

116TH CONGRESS
1ST SESSION

H. R. 3091

To establish a National Flood Research and Education Center to provide research, data, and recommendations on physical science, social science, economic analysis, policy analysis, risk analysis, monitoring, predicting, and planning as they relate to flooding and flood-related issues.

IN THE HOUSE OF REPRESENTATIVES

JUNE 4, 2019

Mr. LOEBSACK introduced the following bill; which was referred to the Committee on Science, Space, and Technology, and in addition to the Committee on Transportation and Infrastructure, 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

A BILL

To establish a National Flood Research and Education Center to provide research, data, and recommendations on physical science, social science, economic analysis, policy analysis, risk analysis, monitoring, predicting, and planning as they relate to flooding and flood-related issues.

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 “National Flood Re-
5 search and Education Center Act”.

1 **SEC. 2. NATIONAL FLOOD RESEARCH AND EDUCATION**

2 **CENTER ESTABLISHMENT AND PURPOSE.**

3 (a) ESTABLISHMENT.—There is established within
4 the National Oceanic and Atmospheric Administration a
5 National Flood Research and Education Center (in this
6 Act referred to as “NFREC”) which shall consist of—

7 (1) an office within the National Oceanic and
8 Atmospheric Administration;

9 (2) one public university or college selected by
10 the Administrator of the National Oceanic and At-
11 mospheric Administration (in this Act referred to as
12 the “Administrator”), which shall serve as the lead
13 partner institution with the National Oceanic and
14 Atmospheric Administration; and

15 (3) a consortium of other public universities or
16 colleges selected by the Administrator and the lead
17 partner institution based on their ability to fulfill
18 specific purposes of NFREC.

19 (b) PURPOSES.—The purposes of NFREC are as fol-
20 lows:

21 (1) To plan, conduct, and arrange for com-
22 petent public research, data, education, and rec-
23 ommendations within the following categories as
24 they relate to flooding issues nationwide, regionally,
25 and locally:

1 (A) Physical sciences, including engineer-
2 ing, hydrology, environmental, and atmospheric
3 sciences, of flooding and flood-related events.

4 (B) Social science of flooding and flood-re-
5 lated events focused on increasing community
6 resilience.

7 (C) Economic analysis of flooding and
8 flood-related events in addition to analysis of a
9 variety of existing and new strategies and tech-
10 niques to reduce, manage, and prevent flooding
11 and flood-related events.

12 (D) Policy analysis and recommendations
13 on flooding-related policy on a Federal, State,
14 and local governmental basis.

15 (E) Risk analysis and risk management of
16 flooding and flood-related events.

17 (F) Improvement of existing, and testing
18 of new, risk assessment tools, methods, and
19 models for flooding and flood risks used by
20 Federal, State, and local governments and other
21 interested organizations.

22 (G) Improvement of existing, and testing
23 of new, monitoring and predicting strategies
24 and techniques of flooding and flood-related
25 events.

1 (H) Improvement of existing, and testing
2 of new, flood management and prevention strat-
3 egies and techniques.

4 (2) To carry out this Act within a variety of re-
5 gions in the United States which are identified and
6 categorized by NFREC based on their specific flood-
7 ing and flood-related issues, hydrology, weather, and
8 related issues so that diverse flood situations are
9 represented and examined through NFREC's work.

10 (3) To identify opportunities for increased effi-
11 ciency in allocation of resources, coordination, co-
12 operation, and consolidation of efforts as they relate
13 to local, statewide, regional, and Federal flood-re-
14 lated efforts with respect to NFREC's purposes.

15 (4) To develop or improve undergraduate and
16 graduate degree programs and other programs at
17 the consortium-member public universities and col-
18 leges to advance the entry of new talent into flood-
19 ing-related fields.

20 (5) To collaborate with other colleges and uni-
21 versities in the region that have demonstrated capa-
22 bility for research, information dissemination, and
23 graduate training in order to develop regional net-
24 works that are knowledgeable on regional flooding
25 issues.

