

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To improve the bill.

**IN THE SENATE OF THE UNITED STATES—111th Cong., 1st Sess.**

**S. 531**

To provide for the conduct of an in-depth analysis of the impact of energy development and production on the water resources of the United States, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and  
ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENTS intended to be proposed by \_\_\_\_\_

Viz:

1        On page 2, line 16, strike “or electricity” and insert  
2        “or electricity used as a fuel source”.

3        On page 2, line 21, strike “kilowatts” and insert “kil-  
4        owatt-hours”.

5        On page 8, line 4, strike “the best available” and in-  
6        sert “alternative”.

1           On page 8, line 5, strike “maximize” and insert “op-  
2   timize”.

3           On page 9, line 5, insert “(including an assessment  
4   of any region-specific factor, such as water availability and  
5   energy reliability, that should be considered in evaluating  
6   the results)” after “this section”.

7           On page 9, line 10, strike “**WATER CONSERVA-**  
8   **TION**” and insert “**RECLAMATION WATER CONSERVA-**  
9   **TION**”.

10          On page 13, line 9, insert “(including the disposal  
11   of desalination concentrated wastes)” after “concentrated  
12   wastes”.

13          On page 14, line 3, insert “manage, operate, or other-  
14   wise” after “entities to”.

15          On page 14, line 4, strike “an academic institution”  
16   and insert “a local or regional academic institution or a  
17   consortium of institutions”.

18          On page 14, line 18, strike “consumed” and insert  
19   “used”.

1       On page 14, lines 21 and 22, strike “consumption”  
2 and insert “use”.

3       On page 14, line 23, strike “acquisition” and insert  
4 “procurement”.

5       On page 15, line 3, strike “consumption” and insert  
6 “use”.

7       On page 16, after line 3, add the following:

8 **SEC. 8. ENERGY-WATER CLEAN TECHNOLOGY GRANT PRO-**  
9 **GRAM.**

10       (a) DEFINITIONS.—In this section:

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

13                   (A) an eligible unit of local government;

14                   (B) an Indian tribe; and

15                   (C) a water or wastewater agency of a  
16 State or local government.

17           (2) ELIGIBLE UNIT OF LOCAL GOVERNMENT.—

18       The term “eligible unit of local government” has the  
19 meaning given the term in section 541 of the Energy  
20 Independence and Security Act of 2007 (42 U.S.C.  
21 17151).

1           (3) INDIAN TRIBE.—The term “Indian tribe”  
2           has the meaning given the term in section 4 of the  
3           Indian Self-Determination and Education Assistance  
4           Act (25 U.S.C. 450b).

5           (b) GRANT PROGRAM.—In accordance with sub-  
6           section (c), the Secretary may carry out a competitive  
7           grant program under which the Secretary may provide  
8           grants to eligible entities to demonstrate the deployment  
9           of technologies that reduce the consumption of, or con-  
10          serve, energy supplies through energy savings and water  
11          conservation activities in commercial, residential, and  
12          mixed-use development projects.

13          (c) REQUIREMENTS.—

14           (1) PROVISION OF ASSISTANCE.—In carrying  
15           out the program under subsection (b), the Secretary  
16           shall provide assistance to eligible entities that carry  
17           out projects that—

18                   (A) have the potential to be replicated in  
19                   other locations;

20                   (B) are of sufficient size to demonstrate  
21                   deployment of the project at scale; and

22                   (C) are likely to accelerate and expand in-  
23                   vestment in cost-effective technologies that  
24                   demonstrate sustained reductions in energy con-  
25                   sumption or conservation of energy supplies, in-

1           cluding the deployment of renewable energy and  
2           water reuse technologies.

3           (2) **PRIORITIZATION.**—In selecting eligible enti-  
4           ties under paragraph (1), the Secretary shall give  
5           priority to each eligible entity that carries out a  
6           project that has the potential to create sustained en-  
7           ergy reductions that are greater than 50 percent for  
8           the project development, as compared to similar  
9           project developments that do not include the tech-  
10          nology used by the project that is the subject of the  
11          demonstration.

12          (3) **COST-SHARING.**—Each demonstration activ-  
13          ity carried out under a project under this program  
14          shall be subject to each cost-sharing requirement de-  
15          scribed in section 988 of the Energy Policy Act of  
16          2005 (42 U.S.C. 16352).

17          (4) **PUBLIC-PRIVATE PARTNERSHIPS.**—The Sec-  
18          retary shall provide a grant under this section only  
19          to an eligible entity that uses a public-private part-  
20          nership to design and carry-out the project of the el-  
21          igible entity.

22          (5) **LIMITATION ON FUNDS.**—Funds provided  
23          through a grant made by the Secretary under this  
24          section shall not be used by the recipient eligible en-

1           tity for any operation or maintenance cost of the eli-  
2           gible entity.

3           (6) REPORT.—The Secretary shall require each  
4           eligible entity that receives a grant from the Sec-  
5           retary under this section to submit to the Secretary  
6           on a date not later than 1 year after the date on  
7           which the eligible entity completes the project of the  
8           eligible entity a report that contains a description  
9           of—

10                   (A) the estimated reductions in water use  
11                   achieved by the project of the entity;

12                   (B) the reductions in energy consumption  
13                   achieved by the project of the entity;

14                   (C) the comprehensive environmental bene-  
15                   fits achieved by the project of the entity; and

16                   (D) the manner by which each reduction or  
17                   benefit described in subparagraphs (A) through  
18                   (C) compare to the original estimates of the eli-  
19                   gible entity.

