Multiple Agency Fiscal Note Summary

Bill Number: 2129 HB Title: Geothermal energy resources

Estimated Cash Receipts

Agency Name	2023-25			2025-27			2027-29			
	GF-State	NGF-Outlook	Total	GF-State	NGF-Outlook	Total	GF-State	NGF-Outlook	Total	
Department of Natural Resources	Non-zero but	Non-zero but indeterminate cost and/or savings. Please see discussion.								
Total \$	0	0	0	0	0	0	0	0	0	

Estimated Operating Expenditures

Agency Name	2023-25				2025-27				2027-29			
	FTEs	GF-State	NGF-Outlook	Total	FTEs	GF-State	NGF-Outlook	Total	FTEs	GF-State	NGF-Outlook	Total
Department of Commerce	.6	198,686	198,686	198,686	.6	198,686	198,686	198,686	.0	0	0	0
Department of Ecology	1.2	0	0	1,569,593	1.2	0	0	1,569,593	.0	0	0	0
Department of In addition to the estimate above, there are additional indeterminate costs and/or savings. Please see individual fiscal note. Ecology												
Department of Natural Resources	2.6	862,400	862,400	862,400	5.2	1,624,000	1,624,000	1,624,000	5.2	1,624,000	1,624,000	1,624,000
Total \$	4.4	1,061,086	1,061,086	2,630,679	7.0	1,822,686	1,822,686	3,392,279	5.2	1,624,000	1,624,000	1,624,000

Estimated Capital Budget Expenditures

Agency Name		2023-25			2025-27			2027-29		
	FTEs	Bonds	Total	FTEs	Bonds	Total	FTEs	Bonds	Total	
Department of Commerce	1.9	0	0	3.8	0	0	.0	0	0	
Department of Commerce	In addi	n addition to the estimate above, there are additional indeterminate costs and/or savings. Please see individual								
	fiscal n	ote.								
Department of Ecology	.0	0	0	.0	0	0	.0	0	0	
Department of Natural	.0	0	0	.0	0	0	.0	0	0	
Resources										
	40	•								
Total \$	1.9	0	0	3.8	U	U	0.0	0	U	

Estimated Capital Budget Breakout

Department of Commerce Non-zero but indeterminate cost and/or savings. Please see discussion.

Prepared by: Lisa Borkowski, OFM	Phone:	Date Published:
	(360) 742-2239	Final 1/29/2024

Individual State Agency Fiscal Note

Bill Number: 2129 HB	Title:	Geothermal energy	resources	Ag	ency: 103-Departr	nent of Commerc
Part I: Estimates No Fiscal Impact Estimated Cash Receipts to: NONE						
Estimated Operating Expenditure	es from:	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years		0.0	1.2	0.6	0.6	0.0
Account		0.0	1.2	0.0	0.0	0.0
General Fund-State 001-1		0	198,686	198,686	198,686	0
0011	Total \$	0	198,686	198,686	198,686	0
The cash receipts and expenditure e and alternate ranges (if appropriate			e most likely fiscal i	impact. Factors impo	acting the precision of	f these estimates,
Check applicable boxes and follo	w corresp	onding instructions:				
X If fiscal impact is greater than form Parts I-V.	n \$50,000 j	per fiscal year in the	current biennium	or in subsequent b	oiennia, complete er	ntire fiscal note
If fiscal impact is less than \$	50,000 per	r fiscal year in the cu	rrent biennium o	in subsequent bier	nnia, complete this	page only (Part I)
X Capital budget impact, comp	lete Part I	V.				
X Requires new rule making, c						
Legislative Contact: Robert H	atfield			Phone: 360-786-71	17 Date: 01	/23/2024
Agency Preparation: Marla Pa	ge			Phone: 360-725-31	29 Date: 01	/29/2024
Agency Approval: Marla Pa	 .ge			Phone: 360-725-31	29 Date: 01	/29/2024

Val Terre

OFM Review:

Date: 01/29/2024

Phone: (360) 280-3973

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

New Section 1 of the bill directs the Washington Geologic Survey to gather and publish in a database, subsurface data on geothermal resources in Washington and to characterize the risk of induced seismicity in areas with high potential for geothermal energy production.

Section 2 of the bill directs DNR to update lease rates for geothermal energy so that Washington's lease rates are competitive with those of other western states and the federal government.

