

110TH CONGRESS  
1ST SESSION

# S. 2204

To assist wildlife populations and wildlife habitats in adapting to and surviving the effects of global warming, and for other purposes.

---

IN THE SENATE OF THE UNITED STATES

OCTOBER 18, 2007

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

---

## A BILL

To assist wildlife populations and wildlife habitats in adapting to and surviving the effects of global warming, 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 cited as the  
5 “Global Warming Wildlife Survival Act”.

6 (b) TABLE OF CONTENTS.—The table of contents of  
7 this Act is as follows:

Sec. 1. Short title; table of contents.  
Sec. 2. Definitions.

TITLE I—NATURAL RESOURCES AND WILDLIFE PROGRAMS

Sec. 101. Definitions.

Subtitle A—National Policy and Strategy for Wildlife

Sec. 111. National policy on wildlife and global warming.

Sec. 112. National strategy.

Sec. 113. Advisory Board; National Global Warming and Wildlife Science Center.

Sec. 114. Authorization of appropriations.

Subtitle B—State and Tribal Wildlife Grants Program

Sec. 121. State and tribal wildlife grants program.

TITLE II—OCEAN PROGRAMS

Sec. 201. Short title.

Sec. 202. Findings.

Subtitle A—National Policy for Ocean, Coastal, and Great Lakes Ecosystem Health and Resiliency

Sec. 211. National policy on ocean, coastal, and great lakes ecosystem health and resiliency.

Sec. 212. National ocean, coastal, and Great Lakes resiliency strategy.

Sec. 213. Advisory Board.

Sec. 214. Implementation of national strategy.

Sec. 215. Reports.

Sec. 216. Authorization of appropriations.

Subtitle B—Planning for Climate Change in Coastal Zone

Sec. 221. Planning for climate change in coastal zone.

TITLE III—SPECIAL IMPERILED SPECIES PROGRAMS

Sec. 301. Definitions.

Sec. 302. Regional ecological symposia.

Sec. 303. National Academy of Sciences report.

1 **SEC. 2. DEFINITIONS.**

2 In this Act:

3 (1) ECOLOGICAL PROCESSES.—

4 (A) IN GENERAL.—The term “ecological  
5 processes” means the biological, chemical, and  
6 physical interactions between the biotic and abi-  
7 otic components of an ecosystem.

(B) INCLUSIONS.—The term “ecological processes” includes—

(i) nutrient cycling;

(ii) pollination;

(iii) predator-prey relationships;

(iv) soil formation;

(v) gene flow;

(vi) hydrologic cycling;

(vii) decomposition; and

(viii) disturbance regimes, such as fire

and flooding.

(2) HABITAT.—

(A) IN GENERAL.—The term “habitat” means the physical, chemical, and biological properties that are used by wildlife for growth, reproduction, and survival.

(B) INCLUSIONS.—The term “habitat” includes aquatic and terrestrial plant communities, food, water, cover, and space on a tract of land, in a body of water, or in an area or region.

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

(4) WILDLIFE.—The term “wildlife” means—

(A) any species of wild, free-ranging fauna, including fish and other aquatic species; and

(B) any fauna in a captive breeding program the object of which is to reintroduce individuals of a depleted indigenous species into previously occupied range.

## **TITLE I—NATURAL RESOURCES AND WILDLIFE PROGRAMS**

### **SEC. 101. DEFINITIONS.**

In this title:

(1) ADVISORY BOARD.—The term “Advisory Board” means the Advisory Board established under section 113(a).

(2) HABITAT LINKAGE.—The term “habitat linkage” means an area that—

(A) connects wildlife habitat or potential wildlife habitat; and

(B) facilitates the ability of wildlife to move within a landscape in response to the effects of global warming.

(3) NATIONAL STRATEGY.—The term “national strategy” means the national strategy established under section 112.

1 (4) SECRETARY.—The term “Secretary” means  
2 the Secretary of the Interior.

3 **Subtitle A—National Policy and**  
4 **Strategy for Wildlife**

5 **SEC. 111. NATIONAL POLICY ON WILDLIFE AND GLOBAL**  
6 **WARMING.**

7 It is the policy of the Federal Government, in co-  
8 operation with State, tribal, and affected local govern-  
9 ments, other concerned public and private organizations,  
10 landowners, and citizens to use all practicable means and  
11 measures—

12 (1) to assist wildlife populations and wildlife  
13 habitats in adapting to and surviving the effects of  
14 global warming; and

15 (2) to ensure the persistence and resilience of  
16 the wildlife of the United States, together with wild-  
17 life habitat, as an essential part of the culture, land-  
18 scape, and natural resources of the United States.

19 **SEC. 112. NATIONAL STRATEGY.**

20 (a) REQUIREMENT.—

21 (1) IN GENERAL.—Not later than 2 years after  
22 the date of enactment of this Act, the Secretary  
23 shall implement the national policy under section  
24 111 by establishing a national strategy for assisting

wildlife populations and wildlife habitats in adapting  
to the impact of global warming.

(2) ADMINISTRATION.—In establishing the national strategy, the Secretary shall—

(A) base the national strategy on the best available science, as provided by the Advisory Board;

(B) develop the national strategy in cooperation with State fish and wildlife agencies and Indian tribes;

(C) consult with—

(i) the Secretary of Agriculture;

(ii) the Secretary of Commerce;

(iii) the Administrator of the Environmental Protection Agency;

(iv) local governments;

(v) conservation organizations;

(vi) scientists; and

(vii) other interested stakeholders;

and

(D) provide public notice and opportunity for comment.

