

112TH CONGRESS  
1ST SESSION

# S. 1669

To authorize the Administrator of the Environmental Protection Agency to establish a program of awarding grants to owners or operators of water systems to increase the resiliency or adaptability of the systems to any ongoing or forecasted changes to the hydrologic conditions of a region of the United States.

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## IN THE SENATE OF THE UNITED STATES

OCTOBER 6, 2011

Mr. CARDIN (for himself, Mrs. BOXER, and Mr. REID) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

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## A BILL

To authorize the Administrator of the Environmental Protection Agency to establish a program of awarding grants to owners or operators of water systems to increase the resiliency or adaptability of the systems to any ongoing or forecasted changes to the hydrologic conditions of a region of the United States.

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

3 **SECTION 1. SHORT TITLE.**

4 This Act may be cited as the “Water Infrastructure  
5 Resiliency and Sustainability Act of 2011”.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ADMINISTRATOR.—The term “Adminis-  
4 trator” means the Administrator of the Environ-  
5 mental Protection Agency.

6 (2) HYDROLOGIC CONDITION.—The term “hy-  
7 drologic condition” means the quality, quantity, or  
8 reliability of the water resources of a region of the  
9 United States.

10 (3) OWNER OR OPERATOR OF A WATER SYS-  
11 TEM.—

12 (A) IN GENERAL.—The term “owner or  
13 operator of a water system” means an entity  
14 (including a regional, State, tribal, local, munic-  
15 ipal, or private entity) that owns or operates a  
16 water system.

17 (B) INCLUSIONS.—The term “owner or op-  
18 erator of a water system” includes—

19 (i) a non-Federal entity that has oper-  
20 ational responsibilities for a federally, trib-  
21 ally, or State-owned water system; and

22 (ii) an entity established by an agree-  
23 ment between—

24 (I) an entity that owns or oper-  
25 ates a water system; and

26 (II) at least 1 other entity.

1 (4) WATER SYSTEM.—The term “water sys-  
2 tem” means—

3 (A) a community water system (as defined  
4 in section 1401 of the Safe Drinking Water Act  
5 (42 U.S.C. 300f));

6 (B) a treatment works (as defined in sec-  
7 tion 212 of the Federal Water Pollution Control  
8 Act (33 U.S.C. 1292)), including a municipal  
9 separate storm sewer system (as such term is  
10 used in that Act (33 U.S.C. 1251 et seq.));

11 (C) a decentralized wastewater treatment  
12 system for domestic sewage;

13 (D) a groundwater storage and replenish-  
14 ment system;

15 (E) a system for transport and delivery of  
16 water for irrigation or conservation; or

17 (F) a natural or engineered system that  
18 manages floodwater.

19 **SEC. 3. WATER INFRASTRUCTURE RESILIENCY AND SUS-**  
20 **TAINABILITY.**

21 (a) PROGRAM.—The Administrator shall establish  
22 and implement a program, to be known as the “Water  
23 Infrastructure Resiliency and Sustainability Program”,  
24 under which the Administrator shall award grants for each  
25 of fiscal years 2012 through 2016 to owners or operators

1 of water systems for the purpose of increasing the resil-  
2 iency or adaptability of the water systems to any ongoing  
3 or forecasted changes (based on the best available research  
4 and data) to the hydrologic conditions of a region of the  
5 United States.

6 (b) USE OF FUNDS.—As a condition on receipt of  
7 a grant under this Act, an owner or operator of a water  
8 system shall agree to use the grant funds exclusively to  
9 assist in the planning, design, construction, implementa-  
10 tion, operation, or maintenance of a program or project  
11 that meets the purpose described in subsection (a) by—

12 (1) conserving water or enhancing water use ef-  
13 ficiency, including through the use of water metering  
14 and electronic sensing and control systems to meas-  
15 ure the effectiveness of a water efficiency program;

16 (2) modifying or relocating existing water sys-  
17 tem infrastructure made or projected to be signifi-  
18 cantly impaired by changing hydrologic conditions;

