

EXECUTIVE MEMORANDUM

TO: Noah Dudley, Washington Department of Natural Resources, Geology Board Licensing Chair

FROM: Tebb & Associates, LLC
G. Thomas Tebb, LHG, LEG
Principal

DATE: August 20, 2026

SUBJECT: Professional Engineer Scope of Practice for Groundwater and Water-Right Evaluations

RE: Interaction of RCW 18.43 and RCW 18.220

Purpose

This memorandum summarizes the attached analysis on whether a Washington-licensed Professional Engineer (PE) may perform groundwater-related work, with particular emphasis on groundwater water-right evaluations involving pumping tests, aquifer parameter interpretation, zones of influence, drawdown at nearby and distant wells, and technical impairment analysis. The memorandum is intended to request clarification of the professional-practice boundary between engineering and the licensed specialty practice of hydrogeology.

Executive Summary

My analysis concludes that Washington law provides a substantial basis for a qualified Professional Engineer (PE) to perform engineering analyses involving groundwater without separately holding a Licensed Hydrogeologist (LHG) credential, so long as the work is undertaken as engineering, is within the PE's competence, and is not a work product that a governing agency *expressly requires* to be prepared or sealed by an LHG.

The central provision is RCW 18.220.190(6), which, in my opinion, preserves the practice of engineering involving soil, rock, groundwater, and other earth materials, including the acquisition and evaluation of data and the use of those data in analysis, design, and construction by appropriately licensed professional engineers. At the same time, the exemption does not authorize a PE who lacks the specialty license to use the title "*hydrogeologist*" or "*Licensed Hydrogeologist*."

For a groundwater water-right evaluation, in my reading of the statute, I therefore find a strong statutory argument that a competent PE may design and supervise pumping tests, interpret drawdown and recovery data, estimate transmissivity and storage properties, calculate pumping influence, predict drawdown at other wells, analyze cumulative pumping effects, and provide an engineering opinion concerning physical interference or impairment. The ultimate legal or regulatory determination of impairment remains with the responsible agency.

Principal Statutory Issue

The apparent overlap arises because RCW 18.220 defines hydrogeology broadly enough to encompass the occurrence, circulation, distribution, quality, remediation, and interpretation of groundwater data. At the

same time, RCW 18.220.190 expressly preserves specified engineering practice involving groundwater.

Accordingly, the analysis suggests that the proper boundary cannot be determined solely by asking whether a task uses hydrogeologic methods. Rather, the inquiry is whether the professional is performing engineering involving groundwater within the statutory exemption or independently offering and taking responsible charge of specialty hydrogeologic practice outside that exemption.

Application to Groundwater Water-Right Evaluations

Technical Activity	Conclusion in Source Analysis
Design, conduct, or supervise a pumping/aquifer test	Yes, if within PE competence
Measure and interpret drawdown and recovery.	Yes
Estimate transmissivity and storage coefficient/specific yield	Yes
Apply analytical or numerical groundwater methods.	Yes
Calculate pumping cone/zone of influence.	Yes
Predict drawdown at nearby or distant wells	Yes
Analyze cumulative pumping effects and hydraulic interference	Yes
Evaluate physical impairment of existing wells/water rights	Likely yes
Provide an engineering opinion on interference/impairment.	Likely yes
Use the title "hydrogeologist" or "LHG" without that license	No
Seal a work product expressly required to be prepared by an LHG	No

Supporting Considerations

- Pumping tests acquire engineering data involving groundwater; interpretation of those tests evaluates aquifer properties; and drawdown/interference calculations use those data in analysis.
- My research notes that Ecology guidance for new groundwater-right applications *recommends* preparation of the hydrogeologic section by a Washington-licensed hydrogeologist, rather than characterizing an LHG as categorically required in every instance.
- My research also notes that professional engineers, as well as hydrogeologists and other qualified professionals, may qualify for Washington's Certified Water Right Examiner program, which is contextual evidence that water-right technical work is not inherently exclusive to LHGs.
- Further research observes that some Ecology cleanup requirements recognize supervision by either an appropriately licensed geologist/hydrogeologist or a Washington registered professional engineer, subject to RCW 18.43 and RCW 18.220.

Areas Requiring Licensing-Board Clarification

The question asks about an unresolved practical issue: Washington statutes do not provide a detailed list of groundwater work products that require an LHG seal rather than a PE seal. Consequently, licensing-board interpretations, disciplinary decisions, agency rules, and the specific nature and presentation of the professional service may determine the boundary in a particular case.

Requested Clarification

In my opinion, clarification is requested from the Geology Licensing Board regarding whether a Washington-licensed PE, acting within demonstrated education and experience and identifying the work as engineering, may independently perform and seal a groundwater water-right evaluation that includes the following: pumping-test design and interpretation; estimation of aquifer parameters; determination of the zone or cone of influence of pumping; prediction of drawdown at nearby and distant groundwater wells; evaluation of hydraulic interference and cumulative pumping effects; and a technical engineering opinion concerning potential physical impairment of existing wells or water rights.

Specifically, clarification is requested as to whether any of these activities are considered reserved specialty hydrogeology practice despite the PE exemption in RCW 18.220.190(6), and, if so, which activities or work products require responsible charge and sealing by an LHG.

Conclusion

A qualified Washington PE may perform substantial groundwater analysis when it constitutes engineering practice, while the hydrogeologist title and any work expressly reserved to an LHG remain protected. Because groundwater water-right evaluations can sit directly at the intersection of these professions, an authoritative clarification would provide useful guidance to practitioners, agencies, and the public.

Basis and limitations

This memorandum is not a legal opinion and does not independently verify the cited statutes, agency guidance, or licensing-board interpretations. My opinion recommends further review of applicable WAC provisions, licensing-board decisions, Attorney General opinions, and Ecology policies before treating the conclusion as definitive.