(b) CONTENTS.—

(1) IN GENERAL.—The Secretary shall include in the national strategy prioritized goals and meas-

1 ures and a plan for implementation (including a  
2 timeframe)—

3 (A) to identify and monitor wildlife popu-  
4 lations, including game species, that are likely  
5 to be adversely affected by global warming, with  
6 particular emphasis on wildlife populations with  
7 the greatest need for conservation;

8 (B) to identify and monitor coastal, ma-  
9 rine, terrestrial, and fresh water habitats that  
10 are at the greatest risk of being damaged by  
11 global warming;

12 (C) assist species in adapting to the impact  
13 of global warming;

14 (D) protect, acquire, and restore wildlife  
15 habitat to build resilience to global warming;

16 (E) provide habitat linkages and corridors  
17 to facilitate wildlife movements in response to  
18 global warming;

19 (F) restore and protect ecological processes  
20 that sustain wildlife populations that are vul-  
21 nerable to global warming; and

22 (G) incorporate consideration of climate  
23 change in, and integrate climate change adapta-  
24 tion strategies for wildlife and wildlife habitat  
25 into, the planning and management of Federal

1 land administered by the Department of the In-  
2 terior and land administered by the Forest  
3 Service.

4 (2) COORDINATION WITH OTHER PLANS.—In  
5 developing the national strategy, the Secretary shall,  
6 to the maximum extent practicable—

7 (A) take into consideration research and  
8 information contained in—

9 (i) State comprehensive wildlife con-  
10 servation plans;

11 (ii) the North American Waterfowl  
12 Management Plan;

13 (iii) the National Fish Habitat Action  
14 Plan; and

15 (iv) other relevant plans; and

16 (B) coordinate and integrate, to the extent  
17 consistent with the policy established under sec-  
18 tion 111, the goals and measures identified in  
19 the national strategy with goals and measures  
20 identified in those plans.

21 (c) REVISIONS.—Not later than 5 years after the  
22 date of the initial establishment of the national strategy  
23 and every 10 years thereafter, the Secretary shall revise  
24 the national strategy to reflect—



1           (1) new information on the impact of global  
2 warming on wildlife and wildlife habitat; and

3           (2) advances in the development of strategies  
4 for adapting to or mitigating the impact.

5 (d) IMPLEMENTATION.—

6           (1) IMPLEMENTATION ON FEDERAL LAND SYS-  
7 TEMS.—To achieve the goals of the national strategy  
8 and to implement measures for the conservation of  
9 wildlife and wildlife habitat identified in the national  
10 strategy—

11           (A) the Secretary of the Interior shall exer-  
12 cise the authority of the Secretary under this  
13 title and other laws within the jurisdiction of  
14 the Secretary pertaining to the administration  
15 of land; and

16           (B) the Secretary of Agriculture shall exer-  
17 cise the authority of the Secretary of Agri-  
18 culture under this title and other laws within  
19 the jurisdiction of the Secretary pertaining to  
20 the administration of land.

21           (2) WILDLIFE CONSERVATION PROGRAMS.—To  
22 the maximum extent practicable, the Secretary, the  
23 Secretary of Agriculture, and the Secretary of Com-  
24 merce shall use the authorities of the respective Sec-

1       retary under other laws to achieve the goals of the  
2       national strategy.

3       (e) LIMITATION ON EFFECT.—Nothing in this sec-  
4       tion creates new authority or expands any existing author-  
5       ity for the Secretary to regulate the use of private prop-  
6       erty.

7       **SEC. 113. ADVISORY BOARD; NATIONAL GLOBAL WARMING**  
8               **AND WILDLIFE SCIENCE CENTER.**

9       (a) ADVISORY BOARD.—

10           (1) IN GENERAL.—The Secretary shall establish  
11       and appoint the members of an Advisory Board that  
12       is composed of—

13           (A) not less than 10, and not more than  
14       20, members recommended by the President of  
15       the National Academy of Sciences with exper-  
16       tise in wildlife biology, ecology, climate change,  
17       and other relevant disciplines; and

18           (B) the Director of the National Global  
19       Warming and Wildlife Science Center estab-  
20       lished under subsection (b), who shall be an ex  
21       officio member of the Advisory Board.

22       (2) FUNCTIONS.—The Advisory Board shall—

23           (A) provide scientific and technical advice  
24       and recommendations to the Secretary on—

1 (i) the impact of global warming on  
2 wildlife and wildlife habitat;

3 (ii) areas of habitat of particular im-  
4 portance for the conservation of wildlife  
5 populations affected by global warming;  
6 and

7 (iii) strategies and mechanisms to as-  
8 sist wildlife populations and wildlife habi-  
9 tats in adapting to the impact of global  
10 warming on the management of Federal  
11 land and in other Federal programs for  
12 wildlife conservation;

13 (B) advise the National Global Warming  
14 and Wildlife Science Center established under  
15 subsection (b) and review the research pro-  
16 grams of the Center; and

17 (C) advise the Secretary regarding the best  
18 science available for purposes of developing and  
19 revising the national strategy established under  
20 section 112.

21 (3) PUBLIC AVAILABILITY.—The advice and  
22 recommendations of the Advisory Board shall be  
23 available to the public.

24 (b) NATIONAL GLOBAL WARMING AND WILDLIFE  
25 SCIENCE CENTER.—

1           (1) IN GENERAL.—The Secretary shall establish  
2           a National Global Warming and Wildlife Science  
3           Center within the United States Geological Survey.

4           (2) DIRECTOR.—The Center shall be headed by  
5           a Director, appointed by the Secretary.

6           (3) FUNCTIONS.—The Center shall—

7                   (A) conduct scientific research on national  
8                   issues relating to the impact of global warming  
9                   on wildlife and wildlife habitat and mechanisms  
10                  for adaptation to, mitigation of, or prevention  
11                  of the impact;

12                  (B) consult with and advise Federal land  
13                  management agencies and Federal wildlife  
14                  agencies on—

15                       (i) the impact of global warming on  
16                       wildlife and wildlife habitat and mecha-  
17                       nisms for adaptation to or mitigation of  
18                       the impact; and

19                       (ii) the incorporation of information  
20                       regarding the impact and the adoption of  
21                       mechanisms for adaptation or mitigation of  
22                       the impact in the management and plan-  
23                       ning for Federal land and in the adminis-  
24                       tration of Federal wildlife programs; and

1 (C) consult and, to the maximum extent  
2 practicable, collaborate with State and local  
3 agencies, institutions of higher education, and  
4 other public and private entities regarding re-  
5 search, monitoring, and other efforts to address  
6 the impact of global warming on wildlife and  
7 wildlife habitat.

