

Calendar No. 156

106TH CONGRESS
1ST Session

S. 607

[Report No. 106-78]

A BILL

To reauthorize and amend the National Geologic
Mapping Act of 1992.

JUNE 14, 1999

Reported without amendment

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106TH CONGRESS
1ST SESSION**S. 607****[Report No. 106-78]**

To reauthorize and amend the National Geologic Mapping Act of 1992.

IN THE SENATE OF THE UNITED STATES

MARCH 15, 1999

Mr. CRAIG (for himself, Mr. MURKOWSKI, Mr. SMITH of Oregon, Mr. HELMS, and Mr. CRAPO) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural Resources

JUNE 14, 1999

Reported by Mr. MURKOWSKI, without amendment

A BILL

To reauthorize and amend the National Geologic Mapping
Act of 1992.

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 Geologic
5 Mapping Reauthorization Act of 1999”.

1 **SEC. 2. FINDINGS.**

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

4 (1) in paragraph (7), by striking “and” at the
5 end;

6 (2) by redesignating paragraph (8) as para-
7 graph (10);

8 (3) by inserting after paragraph (7) the fol-
9 lowing:

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

14 “(9) advances in digital technology and geo-
15 graphical information system science have made geo-
16 logic map databases increasingly important as deci-
17 sion support tools for land and resource manage-
18 ment; and”; and

19 (4) in paragraph (10) (as redesignated by para-
20 graph (2)), by inserting “of surficial and bedrock de-
21 posits” after “geologic mapping”.

22 **SEC. 3. DEFINITIONS.**

23 Section 3 of the National Geologic Mapping Act of
24 1992 (43 U.S.C. 31b) is amended—

1 (1) by redesignating paragraphs (4), (5), (6),
 2 and (7) as paragraphs (6), (7), (8), and (10), re-
 3 spectively;

4 (2) by inserting after paragraph (3) the fol-
 5 lowing:

6 “(4) EDUCATION COMPONENT.—The term ‘edu-
 7 cation component’ means the education component
 8 of the geologic mapping program described in sec-
 9 tion 6(d)(3).

10 “(5) FEDERAL COMPONENT.—The term ‘Fed-
 11 eral component’ means the Federal component of
 12 the geologic mapping program described in section
 13 6(d)(1).”; and

14 (3) by inserting after paragraph (8) (as redesign-
 15 ated by paragraph (1)) the following:

16 “(9) STATE COMPONENT.—The term ‘State
 17 component’ means the State component of the geo-
 18 logic mapping program described in section
 19 6(d)(2).”.

20 **SEC. 4. GEOLOGIC MAPPING PROGRAM.**

21 Section 4 of the National Geologic Mapping Act of
 22 1992 (43 U.S.C. 31c) is amended—

23 (1) in subsection (b)(1)—

1 (A) in the first sentence, by striking “pri-
2 orities” and inserting “national priorities and
3 standards for”;

4 (B) in subparagraph (A)—

5 (i) by striking “develop a geologic
6 mapping program implementation plan”
7 and inserting “develop a 5-year strategic
8 plan for the geologic mapping program”;
9 and

10 (ii) by striking “within 300 days after
11 the date of enactment of the National Geo-
12 logic Mapping Reauthorization Act of
13 1997” and inserting “not later than 1 year
14 after the date of enactment of the National
15 Geologic Mapping Reauthorization Act of
16 1999”;

17 (C) in subparagraph (B), by striking
18 “within 90 days after the date of enactment of
19 the National Geologic Mapping Reauthorization
20 Act of 1997” and inserting “not later than 1
21 year after the date of enactment of the Na-
22 tional Geologic Mapping Reauthorization Act of
23 1999”; and

24 (D) in subparagraph (C)—

1 (i) in the matter preceding clause (i),
 2 by striking “within 210 days after the date
 3 of enactment of the National Geologic
 4 Mapping Reauthorization Act of 1997”
 5 and inserting “not later than 3 years after
 6 the date of enactment of the National Geo-
 7 logic Mapping Reauthorization Act of
 8 1999, and biennially thereafter”;