New Section 3 of the bill directs the Department of Commerce (department) to create a competitive grant program to encourage exploration of geothermal resources in Washington. Grants may be provided to offset the costs of deep exploratory drilling for geothermal resources. The bill lays out a number of requirements for the program and directs the department to consult with the WA Geologic Survey in the program's development. It also requires the department to make reasonable effort to utilize U.S. Department of Energy's recommendations and guidelines concerning enhanced geothermal demonstration projects in the western states.

Section 4 directs the Department of Ecology (Ecology), in consultation with the Department of Natural Resources (DNR) and the department to engage in a collaborative process to identify opportunities and risks in developing geothermal resources. The bill also directs Ecology to engage with a number of potentially impacted and interested groups and to consult with potentially affected Indian tribes, including providing grants to support tribes' evaluation of the impacts of geothermal electricity development. The collaborative process must evaluate impacts of geothermal energy production on endangered species, overburdened communities, rights, interests, and resources including tribal cultural resources.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

None.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

Section 4 — Collaborative Process

The Department of Ecology must commence the geothermal resources collaborative process by November 30, 2024. The bill directs Ecology to submit a final report by June 30, 2026.

To accomplish the work the department estimates:

0.50 FTE EMS2 Senior Energy Policy Specialist (1,044 hours) in FY25-FY26 to engage in the collaborative process led by Ecology to identify opportunities and risks associated with the development of geothermal resources.

0.50 FTE EMPS3 Emergency Management Program Specialist (1,044 hours) in FY25-FY26 to support the identification of risks associated with the development of geothermal resources.

Salaries and Benefits

FY25-FY26: \$142,244 per fiscal year

Goods and Services, Equipment and Travel

FY25-FY26: \$9,644 per fiscal year

Intra-Agency Reimbursements FY25-FY26: \$46,798 per fiscal year

Note: Standard goods and services costs include supplies and materials, employee development and training, Attorney General costs, central services charges and agency administration. Agency administration costs (e.g., payroll, HR, IT) are funded under a federally approved cost allocation plan.

Total Costs

FY25-FY26: \$198,686

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
001-1	General Fund	State	0	198,686	198,686	198,686	0
		Total \$	0	198,686	198,686	198,686	0

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years		1.2	0.6	0.6	
A-Salaries and Wages		107,662	107,662	107,662	
B-Employee Benefits		34,582	34,582	34,582	
C-Professional Service Contracts					
E-Goods and Other Services		9,644	9,644	9,644	
G-Travel					
J-Capital Outlays					
M-Inter Agency/Fund Transfers					
N-Grants, Benefits & Client Services					
P-Debt Service					
S-Interagency Reimbursements					
T-Intra-Agency Reimbursements		46,798	46,798	46,798	
9-					
Total \$	0	198,686	198,686	198,686	0

III. C - Operating FTE Detail: List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
Administrative Services Indirect	111,168		0.2	0.1	0.1	
EMPS3	86,212		0.5	0.3	0.3	
EMS2	122,841		0.5	0.3	0.3	
Total FTEs			1.2	0.6	0.6	0.0

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

IV. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years		3.8	1.9	3.8	
A-Salaries and Wages					
B-Employee Benefits					
C-Professional Service Contracts					
E-Goods and Other Services					
G-Travel					
J-Capital Outlays					
M-Inter Agency/Fund Transfers					
N-Grants, Benefits & Client Services					
P-Debt Service					
S-Interagency Reimbursements					
T-Intra-Agency Reimbursements					
9-					
Total \$	0	0	0	0	0

In addition to the estimates above, there are additional indeterminate costs and/or savings. Please see discussion.

IV. C - Capital Budget Breakout

Acquisition and construction costs not reflected elsewhere on the fiscal note and description of potential financing methods.

Non-zero but indeterminate cost and/or savings. Please see discussion.

IV. D - Capital FTE Detail: FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
Administrative Services Indirect	111,168		0.6	0.3	0.6	
Commerce Specialist 2	70,799		1.0	0.5	1.0	
Commerce Specialist 3	82,056		1.0	0.5	1.0	
EMS2	122,841		0.2	0.1	0.2	
Management Analyst 4	86,212		1.0	0.5	1.0	
Total FTEs			3.8	1.9	3.8	0.0

The capital budget impacts of this program are indeterminate since the bill states that the new grant program at Commerce is "subject to the availability of amounts appropriated for this purpose".

