

117TH CONGRESS  
1ST SESSION

# H. R. 4235

To require the Administrator of the National Oceanic and Atmospheric Administration to award grants to certain entities for purposes of carrying out climate-resilient living shoreline projects that protect coastal communities, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

JUNE 29, 2021

Mr. PALLONE introduced the following bill; which was referred to the Committee on Natural Resources, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To require the Administrator of the National Oceanic and Atmospheric Administration to award grants to certain entities for purposes of carrying out climate-resilient living shoreline projects that protect coastal communities, 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 “Living Shorelines Act”.

5 **SEC. 2. DEFINITIONS.**

6 In this Act:

1           (1) ADMINISTRATOR.—The term “Adminis-  
2           trator” means the Administrator of the National  
3           Oceanic and Atmospheric Administration.

4           (2) INDIAN TRIBE.—The term “Indian Tribe”  
5           has the meaning given that term in section 4 of the  
6           Indian Self-Determination and Education Assistance  
7           Act (25 U.S.C. 5304).

8           (3) LIVING SHORELINE PROJECT.—The term  
9           “living shoreline project” means a coastal natural  
10          infrastructure project that—

11                (A) restores or stabilizes a shoreline using  
12                predominately natural materials to create buff-  
13                ers to attenuate the impact of coastal storms,  
14                currents, flooding, and wave energy and to pre-  
15                vent or minimize shoreline erosion while pro-  
16                viding a net ecological and climate benefit to  
17                ecosystems and habitats;

18                (B) to the extent possible, maintains or re-  
19                stores existing natural slopes and connections  
20                between uplands and adjacent wetlands or sur-  
21                face waters; and

22                (C) as necessary, can retrofit hardened  
23                structures or surfaces to create blended projects  
24                that combine living shoreline elements with  
25                hardened techniques.

1           (4) NATURE-BASED INFRASTRUCTURE.—The  
2           term “nature-based infrastructure” means a feature  
3           that is created by human design, engineering, and  
4           construction to provide risk reduction in coastal  
5           areas by acting in conjunction with natural proc-  
6           esses.

7           (5) STATE.—The term “State” means each of  
8           the several States, the District of Columbia, the  
9           Commonwealth of Puerto Rico, the United States  
10          Virgin Islands, Guam, American Samoa, and the  
11          Commonwealth of the Northern Mariana Islands.

12 **SEC. 3. LIVING SHORELINE GRANT PROGRAM.**

13          (a) ESTABLISHMENT.—The Administrator shall  
14          award grants to eligible entities for purposes of—

15               (1) designing and implementing large- and  
16               small-scale, climate-resilient living shoreline projects;  
17               and

18               (2) applying innovative uses of natural mate-  
19               rials and systems to protect coastal communities,  
20               habitats, and natural system functions.

21          (b) ELIGIBLE ENTITIES.—For purposes of this sec-  
22          tion, an eligible entity is any of the following:

23               (1) A unit of a State or local government.

24               (2) An organization described in section  
25          501(c)(3) of the Internal Revenue Code of 1986 that

1 is exempt from taxation under section 501(a) of  
2 such Code.

3 (3) An Indian Tribe.

4 (c) PROJECT PROPOSALS.—To be eligible to receive  
5 a grant under this section, an eligible entity shall submit  
6 to the Administrator a proposal for a living shoreline  
7 project that includes—

8 (1) monitoring, data collection, and measurable  
9 performance criteria with respect to the project; and

10 (2) an engagement or education component that  
11 seeks and solicits feedback from the local or regional  
12 community most directly affected by the proposal.

13 (d) PROJECT SELECTION.—

14 (1) CRITERIA.—

15 (A) IN GENERAL.—The Administrator  
16 shall select eligible entities to receive grants  
17 under this section based on criteria developed  
18 by the Administrator.

