

To the office of U.S. Representative Jeff Hurd

Re: HR 9646 (119th Congress), Quantum-Enhanced Critical Minerals Mapping Act of 2026 • Latest action (2026-07-21): Subcommittee Hearings Held

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Cooperative Critical Minerals Quantum Mapping Act of 2026

The measure, as described from the official record: To accelerate the domestic discovery and mapping of critical mineral deposits using quantum-enhanced sensing and computing technologies, thereby reducing reliance on foreign supply chains.

THE PROPOSAL

Section 1. Short Title. This Act may be cited as the Cooperative Critical Minerals Quantum Mapping Act of 2026.

Section 2. Findings. Congress finds that critical mineral security is essential to national defense and economic prosperity, and that quantum-enhanced remote sensing can significantly improve the accuracy and speed of mineral mapping while respecting state and private property rights.

Section 3. Voluntary State-Federal Partnership. The Secretary of the Interior, acting through the U.S. Geological Survey, shall establish a voluntary cooperative program with any state that requests assistance in mapping critical mineral deposits within its borders. Participation shall be by written agreement between the Secretary and the governor of the state, specifying the scope, duration, and data-sharing terms. No federal mapping shall occur on non-federal lands without explicit state consent.

Section 4. Private Property Protections. Prior to conducting any mapping activity on private land, the United States shall obtain a written easement or license from the landowner, or demonstrate that the mapping is conducted from public airspace at altitudes exceeding 500 feet and uses only passive sensing technologies that do not invade the curtilage of a home or violate the Fourth Amendment. Any data collected that reveals proprietary information on mineral deposits shall be kept confidential and not disclosed without the landowner's permission, subject to a penalty of \$10,000 per day for unauthorized disclosure.

Section 5. Funding and Oversight. The program shall be funded by an excise tax of 0.5% on the gross value of critical minerals extracted from deposits discovered using this program, collected by the Bureau of Land Management and deposited into the Critical Minerals Mapping Trust Fund. Total authorized spending from the Fund is capped at \$200 million over five fiscal years. The Government Accountability Office shall audit the program annually and report to Congress on cost-effectiveness, any constitutional concerns, and the volume of mineral resources discovered. The program shall sunset on September 30, 2031, unless renewed by Congress.

Section 6. Enforcement. Any officer or employee of the United States who knowingly conducts mapping on non-federal land without the required consent or easement shall be subject to a civil penalty of \$5,000 per violation, and the Attorney General may bring an action to enjoin further unauthorized mapping.

OPERATIVE PROVISIONS (VFA PROPOSAL)

Funding Source	Excise tax of 0.5% on gross value of critical minerals extracted from deposits discovered via this program, deposited into a trust fund.
Funding Amount	\$200 million cap over five fiscal years.
Sunset Years	5 years
Oversight Body	Government Accountability Office (GAO) with annual reports to Congress.
Enforcement Mechanism	Civil penalties for unauthorized mapping on non-federal land; injunctive relief by Attorney General; confidentiality breach penalties.
Effective Date	90 days after enactment.

CONSTITUTIONAL BASIS

- Article I, Section 8, Clause 1 (General Welfare – spending for national mineral security)
- Article I, Section 8, Clause 3 (Commerce Clause – minerals in interstate commerce)
- Tenth Amendment (reserving mapping on non-federal lands to states unless they consent)
- Fourth Amendment (protection against unreasonable searches – passive sensing from public airspace only)
- Fifth Amendment Takings Clause (requires easement or compensation for private property access)

Concerns with the measure as written:

- Potential Tenth Amendment conflict if the bill mandates federal mapping on state-held lands without state consent.
- Potential Fourth Amendment or Fifth Amendment takings issues if the bill authorizes non-consensual aerial or subsurface surveying of private property without compensation or warrant.
- Possible overreach under Article I, Section 8 if the funding mechanism is not tied to a specific enumerated power (e.g., general welfare, commerce).

WHY BOTH SIDES CAN BACK IT (VFA'S ASSESSMENT)

Honors Democratic priorities: federal investment in technology and climate/mineral security, protection of private property rights, and transparency via GAO oversight. Honors Republican priorities: voluntary state-federal partnership (no federal mandate), reliance on private sector easements and compensation, sunset clause to limit federal expansion, and a user-fee funding model that does not increase general taxation.

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