

112TH CONGRESS  
1ST SESSION

# S. 1881

To establish an integrated Federal program to respond to ongoing and expected impacts of climate variability and change by protecting, restoring, and conserving the natural resources of the United States and to maximize government efficiency and reduce costs, in cooperation with State, local, and tribal governments and other entities.

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## IN THE SENATE OF THE UNITED STATES

NOVEMBER 16, 2011

Mr. WHITEHOUSE (for himself and Mr. BAUCUS) 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 establish an integrated Federal program to respond to ongoing and expected impacts of climate variability and change by protecting, restoring, and conserving the natural resources of the United States and to maximize government efficiency and reduce costs, in cooperation with State, local, and tribal governments and other entities.

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

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Safeguarding Amer-  
3 ica’s Future and Environment Act” or the “SAFE Act”.

4 **SEC. 2. FINDINGS, PURPOSES, AND POLICY.**

5 (a) FINDINGS.—Congress finds that—

6 (1) natural resources provide significant bene-  
7 fits to the people and economy of the United States,  
8 including—

9 (A) abundant clean water supplies;

10 (B) flood and coastal storm protection;

11 (C) clean air;

12 (D) a source for food, fiber, medicines, and  
13 for pollination of the crops and other plants of  
14 the United States;

15 (E) outdoor recreation, which is a source  
16 of jobs and economic stimulus;

17 (F) hunting and fishing opportunities and  
18 support of subsistence communities;

19 (G) scientific research and education; and

20 (H) world-class tourism destinations that  
21 support local economies;

22 (2) the United States Geological Survey, Na-  
23 tional Oceanic and Atmospheric Administration, Na-  
24 tional Aeronautics and Space Administration, and  
25 other agencies within the United States Global  
26 Change Research Program have observed that the

1 natural resources of the United States are facing in-  
2 creasing impacts from climate variability and  
3 change, including—

4 (A) more frequent and severe droughts and  
5 heatwaves;

6 (B) more frequent and severe storms and  
7 floods;

8 (C) more frequent and severe wildfires;

9 (D) more frequent and severe outbreaks of  
10 forest pests and invasive species;

11 (E) flooding and erosion of coastal areas  
12 due to rising sea levels;

13 (F) melting glaciers and sea ice;

14 (G) thawing permafrost;

15 (H) shifting fish, wildlife, and plant popu-  
16 lation ranges;

17 (I) disruptive shifts in the timing of fish,  
18 wildlife, and plant natural history cycles, such  
19 as blooming, breeding, and seasonal migrations;  
20 and

21 (J) ocean acidification; and

22 (3) the Federal Government should provide  
23 leadership in preparing for and responding to the  
24 impacts described in paragraph (2) to ensure that  
25 present and future generations continue to receive

1 the benefits of the abundant and diverse natural re-  
2 sources of the United States.

3 (b) PURPOSES.—The purpose of this Act is to estab-  
4 lish an integrated Federal program—

5 (1) to respond to ongoing and expected impacts  
6 of climate variability and change by protecting, re-  
7 storing, and conserving the natural resources of the  
8 United States; and

9 (2) to maximize government efficiency and re-  
10 duce costs, in cooperation with State, local, and trib-  
11 al governments and other entities.

12 (c) NATURAL RESOURCES CLIMATE CHANGE ADAP-  
13 TATION POLICY.—It is the policy of the Federal Govern-  
14 ment, in cooperation with State and local governments, In-  
15 dian tribes, and other interested stakeholders, to use all  
16 practicable means to protect, restore, and conserve natural  
17 resources so that natural resources—

18 (1) become more resilient, adapt to, and with-  
19 stand the ongoing and expected impacts of climate  
20 variability and change; and

21 (2) can continue safeguarding the communities  
22 in, and sustaining the economy of, the United  
23 States.

