

106TH CONGRESS
1ST SESSION

S. 607

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 and Mr. MURKOWSKI) introduced the following bill;
which was read twice and referred to the Committee on Energy and Nat-
ural Resources

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”.

6 **SEC. 2. FINDINGS.**

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

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

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

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

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

9 “(9) advances in digital technology and geo-
10 graphical information system science have made geo-
11 logic map databases increasingly important as deci-
12 sion support tools for land and resource manage-
13 ment; and”;

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

17 **SEC. 3. DEFINITIONS.**

18 Section 3 of the National Geologic Mapping Act of
19 1992 (43 U.S.C. 31b) is amended—

20 (1) by redesignating paragraphs (4), (5), (6),
21 and (7) as paragraphs (6), (7), (8), and (10), re-
22 spectively;

23 (2) by inserting after paragraph (3) the fol-
24 lowing:

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

5 “(5) FEDERAL COMPONENT.—The term ‘Fed-
 6 eral component’ means the Federal component of
 7 the geologic mapping program described in section
 8 6(d)(1).”; and

9 (3) by inserting after paragraph (8) (as redesign-
 10 nated by paragraph (1)) the following:

11 “(9) STATE COMPONENT.—The term ‘State
 12 component’ means the State component of the geo-
 13 logic mapping program described in section
 14 6(d)(2).”.

15 **SEC. 4. GEOLOGIC MAPPING PROGRAM.**

16 Section 4 of the National Geologic Mapping Act of
 17 1992 (43 U.S.C. 31c) is amended—

18 (1) in subsection (b)(1)—

19 (A) in the first sentence, by striking “pri-
 20 orities” and inserting “national priorities and
 21 standards for”;

22 (B) in subparagraph (A)—

23 (i) by striking “develop a geologic
 24 mapping program implementation plan”
 25 and inserting “develop a 5-year strategic

1 plan for the geologic mapping program”;
2 and

3 (ii) by striking “within 300 days after
4 the date of enactment of the National Geo-
5 logic Mapping Reauthorization Act of
6 1997” and inserting “not later than 1 year
7 after the date of enactment of the National
8 Geologic Mapping Reauthorization Act of
9 1999”;

10 (C) in subparagraph (B), by striking
11 “within 90 days after the date of enactment of
12 the National Geologic Mapping Reauthorization
13 Act of 1997” and inserting “not later than 1
14 year after the date of enactment of the Na-
15 tional Geologic Mapping Reauthorization Act of
16 1999”; and

17 (D) in subparagraph (C)—

18 (i) in the matter preceding clause (i),
19 by striking “within 210 days after the date
20 of enactment of the National Geologic
21 Mapping Reauthorization Act of 1997”
22 and inserting “not later than 3 years after
23 the date of enactment of the National Geo-
24 logic Mapping Reauthorization Act of
25 1999, and biennially thereafter”;

1 (ii) in clause (i), by striking “will co-
 2 ordinate” and inserting “are coordi-
 3 nating”;

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

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

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

10 “(d) PROGRAM COMPONENTS—

11 “(1) FEDERAL COMPONENT.—

12 “(A) IN GENERAL.—The geologic mapping
 13 program shall include a Federal geologic map-
 14 ping component, the objective of which shall be
 15 to determine the geologic framework of areas
 16 determined to be vital to the economic, social,
 17 environmental, or scientific welfare of the
 18 United States.

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

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

23 “(ii) shall be based on—

24 “(I) national requirements for
 25 geologic map information in areas of

1 multiple-issue need or areas of com-
2 pelling single-issue need; and

3 “(II) national requirements for
4 geologic map information in areas
5 where mapping is required to solve
6 critical earth science problems.

7 “(C) INTERDISCIPLINARY STUDIES.—

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

11 “(ii) REPRESENTATIVE CAT-
12 EGORIES.—Interdisciplinary studies under
13 clause (i) may include—

14 “(I) establishment of a national
15 geologic map database under section
16 7;

17 “(II) studies that lead to the im-
18 plementation of cost-effective digital
19 methods for the acquisition, compila-
20 tion, analysis, cartographic produc-
21 tion, and dissemination of geologic
22 map information;

23 “(III) paleontologic, geochrono-
24 logic, and isotopic investigations that
25 provide information critical to under-

1 standing the age and history of geo-
2 logic map units;

3 “(IV) geophysical investigations
4 that assist in delineating and mapping
5 the physical characteristics and 3-di-
6 mensional distribution of geologic ma-
7 terials and geologic structures; and

8 “(V) geochemical investigations
9 and analytical operations that charac-
10 terize the composition of geologic map
11 units.

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

15 “(2) STATE COMPONENT.—

16 “(A) IN GENERAL.—The geologic mapping
17 program shall include a State geologic mapping
18 component, the objective of which shall be to es-
19 tablish the geologic framework of areas deter-
20 mined to be vital to the economic, social, envi-
21 ronmental, or scientific welfare of individual
22 States.

