

NATIONAL GEOLOGIC MAPPING ACT OF 1992

[Public Law 102–285; 106 Stat.166]

[As Amended Through P.L. 117–58, Enacted November 15, 2021]

【Currency: This publication is a compilation of the text of Public Law 102–285. It was last amended by the public law listed in the As Amended Through note above and below at the bottom of each page of the pdf version and reflects current law through the date of the enactment of the public law listed at <https://www.govinfo.gov/app/collection/comps/>】

【Note: While this publication does not represent an official version of any Federal statute, substantial efforts have been made to ensure the accuracy of its contents. The official version of Federal law is found in the United States Statutes at Large and in the United States Code. The legal effect to be given to the Statutes at Large and the United States Code is established by statute (1 U.S.C. 112, 204).】

AN ACT To enhance geologic mapping of the United States, 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. [43 U.S.C. 31a note] SHORT TITLE.

This Act may be cited as the “National Geologic Mapping Act of 1992”.

SEC. 2. [43 U.S.C. 31a] FINDINGS AND PURPOSE.

(a) FINDINGS.—The Congress finds and declares that—

(1) although significant progress has been made in the production of geologic maps since the establishment of the national cooperative geologic mapping program in 1992, no modern, digital, geologic map exists for approximately 75 percent of the United States;

(2) geologic maps are the primary data base for virtually all applied and basic earth-science investigations, including—

(A) exploration for and development of mineral, energy, and water resources;

(B) screening and characterizing sites for toxic and nuclear waste disposal;

(C) land use evaluation and planning for homeland and environmental protection;

(D) earthquake hazards reduction;

(E) identifying volcanic hazards;

(F) design and construction of infrastructure requirements such as utility lifelines, transportation corridors, and surface-water impoundments;

(G) reducing losses from landslides and other ground failures;

(H) mitigating effects of coastal and stream erosion;

(I) siting of critical facilities;

(J) recreation and public awareness; and

(K) basic earth-science research;

(3) Federal agencies, State and local governments, private industry, and the general public depend on the information provided by geologic maps to determine the extent of potential environmental damage before embarking on projects that could lead to preventable, costly environmental problems or litigation;

(4) the combined capabilities of State, Federal, and academic groups to provide geologic mapping are not sufficient to meet the present and future needs of the United States for national security, environmental protection, and energy self-sufficiency of the Nation;

(5) States are willing to contribute 50 percent of the funding necessary to complete the mapping of the geology within the State;

(6) the lack of proper geologic maps has led to the poor design of such structures as dams and waste-disposal facilities;

(7) geologic maps have proven indispensable in the search for needed fossil-fuel and mineral resources;

(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 available as decision support tools for land and resource management; and

(10) a comprehensive nationwide program of geologic mapping of surficial and bedrock deposits is required in order to systematically build the Nation's geologic-map data base at a pace that responds to increasing demand.

(b) PURPOSE.—The purpose of this Act is to expedite the production of a geologic-map data base for the Nation, to be located within the United States Geological Survey, which can be applied to land-use management, assessment, and utilization, conservation of natural resources, groundwater management, and environmental protection and management.

SEC. 3. [43 U.S.C. 31b] DEFINITIONS.

In this Act:

(1) ADVISORY COMMITTEE.—The term “ADVISORY COMMITTEE” means the advisory committee established under section 5.

(2) ASSOCIATION.—The term “Association” means the Association of American State Geologists.

(3) DIRECTOR.—The term “Director” means the Director of the United States Geological Survey.

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

(5) FEDERAL COMPONENT.—The term “Federal component” means the Federal component of the geologic mapping program described in section 4(d)(1).

(6) GEOLOGIC MAPPING PROGRAM.—The term “geologic mapping program” means the National Cooperative Geologic Mapping Program established by section 4(a).

(7) SECRETARY.—The term “Secretary” means the Secretary of the Interior.

(8) STATE.—The term “State” includes the District of Columbia, the Commonwealth of Puerto Rico, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and the Virgin Islands.

(9) STATE COMPONENT.—The term “State component” means the State component of the geologic mapping program described in section 4(d)(2).

(10) SURVEY.—The term “Survey” means the United States Geological Survey.

SEC. 4. [43 U.S.C. 31c] GEOLOGIC MAPPING PROGRAM.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—There is established a national cooperative geologic mapping program between the United States Geological Survey and the State geological surveys, acting through the Association.

(2) DESIGN, DEVELOPMENT, AND ADMINISTRATION.—The cooperative geologic mapping program shall be—

(A) designed and administered to achieve the objectives set forth in subsection (c);

(B) developed in consultation with the advisory committee; and

(C) administered through the Survey.

(b) RESPONSIBILITIES OF THE SURVEY.—

(1) LEAD AGENCY.—The Survey shall be the lead Federal agency responsible for planning, developing national priorities and standards for, coordinating, and managing the geologic mapping program. In carrying out this paragraph, the Secretary, acting through the Director, shall—

(A) develop a 5-year strategic plan for the geologic mapping program in accordance with section 6, which plan shall be submitted to the Committee on Resources of the House of Representatives and the Committee on Energy and Natural Resources of the Senate not later than 1 year after the date of enactment of the John D. Dingell, Jr. Conservation, Management, and Recreation Act;

(B) appoint, with the advice and consultation of the Association, the advisory committee not later than 1 year after the date of enactment of the John D. Dingell, Jr. Conservation, Management, and Recreation Act in accordance with section 5; and

(C) submit biennially a report to the Committee on Energy and Natural Resources of the United States Senate and to the Committee on Resources of the House of Representatives identifying—

(i) how the Survey and the Association are coordinating the development and implementation of the geologic mapping program;

(ii) how the Survey and the Association establish goals, mapping priorities, and target dates for implementation of the geologic mapping program; and

(iii) how long-term staffing plans for the various components of the geologic mapping program affect successful implementation of the geologic mapping program.