19 (B) CONSIDERATIONS.—In developing cri-  
20 teria under subparagraph (A) to evaluate a pro-  
21 posed living shoreline project, the Administrator  
22 shall take into account—

23 (i) the potential of the project to pro-  
24 tect the community and maintain the via-  
25 bility of the environment, such as through

1 protection of ecosystem functions, environ-  
2 mental benefits, or habitat types, in the  
3 area where the project is to be carried out;

4 (ii) the historic and future environ-  
5 mental conditions of the project site, par-  
6 ticularly those environmental conditions af-  
7 fected by climate change;

8 (iii) the net ecological benefits of the  
9 project, including the potential of the  
10 project to contribute to carbon sequestra-  
11 tion and storage;

12 (iv) the ability of the entity proposing  
13 the project to demonstrate the potential of  
14 the project to protect the coastal commu-  
15 nity where the project is to be carried out,  
16 including through—

17 (I) mitigating the effects of ero-  
18 sion;

19 (II) attenuating the impact of  
20 coastal storms and storm surge;

21 (III) mitigating shoreline flood-  
22 ing;

23 (IV) mitigating the effects of sea  
24 level rise, accelerated land loss, and  
25 extreme tides;

1 (V) sustaining, protecting, or re-  
2 storing the functions and habitats of  
3 coastal ecosystems;

4 (VI) protecting important cul-  
5 tural sites or values;

6 (VII) protecting low income com-  
7 munities, communities of color, Tribal  
8 communities, Indigenous communities,  
9 and rural communities;

10 (VIII) sustaining, protecting, or  
11 restoring the functions and habitats of  
12 marine protected areas; or

13 (IX) such other forms of protec-  
14 tion as the Administrator considers  
15 appropriate; and

16 (v) the potential of the project to sup-  
17 port climate resiliency at a military instal-  
18 lation or community infrastructure sup-  
19 portive of a military installation (as such  
20 terms are defined in section 2391 of title  
21 10, United States Code).

22 (2) LIVING SHORELINE ENGINEERING STAND-  
23 ARD.—

24 (A) ESTABLISHMENT.—The Adminis-  
25 trator, in consultation with the Army Corps of

1 Engineers, shall establish an engineering stand-  
2 ard applicable to living shoreline projects for  
3 each region of the United States.

4 (B) USE.—The Administrator shall use the  
5 standard established under subparagraph (A) in  
6 selecting eligible entities to receive grants under  
7 this section.

8 (C) CONSULTATION; INPUT.—In estab-  
9 lishing the standard under subparagraph (A),  
10 the Administrator may—

11 (i) consult with—

12 (I) State coastal management  
13 agencies;

14 (II) Indian Tribes and Tribal or-  
15 ganizations; and

16 (III) relevant interagency coun-  
17 cils, such as the Estuary Habitat Res-  
18 toration Council; and

19 (ii) seek input from relevant non-  
20 governmental organizations.

21 (e) USE OF FUNDS.—A grant awarded under this  
22 section to an eligible entity to carry out a living shoreline  
23 project may be used by the eligible entity only—

(1) to carry out the project, including administration, design, permitting, entry into negotiated indirect cost rate agreements, and construction;

(2) to monitor, collect, and report data on the performance (including performance over time) of the project, in accordance with standard established by the Administration under subsection (d)(2)(A); or

(3) to incentivize landowners to engage in living shoreline projects.

(f) MONITORING AND REPORTING.—

(1) IN GENERAL.—The Administrator shall require each eligible entity that receives a grant under this section to carry out a living shoreline project (or a representative of the entity)—

(A) to monitor the project and to collect data on—

(i) the ecological, climate, and economic benefits of the project; and

(ii) the protection provided by the project for the coastal community where the project is carried out;

(B) to transmit to the Administrator data collected under the project;

(C) to make data collected under the project available on a publicly accessible inter-



1 net website of the National Oceanic and Atmos-  
2 pheric Administration; and

3 (D) upon the completion of the project, to  
4 submit to the Administrator a report on—

5 (i) the monitoring and data collection  
6 activities carried out under subparagraph  
7 (A); and

8 (ii) the effectiveness of the project in  
9 increasing protection of the coastal com-  
10 munity where the project is carried out  
11 through living shorelines techniques, in-  
12 cluding—

13 (I) a description of—

14 (aa) the project;

15 (bb) the activities carried  
16 out under the project; and

17 (cc) the techniques and ma-  
18 terials used in carrying out the  
19 project; and

20 (II) data on the performance of  
21 the project in providing protection to  
22 that coastal community.

