

Though this may be a sparsely populated area of this Nation, the communities in Perkins County such as Bison, Lemmon, and Prairie City, all are important to supporting the social fabric of the magnificent rangeland that surrounds. Likewise, there is potential for growth, but only if the basic resources are in place.

H.R. 970 would help this region continue to thrive into the next century. The bill also will allow us to move past simply examining the symptoms of poor drinking water and move forward with the cure to the deficiencies in the current water supply.

On behalf of the residents of Perkins County, South Dakota, I ask all the Members on both sides of the aisle to support this legislation today. Again, I thank the leadership of this committee for moving this bill forward.

Mr. DOOLITTLE. Mr. Speaker, I have no further requests for time. I urge an aye vote, and I yield back the balance of my time.

The SPEAKER pro tempore (Mr. BONILLA). The question is on the motion offered by the gentleman from California (Mr. DOOLITTLE) that the House suspend the rules and pass the bill, H.R. 970, as amended.

The question was taken; and (two-thirds having voted in favor thereof) the rules were suspended and the bill, as amended, was passed.

A motion to reconsider was laid on the table.

NATIONAL GEOLOGIC MAPPING REAUTHORIZATION ACT OF 1999

Mrs. CUBIN. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 1528) to reauthorize and amend the National Geologic Mapping Act of 1992.

The Clerk read as follows:

H.R. 1528

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 Geologic Mapping Reauthorization Act of 1999".

SEC. 2. FINDINGS.

Section 2(a) of the National Geologic Mapping Act of 1992 (43 U.S.C. 31a(a)) is amended—

(1) in paragraph (7), by striking "and" at the end;

(2) by redesignating paragraph (8) as paragraph (10);

(3) by inserting after paragraph (7) the following:

"(8) geologic map information is required for the sustainable and balanced development of natural resources of all types, including energy, minerals, land, water, and biological resources;

"(9) advances in digital technology and geographical information system science have made geologic map databases increasingly important as decision support tools for land and resource management; and"; and

(4) in paragraph (10) (as redesignated by paragraph (2)), by inserting "of surficial and bedrock deposits" after "geologic mapping".

SEC. 3. DEFINITIONS.

Section 3 of the National Geologic Mapping Act of 1992 (43 U.S.C. 31b) is amended—

(1) by redesignating paragraphs (4), (5), (6), and (7) as paragraphs (6), (7), (8), and (10), respectively;

(2) by inserting after paragraph (3) the following:

"(4) EDUCATION COMPONENT.—The term 'education component' means the education component of the geologic mapping program described in section 6(d)(3).

"(5) FEDERAL COMPONENT.—The term 'Federal component' means the Federal component of the geologic mapping program described in section 6(d)(1)."; and

(3) by inserting after paragraph (8) (as redesignated by paragraph (1)) the following:

"(9) STATE COMPONENT.—The term 'State component' means the State component of the geologic mapping program described in section 6(d)(2)."

SEC. 4. GEOLOGIC MAPPING PROGRAM.

Section 4 of the National Geologic Mapping Act of 1992 (43 U.S.C. 31c) is amended—

(1) in subsection (b)(1)—

(A) in the first sentence, by striking "priorities" and inserting "national priorities and standards for";

(B) in subparagraph (A)—

(i) by striking "develop a geologic mapping program implementation plan" and inserting "develop a 5-year strategic plan for the geologic mapping program"; and

(ii) by striking "within 300 days after the date of enactment of the National Geologic Mapping Reauthorization Act of 1997" and inserting "not later than 1 year after the date of enactment of the National Geologic Mapping Reauthorization Act of 1999";

(C) in subparagraph (B), by striking "within 90 days after the date of enactment of the National Geologic Mapping Reauthorization Act of 1997" and inserting "not later than 1 year after the date of enactment of the National Geologic Mapping Reauthorization Act of 1999"; and

