includ-
18 ing improving Federal data for power plants, im-
19 proving information on water produced during oil
20 and gas production, and increasing Federal coordi-
21 nation to better manage energy and water tradeoffs.

22 (9) The Department of Energy's Energy-Water
23 Nexus Crosscut Team is a collaboration of agencies,
24 national laboratories, State and local governments,
25 utilities, industry stakeholders, and the science and

1 environmental community that work to address
2 water and energy challenges and opportunities.

3 (b) SENSE OF CONGRESS.—It is the sense of Con-
4 gress that Congress supports—

5 (1) with respect to the energy-water nexus—

6 (A) an advanced, integrated data, mod-
7 eling, and analysis platform to improve under-
8 standing and inform decision making for a
9 broad range of users and at multiple scales; and

10 (B) investments in targeted technology re-
11 search that offer the greatest potential for posi-
12 tive impact;

13 (2) innovative technology advances that address
14 the challenges relating to the energy-water nexus;
15 and

16 (3) the Department of Energy’s Energy-Water
17 Nexus Crosscut Team and its mission.

18 (c) DEFINITION OF ENERGY-WATER NEXUS.—In
19 this Act, the term “energy-water nexus” means the links
20 between energy and water systems, including—

21 (1) the water needed to produce fuels, generate
22 electricity, and produce other forms of energy;

23 (2) the energy needed to transport, reclaim,
24 treat, and reuse—

1 (A) water, including water needed for heat-
2 ing and cooling; and

3 (B) wastewater, including produced waters;

4 (3) the energy available in organic wastewaters
5 and wet waste streams, including municipal and in-
6 dustrial wastewaters and livestock manures; and

7 (4) the waste heat available in industrial proc-
8 ess and cooling water discharges, steam system con-
9 densate and cooling water, and thermoelectric cool-
10 ing water discharges.

11 **SEC. 1112. NATIONAL ENERGY-WATER NEXUS DATABASE.**

12 (a) ESTABLISHMENT.—Not later than 4 years after
13 the date of enactment of this Act, the Secretary of Energy
14 shall establish and maintain an energy-water nexus data-
15 base.

16 (b) PURPOSES.—The purposes of the database are—

17 (1) to advance the availability, timely distribu-
18 tion, and widespread use of data and information re-
19 lating to the energy-water nexus for energy and
20 water management, education, research, assessment,
21 and monitoring purposes;

22 (2) to advance understanding of interactions be-
23 tween energy and water systems through access to
24 data, including models and modeling results;

1 (3) to promote data collection and information
2 management with respect to—

3 (A) the uses, characteristics, and ultimate
4 fate of water used for or produced in oil and
5 gas production, including safe and appropriate
6 reuse of these non-traditional waters;

7 (B) water consumption based on metered
8 data; and

9 (C) energy use in water systems;

10 (4) to increase accessibility to, and expand the
11 use of, data and information relating to the energy-
12 water nexus, in a standard, easy-to-use format, by
13 Federal, State, local, and tribal governments, com-
14 munities, educational institutions, and the private
15 sector, while leveraging existing data at Federal
16 agencies;

17 (5) to facilitate the open exchange of informa-
18 tion relating to the energy-water nexus in the face
19 of changing technologies, changes in demand, and
20 climate change; and

21 (6) to make data, modeling, and modeling re-
22 sults relating to the energy-water nexus of the De-
23 partment of Energy widely available.

24 (c) ACTIVITIES.—In carrying out this section, the
25 Secretary of Energy shall—

1 (1) integrate data and information relating to
2 the energy-water nexus into an interoperable, na-
3 tional, geospatially referenced energy-water data
4 framework;

5 (2) identify new data and information needs re-
6 lating to the energy-water nexus;

7 (3) use existing shared databases, infrastruc-
8 ture, monitoring networks, and tools to provide—

9 (A) a platform for innovation, predictive
10 analytics, modeling and data sharing, and solu-
11 tion development for data and information re-
12 lating to the energy-water nexus; and

13 (B) nationally uniform water and energy
14 use data;

15 (4) support energy-water nexus data and infor-
16 mation sharing, applied research, and educational
17 programs of State, local, and tribal governments,
18 communities, educational institutions, and the pri-
19 vate sector;

20 (5) promote enhanced cooperation among Fed-
21 eral and State agencies, including cooperation in
22 sensing, surveying, compilation, analysis, modeling,
23 presentation, and interactive updating of data sets
24 to improve data quality and usability; and

(d) AUTHORIZATION OF APPROPRIATIONS.—There are authorized to be appropriated to carry out this section \$20,000,000 for each of fiscal years 2018 through 2027.

Section 979 of the Energy Policy Act of 2005 (42 U.S.C. 16319) is amended—

(A) in paragraph (2), by striking “; and”
and inserting “and brine-management tech-
nologies;”;

17 (C) by adding at the end the following new
18 paragraphs:

“(4) technologies related to the energy-water nexus (as such term is defined in section 1111(c) of the Water and Energy Sustainability through Technology Act) that lessen demand on energy and water systems, including by—

1 “(A) optimizing the freshwater efficiency
2 of energy production, electricity generation, and
3 end use technologies;

4 “(B) optimizing the energy efficiency of
5 water management, treatment, distribution, and
6 end use technologies;

7 “(C) enhancing the reliability and resil-
8 ience of energy and water technologies;

9 “(D) increasing safe and productive use of
10 nontraditional water sources through improved
11 technology;

12 “(E) promoting responsible energy oper-
13 ations with respect to water quality, ecosystem,
14 and seismic impacts;

15 “(F) utilizing efficient synergies among
16 water and energy system technologies; and

17 “(G) recovering energy in the form of
18 biofuels, bioproducts, and biopower from munic-
19 ipal and industrial wastewaters, and similar or-
20 ganic streams.”;

21 (2) by redesignating subsections (d), (e), and
22 (f) as subsections (e), (f), and (g), respectively;

23 (3) by inserting after subsection (c) the fol-
24 lowing subsection:

1 “(d) COORDINATION OF EFFORTS.—The Secretary
 2 shall coordinate efforts with respect to technologies related
 3 to the energy-water nexus (as such term is defined in sec-
 4 tion 1111(c) of the Water and Energy Sustainability
 5 through Technology Act) under subsection (b)(4) of this
 6 section with similar efforts by the National Labora-
 7 tories.”;

8 (4) in subsection (g), as redesignated by para-
 9 graph (2)—

10 (A) by striking “date of enactment of this
 11 Act” and inserting “date of enactment of the
 12 Water and Energy Sustainability through Tech-
 13 nology Act, and annually thereafter”; and

14 (B) by striking “assessment described in
 15 subsection (b)” and inserting “program under
 16 this section”; and

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

18 “(h) AUTHORIZATION OF APPROPRIATIONS.—There
 19 are authorized to be appropriated to carry out this section
 20 \$20,000,000 for each of fiscal years 2018 through 2027.”.

21 **SEC. 1114. SMART ENERGY AND WATER EFFICIENCY PRO-**
 22 **GRAM.**

23 (a) DEFINITIONS.—In this section:

24 (1) ELIGIBLE ENTITY.—The term “eligible enti-
 25 ty” means—

- 1 (A) a utility;
- 2 (B) a municipality;
- 3 (C) a water district;
- 4 (D) a sanitation district; or
- 5 (E) any other authority that provides
- 6 water, wastewater, or water reuse services.

7 (2) SMART ENERGY AND WATER EFFICIENCY
8 PILOT PROGRAM.—The terms “smart energy and
9 water efficiency pilot program” and “pilot program”
10 mean the pilot program established under subsection
11 (b).

12 (b) SMART ENERGY AND WATER EFFICIENCY PILOT
13 PROGRAM.—

14 (1) IN GENERAL.—The Secretary of Energy
15 shall establish and carry out a smart energy and
16 water efficiency pilot program in accordance with
17 this section.

18 (2) PURPOSE.—The purpose of the smart en-
19 ergy and water efficiency pilot program is to award
20 grants to eligible entities to demonstrate advanced
21 and innovative technology-based projects that will—

- 22 (A) increase and improve the energy effi-
23 ciency of water, wastewater, and water end-use
24 and reuse systems to help communities across
25 the United States make significant progress in

1 conserving water, saving energy, and reducing
2 costs;

3 (B) support the implementation of innova-
4 tive processes for energy and water efficiency
5 and the installation of advanced automated sys-
6 tems that provide real-time data on energy and
7 water;

8 (C) improve energy and water conserva-
9 tion, water quality, and predictive maintenance
10 of energy and water systems, through the use
11 of software and communication enabled tech-
12 nologies, including sensors, intelligent gateways,
13 and security embedded in hardware; or

14 (D) support the recovery of energy, in the
15 form of biofuels, bioproducts (including nutrient
16 recovery), and biopower, from municipal
17 wastewaters, biosolids, and biowastes.

18 (3) PROJECT SELECTION.—

19 (A) IN GENERAL.—The Secretary of En-
20 ergy shall make competitive grants under the
21 pilot program to at least 2 eligible entities.

22 (B) SELECTION CRITERIA.—In selecting an
23 eligible entity to receive a grant under the pilot
24 program, the Secretary of Energy shall con-
25 sider—

1 (i) energy and water cost savings an-
2 ticipated to result from the project;

3 (ii) the innovative nature, commercial
4 viability, and reliability of the technology
5 to be used;

6 (iii) the degree to which the project
7 integrates next-generation sensors, soft-
8 ware, hardware, predictive analytics, and
9 management tools;

10 (iv) the anticipated cost effectiveness
11 of the project in terms of energy savings,
12 water savings or reuse, and infrastructure
13 costs averted per dollar spent;

14 (v) whether the technology can be de-
15 ployed in a variety of geographic regions
16 and the degree to which the technology can
17 be implemented on a smaller or larger
18 scale, including whether the technology can
19 be implemented by each type of eligible en-
20 tity;

21 (vi) whether the technology has been
22 successfully deployed elsewhere;

23 (vii) whether the technology is sourced
24 from a manufacturer based in the United
25 States; and

1 (viii) whether the project will be com-
2 pleted in 5 years or less.