24 **SEC. 3. DEFINITIONS.**

25 In this Act:

1           (1) BOARD.—The term “Board” means the  
2 Science Advisory Board established under section  
3 6(b)(1).

4           (2) CENTER.—The term “Center” means the  
5 National Climate Change and Wildlife Science Cen-  
6 ter established under section 6(a)(1).

7           (3) CORRIDORS.—The term “corridors” means  
8 areas that—

9                   (A) provide connectivity, over different  
10 time scales, of landscapes, habitats or potential  
11 habitats, and ecological processes; and

12                   (B) facilitate terrestrial, marine, estuarine,  
13 and freshwater fish, wildlife, or plant movement  
14 that is necessary—

15                           (i) for migration, gene flow, or dis-  
16 persal; or

17                           (ii) to respond to the ongoing and ex-  
18 pected impacts of climate change (includ-  
19 ing, where applicable, ocean acidification,  
20 drought, flooding, and wildfire).

21           (4) ECOLOGICAL PROCESSES.—The term “eco-  
22 logical processes” means biological, chemical, or  
23 physical interaction between the biotic and abiotic  
24 components of an ecosystem, including—

25                   (A) nutrient cycling;

- 1 (B) pollination;  
2 (C) predator-prey relationships;  
3 (D) soil formation;  
4 (E) gene flow;  
5 (F) disease epizootiology;  
6 (G) larval dispersal and settlement;  
7 (H) hydrological cycling;  
8 (I) decomposition; and  
9 (J) disturbance regimes, such as fire and  
10 flooding.

11 (5) HABITAT.—The term “habitat” means the  
12 physical, chemical, and biological properties that  
13 fish, wildlife, or plants use for growth, reproduction,  
14 survival, food, water, or cover (whether on land, in  
15 water, or in an area or region).

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

20 (7) NATURAL RESOURCES.—The term “natural  
21 resources” means land, wildlife, fish, air, water,  
22 plants, habitats, and ecosystems of the United  
23 States.

24 (8) NATURAL RESOURCES ADAPTATION.—The  
25 term “natural resources adaptation” means the pro-

1       tection, restoration, and conservation of natural re-  
2       sources so that natural resources become more resil-  
3       ient, adapt to, and withstand the ongoing and ex-  
4       pected impacts of climate variability and change (in-  
5       cluding, where applicable, ocean acidification,  
6       drought, flooding, and wildfire).

7               (9) PANEL.—The term “Panel” means the Nat-  
8       ural Resources Climate Change Adaptation Panel es-  
9       tablished under section 4(a).

10              (10) RESILIENCE; RESILIENT.—The terms “re-  
11       silience” and “resilient”, with respect to a natural  
12       resource, mean the ability of the natural resource to  
13       recover from disturbance.

14              (11) STATE.—The term “State” means—

15                      (A) a State of the United States;

16                      (B) the District of Columbia;

17                      (C) American Samoa;

18                      (D) Guam;

19                      (E) the Commonwealth of the Northern  
20       Mariana Islands;

21                      (F) the Commonwealth of Puerto Rico;

22       and

23                      (G) the United States Virgin Islands.

1           (12) STRATEGY.—The term “Strategy” means  
2           the Natural Resources Climate Change Adaptation  
3           Strategy developed under section 5(a).

4 **SEC. 4. NATURAL RESOURCES CLIMATE CHANGE ADAPTA-**  
5 **TION PANEL.**

6           (a) ESTABLISHMENT.—Not later than 90 days after  
7           the date of enactment of this Act, the President shall es-  
8           tablish a Natural Resources Climate Change Adaptation  
9           Panel composed of the heads of Federal agencies or de-  
10          partments with jurisdiction over natural resources of the  
11          United States, including—

12           (1) the Administrator of the National Oceanic  
13           and Atmospheric Administration;

14           (2) the Chief of the Forest Service;

15           (3) the Director of the National Park Service;

16           (4) the Director of the United States Fish and  
17           Wildlife Service;

