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H. R. 1261

To establish a national program to identify and reduce losses from landslide hazards, to establish a national 3D Elevation Program, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

FEBRUARY 14, 2019

Ms. DELBENE (for herself, Mr. KILMER, Mr. CARTWRIGHT, Ms. BONAMICI, Mr. HECK, and Mr. SMITH of Washington) 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 establish a national program to identify and reduce losses from landslide hazards, to establish a national 3D Elevation Program, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''National Landslide Preparedness Act''.

SEC. 2. DEFINITIONS.

In this Act:

(1) 3D.—The term ''3D'' means 3-dimensional.

(2) 3D ELEVATION DATA.—

(A) IN GENERAL.—The term ''3D elevation data'' means 3D, high-resolution data obtained using LiDAR, IfSAR, or other methods over the United States (including territories).

(B) INCLUSIONS.—The term ''3D elevation data'' includes terrestrial and bathymetric elevation data.

(3) 3D ELEVATION PROGRAM.—The term ''3D Elevation Program'' means the 3D Elevation Program established under section 5(a).

(4) IFSAR.—The term ''IfSAR'' means interferometric synthetic aperture radar.

(5) INDIAN TRIBE.—The term ''Indian tribe'' has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 5304).

(6) LAHAR.—The term ''lahar'' means a large debris flow of mostly volcanic material that is—

(A) often fast-moving; and

(B) a hazard in watersheds downstream of volcanic peaks.

(7) LIDAR.—The term ''LiDAR'' means light detection and ranging.

(8) SECRETARY.—The term ''Secretary'' means the Secretary of the Interior, acting through the Director of the United States Geological Survey.

(9) STATE.—The term ''State'' means—

(A) a State; and

(B) the District of Columbia.

(10) STATE OFFICE.—The term ''State office'' means any unit of State government that handles the identification, mapping, assessment, and research of landslide hazards or responding to landslide events, including—

(A) a State geological survey office;

(B) a State department of emergency response; and

(C) a State department of transportation.

(11) TERRITORY.—The term ''territory'' means—

(A) the Commonwealth of Puerto Rico;

(B) Guam;

(C) American Samoa;

(D) the Commonwealth of the Northern Mariana Islands;

(E) the Federated States of Micronesia;

(F) the Republic of the Marshall Islands;

(G) the Republic of Palau; and

(H) the United States Virgin Islands.

SEC. 3. NATIONAL LANDSLIDE HAZARDS REDUCTION PROGRAM.

(a) ESTABLISHMENT.—The Secretary shall establish a program, to be known as the ''National Landslide Hazards Reduction Program'' (referred to in this section as the ''program'')—

(1) to identify and understand landslide hazards and risks;

(2) to reduce losses from landslides;

(3) to protect communities at risk of landslide hazards; and

(4) to help improve communication and emergency preparedness, including by coordinating with communities and entities responsible for infrastructure that are at risk of landslide hazards.

(b) DESCRIPTION OF PROGRAM.—

(1) PROGRAM ACTIVITIES.—The Secretary, in coordination with the Interagency Coordinating Committee on Landslide Hazards established by subsection (c)(1) (referred to in this section as the ''Committee'') and in coordination with existing ac-

tivities of the United States Geological Survey and other Federal agencies, shall—

(A) identify, map, assess, and research landslide hazards;

(B) respond to landslide events; and

(C) in coordination with State offices, units of local government, territories, and Indian tribes—

(i) establish working groups with State offices, units of local government, territories, and Indian tribes to identify regional and local priorities for researching, identifying, mapping, and assessing landslide hazards; and

(ii) develop and implement landslide hazard guidelines for—

(I) geologists;

(II) geological and geotechnical engineers;

(III) emergency management personnel; and

(IV) land use and other decision-makers.

(2) NATIONAL STRATEGY.—Not later than 1 year after the date of enactment of this Act, and

every 5 years thereafter, the Secretary, in coordination with the Committee, shall develop and publish a national strategy for landslide hazards, risk reduction, and response in the United States (including territories), which shall include—

(A) goals and priorities for the program;

(B) priorities for data acquisition, research, communications, and risk management on landslides and landslide hazards across relevant Federal agencies; and

(C) a detailed interagency plan, which shall take into consideration national disaster preparedness, response, and recovery frameworks, to carry out the national strategy, including details about the programs, projects, and budgets that will be used to implement the national strategy.