8 (4) INTEGRATION WITH OTHER FEDERAL AC-  
9 TIVITIES.—The Secretary, the Secretary of Agri-  
10 culture, and the Secretary of Commerce shall ensure  
11 that research and other activities carried out under  
12 this section are integrated with climate change pro-  
13 gram research and activities carried out under other  
14 Federal law.

15 (c) DETECTION OF CHANGES.—The Secretary, the  
16 Secretary of Agriculture, and the Secretary of Commerce  
17 shall use existing authorities to each carry out programs  
18 to detect changes in wildlife abundance, distribution, and  
19 behavior related to global warming, including—

20 (1) conducting species inventories on Federal  
21 land and in marine areas within the exclusive eco-  
22 nomic zone of the United States; and

23 (2) establishing and implementing robust, co-  
24 ordinated monitoring programs.

1 **SEC. 114. AUTHORIZATION OF APPROPRIATIONS.**

2 (a) IN GENERAL.—There are authorized to be appro-  
3 priated such sums as are necessary to carry out this sub-  
4 title.

5 (b) IMPLEMENTATION OF NATIONAL STRATEGY.—Of  
6 the amount that is made available to carry out this sub-  
7 title for each fiscal year—

8 (1) 45 percent of the amount shall be made  
9 available to Federal agencies to develop and imple-  
10 ment the national strategy established under section  
11 112 in the administration of Federal land systems,  
12 of which not less than—

13 (A) 35 percent shall be allocated to the  
14 Department of the Interior—

15 (i) to operate the National Global  
16 Warming and Wildlife Science Center es-  
17 tablished under section 113(b); and

18 (ii) to carry out the policy established  
19 under section 111, and implement the na-  
20 tional strategy, in the administration of—

21 (I) the National Park System;

22 (II) the National Wildlife Refuge  
23 System; and

24 (III) public land of the Bureau of  
25 Land Management; and

1           (B) 10 percent shall be allocated to the  
2           Department of Agriculture to carry out the pol-  
3           icy established under section 111, and imple-  
4           ment the national strategy, in the administra-  
5           tion of the National Forest System;

6           (2) 25 percent of the amount shall be made  
7           available to Federal agencies to carry out the policy  
8           established under section 111, and to implement the  
9           national strategy, in the administration of fish and  
10          wildlife programs (other than for the operation and  
11          maintenance of Federal land), of which—

12           (A) 10 percent shall be allocated to the  
13           Department of the Interior to carry out endan-  
14           gered species, migratory bird, and other fish  
15           and wildlife programs administered by the  
16           United States Fish and Wildlife Service, other  
17           than operations and maintenance of the Na-  
18           tional Wildlife Refuges; and

19           (B) 15 percent shall be allocated to the  
20           Department of the Interior to implement or  
21           fund activities that assist wildlife and wildlife  
22           habitat in adapting to the impact of global  
23           warming under applicable cooperative grant  
24           programs, including—

1 (i) grants from the cooperative endan-  
2 gered species conservation fund established  
3 under section 6(i) of the Endangered Spe-  
4 cies Act of 1973 (16 U.S.C. 1535(i));

5 (ii) Private Stewardship Grants;

6 (iii) grants from the North American  
7 Wetlands Conservation Act (16 U.S.C.  
8 4401 et seq.);

9 (iv) grants from the multinational  
10 species conservation fund established under  
11 the heading “MULTINATIONAL SPECIES  
12 CONSERVATION FUND” of title I of the De-  
13 partment of the Interior and Related  
14 Agencies Appropriations Act, 1999 (16  
15 U.S.C. 4246);

16 (v) grants from the Neotropical Mi-  
17 gratory Bird Conservation Fund estab-  
18 lished by section 9(a) of the Neotropical  
19 Migratory Bird Conservation Act (16  
20 U.S.C. 6108(a)); and

21 (vi) grants under the National Fish  
22 Habitat Action Plan; and

23 (3) 30 percent of the amount shall be made  
24 available for grants to States and Indian tribes



1 through the State and tribal wildlife grants program  
2 authorized under section 121—

3 (A) to carry out activities that assist wild-  
4 life and wildlife habitat in adapting to the im-  
5 pact of global warming in accordance with  
6 State comprehensive wildlife conservation plans  
7 developed and approved under the program;  
8 and

9 (B) to revise or supplement existing State  
10 comprehensive wildlife conservation plans as  
11 necessary to include specific strategies for as-  
12 sisting wildlife and wildlife habitat in adapting  
13 to the impact of global warming.

14 (c) AVAILABILITY TO STATES AND INDIAN TRIBES.—

15 (1) IN GENERAL.—Subject to paragraphs (2)  
16 and (3), funding under this section may be made  
17 available to States and Indian tribes in accordance  
18 with this section.

19 (2) INITIAL 5-YEAR PERIOD.—During the 5-  
20 year period beginning on the date of enactment of  
21 this Act, a State shall not be eligible to receive funds  
22 under this section unless the head of the wildlife  
23 agency of the State has—

24 (A) approved, and provided to the Sec-  
25 retary, an express strategy to assist wildlife

1 populations in adapting to the impact of global  
2 warming in the State; and

3 (B) incorporated the strategy as a supple-  
4 ment to the comprehensive wildlife conservation  
5 plan of the State.

6 (3) SUBSEQUENT PERIOD.—After the 5-year  
7 period described in paragraph (2), a State shall not  
8 be eligible to receive funds under this section unless  
9 the State has submitted to the Secretary, and the  
10 Secretary has approved, a revision to the comprehen-  
11 sive wildlife conservation plan of the State that—

12 (A) describes the impact of global warming  
13 on the diversity and health of the wildlife popu-  
14 lations and habitat of the State;

15 (B) describes and prioritizes proposed con-  
16 servation actions to assist wildlife populations  
17 in adapting to the impact;

18 (C) establishes programs for monitoring  
19 the impact of global warming on wildlife popu-  
20 lations and wildlife habitat; and

21 (D) establishes methods for—

22 (i) assessing the effectiveness of con-  
23 servation actions taken to assist wildlife  
24 populations in adapting to the impact; and

1 (ii) adapting the actions to respond  
2 appropriately to new information or chang-  
3 ing conditions.

