

116TH CONGRESS  
1ST SESSION

# S. 1276

To require the Administrator of the Federal Emergency Management Agency to carry out a pilot program to enhance the mapping of urban flooding and associated property damage and the availability of that mapped data to homeowners, businesses, and localities to help understand and mitigate the risk of such flooding, and for other purposes.

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## IN THE SENATE OF THE UNITED STATES

MAY 1, 2019

Mr. DURBIN (for himself, Mr. RUBIO, and Ms. DUCKWORTH) introduced the following bill; which was read twice and referred to the Committee on Banking, Housing, and Urban Affairs

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## A BILL

To require the Administrator of the Federal Emergency Management Agency to carry out a pilot program to enhance the mapping of urban flooding and associated property damage and the availability of that mapped data to homeowners, businesses, and localities to help understand and mitigate the risk of such flooding, 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,*

1 **SECTION 1. SHORT TITLE.**

2       This Act may be cited as the “Flood Mapping Mod-  
3 ernization and Homeowner Empowerment Pilot Program  
4 Act of 2019”.

5 **SEC. 2. FLOOD MAPPING MODERNIZATION AND HOME-**  
6 **OWNER EMPOWERMENT PILOT PROGRAM.**

7       (a) DEFINITIONS.—In this section:

8           (1) ADMINISTRATOR.—The term “Adminis-  
9 trator” means the Administrator of the Federal  
10 Emergency Management Agency.

11          (2) COASTAL.—The term “coastal” means, with  
12 respect to a unit of general local government, that  
13 the unit borders a body of water that—

14           (A) is more than 2,000 square miles in  
15 size; and

16           (B) is not a river.

17          (3) PELAGIC.—The term “pelagic” means, with  
18 respect to a unit of general local government, that—

19           (A) the unit is a coastal unit; and

20           (B) the body of water that the unit borders  
21 is—

22           (i) an ocean; or

23           (ii) a large, open body of water, in-  
24 cluding a bay or a gulf, that empties into  
25 an ocean.

1           (4) PILOT PROGRAM.—The term “pilot pro-  
 2           gram” means the pilot program carried out by the  
 3           Administrator under this section.

4           (5) URBAN FLOODING.—The term “urban  
 5           flooding”—

6                   (A) means the inundation, by water, of  
 7           property in a built environment, particularly in  
 8           a densely populated area, that—

9                           (i) is caused by falling rain—

10                                   (I) collecting on an impervious  
 11                                   surface; or

12                                   (II) increasing the level of a body  
 13                                   of water that is located near that built  
 14                                   environment; and

15                           (ii) overwhelms the capacity of drain-  
 16                                   age systems in the built environment, such  
 17                                   as storm sewers;

18                   (B) includes—

19                           (i) a situation in which stormwater  
 20                                   enters a building through a window, door,  
 21                                   or other opening;

22                           (ii) the backup of water through a  
 23                                   sewer pipe, shower, toilet, sink, or floor  
 24                                   drain;

1 (iii) the seepage of water through a  
2 wall or a floor;

3 (iv) the accumulation of water on  
4 property or a public right-of-way; and

5 (v) the overflow from a body of water,  
6 such as a river, lake, or ocean; and

7 (C) does not include flooding in an unde-  
8 veloped or agricultural area.

9 (6) URBANIZED AREA.—The term “urbanized  
10 area” means an area that has been defined and des-  
11 ignated as an urbanized area by the Bureau of the  
12 Census during the most recently completed decennial  
13 census.

14 (b) ESTABLISHMENT.—The Administrator shall  
15 carry out a pilot program to make grants to units of local  
16 government to—

17 (1) enhance the production of maps relating to  
18 urban flooding and associated property damage; and

19 (2) increase the availability of the maps de-  
20 scribed in paragraph (1) to homeowners, businesses,  
21 and units of local government to enable those enti-  
22 ties to minimize the risk of urban flooding.

23 (c) OBJECTIVES.—Amounts from grants made under  
24 the pilot program may be used only to carry out activities  
25 that meet the following objectives:

(1) Developing a methodology for assessing the risk of urban flooding through the deployment of technology-based mapping tools that—

(A) are easily understandable by the public; and

(B) effectively convey information regarding the level of flood risk.

(2) Providing structure-specific projections of annual chance flood frequency.

(3) Providing structure-based flood risk assessments.

(4) Providing program design for the mitigation of the risk of urban flooding.

(5) Incorporating information regarding climate trends into urban flooding risk assessments.

(6) Making the information described in this subsection publicly available on the internet through a web-based portal so as to increase transparency regarding homeowner flood risks.