3 (C) APPLICATIONS.—

4 (i) IN GENERAL.—Subject to clause
5 (ii), an eligible entity seeking a grant
6 under the pilot program shall submit to
7 the Secretary of Energy an application at
8 such time, in such manner, and containing
9 such information as the Secretary deter-
10 mines to be necessary.

11 (ii) CONTENTS.—An application under
12 clause (i) shall, at a minimum, include—

13 (I) a description of the project;

14 (II) a description of the tech-
15 nology to be used in the project;

16 (III) the anticipated results, in-
17 cluding energy and water savings, of
18 the project;

19 (IV) a comprehensive budget for
20 the project;

21 (V) the names of the project lead
22 organization and any partners;

23 (VI) the number of users to be
24 served by the project; and

1 (VII) any other information that
2 the Secretary of Energy determines to
3 be necessary to complete the review
4 and selection of a grant recipient.

5 (4) ADMINISTRATION.—

6 (A) IN GENERAL.—Not later than 300
7 days after the date of enactment of this Act,
8 the Secretary of Energy shall select grant re-
9 cipients under this section.

10 (B) EVALUATIONS.—The Secretary of En-
11 ergy shall annually carry out an evaluation of
12 each project for which a grant is provided
13 under this section that—

14 (i) evaluates the progress and impact
15 of the project; and

16 (ii) assesses the degree to which the
17 project is meeting the purpose of the pilot
18 program.

19 (C) TECHNICAL AND POLICY ASSIST-
20 ANCE.—On the request of a grant recipient, the
21 Secretary of Energy shall, to the extent prac-
22 ticable, provide technical and policy assistance
23 to the grant recipient to carry out the project.

24 (5) FUNDING.—To carry out this section, the
25 Secretary is authorized to use not more than

1 \$15,000,000, to the extent provided in advance in
2 appropriation Acts.

3 **SEC. 1115. STATE ENERGY-WATER TECHNOLOGY SERVICES**
4 **PROGRAM.**

5 (a) ESTABLISHMENT.—The Secretary of Energy
6 shall establish and carry out a program that—

7 (1) strengthens State programs that aid small
8 and start-up businesses that develop energy-water,
9 water, or water-related hardware and software tech-
10 nologies;

11 (2) provides State programs technical assist-
12 ance to improve engineering principles and tech-
13 niques for energy-water nexus technology products,
14 manufacturing, and commercial production by small
15 and start-up businesses; and

16 (3) fosters greater assistance to small and
17 start-up businesses in dealing with the Federal Gov-
18 ernment on energy-water nexus technology related
19 matters.

20 (b) AUTHORIZATION OF APPROPRIATIONS.—There
21 are authorized to be appropriated to carry out this section
22 \$5,000,000 for each of fiscal years 2018 through 2027.

1 **SEC. 1116. ENERGY-WATER EFFICIENT BUILDINGS AND**
2 **POWER PLANTS.**

3 Section 106 of the Energy Policy Act of 2005 (42
4 U.S.C. 15811) is amended—

5 (1) in subsection (c)—

6 (A) in the heading, but striking “GOAL”
7 and inserting “GOALS”;

8 (B) by striking “as a goal” and inserting
9 “as goals”; and

10 (C) by striking “2007 through 2016” and
11 inserting “2018 through 2027 and an improve-
12 ment in water efficiency each year during such
13 period of calendar years”;

14 (2) in subsection (e), by inserting “and water
15 efficiency” after “energy efficiency”; and

16 (3) in subsection (f)—

17 (A) in the matter preceding paragraph
18 (1)—

19 (i) by striking “2012, and” and in-
20 serting “2018,”; and

21 (ii) by striking “2017” and inserting
22 “2027”; and

23 (B) in paragraph (2), by inserting “and
24 water” after “energy”.

1 **SEC. 1117. ENERGY-WATER NEXUS DATA FOR POWER**
2 **PLANTS.**

3 (a) **METHODOLOGY.**—The Secretary of Energy shall
4 conduct research on, and develop, a methodology for esti-
5 mating water consumption for open-loop cooling systems
6 for thermoelectric power plants.

7 (b) **EIA.**—The Secretary of Energy, acting through
8 the Administrator of the Energy Information Administra-
9 tion, shall develop a data portal for better access by the
10 public to data on water use by thermoelectric power
11 plants.

12 (c) **USGS.**—The Director of the United States Geo-
13 logical Survey shall—

14 (1) collect data on the withdrawal and con-
15 sumptive use of water by laboratory and pilot scale
16 thermoelectric power plants;

17 (2) as part of such collection, collect data on
18 use of sources other than surface water, for water
19 withdrawn by power plants;

20 (3) develop and publish a standard method for
21 determining consumptive losses through enhanced
22 evaporation resulting from water discharges from
23 power plant cooling systems; and

24 (4) distribute to other relevant Federal and
25 State agencies data collected under paragraph (2).

1 (d) COORDINATION AND COLLABORATION.—The Di-
2 rector of the United States Geological Survey, the Admin-
3 istrator of the Energy Information Administration, and
4 the Administrator of the Environmental Protection Agen-
5 cy shall—

6 (1) collaborate in collecting, analyzing, and re-
7 porting all material information on water usage by
8 thermoelectric power plants; and

9 (2) make such information available in the en-
10 ergy-water nexus database established pursuant to
11 section 1112.

12 **SEC. 1118. RECLAMATION WATER CONSERVATION AND EN-**
13 **ERGY SAVINGS.**

14 Not later than one year after the date of the enact-
15 ment of this Act, the Secretary of the Interior, acting
16 through the Commissioner of Reclamation, shall—

17 (1) determine the annual energy consumption,
18 including purchased energy, by pumping stations op-
19 erated by the Bureau of Reclamation for each of the
20 previous 10 years;

21 (2) estimate the annual energy consumption, in-
22 cluding purchased energy, by pumping stations oper-
23 ated by the Bureau of Reclamation for each of the
24 next 10 years;

1 (3) generate a list of the 10 pumping stations
 2 operated by the Bureau of Reclamation that con-
 3 sumed the most energy, including purchased energy,
 4 in the previous 10 years; and

5 (4) pursue opportunities for energy efficiency
 6 and low-carbon energy technologies at the pumping
 7 stations described in paragraph (3).

8 **SEC. 1119. RURAL WATER UTILITIES ENERGY AND WATER**
 9 **EFFICIENCY PROGRAM.**

10 (a) IN GENERAL.—Section 103(a) of the Reclamation
 11 Rural Water Supply Act of 2006 (43 U.S.C. 2402(a)) is
 12 amended—

13 (1) in paragraph (2), by striking “and” at the
 14 end;

15 (2) in paragraph (3), by striking the period at
 16 the end and inserting “; and”; and

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

18 “(4) carry out a program similar to and con-
 19 sistent with the national rural water and wastewater
 20 circuit rider program established under section
 21 306(a)(22) of the Consolidated Farm and Rural De-
 22 velopment Act (7 U.S.C. 1926(a)(22)) (including the
 23 authority to make grants) in consultation with—

24 “(A) the Environmental Protection Agency
 25 to provide on-site technical assistance to rural

drinking water and wastewater utilities, including utilities serving an Indian tribe (as defined in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b));

“(B) the Secretary of Energy to improve energy efficiency, identify and develop low-carbon energy supplies, and conserve water and end uses of water in the operation of rural drinking water and wastewater utilities; and

“(C) the National Centers for Innovation in Small Drinking Water Systems to strengthen the technical, managerial, and financial capacities of small drinking water providers throughout the country.”.

Subtitle B—Improved Data, Technology, and Education

SEC. 1221. DOI GROUNDWATER INFORMATION SYSTEM.

(a) DATA COLLECTION AND INFORMATION SYSTEM.—

(1) DATA COLLECTION.—Not later than 2 years after the date of the enactment of this Act, the Secretary of the Interior shall—

1 (A) conduct a study on the potential im-
2 pacts of Federal projects operated by the Bu-
3 reau of Reclamation on groundwater resources;

4 (B) submit to Congress a report on the
5 findings of the study required by subparagraph
6 (A);

7 (C) determine, to the extent possible, the
8 current groundwater levels and the groundwater
9 levels of Federal projects operated by the Bu-
10 reau of Reclamation over the previous 10 years;
11 and

12 (D) share the data described in subpara-
13 graph (C) with the United States Geological
14 Survey.

15 (2) IMPLEMENTATION OF GROUNDWATER IN-
16 FORMATION SYSTEM.—As soon as practicable after
17 receipt by the United States Geological Survey of
18 the data described in paragraph (1)(C), the United
19 States Geological Survey shall implement a ground-
20 water information system for the purpose of advanc-
21 ing the availability, timely distribution, and wide-
22 spread use of groundwater data for groundwater
23 management, education, research, assessment, and
24 monitoring purposes.

1 (3) AVAILABILITY OF DATA.—The Secretary of
2 the Interior shall make the data described in para-
3 graph (1)(C) available as an input to the Depart-
4 ment of Energy’s National Energy-Water Nexus
5 Data System established pursuant to section 1112.

6 (4) COLLABORATION.—In carrying out this sec-
7 tion, the Secretary of the Interior shall collaborate
8 with States that have or are developing groundwater
9 management programs.

10 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
11 authorized to be appropriated to the Secretary
12 \$25,000,000 for each of fiscal years 2018 through 2022.