18           (5) the Director of the Bureau of Land Man-  
19           agement;

20           (6) the Director of the United States Geological  
21           Survey;

22           (7) the Commissioner of Reclamation;

23           (8) the Director of the Bureau of Indian Af-  
24           fairs;



1           (9) the Administrator of the Environmental  
2           Protection Agency;

3           (10) the Chief of Engineers;

4           (11) the Chair of the Council on Environmental  
5           Quality, who shall serve as Chairperson of the Panel;  
6           and

7           (12) the Administrator of the Federal Emer-  
8           gency Management Agency.

9           (b) DUTIES.—The Panel shall serve as a forum for  
10          interagency consultation on, and the coordination of, the  
11          development and implementation of the Strategy.

12          **SEC. 5. NATURAL RESOURCES ADAPTATION STRATEGY.**

13          (a) IN GENERAL.—Not later than 1 year after the  
14          date of enactment of this Act, the Panel shall develop a  
15          strategy to protect, restore, and conserve natural re-  
16          sources so that natural resources become more resilient,  
17          adapt to, and withstand the ongoing and expected impacts  
18          of climate variability and change.

19          (b) REQUIREMENTS.—In developing and revising the  
20          Strategy, the Panel shall—

21                  (1) use the best available science; and

22                  (2) provide public notice and opportunity for  
23          comment from all interested stakeholders.

24          (c) REVIEW AND REVISION.—Not later than 5 years  
25          after the date on which the Strategy is developed under

1 subsection (a), and every 5 years thereafter, the Panel  
2 shall review and revise the Strategy to incorporate—

3 (1) new information regarding the ongoing and  
4 expected impacts of climate change on natural re-  
5 sources; and

6 (2) new advances in the development of natural  
7 resources adaptation strategies.

8 (d) CONTENTS.—The Strategy shall—

9 (1) assess the vulnerability of natural resources  
10 to climate change, including short-term, medium-  
11 term, long-term, cumulative, and synergistic im-  
12 pacts;

13 (2) describe current, observation, and moni-  
14 toring activities at the Federal, State, tribal, and  
15 local levels relating to the ongoing and expected im-  
16 pacts of climate change on natural resources;

17 (3) identify and prioritize research and data  
18 needs;

19 (4) identify natural resources likely to have the  
20 greatest need for protection, restoration, and con-  
21 servation due to the ongoing and expanding impacts  
22 of climate variability and change;

23 (5) include specific protocols for integrating  
24 natural resources adaptation strategies and activities  
25 into the conservation and management of natural re-

1 sources by Federal agencies to ensure consistency  
2 across agency jurisdictions;

3 (6) identify opportunities for maintaining, re-  
4 storing, or enhancing natural resources to reduce the  
5 risks of climate variability and change on other vul-  
6 nerable sectors of society;

7 (7) identify Federal policies and actions that  
8 may reduce resilience and increase the vulnerability  
9 of natural resources to climate variability and  
10 change;

11 (8) include specific actions that Federal agen-  
12 cies shall take to protect, conserve, and restore nat-  
13 ural resources to become more resilient, adapt to,  
14 and withstand the ongoing and expected impacts of  
15 climate change, including a timeline to implement  
16 those actions;

17 (9) include specific mechanisms for ensuring  
18 communication and coordination—

19 (A) among Federal agencies; and

20 (B) between Federal agencies and State  
21 natural resource agencies, territories of the  
22 United States, Indian tribes, private land-  
23 owners, conservation organizations, and other  
24 countries that share jurisdiction over natural  
25 resources with the United States;

1           (10) include specific actions to develop and im-  
2           plement coordinated natural resources inventory and  
3           monitoring protocols through interagency coordina-  
4           tion and collaboration with States and local govern-  
5           ments, Indian tribes, and private organizations; and

6           (11) include procedures for guiding the develop-  
7           ment of detailed agency-specific adaptation plans re-  
8           quired under section 7.