(d) ELIGIBLE RECIPIENTS.—

(1) IN GENERAL.—A grant under the pilot program may be made only to—

(A) a unit of general local government that is located in an urbanized area with a population of more than 50,000 individuals; or

1 (B) a stormwater management authority of  
 2 a unit of general local government described in  
 3 subparagraph (A).

4 (2) ONE-TIME GRANTS.—A grant under the  
 5 pilot program may not be made to—

6 (A) any unit of general local government,  
 7 or the stormwater management authority of a  
 8 unit of general local government, that pre-  
 9 viously received a grant under the pilot pro-  
 10 gram;

11 (B) any unit of general local government if  
 12 the stormwater management agency for that  
 13 unit previously received a grant under the pilot  
 14 program; or

15 (C) any stormwater management agency of  
 16 a unit of general local government if that unit  
 17 previously received a grant under the pilot pro-  
 18 gram.

19 (3) TREATMENT OF CERTAIN STORMWATER  
 20 MANAGEMENT AUTHORITIES.—

21 (A) IN GENERAL.—In the case of a  
 22 stormwater management authority that oper-  
 23 ates with respect to more than 1 unit of general  
 24 local government, the application of that au-  
 25 thority shall be considered for purposes of para-

1 graph (2) of this subsection and subsections (f),  
 2 (g), and (h)(1) to be made for the largest unit  
 3 of general local government with respect to  
 4 which that authority operates.

5 (B) RULE OF CONSTRUCTION.—Nothing in  
 6 subparagraph (A) may be construed to limit the  
 7 ability of a stormwater management authority  
 8 described in that subparagraph to carry out ac-  
 9 tivities under a demonstration project in any  
 10 other jurisdiction in, or with respect to any  
 11 other unit of local government with, which that  
 12 authority operates.

13 (e) APPLICATIONS.—To be eligible for a grant under  
 14 the pilot program, a unit of general local government or  
 15 a stormwater management agency shall submit to the Ad-  
 16 ministrator an application in such form and containing  
 17 such information as the Administrator shall require.

18 (f) SELECTION OF RECIPIENTS.—

19 (1) ANNUAL SELECTION.—Subject to para-  
 20 graph (2), and to the submission of approvable ap-  
 21 plications, in each fiscal year for which amounts are  
 22 made available for grants under the pilot program,  
 23 the Administrator shall select, from among applica-  
 24 tions submitted under subsection (e) for that fiscal  
 25 year, 3 units of general government or stormwater

management authorities to receive grants under the pilot program.

(2) AGGREGATE LIMIT.—Subject only to the submission of approvable applications, the Administrator shall select, in the aggregate over the entire duration of the pilot program, 12 units of general government or stormwater management authorities to receive grants under the pilot program, as follows:

(A) TIER 1.—Three of the applicants selected shall be units of general local government, or stormwater management authorities for those units, each of which has a population of more than 800,000 individuals, as follows:

(i) PELAGIC COASTAL CITY.—One shall be—

(I) a unit of general local government that is a pelagic unit; or

(II) a stormwater authority for a unit described in subclause (I).

(ii) NON-PELAGIC COASTAL CITY.—One shall be—

(I) a unit of general local government that—

(aa) is a coastal unit; and

(bb) is not a pelagic unit; or



1 (II) a stormwater authority for a  
 2 unit described in subclause (I).

3 (iii) NON-COASTAL CITY.—One shall  
 4 be—

5 (I) a unit of general local govern-  
 6 ment that is not a coastal unit; or

7 (II) a stormwater authority for a  
 8 unit described in subclause (I).

9 (B) TIER 2.—Six of the applicants selected  
 10 shall be units of general local government, or  
 11 stormwater management authorities for those  
 12 units, each of which has a population of more  
 13 than 200,000 individuals and not more than  
 14 800,000 individuals, as follows:

15 (i) COASTAL CITIES.—Three shall  
 16 be—

17 (I) units of general local govern-  
 18 ment that are coastal units; or

19 (II) stormwater management au-  
 20 thorities for units described in sub-  
 21 clause (I).

22 (ii) NON-COASTAL CITIES.—Three  
 23 shall be—

24 (I) units of general local govern-  
 25 ment that are not coastal units; or

1 (II) stormwater management au-  
 2 thorities for units described in sub-  
 3 clause (I).

4 (C) TIER 3.—Three of the applicants se-  
 5 lected shall be—

6 (i) units of general local government,  
 7 each of which has a population of more  
 8 than 50,000 individuals and not more than  
 9 200,000 individuals; or

10 (ii) stormwater management authori-  
 11 ties for units described in clause (i).