13 **SEC. 1222. EIA WATER CONSUMPTION DATA COLLECTION**
14 **IN THE RESIDENTIAL AND COMMERCIAL SEC-**
15 **TORS.**

16 (a) EXPANDING SURVEY DATA TO INCLUDE WATER
17 USE.—The Secretary of Energy, acting through the Ad-
18 ministrators of the Energy Information Administration,
19 shall—

20 (1)(A) if feasible, collect, through each Com-
21 mercial Buildings Energy Consumption Survey of
22 the Energy Information Administration that is con-
23 ducted after the date of enactment of this section,
24 data on water consumption and usage, including
25 total water consumption for commercial buildings

1 (and verify such consumption by users) and water
2 consumption and usage by principal building activ-
3 ity, census division, and end use; or

4 (B) if not feasible, conduct activities to develop
5 the capability to produce and collect such data;

6 (2)(A) if feasible, collect, through each Residen-
7 tial Energy Consumption Survey of the Energy In-
8 formation Administration that is conducted after the
9 date of enactment of this section, data on water con-
10 sumption and usage, including total water consump-
11 tion for residential buildings and water consumption
12 and usage by housing type, census division, and end
13 use; or

14 (B) if not feasible, conduct activities to develop
15 the capability to produce and collect such data; and

16 (3) make the data collected under paragraphs
17 (1) and (2) available in the energy-water nexus data-
18 base established pursuant to section 1112.

19 (b) AUTHORIZATION OF APPROPRIATIONS.—There
20 are authorized to be appropriated to carry out this section
21 \$15,000,000 for each of fiscal years 2018 through 2027.

22 **SEC. 1223. USGS WATER CONSUMPTION ANALYSIS SURVEY.**

23 (a) IN GENERAL.—The Director of the United States
24 Geological Survey shall—

1 (1) include estimates of the consumptive use of
2 surface water, groundwater, and recycled water in
3 its published survey on water uses in the United
4 States; and

5 (2) make this data available as an input to the
6 Department of Energy's National Energy-Water
7 Nexus Data System.

8 (b) STATE PARTNERSHIPS.—The Director shall enter
9 into cooperative agreements with States to carry out this
10 section.

11 (c) AUTHORIZATION OF APPROPRIATIONS.—To carry
12 out this section there is authorized to be appropriated
13 \$10,000,000 for each fiscal year in the 5-fiscal-year period
14 beginning with fiscal year 2018.

15 **SEC. 1224. INNOVATIONS AT THE NEXUS OF FOOD, ENERGY,**
16 **AND WATER SYSTEMS.**

17 (a) AUTHORIZATION OF APPROPRIATIONS.—There
18 are authorized to be appropriated to the National Science
19 Foundation for the National Science Foundation-wide in-
20 vestment in Innovations at the Nexus of Food, Energy,
21 and Water Systems \$62,180,000 for each of the fiscal
22 years 2018 through 2021.

23 (b) SMALL BUSINESS CONSULTATION.—The Innova-
24 tions at the Nexus of Food, Energy, and Water Systems
25 program may inform and consult with the National

1 Science Foundation Small Business Innovation Research
2 program and Small Business Technology Transfer pro-
3 gram to determine criteria for innovative projects that
4 consider the nexus between food, energy, and water sys-
5 tems.

6 **SEC. 1225. USDA AND DOI COORDINATED WATER CON-**
7 **SERVATION EFFORTS.**

8 (a) COORDINATION.—The Secretary of Agriculture
9 shall coordinate with the Secretary of the Interior to im-
10 prove the efficiency of agricultural water use in a manner
11 that is also protective of wildlife, including through coordi-
12 nation of grant programs, best known methods for water
13 management, drought resilience guidelines, education,
14 technical assistance, irrigation technology development,
15 water application system maintenance, research into prac-
16 tices that improve soil health and safe and appropriate
17 uses for recycled water on crops, evaluations of water de-
18 livery systems, and recommendations for improvements
19 needed to meet the needs of efficient water application sys-
20 tems.

21 (b) REPORT.—Not later than one year after the date
22 of enactment of this Act, the Secretary of Agriculture shall
23 submit to Congress a report regarding the implementation
24 of this section.

1 **SEC. 1226. AGRICULTURAL TECHNOLOGY CENTERS.**

2 Chapter 3 of subtitle B of title XVI of the Food, Ag-
 3 riculture, Conservation, and Trade Act of 1990 (7 U.S.C.
 4 5831 et seq.) is amended by adding at the end the fol-
 5 lowing new section:

6 **“SEC. 1630. AGRICULTURAL TECHNOLOGY CENTERS.**

7 “(a) GRANTS FOR AGRICULTURAL TECHNOLOGY
 8 CENTERS.—The Secretary, acting through the Director of
 9 the National Institute of Food and Agriculture, shall carry
 10 out a program to provide grants to State agencies, univer-
 11 sities, nonprofit organizations, and other entities to estab-
 12 lish or improve agricultural technology centers that pro-
 13 vide—

14 “(1) entrepreneurial support programs;

15 “(2) resources on the development and improve-
 16 ment of new and existing technologies, including—

17 “(A) efficient irrigation technologies, in-
 18 cluding drip and microsprinkler systems;

19 “(B) soil moisture monitors and direct
 20 plant measurements to determine plant irriga-
 21 tion needs and management practices that im-
 22 prove soil health;

23 “(C) irrigation scheduling, including
 24 weather-based irrigation scheduling;

25 “(D) software designed to increase the effi-
 26 ciency of water management, including inte-

1 grating irrigation with energy use and the ap-
2 plication of fertilizer and other chemicals;

3 “(E) remote monitoring and control sys-
4 tems, including drones for agricultural moni-
5 toring;

6 “(F) water treatment technologies relating
7 to—

8 “(i) brine and nitrates; and

9 “(ii) increasing the safe and appro-
10 prium use of recycled water for crops;

11 “(3) data-sharing and privacy guidelines for ag-
12 ricultural producers; and

13 “(4) conference facilities for agricultural busi-
14 nesses, universities, and nonprofit organizations.

15 “(b) REQUEST FOR APPLICATIONS.—The Secretary,
16 acting through the Director of the National Institute of
17 Food and Agriculture, shall publish an annual funding an-
18 nouncement that provides information on the availability
19 of grants under subsection (a), including the purpose, eli-
20 gibility, restriction, focus areas, evaluation criteria, regu-
21 latory information, and instructions on how to apply for
22 such grants.

23 “(c) DEADLINE FOR PROGRAM.—Not later than 180
24 days after the date on which funds are first made available
25 to carry out this section, the Secretary shall—

1 “(1) establish the program under subsection
2 (a); and

3 “(2) publish the initial request for applications
4 for grants under the program.

5 “(d) CONSULTATION.—An entity that receives a
6 grant under subsection (a) may consult with clusters es-
7 tablished by the Environmental Protection Agency under
8 the Environmental Technology Innovation Clusters pro-
9 gram to develop, improve, and implement water technology
10 innovation.

11 “(e) AUTHORIZATION OF APPROPRIATIONS.—For
12 purposes of carrying out this section, there is authorized
13 to be appropriated to the Secretary \$15,000,000 for each
14 of fiscal years 2018 through 2022.”.

15 **SEC. 1227. EFFICIENT IRRIGATION TECHNICAL ASSISTANCE**
16 **GRANT PROGRAM.**

17 Chapter 5 of subtitle D of title XII of the Food Secu-
18 rity Act of 1985 (16 U.S.C. 3839bb et seq.) is amended
19 by adding at the end the following new section:

20 **“SEC. 1240S. EFFICIENT IRRIGATION TECHNICAL ASSIST-**
21 **ANCE GRANT PROGRAM.**

22 “(a) GRANTS FOR TECHNICAL ASSISTANCE.—The
23 Secretary, acting through the Chief of the Natural Re-
24 sources Conservation Service, shall carry out an efficient
25 irrigation technical assistance program to provide grants

1 to States, State agencies, local governments, tribal organi-
2 zations, or water districts for technical assistance pro-
3 grams that provide—

4 “(1) technical assistance workshops and edu-
5 cation programs on water and energy efficient irri-
6 gation systems for agricultural producers;

7 “(2) technical assistance to producers to de-
8 velop irrigation water management plans to improve
9 irrigation efficiency;

10 “(3) ongoing assistance to agricultural pro-
11 ducers in implementing and maintaining water and
12 energy efficient irrigation systems that are protective
13 of wildlife, including systems that use water meter
14 and soil sensor data, soil management practices that
15 improve soil health, pump efficiency standards, sys-
16 tem audits, routine maintenance, irrigation sched-
17 uling, and information control automation; and

18 “(4) other technical assistance the Secretary
19 determines appropriate.

20 “(b) REQUEST FOR APPLICATIONS.—The Secretary
21 shall publish an annual funding announcement that pro-
22 vides information on the availability of grants under sub-
23 section (a), including the purpose, eligibility, restriction,
24 focus areas, evaluation criteria, regulatory information,
25 and instructions on how to apply for such grants.

1 “(c) DEADLINE FOR PROGRAM.—Not later than 180
 2 days after the date on which funds are first made available
 3 to carry out this section, the Secretary shall—

4 “(1) establish the program under subsection
 5 (a); and

6 “(2) publish the initial request for applications
 7 for grants under the program.

8 “(d) DEFINITION OF WATER DISTRICT.—In this sec-
 9 tion, the term ‘water district’ means an entity engaged
 10 in—

11 “(1) the provision of water to the public
 12 through pipes or other constructed conveyances; or

13 “(2) the collection, treatment, management, or
 14 disposal of stormwater or wastewater generated by
 15 the public.

16 “(e) AUTHORIZATION OF APPROPRIATIONS.—For
 17 purposes of carrying out this section, there is authorized
 18 to be appropriated to the Secretary \$15,000,000 for each
 19 of fiscal years 2018 through 2022.”.

20 **SEC. 1228. UNITED STATES-ISRAEL WATER COOPERATION**
 21 **WORKING GROUP.**

22 (a) SENSE OF CONGRESS.—It is the sense of Con-
 23 gress that open dialogue and continued mechanisms for
 24 regular engagement encourages further cooperation be-
 25 tween applicable departments, agencies, ministries, insti-

1 tutions of higher education, and the private sectors of the
2 United States and Israel on water security issues.