(2) RESPONSIBILITIES OF THE SECRETARY.—In addition to paragraph (1), the Secretary, acting through the Director, shall be responsible for developing, as soon as practicable—

(A) in cooperation with the Association, other Federal and State agencies, public and private sector organizations and academia, the geologic-map data base; and

(B) maps and mapping techniques which achieve the objectives specified in subsection (c).

(c) PROGRAM OBJECTIVES.—The objectives of the geologic mapping program shall include—

(1) determining the Nation's geologic framework through systematic development of geologic maps at scales appropriate to the geologic setting and the perceived applications, such maps to be contributed to the national geologic map¹ data base;

(2) development of a complementary national geochronologic and paleontologic data base that provides value-added descriptive and interpretative information to the geologic-map data base;

(3) application of cost-effective mapping techniques that assemble, produce, translate and disseminate geologic-map information and that render such information of greater application and benefit to the public; and

(4) development of public awareness of the role and application of geologic-map information to the resolution of national issues of land use management.

(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;

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

¹ So in original. Probably should be "geologic-map".

(III) the needs of land management agencies of the Department of the Interior.

(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.

(4) ABANDONED MINE LAND AND MINE WASTE COMPONENT.—

(A) IN GENERAL.—The geologic mapping program shall include an abandoned mine land and mine waste geologic mapping component, the objective of which shall be to establish the geologic framework of abandoned mine land and other land containing mine waste.

(B) MAPPING PRIORITIES.—For the component described in subparagraph (A), the priority shall be mapping abandoned mine land and other land containing mine waste where multiple critical mineral (as defined in section 7002(a) of the Energy Act of 2020 (30 U.S.C. 1606(a))) and metal commodities are anticipated to be present, rather than single mineral resources.

SEC. 5. [43 U.S.C. 31d] ADVISORY COMMITTEE.

(a) ESTABLISHMENT.—

(1) IN GENERAL.—There shall be established a 11-member geologic mapping advisory committee to advise the Director on planning and implementation of the geologic mapping program.

(2) MEMBERS EX OFFICIO.—Federal agency members shall include the Administrator of the Environmental Protection Agency or a designee, the Secretary of the Interior or a designee from a land management agency of the Department of

the Interior, the Secretary of Energy or a designee, and the Secretary of Agriculture or a designee.

(3) APPOINTED MEMBERS.—In consultation with the Association, the Secretary shall appoint to the advisory committee two representatives from the Survey (including the Associate Director for Core Science Systems, as Chair), two representatives from the State geological surveys, one representative from academia, and 2 representatives from the private sector.

(b) DUTIES.—The advisory committee shall—

(1) review and update the 5-year plan prepared by the Director pursuant to section 6;

(2) review the scientific progress of the geologic mapping program;

(3) provide a scientific overview of geologic maps (including maps of geologic-based hazards) used or disseminated by Federal agencies for regulation or land-use planning; and

(4) submit an annual report to the Secretary that evaluates the progress of the Federal, State, and university mapping activities and evaluates the progress made toward fulfilling the purposes of sections 4 through 7.

SEC. 6. [43 U.S.C. 31e] 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 planning and information exchange and to avoid redundancy.

SEC. 7. [43 U.S.C. 31f] 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 with funding provided by the National Cooperative Geologic Mapping Program, including under the Federal, State, and education components;

(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.

(b) STANDARDIZATION.—

(1) IN GENERAL.—Geologic maps contributed to the national archives shall have format, symbols, and technical attributes that adhere to standards so that archival information can be accessed, exchanged, and compared efficiently and accurately, as required by Executive Order 12906 (59 Fed. Reg. 17,671 (1994)), which established the National Spatial Data Infrastructure.

(2) DEVELOPMENT OF STANDARDS.—Entities that contribute geologic maps to the national archives shall develop the standards described in paragraph (1) in cooperation with the Federal Geographic Data Committee, which is charged with standards development and other data coordination activities as described in Office of Management and Budget revised Circular A-16.

SEC. 8. [43 U.S.C. 31g] BIENNIAL REPORT.

Not later than 3 years after the date of enactment of the Omnibus Public Land Management Act of 2009 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. [43 U.S.C. 31h] AUTHORIZATION OF APPROPRIATIONS.

(a) **IN GENERAL.**—There is authorized to be appropriated to carry out this Act \$64,000,000 for each of fiscal years 2009 through 2031.

(b) **ALLOCATION OF APPROPRIATIONS.**—Of any amounts appropriated for any fiscal year in excess of the amount appropriated for fiscal year 2005—

(1) 50 percent shall be available for the State component; and

(2) 4 percent shall be available for the education component.

SEC. 10. UNITED STATES GEOLOGICAL SURVEY AND UNITED STATES BUREAU OF MINES.

(a) **[43 U.S.C. 31 note] UNITED STATES GEOLOGICAL SURVEY.**—The Geological Survey established by the Act of March 3, 1879 (43 U.S.C. 31(a)), is designated as and shall hereafter be known as the United States Geological Survey.

(b) **[30 U.S.C. 1 note] UNITED STATES BUREAU OF MINES.**—The Bureau of Mines established by the Act of May 16, 1910 (30 U.S.C. 1), is designated as and shall hereafter be known as the United States Bureau of Mines.