12 (g) PRIORITY.—

13 (1) IN GENERAL.—The Administrator shall se-  
 14 lect applicants for grants under the pilot program  
 15 based on the extent to which the applications of  
 16 those applicants shall achieve the objectives de-  
 17 scribed in subsection (c).

18 (2) TIERS 2 AND 3.—In selecting applicants to  
 19 receive grants under the pilot program under sub-  
 20 paragraphs (B) and (C) of subsection (f)(2), the Ad-  
 21 ministrator shall give priority to applicants—

22 (A) that are highly vulnerable to sea level  
 23 rise;

1 (B) within which are located a military in-  
2 stallation or another facility relating to national  
3 security concerns; or

4 (C) that have—

5 (i) populations that are highly vulner-  
6 able to urban flooding; and

7 (ii) an uneven capacity for flood miti-  
8 gation and response efforts resulting from  
9 socioeconomic factors.

10 (h) AMOUNT.—

11 (1) CONSIDERATIONS.—In determining the  
12 amount of a grant under the pilot program, the Ad-  
13 ministrator shall consider the population of the  
14 grant recipient, which may be considered in terms of  
15 the tier under subsection (f)(2) with respect to the  
16 recipient.

17 (2) FEDERAL SHARE.—The amount of a grant  
18 under the pilot program may not exceed 75 percent  
19 of the total cost incurred in carrying out the activi-  
20 ties described in subsection (c).

21 (i) DURATION.—The Administrator shall require  
22 each recipient of a grant under the pilot program to com-  
23 plete the activities described in subsection (c), which shall  
24 be, subject to subsection (h)(2), carried out using the  
25 grant amounts, not later than 18 months after the date

1 on which the recipient initially receives the grant amounts  
2 under the pilot program.

3 (j) USE OF CENSUS DATA.—The Administrator shall  
4 make all determinations regarding population under the  
5 pilot program by using data from the most recently com-  
6 pleted decennial census by the Bureau of the Census.

7 (k) GRANTEE REPORTS TO FEMA.—Each recipient  
8 of a grant under the pilot program shall, not later than  
9 30 months after the date on which the recipient initially  
10 receives the grant amounts, submit to the Administrator  
11 a report that describes—

12 (1) the activities carried out with the grant  
13 amounts;

14 (2) how the activities carried out with the grant  
15 amounts have met the objectives described in sub-  
16 section (c);

17 (3) any lessons learned in carrying out the ac-  
18 tivities described in paragraph (2); and

19 (4) any recommendations for future mapping  
20 modernization efforts by the Federal Emergency  
21 Management Agency.

22 (l) BIENNIAL REPORTS BY FEMA.—Not later than  
23 2 years after the date of enactment of this Act, and not  
24 less frequently than once every 2 years thereafter until  
25 the date on which all activities carried out with amounts

1 from grants under the pilot program are completed, the  
2 Administrator shall submit to Congress and make avail-  
3 able to the public on an internet website a report that—

4 (1) describes—

5 (A) the progress of the activities carried  
6 out with amounts from those grants; and

7 (B) the effectiveness of technology-based  
8 mapping tools used in carrying out the activi-  
9 ties described in subparagraph (A); and

10 (2) with respect to the final report that the Ad-  
11 ministrator is required to submit under this sub-  
12 section, includes recommendations to Congress and  
13 the executive branch of the Federal Government for  
14 implementing strategies, practices, and technologies  
15 to mitigate the effects of urban flooding.

16 (m) SENSE OF CONGRESS.—It is the sense of Con-  
17 gress that, because the pilot program is limited with re-  
18 spect to scope and resources, communities that participate  
19 in the pilot program should acknowledge that the most  
20 successful efforts to mitigate the effects of urban flood-  
21 ing—

22 (1) take a structural-based mitigation approach  
23 with respect to construction, which includes—

24 (A) recognizing any post-storm damage  
25 that may occur; and

1 (B) pursuing designs that proactively mini-  
2 mize future flood damage;

3 (2) make individuals in the community aware,  
4 through any cost-effective and available means of  
5 education, of the best approaches regarding the con-  
6 struction of properties that are able to survive  
7 floods, which reduces the cost of future repairs; and  
8 (3) encourage home and property owners to  
9 consider the measures described in paragraphs (1)  
10 and (2), which are the most cost-effective and pru-  
11 dent ways to reduce the impact of flooding, when  
12 constructing or renovating building components.

13 (n) FUNDING.—There are authorized to be appro-  
14 priated for grants under the pilot program—

15 (1) \$1,200,000 for fiscal year 2020; and

16 (2) \$4,300,000 for fiscal year 2021, to remain  
17 available through 2023.

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