3 (b) ESTABLISHMENT.—There is established a United
4 States-Israel Water Cooperation Working Group (in this
5 section referred to as the “Working Group”).

6 (c) MEMBERSHIP.—The Working Group shall be
7 composed of the following officials or their designees:

8 (1) The Secretary of State.

9 (2) The Secretary of Agriculture.

10 (3) The Secretary of Energy.

11 (4) The Secretary of the Interior.

12 (5) The Administrator of the Environmental
13 Protection Agency.

14 (d) CHAIRPERSON.—The Secretary of State shall
15 serve as chairperson of the Working Group.

16 (e) PURPOSES.—The Working Group shall seek to
17 strengthen dialogue between the United States and Israel
18 in order to—

19 (1) improve the use of water resources through
20 water-saving technologies and practices;

21 (2) counter water shortages;

22 (3) modernize pipeline and other applicable in-
23 frastructure; and

24 (4) pursue best practices in drip irrigation,
25 water recycling, and desalination.

1 **TITLE II—INCREASED WATER**
2 **SUPPLY AND REGIONAL SELF-**
3 **SUFFICIENCY**

4 **SEC. 2001. WATERSMART REAUTHORIZATION.**

5 Section 9504(a)(1)(B) of the Omnibus Public Land
6 Management Act of 2009 (42 U.S.C. 10364(a)(1)(B)) is
7 amended to read as follows:

8 “(B) to increase water use and energy effi-
9 ciency and work to improve instream flows;”.

10 **SEC. 2002. AMENDMENT TO COMPETITIVE GRANT PRO-**
11 **GRAM FOR WATER RECYCLING AND REUSE**
12 **PROJECTS.**

13 Subsection (f)(1) of section 1602 of the Reclamation
14 Wastewater and Groundwater Study and Facilities Act
15 (Public Law 102–575; U.S.C. 390h) is amended by insert-
16 ing “(including reimbursement for costs incurred prior to
17 enactment of this Act)” after “funding”.

18 **SEC. 2003. RECYCLING STANDARDS ASSISTANCE.**

19 Not later than 2 years after the date of enactment
20 of this Act, the Administrator of the Environmental Pro-
21 tection Agency shall—

22 (1) conduct research relevant to developing reg-
23 ulations regarding direct potable reuse; and

1 (2) provide the results of such research and
2 technical assistance to States that are in the process
3 of developing direct potable reuse regulations.

4 **SEC. 2004. STORMWATER MANAGEMENT AND TECHNICAL**
5 **ASSISTANCE.**

6 (a) **STORMWATER CAPTURE.**—In issuing a permit
7 under section 402(p) of the Federal Water Pollution Con-
8 trol Act (33 U.S.C. 1342(p)), the Administrator of the
9 Environmental Protection Agency (or the State, in the
10 case of a permit program approved under section 402(b)
11 of such Act) shall evaluate the capacity of stormwater cap-
12 ture and reuse programs, on-site stormwater retention
13 standards, green infrastructure projects, and adoption of
14 other innovative practices, to reduce the discharge of pol-
15 lutants to the maximum extent practicable and to produce
16 additional benefits.

17 (b) **TECHNICAL ASSISTANCE.**—The Administrator
18 shall provide technical assistance to communities to de-
19 velop integrated plans for the purposes of complying with
20 Federal Water Pollution Control Act regulations for mu-
21 nicipal wastewater and stormwater management.

22 (c) **AUTHORIZATION OF APPROPRIATIONS.**—There is
23 authorized to be appropriated to carry out this section
24 \$10,000,000 for each of fiscal years 2018 through 2022.

1 **SEC. 2005. GROUNDWATER MANAGEMENT TECHNICAL AS-**
2 **SISTANCE.**

3 (a) IN GENERAL.—The Director of the United States
4 Geological Survey shall provide technical assistance in the
5 development and implementation of new and existing
6 groundwater management plans in the United States.

7 (b) PRIORITY FOR DROUGHT-AFFLICTED AREAS.—
8 In implementing this section, the Director may give pri-
9 ority to such plans for areas that are subject to a drought
10 declaration by a State.

11 (c) AUTHORIZATION OF APPROPRIATIONS.—To carry
12 out this section there is authorized to be appropriated to
13 the Director \$15,000,000 for each of fiscal years 2018
14 through 2022.

15 **SEC. 2006. GROUNDWATER RECHARGE PROGRAM.**

16 Chapter 5 of subtitle D of title XII of the Food Secu-
17 rity Act of 1985 (16 U.S.C. 3839bb et seq.), as amended
18 by section 1228, is further amended by adding at the end
19 the following new section:

20 **“SEC. 1240T. GROUNDWATER RECHARGE PROGRAM.**

21 “(a) GRANTS FOR GROUNDWATER RECHARGE IM-
22 PROVEMENTS.—The Secretary shall carry out a ground-
23 water recharge program to provide grants to producers for
24 groundwater recharge improvements to eligible land, in-
25 cluding the installation of measurement devices on wells
26 and pumps.

1 “(b) PRIORITY.—In making grants under subsection
2 (a), the Secretary shall give priority to groundwater re-
3 charge improvements—

4 “(1) implemented in conjunction with State
5 groundwater recharge programs; and

6 “(2) that provide habitat benefits and maintain
7 groundwater quality without adversely impacting
8 surface waters.

9 “(c) REQUEST FOR APPLICATIONS.—The Secretary
10 shall publish an annual funding announcement that pro-
11 vides information on the availability of grants under sub-
12 section (a), including the purpose, eligibility, restriction,
13 focus areas, evaluation criteria, regulatory information,
14 and instructions on how to apply for such grants.

15 “(d) DEADLINE FOR THE PROGRAM.—Not later than
16 180 days after the date on which funds are first made
17 available to carry out this section, the Secretary shall—

18 “(1) establish the program under subsection
19 (a); and

20 “(2) publish the initial request for applications
21 for grants under the program.

22 “(e) ELIGIBLE LAND DEFINED.—In this section, the
23 term ‘eligible land’ has the meaning given the term in sec-
24 tion 1240A.

25 “(f) REPORT.—

1 “(1) REPORT TO SECRETARY.—Not later than
 2 1 year after the date of the enactment of this sec-
 3 tion, the Administrator of the Agricultural Research
 4 Service shall—

5 “(A) conduct a study on groundwater re-
 6 charge improvements; and

7 “(B) submit to the Secretary a report that
 8 includes recommendations on groundwater re-
 9 charge improvements to be used for the pur-
 10 poses of this section.

11 “(2) REPORT TO CONGRESS.—Not later than 2
 12 years after the date of the enactment of this section,
 13 the Secretary shall submit to Congress a report that
 14 includes an assessment of the effectiveness of the
 15 groundwater recharge improvements funded pursu-
 16 ant to this section.

17 “(g) AUTHORIZATION OF APPROPRIATIONS.—For
 18 purposes of carrying out this section, there is authorized
 19 to be appropriated to the Secretary \$15,000,000 for each
 20 of fiscal years 2018 through 2022.”.

21 **SEC. 2007. COMMUNITY WATER ENHANCEMENT.**

22 (a) SELECTION OF PROJECTS.—Section 220(d) of
 23 the Federal Water Pollution Control Act (33 U.S.C.
 24 1300(d)) is amended—

1 (1) by striking paragraph (2) and redesignating
 2 paragraph (3) as paragraph (2); and

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

4 “(3) PARTICIPATION OF RURAL COMMU-
 5 NITIES.—In making grants under this section, the
 6 Administrator shall consider whether the project—

7 “(A) is located in an unincorporated rural
 8 community;

9 “(B) is located in an area that—

10 “(i) is served by a public water system
 11 (as defined in section 1401 of the Safe
 12 Drinking Water Act) with fewer than
 13 3,000 connections; or

14 “(ii) does not have a public water sys-
 15 tem (as so defined);

16 “(C) is located in an agricultural area with
 17 rural residences served by a public water sys-
 18 tem (as so defined) or by private wells; or

19 “(D) is not only a benefit to the rural com-
 20 munity served by the project, but also a benefit
 21 to additional regional partners.”.

22 (b) COMMITTEE RESOLUTION PROCEDURE.—Section
 23 220 of such Act (33 U.S.C. 1300) is amended by striking
 24 subsection (e) and redesignating subsections (f) through
 25 (j) as subsections (e) through (i), respectively.

1 (c) DEFINITION OF ALTERNATIVE WATER
2 SOURCE.—Section 220(h)(1) of such Act (as so redesign-
3 nated) is amended—

4 (1) in the first sentence, by striking “water or
5 wastewater or by treating wastewater” and inserting
6 “water, wastewater, or stormwater, by treating
7 wastewater or stormwater, or through conjunctively
8 managing groundwater supplies by delivering surface
9 water instead of groundwater”; and

10 (2) in the second sentence, by inserting before
11 the period at the end the following: “unless the
12 project requires those facilities to deliver the alter-
13 native water supply”.

14 (d) AUTHORIZATION OF APPROPRIATIONS.—Section
15 220(i) of such Act (as so redesignated) is amended by
16 striking “\$75,000,000 for fiscal years 2002 through
17 2004” and inserting “\$150,000,000 for fiscal years 2018
18 through 2020”.