19 (3) preserving or improving water quality, in-  
20 cluding through measures to manage, reduce, treat,  
21 or reuse municipal stormwater, wastewater, or  
22 drinking water;

23 (4) investigating, designing, or constructing  
24 groundwater remediation, recycled water, or desali-

1 nation facilities or systems to serve existing commu-  
2 nities;

3 (5) enhancing water management by increasing  
4 watershed preservation and protection, such as  
5 through the use of natural or engineered green in-  
6 frastructure in the management, conveyance, or  
7 treatment of water, wastewater, or stormwater;

8 (6) enhancing energy efficiency or the use and  
9 generation of renewable energy in the management,  
10 conveyance, or treatment of water, wastewater, or  
11 stormwater;

12 (7) supporting the adoption and use of ad-  
13 vanced water treatment, water supply management  
14 (such as reservoir reoperation and water banking),  
15 or water demand management technologies, projects,  
16 or processes (such as water reuse and recycling,  
17 adaptive conservation pricing, and groundwater  
18 banking) that maintain or increase water supply or  
19 improve water quality;

20 (8) modifying or replacing existing systems or  
21 constructing new systems for existing communities  
22 or land that is being used for agricultural production  
23 to improve water supply, reliability, storage, or con-  
24 veyance in a manner that—

1 (A) promotes conservation or improves the  
2 efficiency of use of available water supplies; and

3 (B) does not further exacerbate stresses on  
4 ecosystems or cause redirected impacts by de-  
5 grading water quality or increasing net green-  
6 house gas emissions;

7 (9) supporting practices and projects, such as  
8 improved irrigation systems, water banking and  
9 other forms of water transactions, groundwater re-  
10 charge, stormwater capture, groundwater conjunc-  
11 tive use, and reuse or recycling of drainage water,  
12 to improve water quality or promote more efficient  
13 water use on land that is being used for agricultural  
14 production;

15 (10) reducing flood damage, risk, and vulner-  
16 ability by—

17 (A) restoring floodplains, wetland, and up-  
18 land integral to flood management, protection,  
19 prevention, and response;

20 (B) modifying levees, floodwalls, and other  
21 structures through setbacks, notches, gates, re-  
22 moval, or similar means to facilitate reconne-  
23 ction of rivers to floodplains, reduce flood stage  
24 height, and reduce damage to properties and  
25 populations;

1 (C) providing for acquisition and easement  
2 of flood-prone land and properties in order to  
3 reduce damage to property and risk to popu-  
4 lations; or

5 (D) promoting land use planning that pre-  
6 vents future floodplain development;

7 (11) conducting and completing studies or as-  
8 sessments to project how changing hydrologic condi-  
9 tions may impact the future operations and sustain-  
10 ability of water systems; or

11 (12) developing and implementing measures to  
12 increase the resilience of water systems and regional  
13 and hydrological basins, including the Colorado  
14 River Basin, to rapid hydrologic change or a natural  
15 disaster (such as tsunami, earthquake, flood, or vol-  
16 canic eruption).

17 (c) APPLICATION.—To seek a grant under this Act,  
18 the owner or operator of a water system shall submit to  
19 the Administrator an application that—

20 (1) includes a proposal for the program, strat-  
21 egy, or infrastructure improvement to be planned,  
22 designed, constructed, implemented, or maintained  
23 by the water system;

24 (2) provides the best available research or data  
25 that demonstrate—

1 (A) the risk to the water resources or in-  
2 frastructure of the water system as a result of  
3 ongoing or forecasted changes to the  
4 hydrological system of a region, including rising  
5 sea levels and changes in precipitation patterns;  
6 and

7 (B) the manner in which the proposed pro-  
8 gram, strategy, or infrastructure improvement  
9 would perform under the anticipated hydrologic  
10 conditions;

11 (3) describes the manner in which the proposed  
12 program, strategy, or infrastructure improvement is  
13 expected—

14 (A) to enhance the resiliency of the water  
15 system, including source water protection for  
16 community water systems, to the anticipated  
17 hydrologic conditions; or

18 (B) to increase efficiency in the use of en-  
19 ergy or water of the water system; and

20 (4) describes the manner in which the proposed  
21 program, strategy, or infrastructure improvement is  
22 consistent with an applicable State, tribal, or local  
23 climate adaptation plan, if any.