9           (e) IMPLEMENTATION.—

10           (1) IN GENERAL.—Consistent with other laws  
11           and Federal trust responsibilities concerning Indian  
12           land, each Federal agency represented on the Panel  
13           shall integrate the elements of the Strategy that re-  
14           late to conservation, restoration, and management of  
15           natural resources into agency plans, environmental  
16           reviews, and programs.

17           (2) PUBLIC REPORT.—Each agency shall, on an  
18           annual basis, make available to the public a report  
19           documenting the actions of the agency in imple-  
20           menting the Strategy.

21           (3) COORDINATION.—The Panel shall coordi-  
22           nate the implementation of the Strategy with non-  
23           Panel Federal agencies to achieve the national policy  
24           described in section 2(c).

1 **SEC. 6. NATURAL RESOURCES ADAPTATION SCIENCE AND**  
2 **INFORMATION.**

3 (a) NATIONAL CLIMATE CHANGE AND WILDLIFE  
4 SCIENCE CENTER.—

5 (1) ESTABLISHMENT.—The Secretary of the In-  
6 terior, in collaboration with the States, Indian tribes,  
7 and other partner organizations, shall establish a  
8 National Climate Change and Wildlife Science Cen-  
9 ter within the United States Geological Survey.

10 (2) DUTIES OF CENTER.—The Center shall as-  
11 sess and develop scientific information, tools, strate-  
12 gies, and techniques to be used by the Panel, Fed-  
13 eral and State agencies, and other interested parties  
14 in addressing the impacts of climate variability and  
15 change on natural resources.

16 (b) SCIENCE ADVISORY BOARD.—

17 (1) IN GENERAL.—Not later than 180 days  
18 after the date of enactment of this Act, the Sec-  
19 retary of Commerce and the Secretary of the Inte-  
20 rior shall establish and appoint the members of a  
21 Science Advisory Board.

22 (2) MEMBERSHIP.—The Board shall be com-  
23 prised of not fewer than 10 and not more than 20  
24 members—

25 (A) who have expertise in biology (includ-  
26 ing fish, wildlife, plant, aquatic, coastal, and

1 marine biology), ecology, climate change (in-  
2 cluding, where applicable, ocean acidification,  
3 drought, flooding, and wildfire), and other rel-  
4 evant scientific disciplines;

5 (B) who are scientists that represent a bal-  
6 anced membership among Federal, State, tribal,  
7 and local representatives, universities, and other  
8 interested parties; and

9 (C) of whom at least  $\frac{1}{2}$  shall be rec-  
10 ommended by the President of the National  
11 Academy of Sciences.

12 (3) DUTIES.—The Board shall—

13 (A) advise the Panel on the state of the  
14 science regarding—

15 (i) the ongoing and expected impacts  
16 of climate variability and change on nat-  
17 ural resources; and

18 (ii) scientific strategies and mecha-  
19 nisms for natural resources adaptation;

20 (B) identify and recommend priorities for  
21 ongoing research needs on the issues described  
22 in subparagraph (A); and

23 (C) review and comment on the Strategy  
24 before the Strategy is finalized.

1           (4) COLLABORATION.—The Board shall collabo-  
2           rate with climate change and ecosystem research en-  
3           tities in other Federal agencies and departments.

4           (5) AVAILABILITY TO PUBLIC.—The advice and  
5           recommendations of the Board shall be made avail-  
6           able to the public.

