

117TH CONGRESS
1ST SESSION

S. 1581

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.

IN THE SENATE OF THE UNITED STATES

MAY 12, 2021

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

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 2021”.

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

4 (A) are easily understandable by the pub-
5 lic; and

6 (B) effectively convey information regard-
7 ing the level of flood risk.

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

10 (3) Providing structure-based flood risk assess-
11 ments.

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

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

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

20 (d) ELIGIBLE RECIPIENTS.—

21 (1) IN GENERAL.—A grant under the pilot pro-
22 gram may be made only to—

23 (A) a unit of general local government that
24 is located in an urbanized area with a popu-
25 lation 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 governmental,
 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

1 management authorities to receive grants under the
2 pilot program.

3 (2) AGGREGATE LIMIT.—Subject only to the
4 submission of approvable applications, the Adminis-
5 trator shall select, in the aggregate over the entire
6 duration of the pilot program, 12 units of general
7 government or stormwater management authorities
8 to receive grants under the pilot program, as follows:

9 (A) TIER 1.—Three of the applicants se-
10 lected shall be units of general local govern-
11 ment, or stormwater management authorities
12 for those units, each of which has a population
13 of more than 800,000 individuals, as follows:

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

16 (I) a unit of general local govern-
17 ment that is a pelagic unit; or

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

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

22 (I) a unit of general local govern-
23 ment that—

24 (aa) is a coastal unit; and

25 (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 2022; and

16 (2) \$4,300,000 for fiscal year 2023, to remain
17 available through fiscal year 2025.

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