24 (d) PRIORITY.—



1           (1) WATER SYSTEMS AT GREATEST AND MOST  
2 IMMEDIATE RISK.—In selecting grantees under this  
3 Act, subject to section 4(b), the Administrator shall  
4 give priority to owners or operators of water systems  
5 that are, based on the best available research and  
6 data, at the greatest and most immediate risk of  
7 facing significant negative impacts due to changing  
8 hydrologic conditions.

9           (2) GOALS.—In selecting among applicants de-  
10 scribed in paragraph (1), the Administrator shall en-  
11 sure that, to the maximum extent practicable, the  
12 final list of applications funded for each year in-  
13 cludes a substantial number that propose to use in-  
14 novative approaches to meet 1 or more of the fol-  
15 lowing goals:

16                   (A) Promoting more efficient water use,  
17 water conservation, water reuse, or recycling.

18                   (B) Using decentralized, low-impact devel-  
19 opment technologies and nonstructural ap-  
20 proaches, including practices that use, enhance,  
21 or mimic the natural hydrological cycle or pro-  
22 tect natural flows.

23                   (C) Reducing stormwater runoff or flood-  
24 ing by protecting or enhancing natural eco-  
25 system functions.

1 (D) Modifying, upgrading, enhancing, or  
2 replacing existing water system infrastructure  
3 in response to changing hydrologic conditions.

4 (E) Improving water quality or quantity  
5 for agricultural and municipal uses, including  
6 through salinity reduction.

7 (F) Providing multiple benefits, including  
8 to water supply enhancement or demand reduc-  
9 tion, water quality protection or improvement,  
10 increased flood protection, and ecosystem pro-  
11 tection or improvement.

12 (e) COST-SHARING REQUIREMENT.—

13 (1) FEDERAL SHARE.—The share of the cost of  
14 any program, strategy, or infrastructure improve-  
15 ment that is the subject of a grant awarded by the  
16 Administrator to the owner or operator of a water  
17 system under subsection (a) paid through funds dis-  
18 tributed under this Act shall not exceed 50 percent  
19 of the cost of the program, strategy, or infrastruc-  
20 ture improvement.

21 (2) CALCULATION OF NON-FEDERAL SHARE.—  
22 In calculating the non-Federal share of the cost of  
23 a program, strategy, or infrastructure improvement  
24 proposed by a water system in an application sub-

1 mitted under subsection (c), the Administrator  
2 shall—

3 (A) include the value of any in-kind serv-  
4 ices that are integral to the completion of the  
5 program, strategy, or infrastructure improve-  
6 ment, including reasonable administrative and  
7 overhead costs; and

8 (B) not include any other amount that the  
9 water system involved receives from the Federal  
10 Government.

11 (f) REPORT TO CONGRESS.—Not later than 3 years  
12 after the date of enactment of this Act, and every 3 years  
13 thereafter, the Administrator shall submit to Congress a  
14 report that—

15 (1) describes the progress in implementing this  
16 Act; and

17 (2) includes information on project applications  
18 received and funded annually under this Act.

19 **SEC. 4. AUTHORIZATION OF APPROPRIATIONS.**

20 (a) IN GENERAL.—There is authorized to be appro-  
21 priated to carry out this Act \$50,000,000 for each of fiscal  
22 years 2012 through 2016.

23 (b) REDUCTION OF FLOOD DAMAGE, RISK, AND  
24 VULNERABILITY.—Of the amount made available to carry  
25 out this Act for a fiscal year, not more than 20 percent

- 1 may be made available to grantees for activities described
- 2 in subsection (b)(10).

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