4 (d) MAINTENANCE OF EFFORT.—It is the intent of  
5 Congress that funding provided under this subtitle supple-  
6 ments (and not supplants) existing sources of funding for  
7 wildlife conservation.

8 **Subtitle B—State and Tribal**  
9 **Wildlife Grants Program**

10 **SEC. 121. STATE AND TRIBAL WILDLIFE GRANTS PROGRAM.**

11 (a) AUTHORIZATION OF PROGRAM.—The Secretary  
12 shall establish a State and tribal wildlife grants program  
13 under which the Secretary shall provide wildlife conserva-  
14 tion grants to States, the District of Columbia, the Com-  
15 monwealth of Puerto Rico, Guam, American Samoa, the  
16 Commonwealth of the Northern Mariana Islands, the  
17 United States Virgin Islands, and Indian tribes for the  
18 planning, development, and implementation of programs  
19 for the benefit of wildlife and wildlife habitat, including  
20 species that are not hunted or fished.

21 (b) ALLOCATION OF FUNDS.—

22 (1) IN GENERAL.—Subject to paragraph (2), of  
23 the amount that is made available to carry out this  
24 section for each fiscal year—

1 (A) 10 percent shall be used to conduct a  
 2 competitive grant program for Indian tribes  
 3 that are not subject to any other provision of  
 4 this section;

5 (B) of the amount remaining after the ap-  
 6 plication of subparagraph (A) and after the de-  
 7 duction of the administrative expenses incurred  
 8 by the Secretary to carry out this section—

9 (i) not more than  $\frac{1}{2}$  of 1 percent  
 10 shall be allocated to provide grants to each  
 11 of—

12 (I) the District of Columbia; and

13 (II) the Commonwealth of Puerto  
 14 Rico; and

15 (ii) not more than  $\frac{1}{4}$  of 1 percent  
 16 shall be allocated to each of—

17 (I) Guam;

18 (II) American Samoa;

19 (III) the Commonwealth of the  
 20 Northern Mariana Islands; and

21 (IV) the United States Virgin Is-  
 22 lands; and

23 (C) of the amount remaining after the ap-  
 24 plication of subparagraphs (A) and (B), the  
 25 Secretary shall apportion among the States—

1 (i)  $\frac{1}{3}$  based on the ratio that the land  
 2 area of each State bears to the total land  
 3 area of all States; and

4 (ii)  $\frac{2}{3}$  based on the ratio that the  
 5 population of each State bears to the total  
 6 population of all States.

7 (2) ADJUSTMENTS.—The amount apportioned  
 8 under paragraph (1)(C) for a fiscal year shall be ad-  
 9 justed equitably so that no State is apportioned  
 10 under that subparagraph an amount that is—

11 (A) less than 1 percent of the amount  
 12 available for apportionment under that subpara-  
 13 graph for the fiscal year; or

14 (B) more than 5 percent of the amount.

15 (c) COST SHARING.—

16 (1) PLAN DEVELOPMENT GRANTS.—The Fed-  
 17 eral share of the costs of developing or revising a  
 18 comprehensive wildlife conservation plan shall not  
 19 exceed 75 percent of the total costs of developing or  
 20 revising the plan.

21 (2) PLAN IMPLEMENTATION GRANTS.—The  
 22 Federal share of the costs of carrying out an activity  
 23 under an approved comprehensive wildlife conserva-  
 24 tion plan carried out with a grant under this section

1 shall not exceed 50 percent of the total costs of car-  
 2 rying out the activity.

3 (3) PROHIBITION ON USE OF FEDERAL  
 4 FUNDS.—The non-Federal share of costs of an activ-  
 5 ity carried out under this section shall not be paid  
 6 with amounts derived from any Federal grant pro-  
 7 gram.

8 (d) REQUIREMENT FOR PLAN.—

9 (1) IN GENERAL.—No State, territory, posses-  
 10 sion, or other jurisdiction (referred to in this sub-  
 11 section as an “eligible jurisdiction”) shall be eligible  
 12 for a grant under this section unless the eligible ju-  
 13 risdiction submits to the Secretary a comprehensive  
 14 wildlife conservation plan that—

15 (A) complies with paragraph (2); and

16 (B) considers the broad range of wildlife  
 17 and associated habitats of the eligible jurisdic-  
 18 tion, with appropriate priority placed on species  
 19 with the greatest conservation need and taking  
 20 into consideration the relative level of funding  
 21 available for the conservation of those species.

22 (2) CONTENTS.—The comprehensive wildlife  
 23 conservation plan of an eligible jurisdiction shall  
 24 contain—

1 (A) information on the distribution and  
2 abundance of species of wildlife (including low  
3 and declining populations as the fish and wild-  
4 life agency of the eligible jurisdiction considers  
5 appropriate) that are indicative of the diversity  
6 and health of the wildlife of the eligible jurisdic-  
7 tion;

8 (B) information on the location and rel-  
9 ative condition of key habitats and community  
10 types essential to the conservation of species  
11 identified under subparagraph (A);

12 (C) a description of—

13 (i) problems that may adversely affect  
14 species identified under subparagraph (A)  
15 or the habitats of the species; and

16 (ii) priority research and survey ef-  
17 forts that are needed to identify factors  
18 that may assist in the restoration and im-  
19 proved conservation of those species and  
20 habitats;

21 (D) a description of conservation actions  
22 proposed to conserve the identified species and  
23 habitats and priorities for implementing the ac-  
24 tions;

1 (E) a proposed plan for monitoring species  
2 identified under subparagraph (A) and the  
3 habitats of the species, for—