The department assumes that the geothermal exploration grant program would be funded in the capital budget in Fiscal Year (FY) 2025 but the amount of funding for this program is unknown at this time. The type of complex drilling projects that will be eligible for the grant program could not be completed in a year so the department estimates that funding would be reappropriated in the FY26-FY27 biennium. The potential number of drilling sites will depend on public and private interest in this new grant program which is difficult to gauge since geothermal energy is a newly emerging technology area for Washington. The availability of funding to reimburse costs of exploratory drilling for geothermal could generate new interest from out of state entities that might grow over time.

Based on experience administering similarly technologically complex grant programs, such as the Clean Energy Fund Grid Modernization program, below is the estimated minimum FTE level needed for a new grant program for which Commerce does not have existing expertise.

Section 3 — Geothermal Exploration Grant Program

To accomplish the work the department estimates:

1.0 FTE Commerce Specialist 3 (2088 hours) in FY25-FY27 to lead development, solicitation, origination, management and monitoring of competitive grant process and contracts. Provides evaluation and subject matter expertise on grant program, monitors budget and expenditures, conducts detailed analysis, and provides consultative planning for program established in this bill.

1.0 FTE Commerce Specialist 2 (2088 hours) in FY25-FY27 to provide junior-level support to the Commerce Specialist 3 in developing and managing grant processes. Collects grantee information to draft contracts, routes documents for approval and execution, performs data entry, supports grantee invoicing, tracks reporting and deliverables, and provides data on spending.

1.0 FTE Management Analyst 4 (2088 hours) in FY 25-FY27 to gain technical expertise on geothermal exploratory drilling to inform and advise on the development and implementation of the grant program. This position will also lead the environmental justice assessment and community engagement process required under the Healthy Environment for All (HEAL) Act, RCW 70A.02.

0.20 FTE EMS2 Senior Energy Policy Specialist (417 hours) in FY25-FY27 to provide subject matter expertise and expert policy advice in coordinating development of the program.

Salaries and Benefits

FY25-FY27: \$368,795 per fiscal year

Goods and Services

FY25-FY27: \$30,680 per fiscal year

Equipment and Travel

The department assumes the purchase of three standard workstations for the new staff in FY25. The department assumes travel for two staff to attend two in person meetings to support community engagement in FY25. The department also assumes that one staff member will travel to the Geothermal Rising Conference in FY25 to gain insights on geothermal exploratory drilling practices.

FY25: \$21,594

Intra-Agency Reimbursements

FY25-FY27: \$121,334 per fiscal year

Note: Standard goods and services costs include supplies and materials, employee development and training, Attorney General costs, central services charges and agency administration. Agency administration costs (e.g., payroll, HR, IT) are funded under a federally approved cost allocation plan.

Total Costs

FY25: \$542,403

FY26-FY27: \$520,809 per fiscal year

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

None.

Individual State Agency Fiscal Note

Bill Number: 2129 HB	Title:	Geothermal energy	resources		Agency: 461-Depar	tment of Ecology
Part I: Estimates				•		
No Fiscal Impact						
Estimated Cash Receipts to:						
NONE						
Estimated Operating Expendit	ures from:					•
		FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years		0.0	2.3	1.2	2 1.2	2 0.0
Account	C4-4-	0	1 560 502	1 560 50	1 560 503	
Climate Commitment Account- 26C-1		0	1,569,593	1,569,593	1,569,593	
	Total \$	0	1,569,593	1,569,59	1,569,593	0
In addition to the estim	nates above,	there are additional in	ndeterminate costs	s and/or savings	Please see discussion	on.
The cash receipts and expenditur	a astimatas o	a this maga vanyasayt th	a mast likabi fisaal ji	maat Eastows in	angeting the precision	of those estimates
and alternate ranges (if appropri	ate), are expl	ained in Part II.	e most tikety jiscat ti	npacı. Faciors in	ipaciing the precision	of these estimates,
Check applicable boxes and fo	llow corresp	onding instructions:				
X If fiscal impact is greater the form Parts I-V.	nan \$50,000	per fiscal year in the	current biennium	or in subsequen	t biennia, complete	entire fiscal note
If fiscal impact is less than	\$50,000 pe	r fiscal year in the cu	rrent biennium or	in subsequent b	iennia, complete this	s page only (Part I)
Capital budget impact, con	nplete Part I	V.				
Requires new rule making	, complete P	art V.				
Legislative Contact: Robert	Hatfield		I	Phone: 360-786-	7117 Date: 0	01/23/2024
Agency Preparation: Jessica	Moore		1	Phone: 360-529-	7583 Date: (01/23/2024
Agency Approval: Erik F	airchild			Phone: 360-407-	7005 Date: 0	01/23/2024
OFM Review: Lisa B	orkowski		1	Phone: (360) 742	2-2239 Date: (01/28/2024