(3) NATIONAL LANDSLIDE HAZARDS DATABASE.—In carrying out the program, the Secretary, in coordination with State offices, units of local government, territories, and Indian tribes, shall develop and maintain a publicly accessible national landslide hazard and risk inventory database to compile, maintain, standardize, and evaluate data regarding—

(A) landslide hazards and risks;

(B) the impact of landslides on—

(i) health and safety;

(ii) the economy and infrastructure; and

(iii) the environment;

(C) landslide hazard stabilization; and

(D) reduction of losses from landslides.

(4) LANDSLIDE HAZARD AND RISK PREPAREDNESS FOR COMMUNITIES.—In carrying out the program, the Secretary, in coordination with the Secretary of the Army, the Secretary of Commerce, the Secretary of Homeland Security, the Secretary of Transportation, and the heads of other relevant Federal agencies, and in consultation with State offices, units of local government, territories, and Indian tribes, shall develop and disseminate—

(A) landslide planning and risk reduction guidance, guidelines, maps, tools, and training materials to help inform State, territorial, local, and Tribal governments and decisionmakers with respect to—

(i) the use and implementation of landslide hazard assessments;

(ii) the applied use of the database developed under paragraph (3);

(iii) reducing losses from landslides; and

(iv) resources available for communities working to improve landslide hazard preparedness; and

(B) landslide preparedness curricula and training modules for—

(i) State, territorial, local, and Tribal officials;

(ii) Federal, State, territorial, local, and Tribal emergency managers; and

(iii) the National Guard.

(5) DEBRIS FLOW EARLY WARNING SYSTEM.—In carrying out the program, the Secretary, in coordination with the Secretary of Commerce and the Secretary of Homeland Security, shall expand the early warning system for debris flow by—

(A) expanding the early warning system for post-wildfire debris flow to include recently burned areas across the western United States;

(B) developing procedures with State, territorial, local, and Tribal governments to mon-

itor stormwater drainage in areas with high debris flow risk; and

(C) identifying high-risk debris flow areas, such as recently burned land and potential lahar hazard areas.

(6) EMERGENCY RESPONSE ACTIVITIES.—In carrying out the program, the Secretary, in coordination with the Secretary of Commerce, the Secretary of Homeland Security, the heads of other relevant Federal agencies, States offices, units of local government, territories, and Indian tribes, shall establish and support emergency response procedures for the rapid deployment of Federal scientists, equipment, and services to areas impacted by a significant landslide event—

(A) to support emergency response efforts and improve the safety of emergency responders;

(B) to improve data collection; and

(C) to conduct research to advance the understanding of the causes, impacts, and reduction of landslide hazards and risks.

(c) INTERAGENCY COORDINATING COMMITTEE ON LANDSLIDE HAZARDS.—

(1) IN GENERAL.—There is established a committee, to be known as the ''Interagency Coordinating Committee on Landslide Hazards''.

(2) MEMBERSHIP.—The Committee shall be composed of the following members (or their designees):

(A) The Secretary, who shall serve as Chairperson of the Committee.

(B) The Secretary of Agriculture.

(C) The Secretary of the Army.

(D) The Secretary of Commerce.

(E) The Secretary of Homeland Security.

(F) The Secretary of Transportation.

(G) The Director of the National Science Foundation.

(H) The Director of the Office of Science and Technology Policy.

(I) The Director of the Office of Management and Budget.

(3) MEETINGS.—The Committee shall meet at the call of the Chairperson.

(4) PURPOSE AND DUTIES.—The Committee shall—

(A) advise and oversee the program;

(B) facilitate communication and coordination across Federal agencies in the planning, management, budgeting, and execution of landslide activities; and

(C) support the development and execution of the national strategy under subsection (b)(2), including by—

(i) supporting the development of national goals and priorities for the national strategy;

(ii) articulating Federal agency roles, responsibilities, and resources for carrying out the national strategy; and

(iii) overseeing the implementation of the national strategy.