1 **SEC. 3. CONSORTIUM SELECTION AND COLLABORATION.**

2 (a) SELECTION OF THE LEAD PARTNER INSTITU-
3 TION.—The Administrator, within 180 days after the date
4 of enactment of this Act, shall select the lead partner insti-
5 tution described in section 2(a)(2). The Administrator
6 shall select a public university or college which—

7 (1) has demonstrated and proven expertise in
8 physical and environmental science, flooding, hy-
9 draulic research, hydroscience, engineering, and me-
10 teorological issues;

11 (2) is located in a State which frequently expe-
12 riences inland flooding;

13 (3) has previously partnered with, or received
14 funds from, Federal and international agencies for
15 flooding, hydrology, and watershed issues, including
16 the Army Corps of Engineers, the United States Ge-
17 ological Survey, the National Oceanic and Atmos-
18 pheric Administration, the Department of Agri-
19 culture, the Federal Emergency Management Agen-
20 cy, the National Science Foundation, the Depart-
21 ment of Housing and Urban Development, and the
22 United Nations Educational, Scientific, and Cultural
23 Organization;

24 (4) has the capacity to develop and submit a
25 plan on how it will operate as the lead partner insti-
26 tution, the type of research, activities, and collabora-

1 tion it would undertake, and how it would incor-
2 porate its previous work on issues related to the pur-
3 poses of NFREC into its new mission as the lead
4 partner institution;

5 (5) can demonstrate an ability to take the lead-
6 ing role of coordinating and fulfilling the purposes of
7 NFREC;

8 (6) can demonstrate an ability to provide tech-
9 nical assistance and demonstration project manage-
10 ment and oversight both of grantees demonstration
11 projects and of demonstration projects initiated
12 through consortium members;

13 (7) can demonstrate an ability to incorporate
14 NFREC work into undergraduate and graduate edu-
15 cational programs within the public university or col-
16 lege; and

17 (8) can demonstrate an ability to contribute the
18 required non-Federal matching funding to maintain
19 a lead partner institution center.

20 (b) SELECTION OF CONSORTIUM MEMBERS.—The
21 Administrator, in partnership with the lead partner insti-
22 tution, shall select, within 90 days after the selection of
23 the lead partner institution, additional universities and
24 colleges to participate in a consortium through criteria as
25 determined by the Administrator and the lead partner in-

stitution which shall, among other criteria determined by the Administrator and lead partner institution, prioritize institutions that—

(1) have a focus or expertise in at least one of the categories described in section 2(b)(1);

(2) have the ability to plan, conduct, and arrange for competent public research, data, education, and recommendations as they relate to flooding in diverse regions of the United States identified and in the categories described in section 2(b)(1) and meet the purposes of NFREC;

(3) can demonstrate an ability to provide technical assistance and demonstration project management and oversight;

(4) can demonstrate an ability to incorporate NFREC work into undergraduate and graduate educational programs within the university or college; and

(5) can demonstrate an ability to contribute the required non-Federal matching funding to maintain a consortium member center.

(c) CONSORTIUM PARTNERSHIPS.—The member institutions of NFREC shall partner for the purposes of this Act in the following ways:

1 (1) NOAA PARTNERSHIP.—The National Oce-
 2 anic and Atmospheric Administration shall partner
 3 directly with the lead partner institution for the pur-
 4 poses of NFREC.

5 (2) LEAD PARTNER INSTITUTION PARTNER-
 6 SHIP.—The lead partner institution shall partner di-
 7 rectly with the National Oceanic and Atmospheric
 8 Administration and the consortium members for the
 9 purposes of NFREC.

10 (3) CONSORTIUM MEMBER PARTNERSHIP.—The
 11 consortium members shall partner with the lead
 12 partner institution for the purposes of NFREC.