(D) in subparagraph (C)—

(i) in the matter preceding clause (i), by striking "within 210 days after the date of enactment of the National Geologic Mapping Reauthorization Act of 1997" and inserting "not later than 3 years after the date of enactment of the National Geologic Mapping Reauthorization Act of 1999, and biennially thereafter";

(ii) in clause (i), by striking "will coordinate" and inserting "are coordinating";

(iii) in clause (ii), by striking "will establish" and inserting "establish"; and

(iv) in clause (iii), by striking "will lead to" and inserting "affect"; and

(2) by striking subsection (d) and inserting the following:

"(d) PROGRAM COMPONENTS.—

"(1) FEDERAL COMPONENT.—

"(A) IN GENERAL.—The geologic mapping program shall include a Federal geologic mapping component, the objective of which shall be to determine the geologic framework of areas determined to be vital to the economic, social, environmental, or scientific welfare of the United States.

"(B) MAPPING PRIORITIES.—For the Federal component, mapping priorities—

"(i) shall be described in the 5-year plan under section 6; and

"(ii) shall be based on—

"(I) national requirements for geologic map information in areas of multiple-issue need or areas of compelling single-issue need; and

"(II) national requirements for geologic map information in areas where mapping is required to solve critical earth science problems.

"(C) INTERDISCIPLINARY STUDIES.—

"(i) IN GENERAL.—The Federal component shall include interdisciplinary studies that add value to geologic mapping.

"(ii) REPRESENTATIVE CATEGORIES.—Interdisciplinary studies under clause (i) may include—

"(I) establishment of a national geologic map database under section 7;

"(II) studies that lead to the implementation of cost-effective digital methods for the acquisition, compilation, analysis, cartographic production, and dissemination of geologic map information;

"(III) paleontologic, geochronologic, and isotopic investigations that provide information critical to understanding the age and history of geologic map units;

"(IV) geophysical investigations that assist in delineating and mapping the physical characteristics and 3-dimensional distribution of geologic materials and geologic structures; and

"(V) geochemical investigations and analytical operations that characterize the composition of geologic map units.

"(iii) USE OF RESULTS.—The results of investigations under clause (ii) shall be contributed to national databases.

"(2) STATE COMPONENT.—

"(A) IN GENERAL.—The geologic mapping program shall include a State geologic mapping component, the objective of which shall be to establish the geologic framework of areas determined to be vital to the economic, social, environmental, or scientific welfare of individual States.

"(B) MAPPING PRIORITIES.—For the State component, mapping priorities—

"(i) shall be determined by State panels representing a broad range of users of geologic maps; and

"(ii) shall be based on—

"(I) State requirements for geologic map information in areas of multiple-issue need or areas of compelling single-issue need; and

"(II) State requirements for geologic map information in areas where mapping is required to solve critical earth science problems.

"(C) INTEGRATION OF FEDERAL AND STATE PRIORITIES.—A national panel including representatives of the Survey shall integrate the State mapping priorities under this paragraph with the Federal mapping priorities under paragraph (1).

"(D) USE OF FUNDS.—The Survey and recipients of grants under the State component shall not use more than 15.25 percent of the Federal funds made available under the State component for any fiscal year to pay indirect, servicing, or program management charges.

"(E) FEDERAL SHARE.—The Federal share of the cost of activities under the State component for any fiscal year shall not exceed 50 percent.

"(3) EDUCATION COMPONENT.—

"(A) IN GENERAL.—The geologic mapping program shall include a geologic mapping education component for the training of geologic mappers, the objectives of which shall be—

"(i) to provide for broad education in geologic mapping and field analysis through support of field studies; and

"(ii) to develop academic programs that teach students of earth science the fundamental principles of geologic mapping and field analysis.

"(B) INVESTIGATIONS.—The education component may include the conduct of investigations, which—

"(i) shall be integrated with the Federal component and the State component; and

"(ii) shall respond to mapping priorities identified for the Federal component and the State component.