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

Under current law, Ecology is involved in various aspects of clean energy siting and permitting. RCW 43.394.010 requires Ecology to co-chair an interagency clean energy siting coordination council. The council is responsible for identifying actions to improve siting and permitting of clean energy projects. RCW 43.158.100 requires Ecology to lead a coordinated process for clean energy projects.

This bill would require Department of Natural Resources (DNR), Commerce, and Ecology to work on efforts to support the exploration and development of geothermal resources.

Section 1 would add a new section to chapter 43.92 RCW (Geological Survey) that would require DNR to compile and maintain a database of geologic information. DNR would be required to coordinate with federal, state, and local agencies to compile existing subsurface geologic information, analyze new subsurface geologic data and update deficient data, characterize the hazard of induced seismicity for high-potential geothermal areas, and provide technical assistance.

Section 2 would amend RCW 79.13.530 (Land Leases) to require DNR to begin rulemaking by September 30, 2024 to update geothermal resources lease rates.

Section 3 would add a new section to chapter 79.02 RCW (Public Lands Management) to require Commerce, in consultation with DNR, to implement a competitive cost-share grant program for geothermal exploration.

Section 4 would require Ecology, in consultation with Commerce and DNR, to identify opportunities and risks associated with the development of geothermal resources with engagement and consultation with Tribes, local governments, state research institutions, environmental organizations, and participants in Washington's electrical generation, transmission, and distribution sector. This process would be required to begin by November 30, 2024. Ecology would be required to provide interim legislative reports by June 30, 2025, and November 30, 2025, and a final legislative report by June 30, 2026. Furthermore, Ecology would be required to provide grants to potentially affected federally recognized Indian Tribes to support their evaluation of cultural, natural resource, and other impacts of geothermal electricity development and to support their participation in the collaborative process.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

The expenditure impact to Ecology to run a collaborative process required under section 4 and to identify factors, impacts and analysis on a state-wide basis under this bill is estimated to be greater than \$50,000 in Fiscal Year (FY) 2025 and 2026. The cost of a consultant contract to complete data gathering necessary to identify factors for developing sites and potential impacts from new technologies on a state-wide basis as well as the grant funding for federally recognized Indian Tribes is indeterminate.

Section 4

Ecology, in consultation with DNR and Commerce, would be required to engage in a collaborative process to identify opportunities and risks associated with the development of geothermal resources. Ecology would be required to engage in

meaningful government-to-government consultation with potentially affected federal recognized Indian Tribes, local governments, state research institutions, participants in Washington's electrical generation, transmission, and distribution sector, as well as environmental organizations.

The process would be required to address potential impacts of geothermal resources development on

- The rights, interests, and resources, including Tribal cultural resources, of potentially affected federally recognized Indian Tribes
- State or federal endangered species
- Overburdened communities

The process would be required to develop factors to identify preferred sites for development and the capacity of geothermal resources to meet generation requirements and GHG emission limits.

Ecology would be required to provide grants to potentially affected federally recognized Indian Tribes.

Ecology would be required to start the process by November 30, 2024. Ecology would be required to submit interim reports to the Legislature by June 30, 2025, and again by November 30, 2025. Ecology would be required to submit a final report by June 30, 2026.

Section 1 would require the Department of Natural Resources to gather and make available data on geological resources. Ecology assumes DNR will participate in the collaborative process as the source of information about emerging technologies for geothermal energy development and will provide all information necessary to identify the capacity of geothermal resources to meet clean energy generation requirements. Ecology assumes DNR will provide the expertise to identify all required information on factors for developing sites and potential impacts and any other technical analysis to support the collaborative process.

Ecology assumes the collaborative process required by this bill would require work like the approach taken by Washington State University (WSU) in exploring solar energy in 2021 and pumped storage in 2024. These processes were used to identify risks and opportunities in a collaborative manner.

