

111TH CONGRESS  
1ST SESSION

# S. 1566

To create the American Arctic Adaptation Grant Program to prevent or mitigate effects of Arctic climate change, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

AUGUST 3, 2009

Mr. BEGICH 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 create the American Arctic Adaptation Grant Program to prevent or mitigate effects of Arctic climate change, 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.**

4       This Act may be cited as the “Arctic Climate Adapta-  
5       tion Act”.

6       **SEC. 2. FINDINGS.**

7       Congress finds the following:

8               (1) The United States is an Arctic Nation  
9       with—

1 (A) an approximately 700-mile border with  
2 the Arctic Ocean;

3 (B) more than 100,000,000 acres of land  
4 above the Arctic Circle; and

5 (C) a broader area within the Arctic iso-  
6 therm that encompasses most of the Bering  
7 Sea.

8 (2) The Arctic region of the United States—

9 (A) is home to an indigenous population  
10 which has subsisted for millennia on the abun-  
11 dance in marine mammals, fish, and wildlife,  
12 many of which are unique to the region;

13 (B) is known to the indigenous population  
14 as Inuvikput or the “place where we live”; and

15 (C) has produced more than  
16 16,000,000,000 barrels of oil and, according to  
17 the United States Geological Survey, may hold  
18 an additional 30,000,000,000 barrels of oil and  
19 220,000,000,000,000 cubic feet of natural gas,  
20 making the region of fundamental importance  
21 to the national interest of the United States.

22 (3) Temperatures in the United States Arctic  
23 region have warmed by 3 to 4 degrees Celsius over  
24 the past half-century, a rate of increase that is twice  
25 the global average.

1           (4) The Arctic ice pack is rapidly diminishing  
2           and thinning, and the National Oceanic and Atmos-  
3           pheric Administration estimates the Arctic Ocean  
4           may be ice free during summer months in as few as  
5           30 years.

6           (5) Such changes to the Arctic region are hav-  
7           ing a significant impact on the indigenous people of  
8           the Arctic, their communities and ecosystems, as  
9           well as the marine mammals, fish, and wildlife upon  
10          which they depend.

11          (6) Such changes are opening new portions of  
12          the United States Arctic continental shelf to possible  
13          development for offshore oil and gas, commercial  
14          fishing, marine shipping, and tourism.

15          (7) Unprecedented storms over an area of Arc-  
16          tic waters that are now ice-free are eroding sections  
17          of Alaska shoreline at rates of 45 feet or more annu-  
18          ally. Thawing permafrost is causing roads and the  
19          foundations of public buildings and homes to buckle.  
20          Entire Alaskan Arctic villages are at risk of serious  
21          erosion or of being washed into the sea.

22          (8) As many as 4 of Alaska's coastal villages  
23          are at immediate risk and will face overwhelming re-  
24          location costs in the during the period from 2009  
25          through 2014 as the lack of winter ice pack allows

1 increased wave energy to erode beachfronts that are  
2 no longer held together by frozen soil. The Govern-  
3 ment Accountability Office estimates that relocation  
4 costs for those 4 villages will be \$450,000,000 and  
5 that as many as 30 additional Alaskan coastal vil-  
6 lages will face similar threats during the period from  
7 2009 through 2019.

8 (9) A study conducted by the Government Ac-  
9 countability Office published in June 2009, states  
10 that “most of Alaska’s more than 200 Native vil-  
11 lages were affected to some degree by flooding and  
12 erosion,” and recommends that “Congress may wish  
13 to consider designating or creating a lead Federal  
14 entity that could work in conjunction with the lead  
15 state agency to coordinate and oversee village reloca-  
16 tion efforts”.

17 (10) A 2009 study by the University of Alas-  
18 ka’s Institute for Social and Economic Research  
19 concluded that the added adaptation costs for Alas-  
20 ka’s public infrastructure resulting from climate  
21 change impacts will range up to \$6,000,000,000 by  
22 2030.