"(C) USE OF FUNDS.—The Survey and recipients of grants under the education component shall not use more than 15.25 percent of the Federal funds made available under

the education component for any fiscal year to pay indirect, servicing, or program management charges.

“(D) FEDERAL SHARE.—The Federal share of the cost of activities under the education component for any fiscal year shall not exceed 50 percent.”.

SEC. 5. ADVISORY COMMITTEE.

Section 5 of the National Geologic Mapping Act of 1992 (43 U.S.C. 31d) is amended—

(1) in subsection (a)(3), by striking “90 days after the date of enactment of the National Geologic Mapping Reauthorization Act of 1997” and inserting “1 year after the date of enactment of the National Geologic Mapping Reauthorization Act of 1999”; and

(2) in subsection (b)—

(A) in paragraph (1), by striking “critique the draft implementation plan” and inserting “update the 5-year plan”; and

(B) in paragraph (3), by striking “this Act” and inserting “sections 4 through 7”.

SEC. 6. GEOLOGIC MAPPING PROGRAM 5-YEAR PLAN.

The National Geologic Mapping Act of 1992 is amended by striking section 6 (43 U.S.C. 31e) and inserting the following:

“SEC. 6. GEOLOGIC MAPPING PROGRAM 5-YEAR PLAN.

“(a) IN GENERAL.—The Secretary, acting through the Director, shall, with the advice and review of the advisory committee, prepare a 5-year plan for the geologic mapping program.

“(b) REQUIREMENTS.—The 5-year plan shall identify—

“(1) overall priorities for the geologic mapping program; and

“(2) implementation of the overall management structure and operation of the geologic mapping program, including—

“(A) the role of the Survey in the capacity of overall management lead, including the responsibility for developing the national geologic mapping program that meets Federal needs while fostering State needs;

“(B) the responsibilities of the State geological surveys, with emphasis on mechanisms that incorporate the needs, missions, capabilities, and requirements of the State geological surveys, into the nationwide geologic mapping program;

“(C) mechanisms for identifying short- and long-term priorities for each component of the geologic mapping program, including—

“(i) for the Federal component, a priority-setting mechanism that responds to—

“(I) Federal mission requirements for geologic map information;

“(II) critical scientific problems that require geologic maps for their resolution; and

“(III) shared Federal and State needs for geologic maps, in which joint Federal-State geologic mapping projects are in the national interest;

“(ii) for the State component, a priority-setting mechanism that responds to—

“(I) specific intrastate needs for geologic map information; and

“(II) interstate needs shared by adjacent States that have common requirements; and

“(iii) for the education component, a priority-setting mechanism that responds to requirements for geologic map information that are dictated by Federal and State mission requirements;

“(D) a mechanism for adopting scientific and technical mapping standards for preparing and publishing general- and special-purpose geologic maps to—

“(i) ensure uniformity of cartographic and scientific conventions; and

“(ii) provide a basis for assessing the comparability and quality of map products; and

“(E) a mechanism for monitoring the inventory of published and current mapping investigations nationwide to facilitate plan-

ning and information exchange and to avoid redundancy.”.

SEC. 7. NATIONAL GEOLOGIC MAP DATABASE.

Section 7 of the National Geologic Mapping Act of 1992 (43 U.S.C. 31f) is amended by striking the section heading and all that follows through subsection (a) and inserting the following:

“SEC. 7. NATIONAL GEOLOGIC MAP DATABASE.

“(a) ESTABLISHMENT.—

“(1) IN GENERAL.—The Survey shall establish a national geologic map database.

“(2) FUNCTION.—The database shall serve as a national catalog and archive, distributed through links to Federal and State geologic map holdings, that includes—

“(A) all maps developed under the Federal component and the education component;

“(B) the databases developed in connection with investigations under subclauses (III), (IV), and (V) of section 4(d)(1)(C)(ii); and

“(C) other maps and data that the Survey and the Association consider appropriate.”.