19 **SEC. 2008. WATER SYSTEM MITIGATION AND ADAPTATION**
20 **GRANTS.**

21 (a) GRANTS.—Beginning in fiscal year 2018, the Ad-
22 ministrator shall make grants to owners or operators of
23 water systems to address any ongoing or forecasted (based
24 on the best available research and data) climate-related
25 impact on the water quality or quantity of a region of the

1 United States, for the purposes of mitigating or adapting
2 to the impacts of climate change.

3 (b) ELIGIBLE USES.—In carrying out this sub-
4 section, the Administrator shall make grants to assist in
5 the planning, design, construction, implementation, or
6 maintenance of any program or project to increase the re-
7 silience of a water system to climate change by—

8 (1) conserving water or enhancing water use ef-
9 ficiency, including through the use of water meter-
10 ing;

11 (2) preserving or improving water quality, in-
12 cluding through measures to manage, reduce, treat,
13 or reuse municipal stormwater, wastewater, or
14 drinking water;

15 (3) investigating, designing, or constructing
16 groundwater remediation, recycled water, or desali-
17 nation facilities or systems;

18 (4) enhancing green infrastructure in the man-
19 agement or treatment of water, wastewater, or
20 stormwater;

21 (5) enhancing energy efficiency or the use and
22 generation of low-carbon energy in the management,
23 conveyance, or treatment of water, wastewater, or
24 stormwater;

1 (6) supporting practices and projects, such as
2 improved irrigation systems, groundwater recharge,
3 stormwater capture, and reuse or recycling of drain-
4 age water and groundwater, to improve water qual-
5 ity or promote more efficient water use, including on
6 land currently in agricultural production;

7 (7) conducting and completing studies or as-
8 sessments to project how climate change may impact
9 the sustainability of water systems; or

10 (8) developing and implementing mitigation
11 measures to rapidly address impacts on water sys-
12 tems most susceptible to abrupt climate change, in-
13 cluding those in the Colorado River Basin and coast-
14 al regions at risk from rising sea levels.

15 (c) APPLICATION.—To be eligible to receive a grant
16 from the Administrator under subsection (b), the owner
17 or operator of a water system shall submit to the Adminis-
18 trator an application that—

19 (1) includes a proposal of the program or strat-
20 egy to be planned, designed, implemented, or main-
21 tained by the water system;

22 (2) cites the best available research or data that
23 demonstrates—

24 (A) the risk to the water resources of the
25 water system as a result of ongoing or fore-

1 casted changes to the hydrological system
 2 brought about by factors arising from climate
 3 change, including rising sea levels, temperature
 4 changes, and changes in precipitation levels;
 5 and

6 (B) how the proposed program or strategy
 7 would perform under the anticipated climate
 8 conditions and demonstrates no adverse envi-
 9 ronmental impacts; and

10 (3) explains how the proposed program or strat-
 11 egy is expected to enhance the resiliency of the water
 12 system, including source water protection for com-
 13 munity water systems, to these risks or reduce the
 14 direct or indirect greenhouse gas emissions of the
 15 water system.

16 (d) COMPETITIVE PROCESS.—

17 (1) IN GENERAL.—Each calendar year, the Ad-
 18 ministrator shall conduct a competitive process to
 19 select and fund applications under this subsection.

20 (2) PRIORITY REQUIREMENTS AND
 21 WEIGHTING.—In carrying out the process, the Ad-
 22 ministrator shall—

23 (A) prioritize funding of programs or strat-
 24 egies the applications for which—

1 (i) are submitted by the owners or op-
2 erators of water systems that are, based on
3 the best available research and data, at the
4 greatest and most immediate risk of facing
5 significant climate-related negative impacts
6 on water quality or quantity; and

7 (ii) propose a program or strategy
8 that will provide an environmental benefit;

9 (B) in selecting among the priority applica-
10 tions determined under subparagraph (A), en-
11 sure that the final list of programs and strate-
12 gies funded for each year includes programs
13 and strategies for disadvantaged communities
14 to the maximum extent practicable; and

15 (C) select not fewer than three programs
16 or strategies to receive a grant under subsection
17 (b).

18 (3) DISADVANTAGED COMMUNITY DEFINED.—
19 For purposes of this subsection, the term “disadvan-
20 taged community” means a community with an an-
21 nual median household income that is less than 80
22 percent of the annual median household income of
23 the State in which the community is located.

24 (e) COST SHARING.—

1 (1) FEDERAL SHARE.—The Federal share of
2 the cost of any program or strategy that is the sub-
3 ject of a grant awarded by the Administrator to a
4 water system under subsection (b) shall not exceed
5 50 percent of the cost of the program or strategy.

6 (2) CALCULATION OF NON-FEDERAL SHARE.—
7 In calculating the non-Federal share of the cost of
8 a program or strategy proposed by a water system
9 through an application submitted by the water sys-
10 tem under subsection (d), the Administrator shall—

11 (A) include the value of any in-kind serv-
12 ices that are integral to the completion of the
13 program or strategy, as determined by the Ad-
14 ministrator; and

15 (B) not include any other amount that the
16 water system receives from a Federal agency.

17 (f) LABOR STANDARDS.—

18 (1) IN GENERAL.—All laborers and mechanics
19 employed on infrastructure improvements funded di-
20 rectly by or assisted in whole or in part by this sec-
21 tion shall be paid wages at rates not less than those
22 prevailing for the same type of work on similar con-
23 struction in the immediate locality, as determined by
24 the Secretary of Labor in accordance with sub-

1 chapter IV of chapter 31 of part A of subtitle II of
2 title 40, United States Code.

3 (2) AUTHORITY AND FUNCTIONS.—With re-
4 spect to the labor standards in this paragraph, the
5 Secretary of Labor shall have the authority and
6 functions set forth in Reorganization Plan Num-
7 bered 14 of 1950 (64 Stat. 1267; 5 U.S.C. App.)
8 and section 3145 of title 40, United States Code.

9 (g) REGULATIONS.—

10 (1) IN GENERAL.—Not later than 1 year after
11 the date of enactment of this Act, the Administrator
12 shall promulgate final regulations to carry out this
13 section.

14 (2) SPECIAL RULE FOR THE CONSTRUCTION OF
15 TREATMENT WORKS.—In carrying out this sub-
16 section, the Administrator shall incorporate all rel-
17 evant and appropriate requirements of title VI of the
18 Federal Water Pollution Control Act (33 U.S.C.
19 1381 et seq.) applicable to the construction of treat-
20 ment works that are carried out under this sub-
21 section.

22 (h) REPORT TO CONGRESS.—Not later than 3 years
23 after the date of enactment of this Act, and every 3 years
24 thereafter, the Administrator shall submit to the Congress
25 a report on progress in implementing this section, includ-

1 ing information on project applications received and fund-
2 ed annually.

3 (i) AUTHORIZATION OF APPROPRIATIONS.—There is
4 authorized to be appropriated to carry out this section
5 \$10,000,000 for each of fiscal years 2018 through 2022.

6 **SEC. 2009. WATERSENSE PROGRAM.**

7 (a) ESTABLISHMENT.—

8 (1) IN GENERAL.—There is established within
9 the Environmental Protection Agency a WaterSense
10 program to identify and promote water-efficient
11 products, buildings, landscapes, facilities, processes,
12 and services so as—

13 (A) to reduce water use;

14 (B) to reduce the strain on water, waste-
15 water, and stormwater infrastructure;

16 (C) to conserve energy used to pump, heat,
17 transport, and treat water; and

18 (D) to preserve water resources for future
19 generations through voluntary labeling of, or
20 other forms of communications about, products,
21 buildings, landscapes, facilities, processes, and
22 services that meet the highest water efficiency
23 and performance criteria.

24 (2) DUTIES.—The Administrator of the Envi-
25 ronmental Protection Agency shall—

1 (A) establish—

2 (i) a WaterSense label to be used for
3 certain items; and

4 (ii) the procedure by which an item
5 may be certified to display the WaterSense
6 label;

7 (B) promote WaterSense-labeled products,
8 buildings, landscapes, facilities, processes, and
9 services in the marketplace as the preferred
10 technologies and services for—

11 (i) reducing water use; and

12 (ii) ensuring product and service per-
13 formance;

14 (C) work to enhance public awareness of
15 the WaterSense label through public outreach,
16 education, and other means;

17 (D) preserve the integrity of the
18 WaterSense label by—

19 (i) establishing and maintaining per-
20 formance criteria so that products, build-
21 ings, landscapes, facilities, processes, and
22 services labeled with the WaterSense label
23 perform as well or better than less water-
24 efficient counterparts;

1 (ii) considering factors, when devel-
2 oping the performance criteria, to ensure
3 that the criteria do not directly or indi-
4 rectly contribute to the degradation of
5 waste streams treated by community sewer
6 systems;

7 (iii) overseeing WaterSense certifi-
8 cations made by third parties;

9 (iv) conducting reviews of the use of
10 the WaterSense label in the marketplace
11 and taking corrective action in any case in
12 which misuse of the label is identified; and

13 (v) carrying out such other measures
14 as the Administrator determines to be ap-
15 propriate;

16 (E) regularly review and, if appropriate,
17 update WaterSense criteria for categories of
18 products, buildings, landscapes, facilities, proc-
19 esses, and services, at least once every 4 years;

20 (F) to the maximum extent practicable,
21 regularly estimate and make available to the
22 public the production and relative market
23 shares of, and the savings of, water, energy,
24 and capital costs of water, wastewater, and
25 stormwater infrastructure attributable to the

1 use of WaterSense-labeled products, buildings,
2 landscapes, facilities, processes, and services, at
3 least annually;

4 (G) solicit comments from interested par-
5 ties and the public prior to establishing or re-
6 vising a WaterSense category, specification, in-
7 stallation criterion, or other criterion (or prior
8 to effective dates for any such category, speci-
9 fication, installation criterion, or other cri-
10 terion);

11 (H) provide reasonable notice to interested
12 parties and the public of any changes (including
13 effective dates) on the adoption of a new or re-
14 vised category, specification, installation cri-
15 terion, or other criterion, along with—

16 (i) an explanation of the changes; and

17 (ii) as appropriate, responses to com-
18 ments submitted by interested parties and
19 the public; and

20 (I) provide appropriate lead time (as deter-
21 mined by the Administrator) prior to the appli-
22 cable effective date for a new or significant revi-
23 sion to a category, specification, installation cri-
24 terion, or other criterion, taking into account
25 the timing requirements of the manufacturing,

1 marketing, training, and distribution process
 2 for the specific product, building and landscape,
 3 or service category addressed;

4 (J) identify and, if appropriate, implement
 5 other voluntary approaches in commercial, insti-
 6 tutional, residential, industrial, and municipal
 7 sectors to encourage recycling and reuse tech-
 8 nologies to improve water efficiency or lower
 9 water use; and

10 (K) if appropriate, apply the WaterSense
 11 label to water-using products that are labeled
 12 by the Energy Star program implemented by
 13 the Administrator and the Secretary of Energy.