4 (i) monitoring the effectiveness of the  
5 conservation actions proposed under sub-  
6 paragraph (D); and

7 (ii) adapting the conservation actions  
8 to respond appropriately to new informa-  
9 tion or changing conditions;

10 (F) a description of procedures to review  
11 the comprehensive wildlife conservation plan at  
12 intervals of not to exceed 10 years;

13 (G) a plan for coordinating the develop-  
14 ment, implementation, review, and revision of  
15 the comprehensive wildlife conservation plan  
16 with Federal, State, and local agencies and In-  
17 dian tribes that manage significant land and  
18 water areas within the jurisdiction or admin-  
19 ister programs that significantly affect the con-  
20 servation of identified species and habitats; and

21 (H) provisions that provide an opportunity  
22 for broad public participation as an essential  
23 element of the development, revision, and imple-  
24 mentation of the comprehensive wildlife con-  
25 servation plan.



1 (e) EXISTING STRATEGIES AND ACTIVITIES.—

2 (1) STRATEGIES.—A State comprehensive wild-  
3 life strategy that was approved by the Secretary pur-  
4 suant to a provision of law in effect on the day be-  
5 fore the date of enactment of this Act shall remain  
6 in effect until the authority for the strategy expires  
7 or is revised in accordance with the terms of the  
8 strategy.

9 (2) ACTIVITIES.—Except as specified in section  
10 114(c), funds made available under this section may  
11 be used to carry out conservation and education ac-  
12 tivities conducted or proposed to be conducted pur-  
13 suant to a strategy described in paragraph (1).

14 (f) AUTHORIZATION OF APPROPRIATIONS.—There  
15 are authorized to be appropriated such sums as are nec-  
16 essary to carry out this section.

## 17 **TITLE II—OCEAN PROGRAMS**

### 18 **SEC. 201. SHORT TITLE.**

19 This title may be cited as the “Global Warming and  
20 Acidification Coastal and Ocean Resiliency Act”.

### 21 **SEC. 202. FINDINGS.**

22 Congress finds that—

23 (1) healthy, diverse, and productive coastal,  
24 ocean, and Great Lakes ecosystems, communities,

1 and habitats are critical to securing the full range  
2 of natural resource benefits for the United States;

3 (2) healthy ecosystems are more resilient than  
4 degraded ecosystems;

5 (3) resilient ecosystems can better adapt to  
6 changing environmental conditions, including global  
7 warming and ocean acidification;

8 (4) the effects of global warming, including rel-  
9 ative sea level rise and ocean acidification pose sig-  
10 nificant threats to healthy ocean, coastal, and Great  
11 Lakes ecosystems; and

12 (5) policies and programs designed to ensure  
13 the recovery, resilience, and health of coastal, ocean,  
14 and Great Lakes ecosystems and the resources of  
15 the ecosystems in the face of environmental change  
16 are an urgent national priority.

17 **Subtitle A—National Policy for**  
18 **Ocean, Coastal, and Great Lakes**  
19 **Ecosystem Health and Resil-**  
20 **ience**

21 **SEC. 211. NATIONAL POLICY ON OCEAN, COASTAL, AND**  
22 **GREAT LAKES ECOSYSTEM HEALTH AND RE-**  
23 **SILIENCY.**

24 It is the policy of the Federal Government, in co-  
25 operation with State, tribal, and affected local govern-

1 ments, other concerned public and private organizations,  
 2 coastal and ocean resource users, and citizens to take ef-  
 3 fective measures—

4           (1) to ensure the recovery, resiliency, and  
 5 health of ocean, coastal, and Great Lakes eco-  
 6 systems;

7           (2) to predict, plan for, and mitigate the impact  
 8 on coastal, ocean, and Great Lakes ecosystems from  
 9 global warming, including relative sea level rise, and  
 10 from ocean acidification;

11           (3) to plan for and mitigate the impact of the  
 12 development of offshore alternative energy resources  
 13 and appropriate carbon capture and sequestration  
 14 activities; and

15           (4) to cooperate and collaborate to support im-  
 16 proved and enhanced ocean and coastal management  
 17 in the United States.

18 **SEC. 212. NATIONAL OCEAN, COASTAL, AND GREAT LAKES**

19 **RESILIENCY STRATEGY.**

20 (a) REQUIREMENT.—

21           (1) IN GENERAL.—Not later than 2 years after  
 22 the date of enactment of this Act, the Secretary of  
 23 Commerce (referred to in this title as the “Sec-  
 24 retary”) shall implement the national policy under  
 25 section 211 by establishing a national strategy to

1 protect, maintain, and restore coastal and marine  
2 ecosystems so that the ecosystems are more resilient  
3 and better able to withstand the additional stresses  
4 associated with global warming, including relative  
5 sea level rise, and with ocean acidification.

6 (2) MEASURES.—In establishing the national  
7 strategy, the Secretary shall provide for research  
8 and design of practical measures—

9 (A) to avoid, alleviate, or mitigate the im-  
10 pact of global warming, including relative sea  
11 level rise, and of ocean acidification on ocean,  
12 coastal, and Great Lakes ecosystems and re-  
13 sources in the United States; and

14 (B) to ensure the recovery, resiliency, and  
15 health of ocean, coastal, and Great Lakes eco-  
16 systems.

17 (3) ADMINISTRATION.—Before and during the  
18 development of the national strategy, the Secretary  
19 shall—

20 (A) base the national strategy on the best  
21 available science;

22 (B) consult with—

23 (i) the Secretary of the Interior;

24 (ii) the Administrator of the Environ-  
25 mental Protection Agency;

1 (iii) Regional Fishery Management  
2 Councils;

3 (iv) State coastal management and  
4 fish and wildlife agencies;

5 (v) Indian tribes;

6 (vi) local governments;

7 (vii) conservation organizations;

8 (viii) scientists; and

9 (ix) other interested stakeholders; and

10 (C) provide public notice and opportunity  
11 for comment.