Ecology assumes that we would contract with WSU to lead the collaborative process. WSU spent \$500,000 to lead a collaborative process for solar energy. However, that process was not state-wide and was only focused on the Columbia Plateau. Furthermore, there was limited Tribal participation. Therefore, Ecology assumes that the cost of leading a collaborative process for geothermal energy that is state-wide with Tribal participation would be much higher. Based on the WSU process and on previous experience at Ecology with clean energy contracting work, Ecology estimates that the cost of this work would be \$2,500,000, split between FY 2025 and FY 2026, shown in contracts.

Ecology estimates that 2.0 FTE Environmental Specialist 4 in FY 2025 and FY 2026 would be required to manage consultant teams for field data and expertise, to identify factors, impacts, and analysis on a state-wide basis, lead the collaboration process, and write the legislative reports.

Ecology assumes that the amount of funding required for the grant program would be dependent on the number of potentially affected federally recognized Indian Tribes. According to the Washington State Governor's Office of Indian Affairs there are 32 federal recognized Indian Tribes with lands and territories in Washington state. Because Ecology has no way to estimate the number or location of areas with potential geothermal resources, it is difficult to determine which of the 32 federal recognized Indian Tribes would need or want to receive funding to participate in the process. In addition to the grants themselves, staff resources would be required to develop guidelines, outreach materials, complete the agreements. Ecology assumes that as part of the grant program, an Environmental Justice Assessment would be completed in FY 2025 as required under the HEAL Act, chapter 70A.02 RCW. Because we don't know the size of the grant program, it is not possible to estimate staff costs currently. Therefore, the amount of grant funding and staff resources necessary to implement this bill is indeterminate.

SUMMARY: The expenditure impact to Ecology under this bill is \$3,139,186 to run a collaborative process and identify factors, impacts, and analysis on a state-wide basis. The cost of a consultant contract to complete fieldwork, exploratory drilling, and other data gathering necessary to identify factors, impacts, and analysis on a state-wide basis as well as the grant funding for federally recognized Indian Tribes is indeterminate.

Section 4 is estimated to require:

FY 2025: \$1,569,593 and 2.3 FTEs FY 2026: \$1,569,593 and 2.3 FTEs

Notes on costs by object:

Salary estimates are current biennium actual rates at Step L.

Benefits are the agency average of 34.1% of salaries.

Contracts includes \$2,500,000 split between FY 2025 and FY 2026 for WSU to lead the collaborative process required under section 4.

Goods and Services are the agency average of \$6,048 per direct program FTE.

Travel is the agency average of \$2,205 per direct program FTE.

Equipment is the agency average of \$1,286 per direct program FTE.

Agency Administrative Overhead is calculated at the federally approved agency indirect rate of 29.8% of direct program salaries and benefits, and is shown as object 9. Agency Administrative Overhead FTEs are included at 0.15 FTE per direct program FTE, and are identified as Fiscal Analyst 2 and IT App Development - Journey.

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
26C-1	Climate Commitment	State	0	1,569,593	1,569,593	1,569,593	0
	Account						
	-	Total \$	0	1,569,593	1,569,593	1,569,593	0

In addition to the estimates above, there are additional indeterminate costs and/or savings. Please see discussion.

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years		2.3	1.2	1.2	
A-Salaries and Wages		172,648	172,648	172,648	
B-Employee Benefits		58,873	58,873	58,873	
C-Professional Service Contracts		1,250,000	1,250,000	1,250,000	
E-Goods and Other Services		12,096	12,096	12,096	
G-Travel		4,410	4,410	4,410	
J-Capital Outlays		2,572	2,572	2,572	
9-Agency Administrative Overhead		68,994	68,994	68,994	
Total \$	0	1,569,593	1,569,593	1,569,593	0

In addition to the estimates above, there are additional indeterminate costs and/or savings. Please see discussion.