13 **SEC. 4. PARTNERSHIPS AND COLLABORATION WITH FED-**
 14 **ERAL, REGIONAL, STATE, AND LOCAL GOV-**
 15 **ERNMENTS AND ORGANIZATIONS.**

16 (a) PARTNERSHIPS.—NFREC shall partner with the
 17 United States Geological Survey and the Army Corps of
 18 Engineers for the purposes of this Act.

19 (b) COLLABORATION.—NFREC shall—

20 (1) collaborate on Federal flood-related issues
 21 with Federal agencies such as the Federal Emer-
 22 gency Management Agency, the Environmental Pro-
 23 tection Agency, the National Aeronautics and Space
 24 Administration, the National Science Foundation,
 25 and the Department of Agriculture;

1 (2) collaborate and share best practices on re-
2 gional, State, and locally specific flooding and flood-
3 related issues with—

4 (A) State, county, and local governments;

5 (B) local councils of governments or re-
6 gional planning organizations;

7 (C) State agriculture, natural resource, en-
8 vironment, economic development, and water
9 agencies;

10 (D) floodplain managers;

11 (E) State Homeland Security personnel,
12 county disaster recovery coordinators, emer-
13 gency management personnel, and first re-
14 sponders;

15 (F) resource conservation and development
16 councils;

17 (G) watershed organizations and boards;

18 (H) agriculture and commodity organiza-
19 tions and farmers;

20 (I) environmental organizations; and

21 (J) business and development organiza-
22 tions; and

23 (3) explore opportunities to collaborate, when
24 appropriate, on Federal flood-related issues with
25 other Federal agencies such as the Bureau of Rec-

1 lamation, the Tennessee Valley Authority, the Bu-
2 reau of Land Management, the National Park Serv-
3 ice, the Bureau of Indian Affairs, the Public Health
4 Administration, the National Science Foundation,
5 the Department of Defense, the Department of the
6 Interior, the Department of Housing and Urban De-
7 velopment, and various national laboratories.

8 **SEC. 5. INFORMATION COLLECTION AND DISSEMINATION.**

9 (a) NOAA.—

10 (1) ANNUAL REPORT.—The Administrator shall
11 publish annually a report containing the activities,
12 partnerships and collaborations, Federal policy rec-
13 ommendations, previous and continuing budgets,
14 findings, and any other applicable information from
15 the consortium members, and shall provide each re-
16 port to Congress and the President and make it
17 available to the public in an easily accessible elec-
18 tronic format on the National Oceanic and Atmos-
19 pheric Administration’s website.

20 (2) REVIEW OF REPORTS FROM CONSORTIUM
21 MEMBERS.—The Administrator shall review the re-
22 ports from the consortium members to ensure that
23 funds are being spent properly according to the pur-
24 poses of this Act and that the consortium members
25 are producing competent public research, data, edu-

1 cation, and recommendations in regard to flooding
2 and flood-related issues.

3 (3) REVIEW OF CONSORTIUM OPERATIONS.—

4 The Administrator shall periodically review the oper-
5 ation of consortium members to ensure that funds
6 are being spent properly according to the purposes
7 of this Act and that the consortium members are
8 producing competent public research, data, edu-
9 cation, and recommendations in regard to flooding
10 and flood-related issues.

11 (b) LEAD PARTNER INSTITUTION.—

12 (1) COMPILATION OF ANNUAL CONSORTIUM
13 MEMBER REPORTS.—The lead partner institution
14 shall compile annually reports from consortium
15 members, along with its own report, containing the
16 activities, partnerships and collaborations, Federal
17 policy recommendations, previous and continuing
18 budgets, findings, and any other applicable informa-
19 tion from consortium members, and shall provide
20 this information to the Administrator annually by a
21 date determined by the Administrator.

