# Washington State House of Representatives Office of Program Research



## **Environment & Energy Committee**

### **HB 2129**

**Brief Description:** Promoting the development of geothermal energy resources.

**Sponsors:** Representatives Ramel, Mena, Simmons, Reed, Street, Orwall, Doglio and Kloba.

#### **Brief Summary of Bill**

- Directs the Washington Geological Survey to compile and maintain a publicly available comprehensive database of state subsurface geologic information.
- Directs the Department of Natural Resources to update its geothermal resources lease rates.
- Directs the Department of Commerce to establish a competitive geothermal exploration cost-share grant program to incentivize and offset direct costs associated with deep exploratory drilling to identify locations suitable for the development of geothermal energy.
- Directs the Department of Ecology to engage in a collaborative process to identify opportunities and risks associated with the development of geothermal resources.

**Hearing Date:** 1/29/24

**Staff:** Robert Hatfield (786-7117).

#### **Background:**

The Department of Natural Resources (DNR), through the appointed State Geologist, is responsible for maintaining the Washington Geological Survey (Survey). The Survey includes examination of economic products, soils, water resources, and road building materials; and

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preparation of geological and economic maps. The Survey must assess and map volcanic, seismic, landslide, and tsunami hazards in Washington.

According to the 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 of Bill:**

#### Washington Geological Survey.

The Survey must compile and maintain a comprehensive database of Washington 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:

- coordinate with federal, state, and local agencies 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.

The 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.

#### 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;
- 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 to 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 and tribal applicants;
- an analysis of any potential for induced seismicity, if any fluid is proposed to be injected, and a plan for managing the risk of induced seismicity; 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 utilize the United States 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 and the DNR, must engage in a collaborative process to identify opportunities and risks associated with the development of geothermal resources, beginning November 30, 2024.

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 local governments; state research institutions; the electrical generation, transmission, and distribution sector; and environmental organizations. Subject to the amounts appropriated, Ecology must provide grants to these Indian tribes to support their evaluation of the impacts of geothermal electricity development and participation in the collaborative process.

At a minimum, the collaborative process must address 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
- the capacity for geothermal resources to help Washington meet its clean energy generation requirements and GHG emissions limits.

Ecology must provide to the Legislature interim reports on the status of the collaborative process

by June 30, 2025, and November 30, 2025, and a final report by June 30, 2026.

Appropriation: None.

Fiscal Note: Requested on January 23, 2024.

Effective Date: The bill takes effect 90 days after adjournment of the session in which the bill is

passed.