12 (b) CONTENTS.—

13 (1) IN GENERAL.—The Secretary shall include  
14 in the national strategy prioritized goals and meas-  
15 ures and a plan for implementation (including a  
16 timeframe)—

17 (A) to incorporate climate change adapta-  
18 tion strategies into the planning and manage-  
19 ment of ocean and coastal programs and re-  
20 sources administered by the Department of  
21 Commerce;

22 (B) to incorporate the strategies into the  
23 planning and management of ocean and coastal  
24 resources administered by Federal and non-

1 Federal governmental entities other than the  
2 Department of Commerce;

3 (C) to support predictions of relative sea  
4 level rise;

5 (D) to protect, maintain, and restore  
6 coastal and marine ecosystems so that the eco-  
7 systems are more resilient and better able to  
8 withstand the additional stresses associated  
9 with global warming, including relative sea level  
10 rise, and with ocean acidification;

11 (E) to protect ocean and coastal species  
12 from the impact of global warming and ocean  
13 acidification;

14 (F) to incorporate adaptation strategies for  
15 relative sea level rise into coastal zone planning;

16 (G) to protect and restore ocean and coast-  
17 al habitats to build healthy and resilient eco-  
18 systems, including the purchase of coastal and  
19 island land; and

20 (H) to promote the development of plans  
21 to mitigate at the community level the economic  
22 consequences of global warming, including rel-  
23 ative sea level rise and ocean acidification.

1           (2) COORDINATION WITH OTHER PLANS.—In  
2       developing the national strategy, the Secretary shall,  
3       to the maximum extent practicable—

4                   (A) take into consideration research and  
5       information contained in—

6                           (i) Federal, regional, and State man-  
7       agement and restoration plans;

8                           (ii) the reports of the Pew Oceans  
9       Commission and the United States Com-  
10      mission on Ocean Policy; and

11                          (iii) any other relevant reports and in-  
12      formation; and

13                   (B) encourage and take into account re-  
14      gional plans for protecting and restoring the  
15      health and resilience of ocean and coastal eco-  
16      systems, including the Great Lakes.

17       (c) REVISIONS.—Not later than 5 years after the  
18      date of the initial establishment of the national strategy  
19      and each 10 years thereafter, the Secretary shall revise  
20      the national strategy to reflect—

21                   (1) new information on the impact of global  
22      warming, including relative sea level rise, and of  
23      acidification on ocean, coastal and Great Lakes eco-  
24      systems and the resources of the ecosystems; and

1           (2) advances in the development of strategies  
2           for adapting to or mitigating for the impact.

3           (d) IMPLEMENTATION.—To achieve the goals of the  
4 national strategy, each Federal agency shall (directly and  
5 in cooperation with other agencies) implement measures  
6 for the conservation of ocean, coastal, and Great Lakes  
7 ecosystems under the jurisdiction of the Federal agency  
8 that promote the national strategy established under this  
9 section.

10 **SEC. 213. ADVISORY BOARD.**

11           (a) IN GENERAL.—The Secretary shall establish and  
12 appoint the members of an Advisory Board that is com-  
13 posed of not less than 10, and not more than 20, members  
14 recommended by the President of the National Academy  
15 of Sciences with expertise in ocean, coastal, and Great  
16 Lakes biology, ecology, fisheries, climate change, ocean  
17 acidification, and other relevant disciplines, including eco-  
18 nomics at the community level.

19           (b) FUNCTION.—The Advisory Board shall—

20               (1) provide scientific and technical advice and  
21               recommendations to the Secretary on—

22                       (A) the impact of global warming, includ-  
23                       ing relative sea level rise, and of acidification on  
24                       ocean and coastal ecosystems, resources, eco-



1           logical and coastal communities, and habitats;  
2           and

3                 (B) strategies and mechanisms to mitigate  
4           the impact of global warming, including relative  
5           sea level rise, and of acidification on ocean and  
6           coastal ecosystems;

7           (2) advise the Secretary on priorities for re-  
8           search or information collection; and

9           (3) advise the Secretary on priority needs for  
10          achieving systematic improvements in ocean and  
11          coastal resiliency for the purposes of section 212.

12 **SEC. 214. IMPLEMENTATION OF NATIONAL STRATEGY.**

13          (a) IN GENERAL.—Of the amount that is made avail-  
14          able to carry out this subtitle for each fiscal year—

15                 (1) 40 percent shall be made available for the  
16          carrying out of Federal responsibilities to develop  
17          and implement the national strategy established  
18          under section 212; and

19                 (2) 60 percent shall be used to make grants  
20          under subsection (b).

21          (b) GRANTS.—

22                 (1) IN GENERAL.—The Secretary shall make  
23          grants to eligible entities to pay the Federal share  
24          (as determined by the Secretary) to carry out activi-  
25          ties that contribute to or result in protecting, main-

1        taining, or restoring the resilience and health of  
2        coastal, ocean, and Great Lakes ecosystems and re-  
3        sources, including planning and scientific research to  
4        support such purposes.

5            (2) ELIGIBLE ENTITIES.—To be eligible to re-  
6        ceive a grant under this subsection, an entity shall  
7        be—

8            (A) a Federal agency;

9            (B) an agency of a State or political sub-  
10       division;

11          (C) a regional partnership;

12          (D) an Indian tribe;

13          (E) an institution of higher education; or

14          (F) a nongovernmental organization.

15            (3) ELIGIBLE USES.—A grant provided under  
16       this subsection may only be used to carry out an ac-  
17       tivity described in paragraph (1) that is approved by  
18       the Secretary.

19            (4) PRIORITIZATION.—In approving applica-  
20       tions under this subsection, the Secretary shall give  
21       priority to proposals that—

22            (A) implement measures to enhance the  
23       health or resilience of coastal, ocean, or Great  
24       Lakes areas of national significance, including  
25       biological, historical, and cultural measures;

1 (B) result in systematic improvements to  
2 the resilience and health of coastal and ocean  
3 ecosystems and resources;

4 (C) are sufficiently cooperative and broad  
5 in geographic scope to address the problem or  
6 need; and

7 (D) demonstrate cost-effectiveness based  
8 on ecosystems services provided per dollar of  
9 Federal expenditure, including consideration of  
10 the potential for a funding match.