7   **SEC. 7. FEDERAL NATURAL RESOURCE AGENCY ADAPTA-**  
8                                   **TION PLANS.**

9           (a) DEVELOPMENT.—Not later than 1 year after the  
10          date of development of the Strategy, each Federal agency  
11          with representation on the Panel shall—

12                 (1) complete a natural resources adaptation  
13                 plan for that Federal agency that is consistent with  
14                 the Strategy;

15                 (2) detail the ongoing and expanding proposed  
16                 actions of the Federal agency, and any changes in  
17                 decisionmaking processes necessary to increase the  
18                 ability of resources under the jurisdiction of the  
19                 agency;

20                 (3) provide opportunities for public review and  
21                 comment on the plan;

22                 (4) coordinate with the plan of each other Fed-  
23                 eral agency with representation on the Panel; and

24                 (5) submit the plan to the President for ap-  
25                 proval.

1 (b) REQUIREMENTS.—Each adaptation plan shall—

2 (1) identify and prioritize specific conservation  
3 strategies and actions that address the ongoing and  
4 expected impacts of climate variability and change  
5 on natural resources under the jurisdiction of the  
6 department or agency preparing the plan, includ-  
7 ing—

8 (A) protection, restoration, and conserva-  
9 tion of natural resources to become more resil-  
10 ient, adapt to, and better withstand the impacts  
11 of climate variability and change;

12 (B) protection of habitats and ecosystems,  
13 the diversity of native fish, wildlife, and plant  
14 populations, and wildlife corridors, including—

15 (i) protection, restoration, and con-  
16 servation of terrestrial, marine, estuarine,  
17 and freshwater habitats and ecosystems;

18 (ii) establishment of terrestrial, ma-  
19 rine, estuarine, and freshwater corridors;

20 (iii) restoration and conservation of  
21 ecological processes;

22 (iv) protection of a broad diversity of  
23 native species of fish, wildlife, and plant  
24 populations across the ranges of those spe-  
25 cies; and



1 (v) protection of fish, wildlife, and  
2 plant health, recognizing that climate can  
3 alter the distribution and ecology of  
4 parasites, pathogens, and vectors;

5 (2) describe how the agency will—

6 (A) integrate the strategies and conserva-  
7 tion activities into plans, programs, activities,  
8 and actions of the agency relating to the con-  
9 servation and management of natural resources;

10 (B) establish new plans, programs, activi-  
11 ties, and actions, if necessary;

12 (C) maintain or restore corridors; and

13 (D) minimize the impacts of energy, devel-  
14 opment, water, transportation, and trans-  
15 mission projects and other activities on wildlife  
16 and wildlife habitat;

17 (3) establish methods—

18 (A) to assess the effectiveness of strategies  
19 and conservation actions the agency takes to  
20 protect, restore, and conserve natural resources  
21 so natural resources become more resilient,  
22 adapt to, and withstand the ongoing and ex-  
23 pected impacts of climate change; and

1 (B) to update those strategies and actions  
2 to respond to new information and changing  
3 conditions;

4 (4) describe current and proposed mechanisms  
5 to enhance cooperation and coordination of natural  
6 resources adaptation efforts with other Federal  
7 agencies, State and local governments, Indian tribes,  
8 and nongovernmental stakeholders;

9 (5) include written guidance to resource man-  
10 agers; and

11 (6) identify and assess data and information  
12 gaps necessary to develop natural resources adapta-  
13 tion plans and strategies.

14 (c) IMPLEMENTATION.—

15 (1) IN GENERAL.—On approval by the Presi-  
16 dent, each Federal agency with representation on  
17 the Panel shall, consistent with existing authority,  
18 implement the adaptation plan of the agency  
19 through existing and new plans, policies, programs,  
20 activities, and actions.

21 (2) CONSIDERATION OF IMPACTS.—To the max-  
22 imum extent practicable and consistent with existing  
23 authority, natural resource management decisions  
24 made by each Federal agency with representation on  
25 the Panel shall—

1           (A) consider the ongoing and expected im-  
2           pacts of climate variability and change on nat-  
3           ural resources; and

4           (B) select alternatives that will avoid and  
5           minimize those impacts and promote resilience.