SEC. 8. BIENNIAL REPORT.

The National Geologic Mapping Act of 1992 is amended by striking section 8 (43 U.S.C. 31g) and inserting the following:

“SEC. 8. BIENNIAL REPORT.

“Not later 3 years after the date of enactment of the National Geologic Mapping Reauthorization Act of 1999 and biennially thereafter, the Secretary shall submit to the Committee on Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a report that—

“(1) describes the status of the national geologic mapping program;

“(2) describes and evaluates the progress achieved during the preceding 2 years in developing the national geologic map database; and

“(3) includes any recommendations that the Secretary may have for legislative or other action to achieve the purposes of sections 4 through 7.”.

SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

The National Geologic Mapping Act of 1992 is amended by striking section 9 (43 U.S.C. 31h) and inserting the following:

“SEC. 9. AUTHORIZATION OF APPROPRIATIONS.

“(a) IN GENERAL.—There are authorized to be appropriated to carry out this Act—

“(1) \$28,000,000 for fiscal year 1999;

“(2) \$30,000,000 for fiscal year 2000;

“(3) \$37,000,000 for fiscal year 2001;

“(4) \$43,000,000 for fiscal year 2002;

“(5) \$50,000,000 for fiscal year 2003;

“(6) \$57,000,000 for fiscal year 2004; and

“(7) \$64,000,000 for fiscal year 2005.

“(b) ALLOCATION OF APPROPRIATIONS.—Of any amounts appropriated for any fiscal year in excess of the amount appropriated for fiscal year 2000—

“(1) 48 percent shall be available for the State component; and

“(2) 2 percent shall be available for the education component.”.

The SPEAKER pro tempore. Pursuant to the rule, the gentlewoman from Wyoming (Mrs. CUBIN) and the gentleman from Guam (Mr. UNDERWOOD) each will control 20 minutes.

The Chair recognizes the gentlewoman from Wyoming (Mrs. CUBIN).

GENERAL LEAVE

Mrs. CUBIN. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days within which to revise and extend their remarks on H.R. 1528.

The SPEAKER pro tempore. Is there objection to the request of the gentlewoman from Wyoming?

There was no objection.

Mrs. CUBIN. Mr. Speaker, I yield myself such time as I may consume.

Mr. Speaker, I rise in strong support of H.R. 1528, a bill to reauthorize and amend the National Geologic Mapping Act of 1992. That law established a cooperative program between the United States Geologic Survey, the various State geologic surveys, and academia to prioritize geologic mapping needs for the Nation, and to ensure that a small cadre of trained mappers continues to flow from our universities.

This bill represents the second authorization, the second reauthorization of the initial program, which was enacted by the 102nd Congress.

Mr. Speaker, just in the last few months we have witnessed earthquakes in Turkey, Greece, and Taiwan, with devastating loss of life and quality of life. The planet we live on is a dynamic one. Having modern geologic maps of our country is a foundation of good Earth science application to natural hazards identification and abatement, as well as for broad planning efforts for resources utilization. Such mapping is also key to delineation and protection of sources of safe drinking water and sound land use planning.

The National Geologic Mapping Act has fostered a spirit of cooperation between the Federal Government's Earth scientists and those employed by the 50 States, as well as academia. No one agency or group has all the answers. Through the workings of the Cooperative Geologic Mapping Program, priorities based on real needs are advanced, and funding is made available to the States on a 50/50 matching basis from a small portion of the annual USGS appropriation.

Since the program was initiated, the States have demonstrated a greater ability to come up with the matching funds in their own State legislatures, a sign that the program is indeed successful.

Of course, we realize that geologic mapping will not stop earthquakes, landslides, and volcanic eruptions from happening, but it does provide new insights into the likelihood of their occurrence, so that the impacts to society may be ameliorated.

