

to be known as the “National Volcano Early Warning and Monitoring System”, to monitor, warn, and protect citizens of the United States from undue and avoidable harm from volcanic activity.

**(B) Purposes**

The purposes of the System are—

(i) to organize, modernize, standardize, and stabilize the monitoring systems of the volcano observatories in the United States, which includes the Alaska Volcano Observatory, California Volcano Observatory, Cascades Volcano Observatory, Hawaiian Volcano Observatory, and Yellowstone Volcano Observatory; and

(ii) to unify the monitoring systems of volcano observatories in the United States into a single interoperative system.

**(C) Objective**

The objective of the System is to monitor all the volcanoes in the United States at a level commensurate with the threat posed by the volcanoes by—

(i) upgrading existing networks on monitored volcanoes;

(ii) installing new networks on unmonitored volcanoes; and

(iii) employing geodetic and other components when applicable.

**(2) System components**

**(A) In general**

The System shall include—

(i) a national volcano watch office that is operational 24 hours a day and 7 days a week;

(ii) a national volcano data center; and

(iii) an external grants program to support research in volcano monitoring science and technology.

**(B) Modernization activities**

Modernization activities under the System shall include the comprehensive application of emerging technologies, including digital broadband seismometers, real-time continuous Global Positioning System receivers, satellite and airborne radar interferometry, acoustic pressure sensors, and spectrometry to measure gas emissions.

**(3) Management**

**(A) Management plan**

**(i) In general**

Not later than 180 days after March 12, 2019, the Secretary shall submit to Congress a 5-year management plan for establishing and operating the System.

**(ii) Inclusions**

The management plan submitted under clause (i) shall include—

(I) annual cost estimates for modernization activities and operation of the System;

(II) annual milestones, standards, and performance goals; and

(III) recommendations for, and progress towards, establishing new, or enhancing existing, partnerships to leverage resources.

**(B) Advisory committee**

The Secretary shall establish an advisory committee to assist the Secretary in implementing the System, to be comprised of representatives of relevant agencies and members of the scientific community, to be appointed by the Secretary.

**(C) Partnerships**

The Secretary may enter into cooperative agreements with institutions of higher education and State agencies designating the institutions of higher education and State agencies as volcano observatory partners for the System.

**(D) Coordination**

The Secretary shall coordinate the activities under this section with the heads of relevant Federal agencies, including—

(i) the Secretary of Transportation;

(ii) the Administrator of the Federal Aviation Administration;

(iii) the Administrator of the National Oceanic and Atmospheric Administration; and

(iv) the Administrator of the Federal Emergency Management Agency.

**(4) Annual report**

Annually, the Secretary shall submit to Congress a report that describes the activities carried out under this section.

**(c) Funding**

**(1) Authorization of appropriations**

There is authorized to be appropriated to carry out this section \$55,000,000 for the period of fiscal years 2019 through 2023.

**(2) Effect on other sources of Federal funding**

Amounts made available under this subsection shall supplement, and not supplant, Federal funds made available for other United States Geological Survey hazards activities and programs.

(Pub. L. 116-9, title V, § 5001, Mar. 12, 2019, 133 Stat. 766.)

**Statutory Notes and Related Subsidiaries**

**DEFINITION OF “SECRETARY”**

Secretary means the Secretary of the Interior, see section 2 of Pub. L. 116-9, set out as a note under section 1 of this title.

**§ 317. Earth Mapping Resources Initiative**

**(a) Definition of critical mineral**

In this section, the term “critical mineral” has the meaning given the term in section 1606(a) of title 30.

**(b) Establishment**

There is established within the United States Geological Survey an initiative, to be known as the “Earth Mapping Resources Initiative” (referred to in this section as the “Initiative”).

**(c) Purpose**

The purpose of the Initiative shall be to accelerate efforts to carry out the fundamental resources and mapping mission of the United States Geological Survey by—

- (1) providing integrated topographic, geologic, geochemical, and geophysical mapping;
- (2) accelerating the integration and consolidation of geospatial and resource data; and
- (3) providing interpretation of subsurface and above-ground mineral resources data.

**(d) Cooperative agreements**

**(1) In general**

In carrying out the Initiative, the Director of the United States Geological Survey may enter into cooperative agreements with State geological surveys.