(d) ADVISORY COMMITTEE.—

(1) IN GENERAL.—The Secretary shall establish an advisory committee, to be known as the ''Advisory Committee on Landslides'' (referred to in this subsection as the ''Advisory Committee'').

(2) MEMBERSHIP.—The Advisory Committee shall be composed of not fewer than 11 members—

(A) of whom none may be an individual described in any of subparagraphs (A) through

(F) of section 7342(a)(1) of title 5, United States Code; and

(B) who shall be representatives of—

(i) States, including State geological organizations;

(ii) territories, including territorial geological organizations;

(iii) Indian tribes, including Tribal geological organizations;

(iv) research institutions and institutions of higher education that are qualified—

(I) to provide advice regarding landslide hazard and risk reduction; and

(II) to represent related scientific, architectural, engineering, and planning disciplines;

(v) industry standards development organizations; and

(vi) State, territorial, local, and Tribal emergency management agencies.

(3) RECOMMENDATIONS.—

(A) IN GENERAL.—The Advisory Committee shall submit to the Committee rec-

ommendations for the implementation of the program, including recommendations regarding—

(i) landslide hazard and risk reduction and planning;

(ii) tools for communities;

(iii) research; and

(iv) such other topics as the Advisory Committee determines appropriate.

(B) CONSIDERATION.—The Secretary and the agency heads described in subparagraphs (B) through (I) of subsection (c)(2) shall take into consideration any recommendation of the Advisory Committee submitted under subparagraph (A).

(e) GRANT PROGRAMS.—

(1) COOPERATIVE LANDSLIDE HAZARD MAPPING AND ASSESSMENT PROGRAM.—

(A) IN GENERAL.—Subject to appropriations, the Secretary may—

(i) provide grants, on a competitive basis, to State, territorial, local, and Tribal governments to research, map, assess, and collect data on landslide hazards within the jurisdictions of those governments; and

(ii) accept and use funds received from other Federal and non-Federal partners to advance the purposes of the program.

(B) PRIORITY.—

(i) IN GENERAL.—The Secretary shall consult annually with the Committee, States, units of local government, territories, and Indian tribes to establish priorities for the grant program under this paragraph.

(ii) FUNDING PRIORITIZATION.—In providing grants under this paragraph, the Secretary shall give priority to projects—

(I) that will achieve the greatest landslide hazard and risk reduction;

(II) that reflect the goals and priorities of the national strategy established under subsection (b)(2)(A);

(III) not less than 50 percent of the total cost of which is matched by non-Federal sources; and

(IV) that include acquisition of enhanced elevation data consistent with the 3D Elevation Program.

(2) NATIONAL LANDSLIDE RESEARCH GRANTS.—

(A) IN GENERAL.—To advance the goals and priorities of the national strategy established under subsection (b)(2)(A), subject to appropriations, the Director of the National Science Foundation (referred to in this paragraph as the ''Director'') may provide grants to eligible entities for landslide research, including research on—

(i) the causes, mechanisms, triggers, hydrology, and geology of landslides;

(ii) ways to reduce landslide hazards and risks to minimize loss of life and property, including landslide hazard and risk communication, perception, decision-making, tools, and technologies; and

(iii) other goals and priorities of the national strategy established under subsection (b)(2)(A).

(B) ELIGIBLE ENTITIES.—The Director shall determine whether an entity is eligible to receive a grant under this paragraph.

(C) REQUIREMENTS.—In providing grants under this paragraph, the Director shall—

(i) ensure that the grants are provided on a competitive basis; and

(ii) consider grant applications submitted by eligible entities that have developed the application in partnership with 1 or more State geological surveys.