I would like to thank our colleague, the gentleman from West Virginia (Mr. RAHALL), a cosponsor of this bill and a sponsor of the original act in 1992, for joining with me in support of this new and improved act, and likewise for our colleague, the gentleman from the Second District of Nevada (Mr. GIBBONS), who is a geologist himself and a cosponsor of H.R. 1528.

Lastly, I would like to acknowledge the efforts of Dr. David Wunsch, who is a congressional science fellow who worked with the Subcommittee on Energy and Mineral Resources during the last year. David has returned to the Kentucky Geologic Survey to do important research in the hydrogeology of coal-bearing terrains, but he was instrumental in seeing this bill come this far.

H.R. 1528 has the full support of the administration, and I urge its passage.

Mr. Speaker, I reserve the balance of my time.

Mr. UNDERWOOD. Mr. Speaker, I yield myself such time as I may consume.

(Mr. UNDERWOOD asked and was given permission to revise and extend his remarks.)

Mr. UNDERWOOD. Mr. Speaker, this bill, the National Geologic Mapping Reauthorization Act of 1991, has the full support of the Committee on Resources. Democrats and Republicans alike have voted to favorably report this bill to the House, and the Clinton administration has also endorsed the bill.

We need geologic mapping in our society for many worthwhile purposes, including emergency preparedness, environmental protection, land use planning, and resource extraction.

Over the years, the need for geologic maps has grown steadily, but map production has not kept up. The Earth provides the physical foundation for our society. We live upon it and we use its resources. Therefore, we need to work toward a better understanding of the Earth's resources and potential dangers.

Geologic maps are one effective way to convey the Earth science foundation needed for better understanding and decision-making by all of us, Federal agencies, State, territorial, and local governments, private industry, and the general public alike.

The National Geologic Mapping Act of 1992, which this bill would extend, which was first authored by our colleague, the gentleman from West Virginia (Mr. RAHALL) authorized a national program of geologic mapping to be accomplished through partnership with State geological surveys, academia, the private sector, and the USGS.

This partnership is essential if we are to developing the extensive amount of material needed for informed decision-making. Accordingly, it is my pleasure to support adoption of the bill. I urge all of my colleagues on both sides of the aisle to join me in voting on H.R. 1528.

I would like to acknowledge the leadership of the subcommittee chairwoman, the gentlewoman from Wyoming (Mrs. CUBIN).

Mrs. CUBIN. Mr. Speaker, I yield 5 minutes, to the gentleman from Nevada (Mr. GIBBONS).

(Mr. GIBBONS asked and was given permission to revise and extend his remarks.)

Mr. GIBBONS. Mr. Speaker, first of all, I would like to begin by thanking the gentlewoman from Wyoming (Mrs. CUBIN) for her gracious yielding of time for me to speak, and her diligent work and commitment on this bill, as well as that of the gentleman from Guam (Mr. UNDERWOOD), and for seeing to it that this bill reaches the House floor.

Mr. Speaker, this legislation becomes very important when we consider and

address issues of safety in the environment. H.R. 1528 reauthorizes the geologic mapping Act of 1992, which was a legislative response to identified deficiencies in the National Academy of Sciences with their lack of basic geologic knowledge and structures in this country.

Being a geologist myself, I can personally attest to the great importance of geologic mapping and its resultant impact on many aspects of our society. Geologic maps benefit safety and planning regulations, telling us where natural disasters may occur. For example, they identify and map earthquake fault lines and water flow patterns which are important to identifying disaster potentials when building infrastructure for our communities and transportation routes.

□ 1230

Without a detailed geologic map of the United States, we will be forced to address issues such as safe drinking water and environmental systems, understanding in the same dangerous fashion that someone might drive a car at night without headlights.

It is imperative for us to explore and understand what resources we have in this country and how best to use them before we carelessly make unscientific decisions without the full knowledge of our underlying environment.

