## 105TH CONGRESS 1ST SESSION

## S. 317

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

## IN THE SENATE OF THE UNITED STATES

February 12, 1997

Mr. Craig (for himself, Mr. Bryan, Mr. Cochran, and Mr. Bennett) introduced the following bill; which was read twice and referred to the Committee on Energy and Natural 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 1997".
- 6 SEC. 2. FINDINGS.
- 7 Congress finds that—
- 8 (1) in enacting the National Geologic Mapping
- 9 Act of 1992 (43 U.S.C. 31a et seq.), Congress
- found, among other things, that—

	<del>-</del>
1	(A) during the 2 decades preceding enact-
2	ment of that Act, the production of geologic
3	maps had been drastically curtailed;
4	(B) geologic maps are the primary data
5	base for virtually all applied and basic earth-
6	science investigations;
7	(C) Federal agencies, State and local gov-
8	ernments, private industry, and the general
9	public depend on the information provided by
10	geologic maps to determine the extent of poten-
11	tial environmental damage before embarking on
12	projects that could lead to preventable, costly
13	environmental problems or litigation;
14	(D) the lack of proper geologic maps has
15	led to the poor design of such structures as
16	dams and waste-disposal facilities;
17	(E) geologic maps have proven indispen-
18	sable in the search for needed fossil fuel and
19	mineral resources; and
20	(F) a comprehensive nationwide program
21	of geologic mapping is required in order to sys-
22	tematically build the Nation's geologic-map
23	data base at a pace that responds to increasing

24

demand;

1	(2) the geologic mapping program called for by
2	that Act has not been fully implemented; and
3	(3) it is time for this important program to be
4	fully implemented.
5	SEC. 3. REAUTHORIZATION AND AMENDMENT.
6	(a) Definitions.—Section 3 of the National Geo-
7	logic Mapping Act of 1992 (43 U.S.C. 31b) is amended—
8	(1) by striking "As used in this Act:" and in-
9	serting "In this Act:"
10	(2) by redesignating paragraphs (2), (3), (4),
11	and (5) as paragraphs (3), (4), (5), and (6), respec-
12	tively;
13	(3) by inserting after paragraph (1) the follow-
14	ing:
15	"(2) Association.—The term 'Association'
16	means the Association of American State Geolo-
17	gists."; and
18	(4) in each paragraph that does not have a
19	heading, by inserting a heading, in the same style as
20	the heading in paragraph (2), as added by para-
21	graph (3), the text of which is comprised of the term
22	defined in the paragraph.
23	(b) Geologic Mapping Program.—Section 4 of the
24	National Geologic Mapping Act of 1992 (43 U.S.C. 31c)
25	is amended—

1	(1) by striking subsection (a) and inserting the
2	following:
3	"(a) Establishment.—
4	"(1) In general.—There is established a na-
5	tional cooperative geologic mapping program be-
6	tween the United States Geological Survey and the
7	State geological surveys, acting through the Associa-
8	tion.
9	"(2) Design, Development, and adminis-
10	TRATION.—The cooperative geologic mapping pro-
11	gram shall be—
12	"(A) designed and administered to achieve
13	the objectives set forth in subsection (c);
14	"(B) developed in consultation with the ad-
15	visory committee; and
16	"(C) administered through the Survey.";
17	(2) in subsection (b)—
18	(A) in the subsection heading by striking
19	"USGS" and inserting "THE SURVEY";
20	(B) in paragraph (1)—
21	(i) by single-indenting the paragraphs,
22	double-indenting the subparagraphs, and
23	triple indenting the clauses;
24	(ii) by inserting "Lead Agency.—"
25	before "The Survey";

1	(iii) in subparagraph (A)—
2	(I) by striking "Committee on
3	Natural Resources" and inserting
4	"Committee on Resources"; and
5	(II) by striking "date of enact-
6	ment of this Act" and inserting "date
7	of enactment of the National Geologic
8	Mapping Reauthorization Act of
9	1995";
10	(iv) in subparagraph (B)—
11	(I) by striking "State geological
12	surveys" and inserting "Association";
13	and
14	(II) by striking "date of enact-
15	ment of this Act" and inserting "date
16	of enactment of the National Geologic
17	Mapping Reauthorization Act of
18	1995"; and
19	(v) in subparagraph (C)—
20	(I) by striking "date of enact-
21	ment of this Act" and inserting "date
22	of enactment of the National Geologic
23	Mapping Reauthorization Act of
24	1995'';