11 (5) GUIDANCE.—The Secretary shall issue  
12 guidance regarding a process for—

13 (A) the approval or disapproval of applica-  
14 tions for grants under this subsection, including  
15 opportunities for public comment; and

16 (B) the establishment of annual and  
17 multiyear national funding priorities.

18 (6) EVALUATION.—

19 (A) IN GENERAL.—The Secretary shall es-  
20 tablish a system to provide for an annual exter-  
21 nal evaluation of each grant that measures the  
22 progress of implementation of the grant against  
23 the goals and objectives of the grant project.

1 (B) PUBLIC AVAILABILITY.—The Secretary  
2 shall make the results of the evaluations pub-  
3 licly available.

4 **SEC. 215. REPORTS.**

5 (a) NATIONAL ACADEMY OF SCIENCES.—The Sec-  
6 retary shall enter into an arrangement with the National  
7 Academy of Sciences under which the Academy shall re-  
8 port to Congress, not later than 2 years after the date  
9 of enactment of this Act, on the current and projected im-  
10 pact of global warming, including relative sea level rise,  
11 of ocean acidification, and on effective mitigation strate-  
12 gies for the ocean, coastal, and Great Lakes ecosystems  
13 and resources of the United States.

14 (b) REPORT TO CONGRESS.—The Secretary shall  
15 make available to Congress a copy of the strategy and im-  
16 plementation plan established under this subtitle (includ-  
17 ing any updates to the strategy and plan).

18 **SEC. 216. AUTHORIZATION OF APPROPRIATIONS.**

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

1     **Subtitle B—Planning for Climate**  
2             **Change in Coastal Zone**

3     **SEC. 221. PLANNING FOR CLIMATE CHANGE IN COASTAL**  
4             **ZONE.**

5             (a) IN GENERAL.—The Coastal Zone Management  
6     Act of 1972 (16 U.S.C. 1451 et seq.) is amended by add-  
7     ing at the end the following:

8     **“SEC. 320. CLIMATE CHANGE RESILIENCY PLANNING.**

9             “(a) DEFINITIONS.—In this section, the terms ‘eco-  
10     logical processes’, ‘habitat’, and ‘wildlife’ have the mean-  
11     ings given those terms in section 2 of the Global Warming  
12     Wildlife Survival Act.

13            “(b) PROGRAM.—The Secretary shall establish, con-  
14     sistent with the national policies established under section  
15     303, a coastal climate change resiliency planning and re-  
16     sponse program to—

17               “(1) provide assistance to coastal states to de-  
18     velop and implement coastal climate change resili-  
19     ency plans pursuant to approved management pro-  
20     grams approved under section 306, to prepare for  
21     and reduce, in an environmentally sensitive manner,  
22     the negative consequences to the coastal zone that  
23     may result from global warming and ocean acidifica-  
24     tion; and

1           “(2) provide financial and technical assistance  
 2           and training to enable coastal states to implement  
 3           plans developed pursuant to this section through en-  
 4           forceable policies of the coastal states.

5           “(c) GUIDELINES.—Not later than 180 days after the  
 6           date of enactment of this section, the Secretary, in con-  
 7           sultation with the coastal states, shall issue guidelines for  
 8           the implementation of the grant program established  
 9           under subsection (d).

10          “(d) CLIMATE CHANGE RESILIENCY PLANNING  
 11          GRANTS.—

12               “(1) IN GENERAL.—Subject to the availability  
 13               of appropriations, the Secretary may make a grant  
 14               to any coastal state for the purpose of developing  
 15               and implementing climate change resiliency plans  
 16               pursuant to guidelines issued by the Secretary under  
 17               subsection (c).

18               “(2) PLAN CONTENT.—

19                   “(A) IN GENERAL.—A plan developed with  
 20                   a grant under this section shall include adapta-  
 21                   tion strategies for fish and wildlife, fish and  
 22                   wildlife habitat, and associated ecological proc-  
 23                   ess as are necessary to assist fish and wildlife,  
 24                   fish and wildlife habitat, and associated ecologi-  
 25                   cal processes to adapt to, become resilient to,

1 and mitigate the impact of, global warming and  
2 ocean acidification.

3 “(B) INCLUSIONS.—The plans shall spe-  
4 cifically include—

5 “(i) adaptive management strategies  
6 for land and water use to respond or adapt  
7 to changing environmental conditions, in-  
8 cluding strategies to protect biodiversity  
9 and establish habitat buffer zones, migra-  
10 tion corridors, and climate refugia; and

11 “(ii) requirements—

12 “(I) to initiate and maintain  
13 long-term monitoring of environ-  
14 mental change to assess coastal zone  
15 resiliency; and

16 “(II) if necessary, to adjust  
17 adaptive management strategies and  
18 new planning guidelines to attain the  
19 policies under section 303.

20 “(3) ALLOCATION.—Grants under this section  
21 shall be—

22 “(A) available only to coastal states with  
23 management programs approved by the Sec-  
24 retary under section 306; and

1           “(B) allocated among the coastal states in  
2           a manner consistent with regulations promul-  
3           gated pursuant to section 306(c).

4           “(4) PRIORITY.—In the awarding grants under  
5           this subsection, the Secretary may give priority to  
6           any coastal state that has received grant funding to  
7           develop program changes pursuant to paragraphs  
8           (1), (2), (3), (5), (6), (7), and (8) of section 309(a).

9           “(5) TECHNICAL ASSISTANCE.—The Secretary  
10          may provide technical assistance to a coastal state  
11          (consistent with section 310) to ensure the timely  
12          development of plans supported by grants awarded  
13          under this subsection.

14          “(6) FEDERAL APPROVAL.—In order to be eligi-  
15          ble for a grant under subsection (e), a coastal state  
16          shall have the plan of the coastal state developed  
17          under this section approved by the Secretary.