**(2) Effect**

Nothing in paragraph (1) precludes the Director of the United States Geological Survey from using existing contracting authorities in carrying out the Initiative.

**(e) Comprehensive mapping modernization**

**(1) In general**

Not later than 10 years after November 15, 2021, the Initiative shall complete an initial comprehensive national modern surface and subsurface mapping and data integration effort.

**(2) Approach**

In carrying out paragraph (1) with regard to minerals, mineralization, and mineral deposits, the Initiative shall focus on the full range of minerals, using a whole ore body approach rather than a single commodity approach, to emphasize all of the recoverable critical minerals in a given surface or subsurface deposit.

**(3) Priority**

In carrying out paragraph (1) with regard to minerals, mineralization, and mineral deposits, the Initiative shall prioritize mapping and assessing critical minerals.

**(4) Inclusions**

In carrying out paragraph (1), the Initiative shall also—

- (A) map and collect data for areas containing mine waste to increase understanding of above-ground critical mineral resources in previously disturbed areas; and
- (B) provide for analysis of samples, including samples within the National Geological and Geophysical Data Preservation Program established under section 15908(b) of title 42 for the occurrence of critical minerals.

**(f) Availability**

The Initiative shall make the geospatial data and metadata gathered by the Initiative under subsection (e)(1) electronically publicly accessible on an ongoing basis.

**(g) Integration of data sources**

The Initiative shall integrate data sources, including data from—

- (1) the National Cooperative Geologic Mapping Program established by section 31c(a)(1) of this title;
- (2) the National Geological and Geophysical Data Preservation Program established under section 15908(b) of title 42;
- (3) the USMIN Mineral Deposit Database of the United States Geological Survey;

- (4) the 3D Elevation Program established under section 3104(a) of this title; and
- (5) other relevant sources, including sources providing geothermal resources data.

**(h) Authorization of appropriations**

There is authorized to be appropriated to the Secretary to carry out this section \$320,000,000 for the period of fiscal years 2022 through 2026, to remain available until expended.

(Pub. L. 117-58, div. D, title II, §40201, Nov. 15, 2021, 135 Stat. 958.)

**Statutory Notes and Related Subsidiaries**

WAGE RATE REQUIREMENTS

For provisions relating to rates of wages to be paid to laborers and mechanics on projects for construction, alteration, or repair work funded under div. D or an amendment by div. D of Pub. L. 117-58, including authority of Secretary of Labor, see section 18851 of Title 42, The Public Health and Welfare.

DEFINITION OF “SECRETARY”

For definition of Secretary as used in this section, see section 18701 of Title 42, The Public Health and Welfare.

**§ 32. Acting Director**

The Secretary of the Interior may authorize one of the geologists to act as Director of the United States Geological Survey in the absence of that officer.

(July 31, 1894, ch. 174, §1, 28 Stat. 197; Pub. L. 102-154, title I, Nov. 13, 1991, 105 Stat. 1000.)

**Statutory Notes and Related Subsidiaries**

CHANGE OF NAME

“United States Geological Survey” substituted in text for “Geological Survey” pursuant to provision of title I of Pub. L. 102-154, set out as a note under section 31 of this title.

**Executive Documents**

TRANSFER OF FUNCTIONS

For transfer of functions of other officers, employees, and agencies of Department of the Interior, with certain exceptions, to Secretary of the Interior, with power to delegate, see Reorg. Plan No. 3 of 1950, §§1, 2, eff. May 24, 1950, 15 F.R. 3174, 64 Stat. 1262, set out under section 1451 of this title.

**§ 33. Repealed. Aug. 10, 1956, ch. 1041, § 53, 70A Stat. 641**

Section, act June 16, 1880, ch. 235, 21 Stat. 274, authorized Secretary of War to detail officers of Ordnance Corps to serve with Geological Survey.

**§ 34. Scientific employees**

The scientific employees of the United States Geological Survey shall be selected by the Director, subject to the approval of the Secretary of the Interior exclusively for their qualifications as professional experts.

(July 7, 1884, ch. 332, 23 Stat. 212; Pub. L. 102-154, title I, Nov. 13, 1991, 105 Stat. 1000.)

**Statutory Notes and Related Subsidiaries**

CHANGE OF NAME

“United States Geological Survey” substituted in text for “Geological Survey” pursuant to provision of