(f) BIENNIAL REPORT.—The Secretary shall submit to Congress a biennial report, including a description of, with respect to the preceding 2 calendar years—

(1) the goals and accomplishments of the Secretary and the agency heads described in subparagraphs (B) through (I) of subsection (c)(2) in carrying out the national strategy developed under subsection (b)(2), expressed—

(A) by agency, program, and budgetary resource; and

(B) by the goals and priorities of the national strategy established under subsection (b)(2)(A);

(2) the results of the activities of the Committee under this section;

(3) the extent to which any recommendations of the Advisory Committee under subsection (d)(3)(A) have been implemented;

(4) the grants provided under this section during the preceding 2 calendar years, including a description of—

(A) each activity carried out using such a grant; and

(B) the results of those activities; and

(5) for each significant landslide event in the United States (including territories) during the preceding 2 calendar years—

(A) a description of the landslide event and the implications of the event on communities, including life and property;

(B) recommendations on how the identification of the landslide risk could have been improved prior to the event;

(C) a description of the effectiveness of any warning and risk communication, including the dissemination of warnings by State, territorial, local, and Tribal partners in the affected area;

(D) recommendations to improve risk identification, reduction, and communication to landowners and units of local government;

(E) recommendations to improve landslide hazard preparedness and emergency response activities under this section; and

(F) such other findings as the Secretary determines appropriate.

(g) FUNDING.—There is authorized to be appropriated to carry out this section $37,000,000 for each of fiscal years 2020 through 2023, of which—

(1) $25,000,000 each fiscal year shall be made available to the United States Geological Survey;

(2) $11,000,000 each fiscal year shall be made available to the National Science Foundation; and

(3) $1,000,000 each fiscal year shall be made available to the National Oceanic and Atmospheric Administration.

SEC. 4. GROUND SUBSIDENCE.

As the Secretary determines to be appropriate and subject to appropriations, the Secretary, through existing programs, shall advance the identification, mapping, research, and monitoring of subsidence and groundwater resource accounting, particularly in areas affected by drought.

SEC. 5. 3D ELEVATION PROGRAM.

(a) ESTABLISHMENT OF 3D ELEVATION PROGRAM.—

(1) IN GENERAL.—The Secretary shall establish a program, to be known as the ''3D Elevation Program''—

(A) to provide 3D elevation data coverage for the United States;

(B) to coordinate and facilitate the collection, dissemination, and use of 3D elevation data among Federal departments and agencies and non-Federal entities;

(C) to produce standard, publicly accessible 3D elevation data products for the United States; and

(D) to promote the collection, dissemination, and use of 3D elevation data among Federal, State, local, and Tribal governments, communities, institutions of higher education, and the private sector through—

(i) cooperative agreements;

(ii) the development and maintenance of spatial data infrastructure to provide quality control and deliver to the public 3D elevation data products;

(iii) in coordination with the 3D Elevation Federal Interagency Coordinating Committee established under subsection

(b), States, and industry and standards bodies, the development of standards and guidelines for 3D elevation data acquisition to increase accessibility to 3D elevation data in a standard, easy-to-use format; and

(iv) the identification, assessment, and adoption of emerging technologies to improve the accuracy and efficiency of the 3D Elevation Program.

(2) MANAGEMENT.—

(A) IN GENERAL.—The Secretary shall manage the 3D Elevation Program—

(i) to ensure efficiency with respect to related activities of the Department of the Interior and other participating Federal departments and agencies; and

(ii) to meet the needs of Department of the Interior programs, stakeholders, and the public.

(B) OTHER FEDERAL DEPARTMENTS AND AGENCIES.—The head of each Federal department and agency involved in the acquisition, production, distribution, or application of 3D elevation data shall—

(i) coordinate with the 3D Elevation Federal Interagency Coordinating Committee established under subsection (b) to acquire additional, enhanced 3D elevation data;

(ii) submit to the Secretary a description of priority areas of interest for 3D elevation data collection for use in providing grants and cooperative agreements under subsection (d);

(iii) implement policies and procedures for data acquisition and sharing that are consistent with standards and guidelines developed under the 3D Elevation Program;

(iv) participate in, and share the results and benefits of, the 3D Elevation Program, in accordance with standards and guidelines developed under the 3D Elevation Program; and

(v) ensure that any 3D elevation data acquired with Federal grant funding—

(I) meets 3D Elevation Program standards; and

(II) is included in the national holdings of those data.