1	(II) by striking "Committee on
2	Natural Resources" and inserting
3	"Committee on Resources";
4	(III) in clauses (i) and (ii) by in-
5	serting "and the Association" after
6	"the Survey";
7	(IV) by adding "and" at the end
8	of clause (ii); and
9	(V) by striking "; and" at the
10	end of clause (iii) and all that follows
11	through the end of the subparagraph
12	and inserting a period; and
13	(C) in paragraph (2)—
14	(i) by inserting "Responsibilities
15	OF THE SECRETARY.—" before "In addi-
16	tion to"; and
17	(ii) in subparagraph (A) by striking
18	"State geological surveys" and inserting
19	"Association";
20	(3) in subsection (c)—
21	(A) in paragraph (2) by striking "interpre-
22	tive" and inserting "interpretative"; and
23	(B) in paragraph (4) by striking "aware-
24	ness for" and inserting "awareness of"; and
25	(4) in subsection (d)—

1	(A) in paragraph (1) by inserting "Fed-
2	ERAL COMPONENT.—" before "A Federal";
3	(B) in paragraph (2)—
4	(i) by inserting "Support compo-
5	NENT.—" before "A geologic"; and
6	(ii) by striking subparagraph (D) and
7	inserting the following:
8	"(D) geochronologic and isotopic investiga-
9	tions that—
10	"(i) provide radiometric age dates for
11	geologic-map units; and
12	"(ii) fingerprint the geothermometry,
13	geobarometry, and alteration history of
14	geologic-map units,
15	which investigations shall be contributed to a
16	national geochronologic data base;";
17	(C) in paragraph (3) by inserting "STATE
18	COMPONENT.—" before "A State"; and
19	(D) by striking paragraph (4) and insert-
20	ing the following:
21	"(4) Education component.—A geologic
22	mapping education component—
23	"(A) the objectives of which shall be—

1	"(i) to develop the academic programs
2	that teach earth-science students the fun-
3	damental principles of geologic mapping
4	and field analysis; and
5	"(ii) to provide for broad education in
6	geologic mapping and field analysis
7	through support of field studies;
8	"(B) investigations under which shall be
9	integrated with the other mapping components
10	of the geologic mapping program and shall re-
11	spond to priorities identified for those compo-
12	nents; and
13	"(C) Federal funding for which shall be
14	matched by non-Federal sources on a 1-to-1
15	basis.".
16	(c) Advisory Committee.—Section 5 of the Na-
17	tional Geologic Mapping Act of 1992 (43 U.S.C. 31d) is
18	amended—
19	(1) by striking subsection (a) and inserting the
20	following:
21	"(a) Establishment.—
22	"(1) IN GENERAL.—There shall be established
23	a 10-member geologic mapping advisory committee
24	to advise the Director on planning and implementa-
25	tion of the geologic mapping program.

1	"(2) Members ex officio.—Federal agency
2	members shall include the Administrator of the En-
3	vironmental Protection Agency or a designee, the
4	Secretary of Energy or a designee, the Secretary of
5	Agriculture or a designee, and the Assistant to the
6	President for Science and Technology or a designee.
7	"(3) Appointed members.—Not later than 90
8	days after the date of enactment of the National
9	Geologic Mapping Reauthorization Act of 1995, in
10	consultation with the Association, the Secretary shall
11	appoint to the advisory committee 2 representatives
12	from the Survey (including the Chief Geologist, as
13	Chairman), 2 representatives from the State geologi-
14	cal surveys, 1 representative from academia, and 1
15	representative from the private sector."; and
16	(2) in subsection (b)(3) by striking "and State"
17	and inserting ", State, and university".
18	(d) Geologic Mapping Program Implementation
19	Plan.—Section 6 of the National Geologic Mapping Act
20	of 1992 (43 U.S.C. 31e) is amended—
21	(1) in paragraph (1) by inserting "cooperative"
22	after "national";
23	(2) by striking paragraph (3)(C) and inserting
24	the following:

1	"(C) for the State geologic mapping com-
2	ponent, a priority-setting mechanism that re-
3	sponds to—
4	"(i) specific intrastate needs for geo-
5	logic-map information; and
6	"(ii) interstate needs shared by adja-
7	cent entities that have common require-
8	ments; and";
9	(3) by striking paragraphs (4) and (5) and in-
10	serting the following:
11	"(4) a mechanism for adopting scientific and
12	technical mapping standards for preparing and pub-
13	lishing general-purpose and special-purpose geologic
14	maps to—
15	"(A) ensure uniformity of cartographic and
16	scientific conventions; and
17	"(B) provide a basis for judgment as to
18	the comparability and quality of map products;
19	and"; and
20	(4) by redesignating paragraph (6) as para-
21	graph (5).
22	(e) National Geologic-Map Data Base.—Section
23	7 of the National Geologic Mapping Act of 1992 (43
24	U.S.C. 31f) is amended by striking subsection (b) and in-
25	serting the following:

1	"(b) Standardization.—
2	"(1) In General.—Geologic maps contributed
3	to the national archives shall have format, symbols,
4	and technical attributes that adhere to standards so
5	that archival information can be accessed, ex-
6	changed, and compared efficiently and accurately, as
7	required by Executive Order 12906 (59 Fed. Reg.
8	17,671 (1994), which established the National Spa-
9	tial Data Infrastructure.
10	"(2) Development of standards.—Entities
11	that contribute geologic maps to the national ar-
12	chives shall develop the standards described in para-
13	graph (1) in cooperation with the Federal Geo-
14	graphic Data Committee, which is charged with
15	standards development and other data coordination
16	activities as described in Office of Management and
17	Budget revised Circular A-16.".
18	(f) Annual Report.—Section 8 of the National
19	Geologic Mapping Act of 1992 (43 U.S.C. 31g) is amend-
20	ed in the first sentence—
21	(1) by striking "Committee on Natural Re-
22	sources" and inserting "Committee on Resources";

and

23

1	(2) by striking "program, and describing and
2	evaluating progress" and inserting "program and
3	describing and evaluating the progress".
4	(g) Authorization of Appropriations.—Section
5	9 of the National Geologic Mapping Act of 1992 (43
6	U.S.C. 31h) is amended to read as follows:
7	"SEC. 9. AUTHORIZATION OF APPROPRIATIONS.
8	"(a) In General.—There are authorized to be ap-
9	propriated to carry out the national cooperative geologic
10	mapping program under this Act—
11	"(1) \$24,000,000 for fiscal year 1997;
12	"(2) \$26,000,000 for fiscal year 1998;
13	" $(3)$ \$28,000,000 for fiscal year 1999; and
14	"(4) $$30,000,000$ for fiscal year 2000.
15	"(b) Allocation of Appropriated Funds.—
16	"(1) In general.—Of the amount of funds
17	that are appropriated under subsection (a) for any
18	fiscal year up to the amount that is equal to the
19	amount appropriated to carry out the national coop-
20	erative geologic mapping program for fiscal year
21	1996—
22	"(A) not less than 20 percent shall be allo-
23	cated to State mapping activities; and
24	"(B) not less than 2 percent shall be allo-
25	cated to educational mapping activities.

1	"(2) Increased appropriations.—Of the
2	amount of funds that are appropriated under sub-
3	section (a) for any fiscal year up to the amount that
4	exceeds the amount appropriated to carry out the
5	national cooperative geologic mapping program for
6	fiscal year 1996—
7	"(A) for fiscal year 1997—
8	"(i) 76 percent shall be allocated for
9	Federal mapping and support mapping ac-
10	tivities;
11	"(ii) 22 percent shall be allocated for
12	State mapping activities; and
13	"(iii) 2 percent shall be allocated for
14	educational mapping activities;
15	"(B) for fiscal year 1998—
16	"(i) 75 percent shall be allocated for
17	Federal mapping and support mapping ac-
18	tivities;
19	"(ii) 23 percent shall be allocated for
20	State mapping activities; and
21	"(iii) 2 percent shall be allocated for
22	educational mapping activities;
23	"(C) for fiscal year 1999—

1	"(i) 74 percent shall be allocated for
2	Federal mapping and support mapping ac-
3	tivities;
4	"(ii) 24 percent shall be allocated for
5	State mapping activities; and
6	"(iii) 2 percent shall be allocated for
7	educational mapping activities; and
8	"(D) for fiscal year 2000—
9	"(i) 73 percent shall be allocated for
10	Federal mapping and support mapping ac-
11	tivities;
12	"(ii) 25 percent shall be allocated for
13	State mapping activities; and
14	"(iii) 2 percent shall be allocated for
15	educational mapping activities.".

 $\bigcirc$