20           (d) AUTHORIZATION OF APPROPRIATIONS.—There is  
21           authorized to be appropriated to the Secretary to carry  
22           out this section \$100,000,000 for each of fiscal years 2010  
23           through 2015, to remain available until expended.

1 **SEC. 9. RURAL WATER UTILITIES ENERGY AND WATER EF-**  
2 **FICIENCY PROGRAM.**

3 (a) DUTY OF SECRETARY.—As soon as practicable  
4 after the date of enactment of this Act, the Secretary shall  
5 establish and carry out a program similar to, and con-  
6 sistent with, the national rural water and wastewater cir-  
7 cuit rider program established under section 306(a)(22)  
8 of the Consolidated Farm and Rural Development Act (7  
9 U.S.C. 1926(a)(22)) (including the authority to make  
10 grants)—

11 (1) to provide on-site technical assistance to  
12 rural drinking water and wastewater utilities (in-  
13 cluding utilities serving an Indian tribe (as defined  
14 in section 4 of the Indian Self-Determination and  
15 Education Assistance Act (25 U.S.C. 450b))); and

16 (2) to improve energy efficiency, identify and  
17 develop alternative and renewable energy supplies,  
18 and conserve water in the operation of rural drink-  
19 ing water and wastewater utilities.

20 (b) AUTHORIZATION OF APPROPRIATIONS.—There is  
21 authorized to be appropriated to the Secretary to carry  
22 out this section \$7,000,000 for each of fiscal years 2010  
23 through 2015.

1 **SEC. 10. COMPREHENSIVE WATER USE AND ENERGY SAV-**  
2 **INGS STUDY.**

3 (a) IN GENERAL.—As soon as practicable after the  
4 date of enactment of this Act, in consultation with other  
5 Federal agencies and appropriate entities, and incor-  
6 porating available governmental and nongovernmental  
7 data as appropriate, the Secretary shall conduct a com-  
8 prehensive study to determine the interrelated nature of  
9 water and energy use (including energy consumption in  
10 water-related processes and the manner by which to re-  
11 duce water-related energy consumption) to promote the ef-  
12 ficient use of water and energy.

13 (b) REQUIRED COMPONENTS.—

14 (1) IN GENERAL.—In conducting the study  
15 under subsection (a), the Secretary shall include  
16 each component described in paragraphs (2) through  
17 (5).

18 (2) INDUSTRIAL WATER.—In accordance with  
19 paragraph (1), the Secretary shall—

20 (A) assess the annual industrial water use  
21 of the United States through a comparison, as  
22 the Secretary determines to be appropriate, of  
23 the differences in usage among—

24 (i) various regions of the United  
25 States;

26 (ii) industry types and processes; and



1 (iii) the use of in-plant waste treat-  
2 ment facilities; and

3 (B) identify opportunities to reduce signifi-  
4 cantly industrial energy consumption and asso-  
5 ciated costs through the use of—

6 (i) water management strategies;

7 (ii) water conservation using tech-  
8 nologies in existence as of the date of en-  
9 actment of this Act; and

10 (iii) reused water, particularly with re-  
11 spect to industrial energy applications.

12 (3) PEAK DEMAND.—In accordance with para-  
13 graph (1), the Secretary shall identify options to re-  
14 duce energy use by water treatment and delivery  
15 systems during peak electric demand periods, includ-  
16 ing through—

17 (A) the use of increased water storage fa-  
18 cilities;

19 (B) the aggregation of water system utility  
20 accounts;

21 (C) the installation of supervisory control  
22 and data acquisition systems; and

23 (D) improvements made to primary and  
24 secondary water and wastewater treatment.

1           (4) NONPOTABLE WATER SOURCES.—In accord-  
2           ance with paragraph (1), the Secretary shall identify  
3           and assess—

4                   (A) the applications and uses for nonfresh-  
5           water sources of water supply in industrial,  
6           commercial, and residential applications; and

7                   (B) the potential energy conservation that  
8           may result from the use of nonfreshwater sup-  
9           plies, including—

10                           (i) recycled and reclaimed water;

11                           (ii) produced water; and

12                           (iii) other nontraditional water  
13           sources.

14           (5) EMBEDDED ENERGY.—In accordance with  
15           paragraph (1), to facilitate an understanding of the  
16           potential energy savings associated with water con-  
17           servation and efficiency, the Secretary shall assess  
18           and estimate the quantity and type of energy con-  
19           sumed in the procurement, transport, and treatment  
20           of water supplies and wastewater that serve indus-  
21           trial, commercial, and residential uses, including  
22           variations relating to differences in geography and  
23           types of supply and wastewater processes.

24           (c) REPORT.—Not later than 18 months after the  
25           date of enactment of this Act, the Secretary shall submit

1 to the appropriate committees of Congress a report that  
2 contains a description of—

3           (1) the results of the study conducted by the  
4       Secretary under this section; and

5           (2) the means by which to incorporate, and the  
6       benefits of incorporating, the results of the study  
7       into related reports prepared by the Secretary.