## 111TH CONGRESS 1ST SESSION

## S. 810

To establish 4 regional institutes as centers of excellence for research, planning, and related efforts to assess and prepare for the impacts of climate change on ocean and coastal areas and for other purposes.

## IN THE SENATE OF THE UNITED STATES

APRIL 2, 2009

Mr. Whitehouse introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

## A BILL

- To establish 4 regional institutes as centers of excellence for research, planning, and related efforts to assess and prepare for the impacts of climate change on ocean and coastal areas 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 "Ocean and Coastal
  - 5 Adaptation Planning Act".
  - 6 SEC. 2. FINDINGS.
- 7 Congress makes the following findings:

1	(1) Oceans are a major carbon sink and have
2	absorbed nearly 50 percent of all anthropogenic car-
3	bon dioxide emitted into the atmosphere since the
4	beginning of the Industrial Revolution.
5	(2) The increased absorption of carbon dioxide
6	by the oceans due to rising greenhouse gas emissions
7	in the atmosphere has—
8	(A) increased ocean acidity, which nega-
9	tively impacts the health of marine and coastal
10	ecosystems and resources; and
11	(B) influenced the important role oceans
12	play in the global cycling of carbon, compound-
13	ing the effects of temperature change on the
14	ability of ocean and coastal areas to serve as
15	carbon sinks.
16	(3) Climate change has contributed to sea levels
17	rising 7 inches during the 20th century and nearly
18	1.5 inches between 1993 and 2003.
19	(4) Higher atmospheric concentrations of green-
20	house gases result in increased air temperatures,
21	which in turn lead to warmer ocean waters and re-
22	sulting changes in ecosystem dynamics.
23	(5) Climate change will greatly amplify risks to
24	coastal populations, economies, and ecosystems

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from—

1	(A) saltwater inundation of low-lying
2	coastal regions;
3	(B) more frequent flooding due to storm
4	surges;
5	(C) shifts in plant and animal species dis-
6	tributions; and
7	(D) worsening beach erosion from relative
8	sea level rise and increased storm inundation.
9	(6) Researching the effects of climate change
10	and ocean acidification on coastal environments and
11	the ways in which coastal communities must adapt
12	to the challenges these effects will bring is an essen-
13	tial component to the overall response to climate
14	change and greenhouse gas pollution.
15	SEC. 3. DEFINITIONS.
16	In this Act:
17	(1) Administrators.—The term "Administra-
18	tors" means the Administrator of the National Oce-
19	anic and Atmospheric Administration and the Ad-
20	ministrator of the Environmental Protection Agency
21	(2) Institute.—The term "Institute" means
22	each of the 4 Institutes for Ocean and Coastal Ad-
23	aptation to Climate Change and Ocean Acidification
24	established under section 4(a).

1	SEC. 4. INSTITUTES FOR OCEAN AND COASTAL ADAPTA-
2	TION TO CLIMATE CHANGE.
3	(a) Establishment.—The Administrators shall
4	jointly establish 4 regional institutes, to be known as Insti-
5	tutes for Ocean and Coastal Adaptation to Climate
6	Change and Ocean Acidification, at institutions of higher
7	education in the United States.
8	(b) Purpose.—The purpose of each Institute shall
9	be—
10	(1) to conduct research, planning, and related
11	efforts to assess, prepare for, and adapt to the ongo-
12	ing and expected impacts of climate change and
13	ocean acidification on ocean and coastal areas and
14	resources, including the Great Lakes; and
15	(2) to create centers of excellence—
16	(A) to document and predict coastal and
17	ocean effects of climate change and ocean acidi-
18	fication; and
19	(B) to serve as principal national and
20	international resources for technical expertise
21	on adaptation strategies, including the enhance-
22	ment and preservation of ecosystem and re-
23	source resilience, necessary for ocean and coast-
24	al areas to respond to the impacts of climate
25	change and ocean acidification.
26	(c) Selection.—

1	(1) LOCATION.—The Administrators shall joint-
2	ly select 1 institution of higher education to serve as
3	an Institute in each of the following regions:
4	(A) The Great Lakes Region, which shall
5	include Illinois, Indiana, Michigan, Minnesota,
6	Ohio, and Wisconsin.
7	(B) The Northeast Region, which shall in-
8	clude Connecticut, Delaware, Maine, Maryland,
9	Massachusetts, New Hampshire, New Jersey,
10	New York, Rhode Island, and Vermont.
11	(C) The Southeast and Gulf Coast Region,
12	which shall include Alabama, Florida, Georgia,
13	Louisiana, Mississippi, North Carolina, Puerto
14	Rico, South Carolina, Texas, Virginia, and the
15	Virgin Islands.
16	(D) The Western and Pacific Region,
17	which shall include Alaska, American Samoa,
18	California, Guam, Hawaii, the Northern Mar-
19	iana Islands, Oregon, and Washington.
20	(2) Application.—An institution of higher
21	education seeking to be selected as an Institute shall
22	submit an application to the Administrators at such
23	time, in such manner, and containing such informa-

tion as the Administrators may reasonably require.

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1	(d) Grants for Institutes.—The Administrators
2	shall award a grant to each institutions of higher edu-
3	cation selected as an Institute to carry out the purposes
4	of the Institute.
5	(e) Schedule.—The Administrators shall—
6	(1) not later than 9 months after the date of
7	the enactment of this Act, begin accepting the appli-
8	cations referred to in subsection $(c)(2)$ ; and
9	(2) not later than 90 days after the first date
10	that applications are accepted under paragraph
11	(1)—
12	(A) select each institution of higher edu-
13	cation to serve as an Institute; and
14	(B) award a grant to each such institution,
15	as authorized under subsection (d).
16	SEC. 5. AUTHORIZATION OF APPROPRIATIONS.
17	There are authorized to be appropriated such sums
18	as may be necessary to carry out this Act.

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