23 “(B) MAPPING PRIORITIES.—For the State
24 component, mapping priorities—

1 “(i) shall be determined by State pan-
2 els representing a broad range of users of
3 geologic maps; and

4 “(ii) shall be based on—

5 “(I) State requirements for geo-
6 logic map information in areas of mul-
7 tiple-issue need or areas of compelling
8 single-issue need; and

9 “(II) State requirements for geo-
10 logic map information in areas where
11 mapping is required to solve critical
12 earth science problems.

13 “(C) INTEGRATION OF FEDERAL AND
14 STATE PRIORITIES.—A national panel including
15 representatives of the Survey shall integrate the
16 State mapping priorities under this paragraph
17 with the Federal mapping priorities under para-
18 graph (1).

19 “(D) USE OF FUNDS.—The Survey and re-
20 cipients of grants under the State component
21 shall not use more than 15.25 percent of the
22 Federal funds made available under the State
23 component for any fiscal year to pay indirect,
24 servicing, or program management charges.

1 “(E) FEDERAL SHARE.—The Federal
2 share of the cost of activities under the State
3 component for any fiscal year shall not exceed
4 50 percent.

5 “(3) EDUCATION COMPONENT.—

6 “(A) IN GENERAL.—The geologic mapping
7 program shall include a geologic mapping edu-
8 cation component for the training of geologic
9 mappers, the objectives of which shall be—

10 “(i) to provide for broad education in
11 geologic mapping and field analysis
12 through support of field studies; and

13 “(ii) to develop academic programs
14 that teach students of earth science the
15 fundamental principles of geologic mapping
16 and field analysis.

17 “(B) INVESTIGATIONS.—The education
18 component may include the conduct of inves-
19 tigation, which—

20 “(i) shall be integrated with the Fed-
21 eral component and the State component;
22 and

23 “(ii) shall respond to mapping prior-
24 ities identified for the Federal component
25 and the State component.

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

8 “(D) FEDERAL SHARE.—The Federal
 9 share of the cost of activities under the edu-
 10 cation component for any fiscal year shall not
 11 exceed 50 percent.”.

12 **SEC. 5. ADVISORY COMMITTEE.**

13 Section 5 of the National Geologic Mapping Act of
 14 1992 (43 U.S.C. 31d) is amended—

15 (1) in subsection (a)(3), by striking “90 days
 16 after the date of enactment of the National Geologic
 17 Mapping Reauthorization Act of 1997” and insert-
 18 ing “1 year after the date of enactment of the Na-
 19 tional Geologic Mapping Reauthorization Act of
 20 1999”; and

21 (2) in subsection (b)—

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

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

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

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

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

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

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

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

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

19 “(A) the role of the Survey in the capacity
20 of overall management lead, including the re-
21 sponsibility for developing the national geologic
22 mapping program that meets Federal needs
23 while fostering State needs;

24 “(B) the responsibilities of the State geo-
25 logical surveys, with emphasis on mechanisms

1 that incorporate the needs, missions, capabilities,
2 ties, and requirements of the State geological
3 surveys, into the nationwide geologic mapping
4 program;

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

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

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

12 “(II) critical scientific problems that require geologic
13 maps for their resolution; and
14

15 “(III) shared Federal and State needs for geologic
16 maps, in which joint Federal-State geologic mapping
17 projects are in the national interest;
18

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

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

23 “(II) interstate needs shared by
24 adjacent States that have common requirements; and
25

1 “(iii) for the education component, a
2 priority-setting mechanism that responds
3 to requirements for geologic map informa-
4 tion that are dictated by Federal and State
5 mission requirements;

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

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

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

15 “(E) a mechanism for monitoring the in-
16 ventory of published and current mapping in-
17 vestigations nationwide to facilitate planning
18 and information exchange and to avoid redun-
19 dancy.”.

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

21 Section 7 of the National Geologic Mapping Act of
22 1992 (43 U.S.C. 31f) is amended by striking the section
23 heading and all that follows through subsection (a) and
24 inserting the following:

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

2 “(a) ESTABLISHMENT.—

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

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

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

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

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

16 **SEC. 8. BIENNIAL REPORT.**

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

20 **“SEC. 8. BIENNIAL REPORT.**

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

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

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

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

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

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

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

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

16 “(1) \$28,000,000 for fiscal year 1999;

17 “(2) \$30,000,000 for fiscal year 2000;

18 “(3) \$37,000,000 for fiscal year 2001;

19 “(4) \$43,000,000 for fiscal year 2002;

20 “(5) \$50,000,000 for fiscal year 2003;

21 “(6) \$57,000,000 for fiscal year 2004; and

22 “(7) \$64,000,000 for fiscal year 2005.

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

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

3 “(2) 2 percent shall be available for the edu-
4 cation component.”.

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