14 (b) AUTHORIZATION OF APPROPRIATIONS.—There is
 15 authorized to be appropriated to carry out this section—

- 16 (1) \$5,000,000 for fiscal year 2018;
- 17 (2) \$10,000,000 for fiscal year 2019;
- 18 (3) \$15,000,000 for fiscal year 2020; and
- 19 (4) \$20,000,000 for fiscal year 2021.

20 **SEC. 2010. STATE RESIDENTIAL WATER EFFICIENCY AND**
 21 **CONSERVATION INCENTIVES PROGRAM.**

22 (a) ELIGIBLE ENTITIES.—An entity shall be eligible
 23 to receive an allocation under subsection (b) if the entity—

- 24 (1) establishes (or has established), in consulta-
 25 tion with the Department of Energy, an incentive

1 program to provide financial incentives to residential
2 consumers for the purchase of residential water-effi-
3 cient products, buildings, landscapes, processes, or
4 services;

5 (2) submits an application for the allocation at
6 such time, in such form, and containing such infor-
7 mation as the Administrator of the Environmental
8 Protection Agency may require; and

9 (3) provides assurances satisfactory to the Ad-
10 ministrator that the entity will use the allocation to
11 supplement, but not supplant, funds made available
12 to carry out the incentive program.

13 (b) AMOUNT OF ALLOCATIONS.—For each fiscal
14 year, the Administrator shall determine the amount to al-
15 locate to each eligible entity to carry out subsection (c),
16 taking into consideration—

17 (1) the population served by the eligible entity
18 during the most recent calendar year for which data
19 are available;

20 (2) the targeted population of the incentive pro-
21 gram of the eligible entity, such as general house-
22 holds, low-income households, or first-time home
23 owners, and the probable effectiveness of the incen-
24 tive program for that population;

1 (3) for existing programs, the effectiveness of
2 the program in encouraging the adoption of water
3 efficient products, buildings, landscapes, facilities,
4 processes, and services, including the cost-effective-
5 ness measured as acre-feet saved per program dollar;

6 (4) any allocation to the eligible entity for a
7 preceding fiscal year that remains unused; and

8 (5) the per capita water demand of the popu-
9 lation served by the eligible entity during the most
10 recent calendar year for which data are available
11 and the accessibility of water supplies to the eligible
12 entity.

13 (c) USE OF ALLOCATED FUNDS.—Funds allocated to
14 an eligible entity under subsection (b) may be used to pay
15 up to 50 percent of the cost of establishing and carrying
16 out an incentive program.

17 (d) FIXTURE RECYCLING.—Eligible entities are en-
18 couraged to promote or implement fixture recycling pro-
19 grams to manage the disposal of older fixtures replaced
20 due to the incentive program under this section.

21 (e) ISSUANCE OF INCENTIVES.—

22 (1) IN GENERAL.—Financial incentives may be
23 provided to residential consumers that meet the re-
24 quirements of the applicable incentive program.

1 (2) MANNER OF ISSUANCE.—An eligible entity
2 may—

3 (A) issue all financial incentives directly to
4 residential consumers; or

5 (B) with approval of the Administrator,
6 delegate all or part of financial incentive admin-
7 istration to other organizations, including local
8 governments, municipal water authorities, water
9 utilities, and nonprofit organizations.

10 (3) AMOUNT.—The amount of a financial in-
11 centive shall be determined by the eligible entity,
12 taking into consideration—

13 (A) the amount of any Federal or State
14 tax incentive available for the purchase of the
15 residential water-efficient product or service;

16 (B) the amount necessary to change con-
17 sumer behavior to purchase water-efficient
18 products and services; and

19 (C) the consumer expenditures for on-site
20 preparation, assembly, and original installation
21 of the product.

22 (f) DEFINITIONS.—In this section, the following defi-
23 nitions apply:

24 (1) ELIGIBLE ENTITY.—The term “eligible enti-
25 ty” means a State government, local or county gov-

ernment, tribal government, wastewater or sewerage utility, municipal water authority, energy utility, water utility, or nonprofit organization that meets the requirements of subsection (a).

(2) INCENTIVE PROGRAM.—The term “incentive program” means a program for administering financial incentives for consumer purchase and installation of water-energy efficient residential technologies, buildings, landscapes, processes, or services.

(3) RESIDENTIAL WATER-EFFICIENT PRODUCT, BUILDING, LANDSCAPE, PROCESS, OR SERVICE.—

(A) IN GENERAL.—The term “residential water-efficient product, building, landscape, process, or service” means a product, building, landscape, process, or service for a residence or its landscape that is rated for water efficiency and performance.

(B) INCLUSIONS.—The term “residential water-efficient product, building, landscape, process, or service” includes—

(i) faucets;

(ii) irrigation technologies and services;

(iii) reuse and recycling technologies;

- 1 (iv) toilets;
- 2 (v) clothes washers;
- 3 (vi) dishwashers;
- 4 (vii) showerheads;
- 5 (viii) landscaping and gardening prod-
- 6 ucts, including moisture control or water
- 7 enhancing technologies;
- 8 (ix) xeriscaping, turf removal, and
- 9 other landscape conversions that reduce
- 10 water use; and
- 11 (x) new water efficient homes certified
- 12 under the WaterSense program.

13 (4) WATERSENSE PROGRAM.—The term
 14 “WaterSense program” means the program estab-
 15 lished by section 2010.

16 (g) AUTHORIZATION OF APPROPRIATIONS.—There is
 17 authorized to be appropriated to the Administrator to
 18 carry out this section—

- 19 (1) \$25,000,000 for fiscal year 2018;
- 20 (2) \$50,000,000 for fiscal year 2019;
- 21 (3) \$75,000,000 for fiscal year 2020;
- 22 (4) \$50,000,000 for fiscal year 2021;
- 23 (5) \$25,000,000 for fiscal year 2022; and
- 24 (6) for each subsequent fiscal year, the applica-
- 25 ble amount for the preceding fiscal year, as adjusted

1 to reflect changes for the 12-month period ending
2 the preceding November 30 in the Consumer Price
3 Index for All Urban Consumers published by the
4 Bureau of Labor Statistics of the Department of
5 Labor.

6 **SEC. 2011. APPROPRIATIVE WATER RIGHTS CHARITABLE**
7 **TAX DEDUCTION.**

8 Not later than 2 years after the date of the enact-
9 ment of this Act, the Secretary of the Treasury shall clar-
10 ify, though a revenue ruling, regulation, or other guidance,
11 the Federal tax treatment of charitable donations of water
12 rights acquired by appropriation.

13 **SEC. 2012. STORAGE.**

14 (a) PILOT PROGRAM.—In order to determine the fea-
15 sibility of agreements for long-term use of existing or ex-
16 panded non-Federal storage and conveyance facilities to
17 augment Federal water supply, ecosystem, and operational
18 flexibility benefits, not later than 6 months after the date
19 of the enactment of this section, the Secretary of the Inte-
20 rior shall enter into cooperative agreements with non-Fed-
21 eral entities to provide water supplies for units of the Na-
22 tional Wildlife Refuge System, State wildlife areas, and
23 private wetland areas, pursuant to section 3406(d)(2) of
24 the Central Valley Project Improvement Act (Public Law
25 102–575; 106 Stat. 4706).

1 (b) REQUIREMENTS.—Cooperative agreements with
2 non-Federal entities under this section shall—

3 (1) include the purchase of storage capacity in
4 non-Federal facilities from willing sellers;

5 (2) provide reimbursement to non-Federal enti-
6 ties for the temporary use of available capacity in
7 existing above-ground, off-stream storage, and asso-
8 ciated conveyance facilities owned by local water
9 agencies;

10 (3) provide reimbursement to non-Federal enti-
11 ties for operation and maintenance costs; and

12 (4) provide reimbursement to Federal entities
13 and non-Federal entities for studies conducted by
14 such entities that analyze the operational feasibility
15 and costs of using non-Federal storage and convey-
16 ance facilities to provide the water supplies described
17 in subsection (a).

18 (c) REPORT.—Not later than 2 years after the date
19 of the enactment of this section, the Secretary of the Inte-
20 rior shall complete a report on the feasibility of the agree-
21 ments described in subparagraph (a) for long-term use of
22 existing or expanded non-Federal storage and conveyance
23 facilities to augment Federal water supply, ecosystem, and
24 operational flexibility benefits. The report shall be made
25 available to the Chief of the National Wildlife Refuge Sys-

1 tem and to the public by posting such report on the appro-
2 priate website of the Secretary.

3 **TITLE III—IMPROVED** 4 **INFRASTRUCTURE**

5 **SEC. 3001. WATER LEAK CONTROL TECHNOLOGY STUDY.**

6 Part E of the Safe Drinking Water Act (42 U.S.C.
7 300j et seq.) is amended by adding at the end the fol-
8 lowing:

9 **“SEC. 1460. WATER LEAK CONTROL TECHNOLOGY.**

10 “(a) STUDY.—The Administrator shall conduct a
11 study on technological improvements in location, mapping,
12 monitoring, and communications practices to monitor and
13 regulate pressure and detect leaks in transmission pipe-
14 lines, water distribution systems, and aqueducts operated
15 by public water systems.