(b) 3D ELEVATION FEDERAL INTERAGENCY COORDINATING COMMITTEE.—

(1) ESTABLISHMENT.—The Secretary, in coordination with the Secretary of Commerce and the Secretary of Homeland Security, shall establish an interagency coordinating committee, to be known as the ''3D Elevation Federal Interagency Coordinating Committee'' (referred to in this subsection as the ''Committee''), to better coordinate 3D elevation data management across the Federal Government.

(2) MEMBERSHIP.—The Committee shall be composed of the following members (or their designees):

(A) The Secretary, who shall serve as Chairperson of the Committee.

(B) The Secretary of Agriculture.

(C) The Secretary of Commerce.

(D) The Secretary of Homeland Security.

(E) The Director of the National Science Foundation.

(F) The Director of the Office of Science and Technology Policy.

(G) The Director of the Office of Management and Budget.

(H) The head of any other Federal department or agency, at the request of the Secretary.

(3) COORDINATION.—The Committee shall coordinate, as appropriate, with the existing activities of—

(A) the 3D Elevation Program Executive Forum;

(B) the Alaska Mapping Executive Committee;

(C) the 3D Elevation Working Group;

(D) the 3D National Elevation Subcommittee; and

(E) State offices.

(4) MEETINGS.—The Committee shall meet at the call of the Chairperson.

(5) DUTIES.—The Committee shall—

(A) oversee the planning, management, and coordination of the 3D Elevation Program; and

(B) develop, by not later than 1 year after the date of enactment of this Act, and update periodically thereafter—

(i) a strategic plan that establishes goals and priorities for activities carried out under the 3D Elevation Program; and

(ii) a detailed management plan to implement the strategic plan.

(c) SUBCOMMITTEE OF NATIONAL GEOSPATIAL ADVISORY COMMITTEE.—

(1) ESTABLISHMENT.—

(A) IN GENERAL.—The Secretary shall establish, within the National Geospatial Advisory Committee, a subcommittee (referred to in this subsection as the ''Subcommittee'').

(B) MEMBERSHIP.—The Subcommittee shall—

(i) consist of not fewer than 11 members, of whom none may be a Federal officer or employee; and

(ii) include representatives of—

(I) research and academic institutions;

(II) industry standards development organizations;

(III) units of State and local government; and

(IV) the private sector.

(2) DUTIES.—

(A) ASSESSMENT.—The Subcommittee shall conduct an assessment of—

(i) trends and developments in—

(I) the collection, dissemination, and use of 3D elevation data; and

(II) science and technology relating to 3D elevation data;

(ii) the effectiveness of the 3D Elevation Program in carrying out the activities described in subsection (a)(1);

(iii) the need to revise or reorganize the 3D Elevation Program; and

(iv) the management, coordination, implementation, and activities of the 3D Elevation Program.

(B) REPORT.—Not later than 1 year after the date of enactment of this Act, and every 2 years thereafter, the Subcommittee shall submit to the Secretary and the 3D Elevation Federal Interagency Coordinating Committee established under subsection (b) a report that includes—

(i) the findings of the assessment under subparagraph (A); and

(ii) recommendations of the Subcommittee based on those findings, if any.

(d) GRANTS AND COOPERATIVE AGREEMENTS.—

(1) IN GENERAL.—The Secretary may make grants and enter into cooperative agreements with other Federal departments and agencies, units of State, local, or Tribal government, institutions of higher education, nonprofit research institutions, or other organizations to facilitate the improvement of nationwide coverage of 3D elevation data.

(2) APPLICATIONS.—To be eligible to receive a grant or enter into a cooperative agreement under this subsection, an entity described in paragraph (1) shall submit to the Secretary an application at such time, in such manner, and containing such information as the Secretary may require.

(3) TERMS AND CONDITIONS.—A grant or cooperative agreement under this subsection shall be subject to such terms and conditions as the Secretary determines to be appropriate, including making data publically available and interoperable with other Federal datasets.

(e) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $20,000,000 for each of fiscal years 2020 through 2023.

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