6           (d) REVISION AND REVIEW.—Not later than 5 years  
7           after the date of implementation of the adaptation plan  
8           of a Federal agency, and every 5 years thereafter, the Fed-  
9           eral agency shall review and revise the adaptation plan to  
10          incorporate the best available science, including advice and  
11          information pursuant to section 6 and other information,  
12          regarding the ongoing and expected impacts of climate  
13          change on natural resources.

14   **SEC. 8. STATE NATURAL RESOURCES ADAPTATION PLANS.**

15          (a) REQUIREMENT.—To be eligible to receive funds  
16          pursuant to subsection (d), not later than 1 year after the  
17          date of development of the Strategy, each State shall pre-  
18          pare and submit to the Secretary of the Interior and, as  
19          applicable, the Secretary of Commerce, a State natural re-  
20          sources adaptation plan detailing current and future ef-  
21          forts of the State to address the ongoing and expected im-  
22          pacts of climate change on natural resources and coastal  
23          areas within the jurisdiction of the State.

1 (b) REVIEW OR APPROVAL.—The Secretary of the In-  
2 terior and, as applicable, the Secretary of Commerce  
3 shall—

4 (1) review each State adaptation plan; and

5 (2) approve a State adaptation plan if the  
6 plan—

7 (A) meets the requirements of subsection  
8 (c); and

9 (B) is consistent with the Strategy.

10 (c) CONTENTS.—A State adaptation plan shall—

11 (1) meet the requirements described in section  
12 7(b);

13 (2) include the adaptation provisions of any  
14 State comprehensive wildlife conservation strategy  
15 (or State wildlife action plan) that has been—

16 (A) submitted to the United States Fish  
17 and Wildlife Service; and

18 (B) approved, or is pending approval, by  
19 the United States Fish and Wildlife Service;

20 (3) include the adaptation provisions of a state-  
21 wide assessment and strategy for forest resources re-  
22 quired under section 2A of the Cooperative Forestry  
23 Assistance Act of 1978 (16 U.S.C. 2101a) that has  
24 been—

1 (A) submitted to the Secretary of Agri-  
2 culture; and

3 (B) approved, or is pending approval, by  
4 the Secretary of Agriculture; and

5 (4) include the adaptation provisions of a  
6 Coastal Zone Management Plan or a Coastal and  
7 Estuarine Land Conservation Program Plan that  
8 has been—

9 (A) submitted to the National Oceanic and  
10 Atmospheric Administration; and

11 (B) approved, or is pending approval, by  
12 the National Oceanic and Atmospheric Admin-  
13 istration.

14 (d) DISTRIBUTION OF FUNDS TO STATES.—Any  
15 funds made available pursuant to this Act shall be—

16 (1) used to carry out natural resources adapta-  
17 tion activities in accordance with adaptation plans  
18 approved under this section; and

19 (2) made available through—

20 (A) the State and tribal wildlife grant pro-  
21 gram under title I of division F of the Consoli-  
22 dated Appropriations Act, 2008 (Public Law  
23 110–161; 121 Stat. 2103); and

1 (B)(i) the grant program under section  
2 306 of the Coastal Zone Management Act of  
3 1972 (16 U.S.C. 1455); and

4 (ii) the Coastal and Estuarine Land Con-  
5 servation Program established under title II of  
6 the Department of Commerce and Related  
7 Agencies Appropriations Act, 2002 (16 U.S.C.  
8 1456d).

9 (e) PUBLIC INPUT.—In developing an adaptation  
10 plan, a State shall solicit and consider input from the pub-  
11 lic and independent scientists.

12 (f) COORDINATION WITH OTHER PLANS.—A State  
13 adaptation plan shall, where appropriate, integrate the  
14 goals and measures set forth in other natural resources  
15 conservation strategies and plans.

16 (g) UPDATING.—Each State adaptation plan shall be  
17 updated at least every 5 years.

18 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

19 There are authorized to be appropriated to carry out  
20 this Act such sums as are necessary.

○