23 (11) Coastal erosion and thawing permafrost  
24 threaten the public infrastructure, including airports  
25 which are often the only link to the outside world,

1       roadways, and other basic utilities, of many of Alas-  
2       ka’s 267 incorporated communities, with an esti-  
3       mated adaptation cost in the tens of billions of dol-  
4       lars during the several decades following the date of  
5       the enactment of this Act.

6           (12) Additionally, rising ocean temperatures  
7       and increased ocean acidification result in changes  
8       in fish habitats and invasive fish species jeopardizing  
9       both Alaska’s commercial fisheries, which produce  
10      60 percent of the United States commercial catch,  
11      and the subsistence hunting, fishing, and gathering  
12      that supplies as much as 90 percent of the protein  
13      supply for as many as 214 economically disadvan-  
14      taged Alaskan Native villages from Metlakatla in the  
15      south to Point Barrow in the north.

16 **SEC. 3. DEFINITIONS.**

17       In this Act:

18           (1) DENALI COMMISSION.—The term “Denali  
19       Commission” means the Denali Commission estab-  
20       lished pursuant to section 303(a) of the Denali Com-  
21       mission Act of 1998 (42 U.S.C. 3121 note).

22           (2) PROGRAM.—The term “Program” means  
23       the American Arctic Adaptation Grant Program es-  
24       tablished under section 4(a).

1 **SEC. 4. AMERICAN ARCTIC ADAPTATION GRANT PROGRAM.**

2 (a) ESTABLISHMENT.—There is established in the  
3 Department of Commerce a program to be known as the  
4 “American Arctic Adaptation Grant Program” to award  
5 grants to eligible entities to carry out eligible projects, as  
6 described in this section.

7 (b) COORDINATION.—

8 (1) IN GENERAL.—The Denali Commission  
9 shall—

10 (A) be the Alaska Project Coordinator for  
11 the Program; and

12 (B) select, administer, and coordinate  
13 projects awarded grants under the Program.

14 (2) CONSULTATION.—In carrying out its re-  
15 sponsibilities as the Alaska Project Coordinator, the  
16 Denali Commission shall consult with affected com-  
17 munities, the State of Alaska, the United States  
18 Army Corps of Engineers, the University of Alaska,  
19 the Arctic Research Commission established pursu-  
20 ant to section 103 of the Arctic Research and Policy  
21 Act of 1984 (15 U.S.C. 4102), and the Inuit Cir-  
22 cumpolar Council and the Northern Forum or suc-  
23 cessor organizations.

24 (3) ADAPTATION ADVISORY COMMITTEE.—

25 (A) ESTABLISHMENT.—The Denali Com-  
26 mission shall establish an Adaptation Advisory

1 Committee composed of public and private  
2 members to advise the Denali Commission on  
3 climate adaptation needs and investments and  
4 on the award of grants under the Program.

5 (B) MEMBERSHIP.—The Adaptation Advi-  
6 sory Committee shall include one representative  
7 of each of the following:

8 (i) The Alaska Federation of Natives.

9 (ii) The Inter-Tribal Council.

10 (iii) The Alaska Native Science and  
11 Engineering Program of the University of  
12 Alaska.

13 (iv) The Alaska Associated General  
14 Contractors Association.

15 (v) The Alaska Department of Trans-  
16 portation.

17 (vi) The Alaska Department of Com-  
18 merce, Community, and Economic Devel-  
19 opment.

20 (vii) The United States Army Corps  
21 of Engineers.

22 (viii) Organized labor.

23 (C) MEETINGS.—The Denali Commission  
24 shall meet with the Adaptation Advisory Com-

1 mission not less often than once every 6  
2 months.

3 (c) OTHER FUNDS FOR GRANT AWARDS.—To the ex-  
4 tent practicable and appropriate, the Denali Commission  
5 may combine funds from the Program with awards from  
6 other appropriate Federal or State infrastructure develop-  
7 ment, construction, or maintenance programs to provide  
8 funds to carry out an eligible project.

9 (d) ELIGIBLE ENTITY DEFINED.—In this section,  
10 the term “eligible entity” means—

11 (1) the State of Alaska; or

12 (2) a borough and community organized under  
13 the Constitution of the State of Alaska.