I also believe that detailed geologic maps provide the basic information for solving a broad range of regional and State problems. These include the protection of drinking water, the identification and mitigation of natural hazards such as earthquakes and volcanic eruptions, as well as many other land-use planning requirements.

This legislation will assist State and local communities with land and water decisions, aid farmers and ranchers with crop decisions, advance habitat protection for endangered species, and aid the mining industry with site determination for mineral resources.

Currently, Mr. Speaker, only about 20 percent or one-fifth of the Nation is adequately mapped. Congress, however, has finally begun to understand the importance and need of geologic mapping, and it is time that we use our dollars wisely to bring about the best science for this country.

Geologic maps are the primary database for virtually all applied and basic earth science investigations. It is because of this continued need for core science that I urge all Members to support H.R. 1528. I believe that passage of this bill is in the best interest of science and the Nation as well.

Once again, Mr. Speaker, I would like to thank the gentlewoman from Wyoming (Mrs. CUBIN) for her leadership in bringing this important legislation before us today. I urge all my colleagues to vote in favor of this bill.

Mr. UNDERWOOD. Mr. Speaker, I yield back the balance of my time.

Mrs. CUBIN. Mr. Speaker, I yield back the balance of my time.

The SPEAKER pro tempore (Mr. BONILLA). The question is on the motion offered by the gentlewoman from Wyoming (Mrs. CUBIN) that the House suspend the rules and pass the bill, H.R. 1528.

The question was taken; and (two-thirds having voted in favor thereof) the rules were suspended and the bill was passed.

A motion to reconsider was laid on the table.

GAS HYDRATE RESEARCH AND DEVELOPMENT ACT OF 1999

Mr. SENSENBRENNER. Mr. Speaker, I move to suspend the rules and pass the bill (H.R. 1753) to promote the research, identification, assessment, exploration, and development of methane hydrate resources and for other purposes, as amended.

The Clerk read as follows:

H.R. 1753

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 "Gas Hydrate Research and Development Act of 1999".

SEC. 2. DEFINITIONS.

In this Act:

(1) CONTRACT.—The term "contract" means a procurement contract within the meaning of section 6303 of title 31, United States Code.

(2) COOPERATIVE AGREEMENT.—The term "cooperative agreement" means a cooperative agreement within the meaning of section 6305 of title 31, United States Code.

(3) DIRECTOR.—The term "Director" means the Director of the National Science Foundation.

(4) GRANT.—The term "grant" means a grant awarded under a grant agreement, within the meaning of section 6304 of title 31, United States Code.

(5) INSTITUTION OF HIGHER EDUCATION.—The term "institution of higher education" means an institution of higher education, within the meaning of section 1201(a) of the Higher Education Act of 1965 (20 U.S.C. 1141(a)).

(6) SECRETARY.—The term "Secretary" means the Secretary of Energy, acting through the Assistant Secretary for Fossil Energy.

(7) SECRETARY OF COMMERCE.—The term "Secretary of Commerce" means the Secretary of Commerce, acting through the Administrator of the National Oceanic and Atmospheric Administration.

(8) SECRETARY OF DEFENSE.—The term "Secretary of Defense" means the Secretary of Defense, acting through the Secretary of the Navy.

(9) SECRETARY OF THE INTERIOR.—The term "Secretary of the Interior" means the Secretary of the Interior, acting through the Director of the United States Geological Survey and the Director of the Minerals Management Service.

SEC. 3. GAS HYDRATE RESEARCH AND DEVELOPMENT PROGRAM.

(a) IN GENERAL.—

(1) COMMENCEMENT OF PROGRAM.—Not later than 180 days after the date of enactment of this Act, the Secretary, in consultation with the Secretary of Commerce, the Secretary of Defense, the Secretary of the Interior, and the Director, shall commence a program of gas hydrate research and development.

(2) DESIGNATIONS.—The Secretary, the Secretary of Commerce, the Secretary of Defense, the Secretary of the Interior, and the