9 (ii) in clause (i), by striking “will co-
 10 ordinate” and inserting “are coordi-
 11 nating”;

12 (iii) in clause (ii), by striking “will es-
 13 tablish” and inserting “establish”; and

14 (iv) in clause (iii), by striking “will
 15 lead to” and inserting “affect”; and

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

18 “(d) PROGRAM COMPONENTS—

19 “(1) FEDERAL COMPONENT.—

20 “(A) IN GENERAL.—The geologic mapping
 21 program shall include a Federal geologic map-
 22 ping component, the objective of which shall be
 23 to determine the geologic framework of areas
 24 determined to be vital to the economic, social,

1 environmental, or scientific welfare of the
2 United States.

3 “(B) MAPPING PRIORITIES.—For the Fed-
4 eral component, mapping priorities—

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

7 “(ii) shall be based on—

8 “(I) national requirements for
9 geologic map information in areas of
10 multiple-issue need or areas of com-
11 pelling single-issue need; and

12 “(II) national requirements for
13 geologic map information in areas
14 where mapping is required to solve
15 critical earth science problems.

16 “(C) INTERDISCIPLINARY STUDIES.—

17 “(i) IN GENERAL.—The Federal com-
18 ponent shall include interdisciplinary stud-
19 ies that add value to geologic mapping.

20 “(ii) REPRESENTATIVE CAT-
21 EGORIES.—Interdisciplinary studies under
22 clause (i) may include—

23 “(I) establishment of a national
24 geologic map database under section
25 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.—

1 “(A) IN GENERAL.—The geologic mapping
2 program shall include a State geologic mapping
3 component, the objective of which shall be to es-
4 tablish the geologic framework of areas deter-
5 mined to be vital to the economic, social, envi-
6 ronmental, or scientific welfare of individual
7 States.

8 “(B) MAPPING PRIORITIES.—For the State
9 component, mapping priorities—

10 “(i) shall be determined by State pan-
11 els representing a broad range of users of
12 geologic maps; and

13 “(ii) shall be based on—

14 “(I) State requirements for geo-
15 logic map information in areas of mul-
16 tiple-issue need or areas of compelling
17 single-issue need; and

18 “(II) State requirements for geo-
19 logic map information in areas where
20 mapping is required to solve critical
21 earth science problems.

22 “(C) INTEGRATION OF FEDERAL AND
23 STATE PRIORITIES.—A national panel including
24 representatives of the Survey shall integrate the
25 State mapping priorities under this paragraph

1 with the Federal mapping priorities under para-
2 graph (1).

3 “(D) USE OF FUNDS.—The Survey and re-
4 cipients of grants under the State component
5 shall not use more than 15.25 percent of the
6 Federal funds made available under the State
7 component for any fiscal year to pay indirect,
8 servicing, or program management charges.

9 “(E) FEDERAL SHARE.—The Federal
10 share of the cost of activities under the State
11 component for any fiscal year shall not exceed
12 50 percent.

13 “(3) EDUCATION COMPONENT.—

14 “(A) IN GENERAL.—The geologic mapping
15 program shall include a geologic mapping edu-
16 cation component for the training of geologic
17 mappers, the objectives of which shall be—

18 “(i) to provide for broad education in
19 geologic mapping and field analysis
20 through support of field studies; and

21 “(ii) to develop academic programs
22 that teach students of earth science the
23 fundamental principles of geologic mapping
24 and field analysis.

1 “(B) INVESTIGATIONS.—The education
2 component may include the conduct of inves-
3 tigations, which—

4 “(i) shall be integrated with the Fed-
5 eral component and the State component;
6 and

7 “(ii) shall respond to mapping prior-
8 ities identified for the Federal component
9 and the State component.

10 “(C) USE OF FUNDS.—The Survey and re-
11 cipients of grants under the education compo-
12 nent shall not use more than 15.25 percent of
13 the Federal funds made available under the
14 education component for any fiscal year to pay
15 indirect, servicing, or program management
16 charges.

