

FINAL BILL REPORT

ESSB 6039

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Synopsis as Enacted

Brief Description: Promoting the development of geothermal energy resources.

Sponsors: Senate Committee on Environment, Energy & Technology (originally sponsored by Senators Lovelett, Shewmake, Dhingra, Frame, Hasegawa, Keiser, Lias, Nguyen, Nobles and Saldaña).

Senate Committee on Environment, Energy & Technology
Senate Committee on Ways & Means
House Committee on Environment & Energy
House Committee on Capital Budget

Background: The Department of Natural Resources (DNR), through the appointed state geologist, is responsible for maintaining the state Geological Survey (Survey). The Survey includes examination of economic products, soils, water resources, and road building materials; and preparation of geological and economic maps. The Survey must assess and map volcanic, seismic, landslide, and tsunami hazards in Washington.

According to DNR, subsurface geology is the study of physical properties and location of rock and soil found below the ground surface.

In 2020, the Legislature updated statewide greenhouse gas (GHG) emissions reduction limits to 45 percent below 1990 levels by 2030, 70 percent below 1990 levels by 2040, and 95 percent below 1990 levels, as well as net zero emissions, by 2050.

Summary: Washington Geological Survey. The Survey must compile and maintain a comprehensive database of Washington State subsurface geologic information. The searchable database must be publicly available on the Survey's website. The subsurface geologic information must include, but is not limited to temperature gradient logs, geothermal well records, high resolution surveys, geothermal play fairway studies, three-dimensional reflection seismic surveys, and rock properties databases. The Survey must also:

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- coordinate with federal, state, and local agencies, and tribal governments to combine existing information;
- acquire, process, and analyze new data and update deficient data using the best practicable technology;
- characterize the hazard of induced seismicity for high-potential geothermal play areas, using available data; and
- provide technical assistance on the interpretation and application of subsurface geologic data and hazard assessments.

State-Owned Land Lease Rates. DNR must begin rulemaking to update its geothermal resources lease rates by December 30, 2024, to be competitive with geothermal lease rates adopted by the federal government and other western states. When updating lease rates, the goal is to optimize attracting geothermal exploration and development projects while balancing the state's obligation to trust beneficiaries and not adversely impact the federally reserved tribal rights and resources.

Competitive Geothermal Exploration Cost-Share Grant Program. Subject to the amounts appropriated, the Department of Commerce (Commerce) must establish a competitive geothermal exploration cost-share grant program (grant program) to incentivize and offset direct costs associated with deep exploratory drilling to identify Washington locations suitable for the development of geothermal energy.

Commerce must consult with the Survey to develop a method and criteria for allocation of grants. The criteria must require:

- proposed exploratory drilling projects to be located in areas of high geothermal potential not impacting federally reserved tribal rights and resources;
- exploratory drilling projects to be in alignment with equity and statutory environmental justice principles;
- grant applicants to possess or demonstrate partnership with entities with expertise in geothermal exploration; meet high labor standards; demonstrate site control of the site to be explored through ownership interest or a lease agreement; and efforts to engage with the local community to provide information about the potential project;
- grant awards must be available to private, public, and federally recognized tribal applicants; awards must not be more than one-half of the overall project cost for private applicants and not more than two-thirds of the overall project cost for public applicants;
- grant applicants to provide an analysis of any potential for induced seismicity and a plan for managing the risk of induced seismicity, and to consult with Ecology and, if applicable, comply with underground injection control standards and groundwater antidegradation standards, if any fluid is proposed to be injected; and
- grant awards to seek to broaden the state's knowledge of geothermal resources, with a preference given to high impact projects in favorable geologic settings that have been comparatively underexplored, and all results to be made publicly available and submitted to the Survey to include in its new database.

Commerce must make a reasonable effort to use the U.S. Department of Energy's recommendations and guidelines for geothermal demonstration projects in the western states when administering the grant program.

Geothermal Resources Collaborative Process. The Department of Ecology (Ecology), in consultation with Commerce, DNR, the Department of Fish and Wildlife, and the Department of Archaeology and Historic Preservation must engage in a collaborative process to identify opportunities and risks associated with the development of geothermal resources in the three highest priority locations in the state, beginning November 30, 2024. The locations must be identified by DNR.

As part of the collaborative process, Ecology must engage in meaningful government-to-government consultation with potentially affected federally recognized Indian tribes and seek participation from the Department of Archaeology and Historic Preservation, other state agencies as appropriate, and local governments; state research institutions; the electrical generation, transmission, and distribution sector; and environmental organizations. At the request of tribes, Ecology may include additional participation with independent subject matter experts. Subject to the amounts appropriated, Ecology must provide grants to these Indian tribes to provide capacity and to support their evaluation of the impacts of geothermal electricity development and participation in the collaborative process.

At a minimum, the collaborative process must identify and provide recommendations on the following topics:

- the potential impacts of geothermal resources development on the rights, interests, and resources of federally recognized Indian tribes, endangered species in Washington, and overburdened communities;
- the development of factors to identify preferable sites for development of geothermal resources, including proximity to electrical transmission and distribution infrastructure, and continuity between groundwater and surface water resources; and
- the capacity for geothermal resources to help Washington meet its clean energy generation requirements and GHG emissions limits.

Ecology must provide to the Legislature an update on the status of the collaborative process by June 30, 2026, and a final report by June 30, 2027.

The Interagency Clean Energy Siting Coordinating Council (Council) must support Ecology during the collaborative process. The Council must consider the findings of the interim update and final report and make recommendations to the Legislature and Governor on potential actions regarding the development of geothermal energy. The Council must identify key factors for consideration in planning for and siting geothermal facilities, which include geologic suitability, water resource impacts, impacts to the rights of federally recognized Indian tribes, and proximity to electrical transmission and distribution

infrastructure.

Votes on Final Passage:

Senate 49 0

House 96 0 (House amended)

Senate 49 0 (Senate concurred)

Effective: June 6, 2024