

HF1294 - 0 - Water-Use Permit Public Meeting Required

Chief Author: **Rick Hansen**
 Committee: **Environment And Natural Resources Finance And Policy**
 Date Completed: **2/25/2021 7:26:54 PM**
 Agency: **Natural Resources Dept**

State Fiscal Impact	Yes	No
Expenditures	X	
Fee/Departmental Earnings		X
Tax Revenue		X
Information Technology		X
Local Fiscal Impact		X

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions shown in the parentheses.

State Cost (Savings)	Biennium			Biennium		
	Dollars in Thousands	FY2021	FY2022	FY2023	FY2024	FY2025
General Fund	-	3,360	3,360	3,360	3,360	3,360
Total	-	3,360	3,360	3,360	3,360	3,360
Biennial Total			6,720			6,720

Full Time Equivalent Positions (FTE)	Biennium			Biennium	
	FY2021	FY2022	FY2023	FY2024	FY2025
General Fund	-	17	17	17	17
Total	-	17	17	17	17

LBO Analyst's Comment

I have reviewed this fiscal note for reasonableness of content and consistency with the LBO's Uniform Standards and Procedures.

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State Cost (Savings) Calculation Details

This table shows direct impact to state government only. Local government impact, if any, is discussed in the narrative. Reductions are shown in parentheses.

*Transfers In/Out and Absorbed Costs are only displayed when reported.

State Cost (Savings) = 1-2		Biennium			Biennium	
Dollars in Thousands		FY2021	FY2022	FY2023	FY2024	FY2025
General Fund	-	3,360	3,360	3,360	3,360	3,360
Total	-	3,360	3,360	3,360	3,360	3,360
	Biennial Total		6,720			6,720
1 - Expenditures, Absorbed Costs*, Transfers Out*						
General Fund	-	3,360	3,360	3,360	3,360	3,360
Total	-	3,360	3,360	3,360	3,360	3,360
	Biennial Total		6,720			6,720
2 - Revenues, Transfers In*						
General Fund	-	-	-	-	-	-
Total	-	-	-	-	-	-
	Biennial Total		-			-

Bill Description

This bill would require public meetings for any water appropriation permits that propose taking more than 216,000 gallons per day average in a 30-day period.

This bill would require that no more permits will be issued, and no permit modifications will be allowed if the withdrawal of groundwater causes recent, modern, or mixed water (with tritium) to be drawn into an aquifer that holds pre-modern or older water (without tritium).

This bill will affect the sustainability standard for groundwater use including evaluation of recharge to the aquifer so that groundwater is replenished to meet the needs of future generations.

Assumptions

- Public meetings: A review of the permitted volumes proposed in the past six years of water appropriation permits led us to estimate that about half of submitted permit applications for irrigation wells will require hearings as will some municipal and industrial well permit applications. For this note we will estimate that an average of 75 hearings a year will be needed. Past experience has shown that public meetings take 4 people about 20 hours each for preparation, travel, the meeting itself, and documentation of public input. Most towns have schools, churches, or municipal buildings where larger rooms are available for low or no cost. We assume \$150/person per meeting for travel and lodging. We expect that two planners and two groundwater experts will make up the team carrying out these meetings (\$423,000 and 3 FTE).
- Permits shall not cause intrusion of recent water into 'vintage' water: We assume that testing of tritium in source aquifers could be accelerated to allow classification of aquifer waters before the absence of tritium can no longer be used as a marker for pre-modern water. This information will be most useful if included with and organized by aquifer mapping as part of the DNR's geologic atlas work. We assume that a doubling of effort is possible (additional \$1.6 million dollars per year and 8 FTE) because this program has operated at higher funding levels in the past.
- Ensure adequate recharge remains: We assume that, because recharge cannot be directly measured, DNR will use results from the state's groundwater level monitoring network as a surrogate for recharge to determine the adequacy of aquifer replenishment. Enhanced analysis of information already collected through this network and for geologic atlases will guide additional information needs and thus necessary network expansion. We assume that DNR can contract for additional drilling and will be able to deploy an additional groundwater level monitoring crew (additional \$1.3 million dollars per year and 6 FTE).

We assume that regional groundwater modeling will be necessary in areas where future groundwater development is likely.

Expenditure and/or Revenue Formula

DNR’s estimated FTE cost of planners, monitoring crew members, and Groundwater mappers is \$123,000. DNR’s experienced Groundwater experts are in the highest pay grades and are estimated at \$146,428 per FTE. The average cost per FTE between these job classes is \$134,714.

2 planners and 2 Groundwater experts on the team; Team average FTE cost \$134,714
 Level of effort is estimated at 80 hours per meeting for 75 meetings per year = 6000 productive hours
 = 3 FTE @ \$134,714 = \$404,142/yr
 Nonsalary costs of \$600 per meeting = 75 * 600 = \$45,000/yr.

Total cost of holding public meetings for permit applications as specified is estimated at \$449,142.

4 field hydrologist FTE @ \$123,000 and 4 Groundwater expert FTE @ \$146,428; Team average FTE cost \$134,714
 = 8 FTE @ \$134,714 = \$1,077,712/yr
 \$525,000 for non-salary costs to sample in response to Health Department well drilling permits and to continue work in unmapped areas.

Total cost of accelerating determination of tritium presence in aquifers to allow classification into categories of modern, mixed and premodern in the context of aquifer mapping will be \$1,602,712.

3 field hydrologist FTE @ \$123,000, 2 Groundwater modeler FTE @ \$146,428, and 1 research analyst FTE @ \$146,428;
 Team average FTE cost \$134,714
 = 6 FTE @ \$134,714 = \$808,284/yr
 \$500,000 for non-salary costs to drill additional wells, equip them, and include them in the state Groundwater monitoring network.

Total cost of accelerating the buildout of the state’s Groundwater monitoring network and providing additional trend analysis for use in permitting decisions is estimated at \$1,308,284/year.

	FY22 (dollars)	FY23 (dollars)	FY24 (dollars)	FY25 (dollars)	Total Cost (dollars)
Ongoing Expenses					
Cost to hold public meetings (\$45,000 per year)	\$45,000	\$45,000	\$45,000	\$45,000	\$180,000
Non-salary costs for groundwater mapping including results of additional tritium testing as new wells are drilled (\$525,000/year)	\$525,000	\$525,000	\$525,000	\$525,000	\$2,100,000
Accelerated build of Groundwater monitoring network (\$500,000/year)	\$500,000	\$500,000	\$500,000	\$500,000	\$2,000,000
Operating Expenses					
Planners and Groundwater experts (3 FTEs @ \$134,714/FTE)	\$404,142	\$404,142	\$404,142	\$404,142	\$1,616,568
Field Hydrologist and Groundwater experts (8 FTEs @ \$134,714/FTE)	\$1,077,712	\$1,077,712	\$1,077,712	\$1,077,712	\$4,310,848
Field Hydrologist and Groundwater experts (6 FTEs @ \$134,714/FTE)	\$808,284	\$808,284	\$808,284	\$808,284	\$3,233,136
Total	\$3,360,138	\$3,360,138	\$3,360,138	\$3,360,138	\$13,440,552

Long-Term Fiscal Considerations

This work continues beyond the budgeting horizon.

Local Fiscal Impact

Not applicable

References/Sources

Records of previous investments in Groundwater mapping and in Groundwater monitoring well network development.

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