16 “(b) CONTENTS.—In conducting the study under
17 subsection (a), the Administrator shall—

18 “(1) in consultation with industry, develop a
19 compilation of, and analyze, available and new tech-
20 nologies to improve location and mapping practices
21 used by States and industry to monitor and regulate
22 pressure and reduce water loss and leaks;

23 “(2) conduct an analysis of how increased use
24 of existing and new technologies documented in the
25 compilation under paragraph (1), including G.P.S.

1 digital mapping technologies, predictive analytic
2 tools, the use of mobile devices, and other advanced
3 technologies, could reduce loss of water from leaks;
4 and

5 “(3) based on the analyses conducted under
6 paragraphs (1) and (2), identify criteria for effective
7 pressure management and water loss and leak con-
8 trol technologies to be used by transmission pipe-
9 lines, water distribution systems, and aqueducts op-
10 erated by public water systems.

11 “(c) REPORT.—Not later than 3 years after the date
12 of the enactment of this section, the Administrator shall
13 submit a report to Congress on the study under this sec-
14 tion, including recommendations on how to incorporate,
15 nationwide, technological improvements in practices in
16 managing pressure and identifying water loss and leaks
17 in aging infrastructure, provided that in developing such
18 recommendations, the Administrator takes into consider-
19 ation technical, operational, and economic feasibility.”.

20 **SEC. 3002. WATER MAIN BREAK DATA CLEARINGHOUSE.**

21 Part B of the Safe Drinking Water Act (42 U.S.C.
22 300g et seq.) is amended by adding at the end the fol-
23 lowing:

24 **“SEC. 1420A. WATER MAIN BREAK DATA CLEARINGHOUSE.**

25 “(a) ONLINE DATA CLEARINGHOUSE.—

1 “(1) ESTABLISHMENT.—Not later than 2 years
2 after the date of enactment of this section, the Ad-
3 ministrator shall establish and maintain a publicly
4 accessible website with a national data clearinghouse
5 on reported water main breaks and associated repair
6 activity.

7 “(2) CONTENTS.—The website established pur-
8 suant to paragraph (1) shall present—

9 “(A) information submitted to the Admin-
10 istrator by a public water system under this
11 section with respect to reported water main
12 breaks;

13 “(B) aggregate State and national data on
14 reported water main breaks; and

15 “(C) trends in such information and data
16 over time.

17 “(3) UPDATES.—The website established pursu-
18 ant to paragraph (1) shall be updated at least twice
19 per year.

20 “(b) DEFINITION.—In this section, the term ‘re-
21 ported water main break’ means the unplanned rupture
22 or breach of a pipe 6 inches in diameter or more in service
23 as part of a public water system resulting in water escap-
24 ing and being reported to the public water system by an
25 employee or other person.

1 “(c) RULE.—Not later than one year after the date
2 of enactment of this section, the Administrator shall issue
3 a rule requiring each public water system serving more
4 than 10,000 persons to submit to the Administrator infor-
5 mation on each reported water main break in, and the re-
6 pair activity for such break to be provided by, the public
7 water system with respect to a calendar year. Such rule
8 shall—

9 “(1) specify the format, content, quality assur-
10 ance procedure, and method of submission of infor-
11 mation;

12 “(2) apply to reported water main breaks that
13 occur in the calendar year following the date of en-
14 actment of this section and each calendar year
15 thereafter;

16 “(3) allow for the submission, storage, and dis-
17 play of information in electronic format;

18 “(4) allow for the submission of information by
19 a public water system serving 10,000 or fewer per-
20 sons submitted on a voluntary basis;

21 “(5) allow for submission of any additional in-
22 formation that may be required of a public water
23 system by a State regarding reported water main
24 breaks and repair activity; and

1 “(6) require that a summary of the information
2 submitted be included in a public water system’s an-
3 nual consumer confidence report required under sec-
4 tion 1414(c)(4).

5 “(d) REPORTED WATER MAIN BREAK AND REPAIR
6 INFORMATION.—The rule issued under subsection (c)
7 shall require each public water system serving more than
8 10,000 persons to submit to the Administrator the fol-
9 lowing information with respect to each reported water
10 main break in the public water system:

11 “(1) To the extent practicable, the time and
12 date the reported water main break was reported to
13 the public water system.

14 “(2) The specific location of the reported water
15 main break.

16 “(3) The size, type, age, and bedding material
17 of the broken water main.

18 “(4) The elapsed time from the initial report of
19 the water main break to the public water system to
20 the completion of repairs.

21 “(5) The amount of water escaping from the
22 public water system between the time of the report
23 and the repair, estimated in accordance with ‘Water
24 Audits and Loss Control Programs, Manual—36’

1 (2016) published by the American Water Works As-
 2 sociation or any successor manual.

3 “(6) The estimated cost of repairing the re-
 4 ported water main break and associated public infra-
 5 structure, including pavement restoration, and the
 6 cost of any damage to other public or private prop-
 7 erty.

8 “(e) ANNUAL REPORT.—Not later than 4 years after
 9 the date of enactment of this section, and annually there-
 10 after, the Administrator shall prepare and make available
 11 to the public a report summarizing and evaluating submis-
 12 sions by public water systems pursuant to this section.
 13 Such report shall include information and recommenda-
 14 tions concerning the methods and resources needed by
 15 public water systems to reduce the frequency, duration,
 16 and cost of water main breaks.”.

17 **SEC. 3003. SUSTAINABLE WATER LOSS CONTROL PROGRAM.**

18 (a) TECHNICAL ASSISTANCE AND GRANT PRO-
 19 GRAM.—The Administrator of the Environmental Protec-
 20 tion Agency shall establish and carry out a program to—

21 (1) make grants to public water systems to vol-
 22 untarily undergo an audit of the public water system
 23 that is—

24 (A) conducted in accordance with the pro-
 25 cedures contained in “Water Audits and Loss

1 Control Programs, Manual—36”, 4th edition,
2 published by the American Water Works Asso-
3 ciation; and

4 (B) validated under such criteria as may
5 be specified by the Administrator; and

6 (2) provide technical assistance to public water
7 systems to—

8 (A) address any findings of audits con-
9 ducted in accordance with the procedures and
10 criteria described in paragraph (1), including
11 audits conducted pursuant to a grant under
12 paragraph (1); and

13 (B) help such public water systems estab-
14 lish sustainable water loss control programs.

15 (b) CRITERIA.—In selecting public water systems to
16 make grants and provide technical assistance to pursuant
17 to subsection (a), the Administrator shall consider—

18 (1) the relative share of the customer base of
19 the public water system made up of customers from
20 disadvantaged communities (as defined in section
21 2008); and

22 (2) the ability of the public water system to
23 successfully sustain a water loss control program
24 upon completion of the audit.

1 (c) FEDERAL SHARE.—The Federal share of the cost
 2 of any audit for which a grant is awarded by the Adminis-
 3 trator under subsection (a) shall not exceed 50 percent
 4 of the cost of the audit.

5 (d) AUTHORIZATION OF APPROPRIATIONS.—There
 6 are authorized to be appropriated to carry out this section
 7 \$10,000,000 for each of fiscal years 2018 through 2022.

8 **SEC. 3004. TAX-EXEMPT FACILITY BONDS.**

9 (a) VOLUME CAP EXCEPTION.—Section 146 of the
 10 Internal Revenue Code of 1986 is amended by adding at
 11 the end the following new subsection:

12 “(o) EXCEPTION FOR BONDS FOR WATER INFRA-
 13 STRUCTURE IN AREAS WITH DROUGHT OR DISASTER.—

14 “(1) IN GENERAL.—Only for purposes of this
 15 section, the term ‘private activity bond’ shall not in-
 16 clude any exempt facility bond issued as part of an
 17 issue described in paragraph (4) or (5) of section
 18 142(a) if not less than 95 percent of the net pro-
 19 ceeds of such bond are used to provide property lo-
 20 cated—

21 “(A) in an area that is, at any time during
 22 the 5-year period ending on the date of enact-
 23 ment of this subsection, rated by the U.S.
 24 Drought Monitor as having at least a D2 inten-
 25 sity, and

1 “(B) in a State that is under a guber-
2 natorial drought declaration.

3 “(2) TERMINATION.—Paragraph (1) shall not
4 apply to any bond issued more than 10 years after
5 the date of the enactment of this subsection.”.

6 (b) RECYCLED WATER FACILITIES.—Section 142(e)
7 of the Internal Revenue Code of 1986 is amended by add-
8 ing at the end the following flush sentence:
9 “For purposes of this subsection, the term ‘water’ includes
10 recycled water.”.

11 (c) EFFECTIVE DATE.—The amendments made by
12 this subsection shall apply with respect to bonds issued
13 after the date of the enactment of this Act.

14 **SEC. 3005. IMPROVING GREEN INFRASTRUCTURE AND COM-**
15 **MUNITY WATER SYSTEMS THROUGH STATE**
16 **REVOLVING LOAN FUNDS.**

17 (a) WATER POLLUTION CONTROL STATE REVOLVING
18 LOAN FUNDS.—Section 603 of the Federal Water Pollu-
19 tion Control Act (33 U.S.C. 1383) is amended by adding
20 at the end the following:

21 “(j) GREEN PROJECT RESERVE.—Each State that
22 has entered into a capitalization agreement pursuant to
23 this title shall prioritize and, unless this funding is needed
24 to protect public health, for each fiscal year, ensure that
25 not less than 20 percent of funds used to provide assist-

1 ance under this title is used for, projects to address green
2 infrastructure, water or energy efficiency improvements,
3 or other environmentally innovative activities, including
4 activities related to—

5 “(1) improving the sustainability of community
6 water systems (as defined in section 1401 of the
7 Safe Drinking Water Act);

8 “(2) water efficiency or conservation, including
9 the rehabilitation or replacement of existing leaking
10 pipes;

11 “(3) stormwater harvesting and use of re-
12 claimed and recycled water, and investment in pipes
13 used for the purposes of transporting recycled water;

14 “(4) increasing energy efficiency in public water
15 systems (as defined in section 1401 of the Safe
16 Drinking Water Act), including public water systems
17 that use pump or hydraulic systems; and

18 “(5) implementation of source water protection
19 plans under the Safe Drinking Water Act.”.