18          “(e) COASTAL RESILIENCY PROJECT GRANTS.—

19                 “(1) IN GENERAL.—Subject to the availability  
20                 of appropriations, the Secretary may make grants to  
21                 any coastal state that has a climate change resil-  
22                 iency plan approved under subsection (d)(6) for im-  
23                 plementation of the plan.

24                 “(2) PROGRAM REQUIREMENTS.—



1           “(A) IN GENERAL.—Not later than 90  
 2           days after the date of approval of the first plan  
 3           approved under subsection (d)(6), the Secretary  
 4           shall publish in the Federal Register require-  
 5           ments regarding applications, allocations, eligi-  
 6           ble activities, and all terms and conditions for  
 7           grants awarded under this subsection.

8           “(B) MERIT-BASED AWARDS.—No less  
 9           than 30 percent of the funds made available for  
 10          any fiscal year for grants under this subsection  
 11          shall be awarded through a merit-based com-  
 12          petitive process.”.

13          (b) AUTHORIZATION OF APPROPRIATIONS.—Section  
 14          318(a) of the Coastal Zone Management Act of 1972 (16  
 15          U.S.C. 1464(a)) is amended—

16               (1) in paragraph (1), by striking “and” at the  
 17               end;

18               (2) in paragraph (2), by striking the period at  
 19               the end and inserting “; and”; and

20               (3) by adding by adding at the end the fol-  
 21               lowing:

22               “(3) for grants under subsections (d) and (e) of  
 23               section 320, such sums as are necessary for each fis-  
 24               cal year.”.

1   **TITLE III—SPECIAL IMPERILED**  
2                   **SPECIES PROGRAMS**

3   **SEC. 301. DEFINITIONS.**

4       In this title:

5           (1) DIRECTOR.—The term “Director” means  
6       the Director of the United States Geological Survey.

7           (2) ECOSYSTEM.—The term “ecosystem”  
8       means any complex of a plant, animal, fungal, and  
9       microorganism community and the associated non-  
10      living environment of the community that interacts  
11      as an ecological unit, including the species and the  
12      viability of species within the community.

13          (3) IMPERILED SPECIES.—The term “imperiled  
14      species” means—

15           (A) a species listed as an endangered spe-  
16      cies or threatened species under the Endan-  
17      gered Species Act of 1973 (16 U.S.C. 1531 et  
18      seq.);

19           (B) a species proposed for listing under  
20      that Act;

21           (C) a candidate species under that Act.;

22           (D) a species listed as an endangered spe-  
23      cies under any State law; and

24           (E) a species, the population of which is  
25      declining at a significant rate.

1 **SEC. 302. REGIONAL ECOLOGICAL SYMPOSIA.**

2 (a) IN GENERAL.—Not later than 18 months after  
3 the date of enactment of this Act, the Director, in coordi-  
4 nation with the Director of the United States Fish and  
5 Wildlife Service and the Director of the National Marine  
6 Fisheries Service, shall convene multiple regional scientific  
7 symposia to examine the ecological impact of global warm-  
8 ing on each imperiled species in each ecosystem of the  
9 United States.

10 (b) COMPOSITION.—A symposium convened in a re-  
11 gion shall include—

12 (1) scientific representatives from Federal agen-  
13 cies with species- or ecosystem-related activities in  
14 the region;

15 (2) if appropriate, scientists or technical experts  
16 representing State, local, and tribal governments;  
17 and

18 (3) scientific experts from institutions of higher  
19 education and scientific societies, and any other  
20 independent scientists with sufficient qualifications  
21 and credentials, particularly with respect to site-spe-  
22 cific ecological conditions and the status of species  
23 and ecological communities of concern in the region.

24 (c) DUTIES.—A symposium convened in a region  
25 shall—

1           (1) identify and assess fish, wildlife, and plant  
2           species, the habitats of the species, and the natural  
3           processes, ecosystems, and landscapes that support  
4           the habitats, that are most imperiled by global  
5           warming; and

6           (2) focus on imperiled species that are located  
7           on public land, declining migratory birds species,  
8           and other species that are protected by treaty or  
9           international agreement.

10 **SEC. 303. NATIONAL ACADEMY OF SCIENCES REPORT.**

11           (a) IN GENERAL.—As soon as practicable after the  
12           date of enactment of this Act, the Secretary of the Interior  
13           shall enter into an arrangement with the National Acad-  
14           emy of Sciences under which the Academy shall convene  
15           a panel—

16           (1) to examine and analyze the reports, data,  
17           documents, and other information created by the  
18           multiple regional scientific symposia convened in ac-  
19           cordance with section 302(a); and

20           (2) to prepare a report that takes into consider-  
21           ation each report, data, document, and other item of  
22           information described in paragraph (1).

23           (b) CONTENTS OF REPORT.—The report required  
24           under subsection (a)(2) shall include—

25           (1) an identification and assessment of—

1 (A) the impact of global warming on each  
2 imperiled species and ecosystem in the United  
3 States (including the territories of the United  
4 States); and

5 (B) different ecological scenarios that may  
6 result from different intensities, rates, and  
7 other critical manifestations of global warming;

8 (2) recommendations for specific roles to be  
9 played by Federal, State, local, and tribal agencies  
10 and private parties in assisting imperiled species in  
11 adapting to, and surviving the impacts of, climate  
12 change, including a recommended list of prioritized  
13 remediation actions by those agencies and parties;  
14 and

15 (3) other relevant ecological information.

16 (c) PUBLIC AVAILABILITY.—The recommendations  
17 and report required under this section shall be made avail-  
18 able to the public as soon as practicable after the rec-  
19 ommendations and report are complete.

20 (d) USE OF REPORT BY CERTAIN HEADS OF FED-  
21 ERAL AGENCIES.—The Secretary of Agriculture, the Sec-  
22 retary of Commerce, and the Secretary of the Interior, in  
23 carrying out each national policy described in sections 111

- 1 and 211, shall take into account the recommendations and
- 2 report required under this section.