23 (g) AUTHORIZATION OF APPROPRIATIONS.—There is  
24 authorized to be appropriated to the Administrator

1 \$50,000,000 for each of fiscal years 2022 through 2026  
2 for purposes of carrying out this section.

3 **SEC. 4. LIVING SHORELINE AND NATURE-BASED INFRA-**  
4 **STRUCTURE RESEARCH PROGRAM.**

5 (a) ESTABLISHMENT.—The Administrator shall  
6 award, on a competitive basis, research grants to eligible  
7 entities to carry out projects focused on developing and  
8 assessing the effectiveness of innovative approaches to na-  
9 ture-based infrastructure for the purposes of—

10 (1) preparing more climate-resilient, sustainable  
11 cities and climate-resilient communities;

12 (2) reducing the costs associated with climate-  
13 related disasters, the degradation of built infrastruc-  
14 ture, and human relocation; and

15 (3) accomplishing improved climate resilience  
16 while maintaining ecosystem functions and habitats  
17 to the greatest extent possible.

18 (b) ELIGIBLE ENTITIES.—For purposes of this sec-  
19 tion, an eligible entity is any of the following:

20 (1) An institution of higher education.

21 (2) A nonprofit organization.

22 (3) A State, local, or Tribal government.

23 (4) A for-profit organization.

24 (5) A United States territory.

1           (6) A Federal agency that is authorized by stat-  
2       ute to receive transfers of funds.

3       (c) RESEARCH PRIORITIES.—The Administrator  
4       shall award grants to eligible entities for projects that  
5       focus on one or more of the following:

6           (1) Assessing the effectiveness of installed na-  
7       ture-based infrastructure in addressing, as applica-  
8       ble, coastal resilience, shoreline erosion, storm dam-  
9       age, including windstorms, inland flooding, water  
10      quality, impact on local ecosystems, and such other  
11      criteria as the Administrator determines appro-  
12      priate.

13          (2) Novel approaches to nature-based infra-  
14      structure and living shorelines aimed at optimizing  
15      resilience to climate change, extreme weather, and  
16      ecosystem sustainability.

17          (3) Interdisciplinary research, including engi-  
18      neering, environmental and ecosystem sciences, biol-  
19      ogy, and social science.

20          (4) Regional, community, and industry partner-  
21      ships to create locally informed solutions.

22      (d) REPORTS FOR INFORMING GRANT SELECTION.—

23          (1) REPORT REQUIRED.—An eligible entity that  
24      receives a grant for a project under this section  
25      shall, not later than the date on which such project

1 concludes, submit to the Administrator a report  
2 summarizing the findings of the project.

3 (2) USE OF REPORTS.—The Administrator  
4 shall use each report submitted under paragraph (1)  
5 to inform the selection and prioritization of living  
6 shoreline projects under section 2 and other nature-  
7 based infrastructure projects.

8 (e) USE OF PROGRAMS.—In carrying out this section,  
9 the Administrator is encouraged to use—

10 (1) the National Oceanographic Partnership  
11 Program established under section 8931 of title 10,  
12 United States Code, as a means for collaboration  
13 and coordination to leverage partnerships between  
14 public institutions of higher education and Federal  
15 agencies;

16 (2) the Coastlines and People initiative of the  
17 National Science Foundation as a tool to use ongoing interdisciplinary research;

18 (3) the national sea grant college program  
19 maintained under the National Sea Grant College  
20 Program Act (33 U.S.C. 1121 et seq.) as a resource  
21 to help foster collaboration between public institu-  
22 tions of higher education and Federal agencies; and  
23

1           (4) the Community Resilience Center of Excel-  
2       lence of the National Institute of Standards and  
3       Technology.

4       (f) AUTHORIZATION OF APPROPRIATIONS.—There is  
5       authorized to be appropriated to the Administrator  
6       \$5,000,000 for each of fiscal years 2022 through 2026  
7       for purposes of carrying out this section.

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