20 (b) DRINKING WATER STATE REVOLVING FUNDS.—
21 Section 1452 of the Safe Drinking Water Act (42 U.S.C.
22 300j–12) is amended by adding at the end the following:

23 “(s) PRIORITIZATION OF GREEN PROJECTS.—Each
24 State that has entered into a capitalization agreement
25 pursuant to this section may prioritize projects or activi-

1 ties that maximize the potential for efficient water use,
 2 reuse, recapture, and conservation, and energy conserva-
 3 tion, taking into account the cost of constructing the
 4 project or activity and the cost of operating and maintain-
 5 ing the project or activity over the life of the project or
 6 activity.”.

7 (c) AUTHORIZATION OF APPROPRIATIONS.—

8 (1) STATE WATER POLLUTION CONTROL RE-
 9 VOLVING FUNDS.—Section 607 of the Federal Water
 10 Pollution Control Act (33 U.S.C. 1387) is amended
 11 to read as follows:

12 **“SEC. 607. AUTHORIZATION OF APPROPRIATIONS.**

13 “There are authorized to be appropriated to carry out
 14 this title—

15 “(1) \$2,000,000,000 for fiscal year 2018; and

16 “(2) \$2,400,000,000 for fiscal year 2019.”.

17 (2) DRINKING WATER TREATMENT REVOLVING
 18 LOAN FUND.—Section 1452(m) of the Safe Drinking
 19 Water Act (42 U.S.C. 300j–12(m)) is amended to
 20 read as follows:

21 “(m) AUTHORIZATION OF APPROPRIATIONS.—There
 22 are authorized to be appropriated to carry out this sec-
 23 tion—

24 “(1) \$1,186,000,000 for fiscal year 2018; and

25 “(2) \$1,286,000,000 for fiscal year 2019.”.

1 **SEC. 3006. BEST PRACTICES FOR ADMINISTRATION OF**
2 **STATE REVOLVING LOAN FUND PROGRAMS.**

3 Section 1452 of the Safe Drinking Water Act (42
4 U.S.C. 300j–12), as amended, is further amended by add-
5 ing at the end the following:

6 “(t) **BEST PRACTICES FOR PROGRAM ADMINISTRA-**
7 **TION.**—The Administrator shall—

8 “(1) collect information from States on admin-
9 istration of State programs with respect to State
10 loan funds, including—

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

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

15 “(C) incentives provided to systems that
16 partner with small public water systems for the
17 application process; and

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

20 “(2) not later than 3 years after the date of en-
21 actment of the Water and Energy Sustainability
22 through Technology Act, disseminate to the States
23 best practices for administration of such programs,
24 based on the information collected pursuant to this
25 subsection; and

1 “(3) periodically update such best practices, as
2 appropriate.”.

3 **TITLE IV—REPEAL CERTAIN TAX**
4 **PREFERENCES FOR ENERGY**
5 **AND NATURAL RESOURCE-**
6 **BASED INDUSTRIES**

7 **SEC. 4001. NO EXPENSING FOR INTANGIBLE DRILLING AND**
8 **DEVELOPMENT COSTS FOR OIL AND GAS**
9 **WELLS.**

10 (a) IN GENERAL.—Section 263(c) of the Internal
11 Revenue Code of 1986 is amended—

12 (1) in the second sentence, by striking “are de-
13 ductible” and inserting “would, but for the last sen-
14 tence of this subsection, be deductible”, and

15 (2) by adding at the end the following new sen-
16 tence: “In the case of any taxable year beginning
17 after December 31, 2017, this subsection shall not
18 apply with respect to any oil or gas well.”.

19 (b) CONFORMING AMENDMENT.—

20 (1) IN GENERAL.—Section 263(i) of such Code
21 is amended by striking “an oil, gas, or geothermal”
22 and inserting “a geothermal”.

23 (2) EFFECTIVE DATE.—The amendment made
24 by this section shall apply with respect to taxable
25 years beginning after December 31, 2017.

1 **SEC. 4002. REPEAL OF PERCENTAGE DEPLETION.**

2 (a) IN GENERAL.—Part I of subchapter I of chapter
3 1 of the Internal Revenue Code of 1986 is amended by
4 striking sections 613 and 613A (and by striking the items
5 relating to such sections in the table of sections for such
6 part).

7 (b) CONFORMING AMENDMENTS.—

8 (1)(A) Such part is amended by redesignating
9 section 614 as section 613 (and, in the table of sec-
10 tions for such part, by redesignating the item relat-
11 ing to section 614 as an item relating to section
12 613).

13 (B) Clauses (iv) and (v) of section 465(c)(2)(A)
14 are each amended by striking “section 614” and in-
15 serting “section 613”.

16 (C) Section 1016(e) is amended by striking
17 “section 614” and inserting “section 613”.

18 (D) Section 1254(a)(3) is amended by striking
19 “section 614” and inserting “section 613”.

20 (2) Section 45(c)(4) is amended to read as fol-
21 lows:

22 “(4) GEOTHERMAL ENERGY.—

23 “(A) IN GENERAL.—The term ‘geothermal
24 energy’ means energy derived from a geo-
25 thermal deposit.

1 “(B) GEOTHERMAL DEPOSIT.—The term
2 ‘geothermal deposit’ means a geothermal res-
3 ervoir consisting of natural heat which is stored
4 in rocks or in an aqueous liquid or vapor
5 (whether or not under pressure).”.

6 (3) Section 48(a)(3)(A)(iii) is amended by
7 striking “section 613(e)(2)” and inserting “section
8 45(c)(4)(B)”.

9 (4) Section 381(c) is amended by striking para-
10 graph (18).

11 (5) Section 465(c)(1)(E) is amended by striking
12 “section 613(e)(2)” and inserting “section
13 45(c)(4)(B)”.

14 (6) Section 468(d)(3) is amended by striking
15 “section 614” and inserting “section 613”.

16 (7) Section 611(a) is amended by striking the
17 second sentence.

18 (8) Section 613(d), as redesignated by para-
19 graph (1), is amended by striking “includes only”
20 and all that follows and inserting “includes only an
21 interest burdened by the costs of production.”.

22 (9) Section 636(a) is amended by striking “(for
23 purposes of section 613)”.

24 (10) Section 636(d) is amended by striking
25 “section 614(a)” and inserting “section 613(a)”.

1 (11) Section 705(a) is amended—

2 (A) in paragraph (1), by adding “and” at
3 the end of subparagraph (A), by striking “,
4 and” at the end of subparagraph (B) and in-
5 serting a period, and by striking subparagraph
6 (C),

7 (B) in paragraph (2), by striking “; and”
8 at the end of subparagraph (B) and inserting a
9 period, and

10 (C) by striking paragraph (3).

11 (12) Section 901(e)(1)(A) is amended by strik-
12 ing “(or, if smaller” and all that follows through
13 “under section 613)”.

14 (13) Section 993(c)(2)(C) is amended by insert-
15 ing “(as each such section was in effect before its
16 repeal by the Tax Reform Act of 2014)” after “sec-
17 tion 613 or 613A”.

18 (14) Section 1202(e)(3)(D) is amended by in-
19 serting “(as each such section was in effect before
20 its repeal by the Tax Reform Act of 2014)” after
21 “section 613 or 613A”.

22 (15) Section 1367(a) is amended—

23 (A) in paragraph (1), by adding “and” at
24 the end of subparagraph (A), by striking “,
25 and” at the end of subparagraph (B) and in-

1 serting a period, and by striking subparagraph
2 (C), and

3 (B) in paragraph (2), by adding “and” at
4 the end of subparagraph (C), by striking “,
5 and” at the end of subparagraph (D) and in-
6 serting a period, and by striking subparagraph
7 (E).

8 (16) Section 1446(c) is amended by striking
9 paragraph (2) and by redesignating paragraph (3)
10 as paragraph (2).

11 (17) Section 4612(a)(7) is amended by insert-
12 ing “(as in effect before its repeal by the Tax Re-
13 form Act of 2014)” after “section 613”.

14 (18) Section 4940(c)(3)(B) is amended—

15 (A) by striking clause (ii), and

16 (B) by striking all that precedes “The de-
17 duction provided” and inserting the following:

18 “(B) MODIFICATIONS.—For purposes of
19 subparagraph (A), the deduction provided”.

20 (c) EFFECTIVE DATE.—The amendments made by
21 this section shall apply to taxable years beginning after
22 December 31, 2017.

1 **TITLE V—SAVINGS CLAUSE**

2 **SEC. 5001. SAVINGS CLAUSE.**

3 This Act shall not be interpreted or implemented in
4 a manner that—

5 (1) preempts or modifies any obligation of the
6 United States to act in conformance with applicable
7 State law, including applicable State water law;

8 (2) affects or modifies any obligation under the
9 Central Valley Project Improvement Act (Public
10 Law 102–575; 106 Stat. 4706);

11 (3) overrides, modifies, or amends the applica-
12 bility of the National Environmental Policy Act of
13 1969 (42 U.S.C. 4321 et seq.), the Endangered Spe-
14 cies Act of 1973 (16 U.S.C. 1531 et seq.), or the
15 Federal Water Pollution Control Act of 1948 (33
16 U.S.C. 1251 et seq.); or

17 (4) authorizes the expenditure of funds for par-
18 ticipation in the construction or use of any facility
19 first put into service after January 1, 2015, that
20 conveys water directly from the Sacramento River to
21 pumping facilities in the south Sacramento-San Joa-
22 quin Delta that are part of the California State
23 Water Project or the Central Valley Project.

○