22 (2) ANNUAL LEAD PARTNER INSTITUTION RE-
23 PORT.—In addition, the lead partner institution
24 shall publish annually a report specific to its activi-
25 ties, partnerships and collaborations, State and local

1 policy recommendations, previous and continuing
2 budgets, findings, and other applicable information
3 by a date determined by the Administrator which
4 shall also be made available to the public in an easily
5 accessible electronic format on the lead partner insti-
6 tution's website.

7 (c) CONSORTIUM MEMBERS.—The consortium mem-
8 bers shall each publish annually a report containing the
9 activities, partnerships and collaborations, State and local
10 policy recommendations, previous and continuing budgets,
11 findings, and other applicable information by a date deter-
12 mined by the lead partner institution which shall also be
13 made available to the public in an easily accessible elec-
14 tronic format on the consortium members' websites.

15 (d) NATIONAL FLOOD RESEARCH AND EDUCATION
16 CENTER WEBSITE.—NFREC shall establish a website
17 which shall contain at least the following information:

18 (1) Key findings and best practices.

19 (2) Collaborations and partnerships.

20 (3) Annual reports and other pertinent informa-
21 tion on its purposes.

22 (4) The location and contact information for
23 the consortium members.

24 (5) Federal, State, local, and regionally specific
25 public research, data, education, and policy rec-

1 ommendations which shall be updated in a timely
2 manner with new information.

3 (6) The variety of regions in the United States
4 which are identified and categorized by NFREC,
5 based on their specific flooding and flood-related
6 issues, hydrology, weather, and related issues.

7 (7) Approved demonstration projects and their
8 progress in addition to information on applying for
9 demonstration project assistance.

10 (8) Tools for monitoring, predicting, and mod-
11 eling flooding as they become available.

12 **SEC. 6. TECHNICAL ASSISTANCE AND DEMONSTRATION**
13 **PROJECTS.**

14 (a) TECHNICAL ASSISTANCE AND DEMONSTRATION
15 PROJECTS.—NFREC may provide technical assistance
16 and demonstration project grant assistance to eligible enti-
17 ties on a competitive basis to assist with implementing rec-
18 ommendations of NFREC or testing new or improved
19 strategies or technologies for the categories described in
20 section 2(b)(1).

21 (b) ELIGIBLE ENTITIES.—The following are eligible
22 entities for purposes of this section:

23 (1) State governments.

24 (2) County governments.

25 (3) Local governments.

1 (c) TECHNICAL ASSISTANCE.—Consortium members
2 may provide technical assistance at their discretion to eli-
3 gible entities that have limited capacity for developing an
4 application for demonstration project grants. Consortium
5 members may also provide technical assistance at their
6 discretion in implementing demonstration projects ap-
7 proved by the Administrator.

8 (d) COMPETITIVE CRITERIA.—The Administrator, in
9 partnership with the lead partner institution, shall develop
10 criteria required for submitting a competitive demonstra-
11 tion project grant application and for the approval of such
12 an application.

13 (e) ELIGIBLE ACTIVITIES.—Grantees may use funds
14 only for flooding-related projects which implement rec-
15 ommendations of NFREC or for testing of—

16 (1) improved existing and or new risk analysis
17 and risk management of flooding and flood-related
18 events;

19 (2) improved existing and or new risk assess-
20 ment tools, methods, and models for flooding and
21 flood risks used by Federal, State, and local govern-
22 ments and other interested organizations;

23 (3) improved existing and or new monitoring
24 and predicting strategies and techniques of flooding
25 and flood-related events; or

1 (4) improved existing and or new flood manage-
2 ment and prevention strategies and techniques.

3 (f) SUBCONTRACTING.—Eligible entities may sub-
4 contract a portion of grant funds received for necessary
5 construction-related costs to pursue an eligible activity.

6 (g) APPLICATIONS.—

7 (1) CONSORTIUM REVIEW AND APPROVAL.—
8 Within 60 days of receiving a completed application,
9 the consortium member in whose region the project
10 will take place and the lead partner institution shall
11 review and approve or disapprove the application.