III. C - Operating FTE Detail: List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
ENVIRONMENTAL SPEC 4	86,324		2.0	1.0	1.0	
FISCAL ANALYST 2			0.2	0.1	0.1	
IT APP DEV-JOURNEY			0.1	0.1	0.1	
Total FTEs			2.3	1.2	1.2	0.0

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

 $Acquisition\ and\ construction\ costs\ not\ reflected\ elsewhere\ on\ the\ fiscal\ note\ and\ description\ of\ potential\ financing\ methods.$

NONE

IV. D - Capital FTE Detail: FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Individual State Agency Fiscal Note

Bill Number: 2129 HB Title: Geothermal energy resources					Agency: 490-Department of Natural Resources		
Part I: Estimate	s						
No Fiscal Impa	ct						
Estimated Cash Recei	pts to:						
	Non-zero but ind	eterminate cost and	or savings. Plea	se see discussion.			
Estimated Operating	Expenditures from:						
		FY 2024	FY 2025	2023-25	2025-27	2027-29	
FTE Staff Years		0.0	5.2	2.6	5.2	5.2	
Account							
General Fund-State	001-1	0	862,400	862,400	1,624,000	1,624,000	
	Total \$	0	862,400	862,400	1,624,000	1,624,000	
The cash receipts and	expenditure estimates or	n this page represent th	e most likely fiscal ir	mpact. Factors impe	acting the precision of	these estimates,	
	(if appropriate), are explo xes and follow corresp						
	s greater than \$50,000		current biennium	or in subsequent b	viennia, complete en	tire fiscal note	
If fiscal impact i	is less than \$50,000 pe	r fiscal year in the cu	rrent biennium or	in subsequent bier	nnia, complete this p	age only (Part	
Capital budget in	mpact, complete Part I	IV.					
X Requires new ru	le making, complete P	Part V.					
Legislative Contact:	Robert Hatfield		I	Phone: 360-786-71	17 Date: 01/	23/2024	
Legislative Contact: Agency Preparation				Phone: 360-786-71 Phone: 360-902-11			

Lisa Borkowski

OFM Review:

Date: 01/28/2024

Phone: (360) 742-2239

Part II: Narrative Explanation

II. A - Brief Description Of What The Measure Does That Has Fiscal Impact

Significant provisions of the bill and any related workload or policy assumptions that have revenue or expenditure impact on the responding agency by section number.

Section 1: Adds a new section to RCW 43.92 that mandates the Survey to compile and maintain a comprehensive publicly facing subsurface database to support geothermal exploration. The Department of Natural Resources (DNR) must coordinate with other agencies to compile subsurface information, and the survey must acquire new subsurface information where needed. Further, DNR must assess and publish the hazards from induced seismicity within high-potential geothermal play areas and provide technical assistance on the interpretation of both subsurface information and hazard assessments. Additional resources are required to meet these requirements.

Section 2 will determine the revenue received from geothermal leasing on DNR land. The costs associated with rule making are already figured into our positions so there will be no change in funding right now. If the rule making associated with this legislation makes it more appealing for geothermal leases in the future, then DNR may need to look at how we manage that work, but it can still be handled with current staffing levels.

The survey will use existing resources to meet the relevant requirements stated in Sections 3 and 4.

II. B - Cash receipts Impact

Cash receipts impact of the legislation on the responding agency with the cash receipts provisions identified by section number and when appropriate, the detail of the revenue sources. Description of the factual basis of the assumptions and the method by which the cash receipts impact is derived. Explanation of how workload assumptions translate into estimates. Distinguished between one time and ongoing functions.

Cash receipts are indeterminate. The annual rate of revenue generated will be driven by the number of leases that are developed from the formula in this legislation. Currently we have one application in for a geothermal proposal. The rule making that comes out of this legislation will dictate how much revenue is received.

II. C - Expenditures

Agency expenditures necessary to implement this legislation (or savings resulting from this legislation), with the provisions of the legislation that result in the expenditures (or savings) identified by section number. Description of the factual basis of the assumptions and the method by which the expenditure impact is derived. Explanation of how workload assumptions translate into cost estimates. Distinguished between one time and ongoing functions.

Section 1: To meet the requirements within Section 1 of establishing and making public a comprehensive subsurface database to support geothermal exploration, a new sub-program will be needed within the Washington Geological Survey program. This sub-program would design a new expansive database structure, would collaborate with external agencies to gather and compile relevant and appropriate datasets, would populate the database from numerous data sources, and would make the database public facing on a web platform. Other new work includes appending and updating the dataset as more data is collected. This work would require the following:

- 1 FTE Natural Resource Scientist 4 would manage the new sub-program, setting priorities, hiring and supervising staff, and applying for additional federal funding opportunities to supplement data gathering activities. Under the program manager;
- 1 FTE Natural Resource Scientist 3 would collaboratively design, populate, and maintain the database, with opportunistic support from resources gained through federal grants;
- 1 FTE Natural Resource Scientist 3 would be needed to establish a public-facing and comprehensive inventory for the numerous physical samples that the survey stores, sample the materials for a suite of analyses to support geothermal exploration, and work with the database geologist to incorporate that information into the subsurface database;
- 1 FTE Natural Resource Scientist 3 is needed to acquire, process, and analyze new subsurface geologic information, including gravity and magnetotelluric surveys, and to conduct hazard assessments related to induced seismicity in high-potential geothermal play areas. The new subsurface information would be provided to the subsurface program for inclusion in the subsurface database, and interpretations from these studies and induced seismicity hazard assessments would be published and made publicly available.

Costs for this section are \$862,445 for FY25 and \$1,624,000 per biennium ongoing and are detailed below:

Salaries for four new staff are \$340,200 for FY25 and \$680,400 per biennium ongoing.

Benefits total \$121,00 for FY 25, \$243,800 per biennium ongoing.

Goods and services and travel are calculated on actual program averages per person.

Additionally, goods and services costs of \$20,000 in FY25 and \$220,000 per biennium ongoing are needed for material sampling, rock property testing, and geophysical survey services.

In addition to program averages, beginning in FY26, travel costs are \$12,000 per biennium ongoing to support field work. Software licensing for geophysical data interpretation and induced seismicity hazard assessments total \$30,000 per biennium ongoing.

One-time costs total \$145,245 in FY25 for workstations, computer equipment, and a new gravimeter.

Administrative costs are calculated at 31% of staff salary and benefits and staff-related goods and services and travel. For fiscal note purposes, this cost is represented as a Fiscal Analyst 2 position (1.24 FTE).

Part III: Expenditure Detail

III. A - Operating Budget Expenditures

Account	Account Title	Type	FY 2024	FY 2025	2023-25	2025-27	2027-29
001-1	General Fund	State	0	862,400	862,400	1,624,000	1,624,000
		Total \$	0	862,400	862,400	1,624,000	1,624,000

III. B - Expenditures by Object Or Purpose

	FY 2024	FY 2025	2023-25	2025-27	2027-29
FTE Staff Years		5.2	2.6	5.2	5.2
A-Salaries and Wages		340,200	340,200	680,400	680,400
B-Employee Benefits		121,900	121,900	243,800	243,800
C-Professional Service Contracts					
E-Goods and Other Services		93,600	93,600	311,200	311,200
G-Travel		4,000	4,000	20,000	20,000
J-Capital Outlays		147,200	147,200	60,000	60,000
M-Inter Agency/Fund Transfers					
N-Grants, Benefits & Client Services					
P-Debt Service					
S-Interagency Reimbursements					
T-Intra-Agency Reimbursements		155,500	155,500	308,600	308,600
9-					
Total \$	0	862,400	862,400	1,624,000	1,624,000

III. C - Operating FTE Detail: List FTEs by classification and corresponding annual compensation. Totals need to agree with total FTEs in Part I and Part IIIA

Job Classification	Salary	FY 2024	FY 2025	2023-25	2025-27	2027-29
Fiscal Analyst 2	58,107		1.2	0.6	1.2	1.2
Natural Resource Scientist 3	82,896		3.0	1.5	3.0	3.0
Natural Resource Scientist 4	91,524		1.0	0.5	1.0	1.0
Total FTEs			5.2	2.6	5.2	5.2

III. D - Expenditures By Program (optional)

NONE

Part IV: Capital Budget Impact

IV. A - Capital Budget Expenditures

NONE

IV. B - Expenditures by Object Or Purpose

NONE

IV. C - Capital Budget Breakout

 $Acquisition\ and\ construction\ costs\ not\ reflected\ elsewhere\ on\ the\ fiscal\ note\ and\ description\ of\ potential\ financing\ methods.$

NONE

IV. D - Capital FTE Detail: FTEs listed by classification and corresponding annual compensation. Totals agree with total FTEs in Part IVB.

NONE

Part V: New Rule Making Required

Provisions of the bill that require the agency to adopt new administrative rules or repeal/revise existing rules.

Section 2 (amending RCW 79.13.53) requires DNR to adopt new rules regarding geothermal royalty rates, with rulemaking to commence by 09/30/2024. Additionally, amendments to WAC 332-22-210 will be required.