

## Benjamin D. Lee, PE, CWRE

Senior Associate



### Expertise

*Hydrology and  
Hydrogeology*

*Stormwater  
Assessment*

*Groundwater flow  
and contaminant  
transport modeling*

*Water Rights*

*Water Supply*

### Education

MSCE, Civil and  
Environmental  
Engineering,  
University of  
Washington,  
Seattle, 2013

BS, Biology,  
University of Puget  
Sound, 2006

### Registration

Professional  
Engineer (Water  
Resources),  
WA No. 55597

Certified Water  
Rights Examiner,  
WA No. 0047

Ben is a Senior Associate Engineer with 9 years of experience at Landau Associates. His area of practice focuses on hydrology and hydrogeology, stormwater, water supply, groundwater modeling, water quality compliance, and water rights permitting. Ben has broad experience in hydrologic evaluation and stormwater design throughout the Pacific Northwest both in terms of technical analysis and regulatory requirements. Select project examples related to hydrology and stormwater flooding are presented below.

#### **City of DuPont; CalPortland Environmental Impact Statement Surface Water Element; DuPont, WA.**

Ben is assisting the City of DuPont in the development of the Surface Water Element of the EIS report for CalPortland's proposed Pioneer Aggregates Mine expansion. The Surface Water Element includes consideration of stormwater, creek flow, and water quality.

**City of North Bend; Hobo Springs Hydrologic Evaluation; North Bend, WA.** Ben assisted the City of North Bend to assess the hydrologic impact of the City's proposed additional diversion of Hobo Springs. The City uses water diverted from Hobo Springs as mitigation for impacts to the Snoqualmie River due to City pumping from a groundwater supply well. Hobo Springs diversions are purchased from Seattle Public Utilities and are completed according to a complex mitigation algorithm on a daily basis. This project required a detailed understanding of the complex surface water-groundwater interactions of SPU's Masonry Pool Reservoir, Hobo Springs, Rattlesnake Lake, the Cedar River, and the Snoqualmie River.

**Liberty Mutual; Residential Development Stormwater Design/Hydrogeology Evaluation; Silverdale, WA.** Ben provided a forensic evaluation to determine the cause of stormwater flooding at a 19-lot development, performed as part of an insurance claim related to construction performance.

**City of Tacoma; South Tacoma Channel Infiltration and Flett Creek Enhancement Feasibility Study; Tacoma, WA.** Ben is assisting the city with implementing a feasibility study to enhance stream flow in Flett Creek. This complex, multi-year project is funded through a grant from the Department of Ecology's Streamflow Restoration Program. Project elements include aquifer recharge, stormwater management, and water availability evaluations. The study will identify permitting requirements and other potential constraints and develop preliminary system design for project implementation. The project involves improvement of a currently poorly functioning stormwater drainage infrastructure system resulting in inadequate drainage and upstream flooding.

**Confidential Client; Constructed Wetland Infiltration and Hydrology Evaluation; Oregon.** Ben is providing technical expert services related to standard of practice litigation. Primary issues include hydrogeologic and hydrologic impacts from infiltration of water from an engineered wetland that serves a post-treatment temperature reduction function for treated municipal wastewater effluent for a large municipality in Oregon. Flow and water quality impacts to nearby creeks were evaluated.

**Confidential Electrical Power Utility; Receiving Water Study; Lewis County, WA.** Ben assisted this electrical power utility in performing a receiving water study for their facility located in Lewis County. The receiving water study was completed to satisfy a requirement of the facility's NPDES permit to assess potential water quality impacts to the Cowlitz River from the facility discharge. The study was developed and completed under Department of Ecology oversight.

**Confidential Industrial Warehouse Client Stormwater Design Evaluation; Tumwater, WA.** Ben led a team of stormwater, geotechnical, and groundwater engineers to provide third-party peer review evaluation of a complex stormwater conveyance and infiltration system design for a large warehouse facility in a location in Tumwater with shallow groundwater and a history of groundwater flooding.

**Multiple Clients; Stormwater Infiltration System Design Evaluations and Groundwater Mounding Analyses; throughout WA.** Ben regularly (4 to 6 projects per year) provides stormwater conveyance and infiltration system design evaluation and groundwater mounding analysis services for proposed development projects throughout Washington State, including within King County. The mounding analyses are completed using both WWHM stormwater modeling and MODFLOW groundwater modeling and provide an assessment of the design of the proposed stormwater infiltration systems. The analyses typically include a statistical assessment of hydrograph records for the selection of large (e.g., 100-year 24-hour) storm events for conservative simulations.