12 (2) ADMINISTRATOR APPROVAL.—Within 30
13 days of receiving an application that has been ap-
14 proved by the applicable consortium members, the
15 Administrator shall determine whether to provide
16 the project final approval.

17 (h) GRANT SIZE.—

18 (1) IN GENERAL.—Demonstration project grant
19 awards under this section shall not exceed \$250,000
20 per project.

21 (2) WAIVER OF GRANT SIZE LIMITATION.—The
22 Administrator may waive such grant size limitation
23 if—

24 (A) all consortium members approve of
25 such a waiver;

1 (B) the eligible entity has the expertise, or
2 will work with partners that have the expertise,
3 to manage the proposed project; and

4 (C) the eligible entity can show that a
5 project involves multiple watersheds or jurisdic-
6 tions, benefits multiple communities, has broad
7 community support, and incorporates multiple
8 aspects of NFREC's work in the project.

9 (i) MATCHING FUNDS.—Entities receiving a dem-
10 onstration project grant under this section shall be re-
11 quired to provide a 30-percent non-Federal cost share.

12 (j) TOTAL DEMONSTRATION PROJECT GRANT
13 AMOUNT AVAILABLE.—There shall be not more than
14 \$2,000,000 available annually for demonstration project
15 grants under this section nationwide.

16 (k) MONITORING AND REPORTING.—For a dem-
17 onstration project that receives a grant under this section,
18 the applicable regional consortium member shall monitor
19 the effectiveness, efficiency, and progress of the project
20 and report on these factors and their involvement periodi-
21 cally to the lead partner institution. The applicable re-
22 gional consortium member shall make this information
23 available through its website and additionally provide this
24 information in its annual reports.

1 **SEC. 7. AUTHORIZATION OF APPROPRIATIONS.**

2 (a) IN GENERAL.—For each of the fiscal years 2020
3 through 2025, there are authorized for NFREC,
4 \$10,000,000, of which—

5 (1) not more than \$2,000,000 each fiscal year
6 shall be for the operation of the National Oceanic
7 and Atmospheric Administration’s center; and

8 (2) not more than \$3,000,000 each fiscal year
9 shall be for the operation of the lead partner institu-
10 tion’s center, matched by a 20-percent non-Federal
11 cost share.

12 (b) ADDITIONAL AUTHORIZATION.—

13 (1) LEAD PARTNER INSTITUTION.—There are
14 authorized such sums as may be necessary for the
15 lead partner institution to improve its facilities to a
16 level that meets the requirements of the role of lead
17 partner institution.

18 (2) PLAN.—Before the lead partner institution
19 receives any funding under this subsection, a plan
20 detailing what type of facility construction or im-
21 provements will take place must first be approved by
22 the Administrator. Such plan shall include any land
23 acquisition, engineering, design, and staffing and
24 equipment needs, in addition to other information as
25 required by the Administrator.

1 (3) NON-FEDERAL COST SHARE.—There shall
2 be a non-Federal cost share of 20 percent for facility
3 improvement or construction projects pursued by the
4 lead partner institution.

5 (4) WAGE RATE REQUIREMENTS.—Any author-
6 ized and funded construction activity shall meet
7 Federal prevailing wage requirements as determined
8 by the Secretary of Labor in accordance with sub-
9 chapter IV of chapter 31 of part A of subtitle II of
10 title 40, United States Code (commonly referred to
11 as the “Davis-Bacon Act”).

12 (c) CONSORTIUM MEMBER CENTERS.—

13 (1) IN GENERAL.—Not more than \$3,000,000
14 each fiscal year shall be for the operation of all con-
15 sortium members’ centers, matched by a 20-percent
16 non-Federal cost share.

17 (2) LIMITATION.—Any one consortium member
18 shall not receive more than \$500,000 in Federal
19 funds in one fiscal year.

20 (d) GRANTS.—Not more than \$2,000,000 each fiscal
21 year shall be made available for demonstration project
22 grants nationwide.

○