14 (e) ELIGIBLE PROJECT DEFINED.—In this section,  
15 the term “eligible project” means a project to repair, re-  
16 place, or maintain an element of public infrastructure in  
17 a coastal or remote Alaskan village damaged or threatened  
18 by the effects of climate change, including flooding, storm  
19 surge, coastal or riparian erosion, melting permafrost, and  
20 land subsidence not associated with normal seasonal ef-  
21 fects. An eligible project—

22 (1) may be designed to address—

23 (A) damage to a public transportation sys-  
24 tem and infrastructure or to a public or pri-  
25 vately owned building;



1 (B) negative impacts to human health;

2 (C) interruption of natural migration cy-  
3 cles or disruption of habitats; or

4 (D) disruption of economic activities, in-  
5 cluding projects to develop new northern sea  
6 routes; and

7 (2) shall be of a permanent nature, and de-  
8 signed, built, and maintained to maximize sustain-  
9 ability and resiliency.

10 (f) APPLICATION.—An eligible entity seeking a grant  
11 under the Program shall submit an application to the  
12 Denali Commission at such time and in such manner as  
13 the Commission shall require. Each such application shall,  
14 at a minimum, include a complete description of—

15 (1) the eligible project proposed to be carried  
16 out with such grant; and

17 (2) the extent to which one or more effects of  
18 climate change have necessitated, or given ongoing  
19 and cumulative effects could necessitate, such eligi-  
20 ble project.

21 (g) SELECTION CRITERIA.—In selecting an eligible  
22 project to be carried out with a grant under the Program,  
23 the Denali Commission—

24 (1) may select the eligible project only if the eli-  
25 gible entity agrees—

1 (A) to submit to a directed process in  
 2 which the staff of the Denali Commission pro-  
 3 vides technical assistance and guidance through  
 4 the planning phase, design phase, and construc-  
 5 tion phase of the eligible project; and

6 (B) that not more than 25 percent of the  
 7 grant funds may be used for administrative ex-  
 8 penses; and

9 (2) shall give a preference to an eligible project  
 10 that will be carried out with non-Federal funds to  
 11 match the amount of the grant funds.

12 (h) WORK PLAN.—The Denali Commission shall pub-  
 13 lish an annual work plan for the Program. Each such plan  
 14 shall include—

15 (1) a description of each eligible project ap-  
 16 proved to receive a grant under the Program during  
 17 the previous year;

18 (2) updates on the planning, design, and con-  
 19 struction of each eligible project approved to receive  
 20 such a grant in a prior year; and

21 (3) guidance to eligible entities seeking to ob-  
 22 tain such a grant for the following year.

## 23 **SEC. 5. ARCTIC RESEARCH.**

24 (a) REQUIREMENT TO CONDUCT RESEARCH.—Dur-  
 25 ing fiscal year 2010, and in collaboration with the State

1 of Alaska, the University of Alaska, and relevant agencies  
2 of the United States, the Denali Commission shall conduct  
3 research on the best practices for climate related adaption  
4 that are being used or researched by other polar nations  
5 or foreign or domestic research institutions or institutions  
6 of higher learning, and which could be used by Arctic com-  
7 munities in Alaska. Such research shall focus on—

8 (1) environmentally sensitive design;

9 (2) clean energy alternatives; and

10 (3) innovative transportation, telecommunica-  
11 tions, and other infrastructure solutions.

12 (b) REPORT.—Not later than December 31, 2010,  
13 the Denali Commission shall submit to Congress, the Sec-  
14 retary of Commerce, the Secretary of the Treasury, the  
15 Assistant Secretary of the Army (Civil Works), and the  
16 Governor of Alaska a report on the research carried out  
17 under subsection (a).

18 **SEC. 6. AUTHORIZATION OF APPROPRIATIONS.**

19 (a) AMERICAN ARCTIC ADAPTATION GRANT PRO-  
20 GRAM.—There is authorized to be appropriated to the Sec-  
21 retary of Commerce such sums as may be necessary to  
22 carry out the Program.

1       (b) RESEARCH.—There is authorized to be appro-  
2   priated \$5,000,000 for fiscal year 2010 to carry out sec-  
3   tion 5.

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