17 “(D) FEDERAL SHARE.—The Federal
18 share of the cost of activities under the edu-
19 cation component for any fiscal year shall not
20 exceed 50 percent.”.

21 **SEC. 5. ADVISORY COMMITTEE.**

22 Section 5 of the National Geologic Mapping Act of
23 1992 (43 U.S.C. 31d) is amended—

24 (1) in subsection (a)(3), by striking “90 days
25 after the date of enactment of the National Geologic

1 Mapping Reauthorization Act of 1997” and insert-
 2 ing “1 year after the date of enactment of the Na-
 3 tional Geologic Mapping Reauthorization Act of
 4 1999”; and

5 (2) in subsection (b)—

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

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

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

12 The National Geologic Mapping Act of 1992 is
 13 amended by striking section 6 (43 U.S.C. 31e) and insert-
 14 ing the following:

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

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

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

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

1 “(2) implementation of the overall management
2 structure and operation of the geologic mapping pro-
3 gram, including—

4 “(A) the role of the Survey in the capacity
5 of overall management lead, including the re-
6 sponsibility for developing the national geologic
7 mapping program that meets Federal needs
8 while fostering State needs;

9 “(B) the responsibilities of the State geo-
10 logical surveys, with emphasis on mechanisms
11 that incorporate the needs, missions, capabili-
12 ties, and requirements of the State geological
13 surveys, into the nationwide geologic mapping
14 program;

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

18 “(i) for the Federal component, a pri-
19 ority-setting mechanism that responds to—

20 “(I) Federal mission require-
21 ments for geologic map information;

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

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

5 “(ii) for the State component, a pri-
6 ority-setting mechanism that responds to—

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

9 “(II) interstate needs shared by
10 adjacent States that have common re-
11 quirements; and

12 “(iii) for the education component, a
13 priority-setting mechanism that responds
14 to requirements for geologic map informa-
15 tion that are dictated by Federal and State
16 mission requirements;

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

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

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

1 “(E) a mechanism for monitoring the in-
 2 ventory of published and current mapping in-
 3 vestigations nationwide to facilitate planning
 4 and information exchange and to avoid redun-
 5 dancy.”.

6 **SEC. 7. NATIONAL GEOLOGIC MAP DATABASE.**

7 Section 7 of the National Geologic Mapping Act of
 8 1992 (43 U.S.C. 31f) is amended by striking the section
 9 heading and all that follows through subsection (a) and
 10 inserting the following:

11 **“SEC. 7. NATIONAL GEOLOGIC MAP DATABASE.**

12 “(a) ESTABLISHMENT.—

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

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

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

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

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

1 **SEC. 8. BIENNIAL REPORT.**

2 The National Geologic Mapping Act of 1992 is
3 amended by striking section 8 (43 U.S.C. 31g) and insert-
4 ing the following:

5 **“SEC. 8. BIENNIAL REPORT.**

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

12 “(1) describes the status of the national geo-
13 logic mapping program;

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

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

20 **SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

21 The National Geologic Mapping Act of 1992 is
22 amended by striking section 9 (43 U.S.C. 31h) and insert-
23 ing the following:

24 **“SEC. 9. AUTHORIZATION OF APPROPRIATIONS.**

25 “(a) IN GENERAL.—There are authorized to be ap-
26 propriated to carry out this Act—

- 1 “(1) \$28,000,000 for fiscal year 1999;
2 “(2) \$30,000,000 for fiscal year 2000;
3 “(3) \$37,000,000 for fiscal year 2001;
4 “(4) \$43,000,000 for fiscal year 2002;
5 “(5) \$50,000,000 for fiscal year 2003;
6 “(6) \$57,000,000 for fiscal year 2004; and
7 “(7) \$64,000,000 for fiscal year 2005.

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

- 11 “(1) 48 percent shall be available for the State
12 component; and
13 “(2) 2 percent shall be available for the edu-
14 cation component.”.