



Thomas R. Grindeland, P.E., D.WRE

Vice President



Mr. Grindeland is a registered professional engineer with over 29 years of experience in water resources and hydraulic engineering. His primary areas of technical expertise are hydrology, hydraulics, geomorphology, and sediment transport. He has used his skills in projects involving the characterization of baseline environmental conditions, delineation of flood hazards, development of management alternatives for fluvial systems, hydrologic and hydraulic engineering design, environmental impact assessment and mitigation, permitting, and litigation support. Most of the projects conducted by Mr. Grindeland have required extensive use of computer modeling.

Mr. Grindeland's experience includes hydrologic analyses such as determinations of probable maximum floods, peak flow flood-frequency relationships, flow duration, water supply, water budgets, and water quality. Mr. Grindeland's hydraulic analysis experience includes flood insurance studies, dam-break flood studies, channel capacity analyses, bridge and channel designs, spillway adequacy evaluations, spillway designs, mud/debris flow hazard delineation, and local drainage plans. He is thoroughly experienced in the application of 1- and 2-dimensional hydraulic models. His experience includes dozens of studies involving the delineation of flood plains and the evaluation of potential flood hazards. He is experienced in all aspects of riverine Flood Insurance Studies and the procedures of the Federal Emergency Management Agency (FEMA).

Mr. Grindeland has extensive experience in evaluating the stability of fluvial systems. He has conducted geomorphic assessments and sediment transport studies along dozens of watercourses throughout the United States and internationally. This includes qualitative geomorphic assessments, quantitative engineering geomorphic studies, and mathematical modeling of sediment transport. His project experience includes channel aggradation/degradation analyses, channel migration and avulsion potential assessments, design of stable channels, bank protection design, hydraulic structure stability evaluations and erosion protection design, reservoir sedimentation studies, mud/debris flow hazard delineation, and channel restoration.

Mr. Grindeland has conducted numerous projects to characterize watershed resources and develop management plans for objectives of sustainable forestry, water supply, water quality protection, erosion/sedimentation control, and enhancement and restoration of fisheries and wildlife habitat. He is experienced in managing interdisciplinary assessments of environmental impacts and developing workable management plans.

Registration

*Professional Civil Engineer
Washington No. 32644
Oregon No. 59786PE
Idaho No. 7632
Colorado No. 24029*

Certification

*AAWRE Diplomate, Water
Resource Engineer*

Education

*M.S. (Civil Engineering)
Colorado State University, Ft.
Collins*

*B.S. (Civil Engineering)
University of Massachusetts,
Amherst*

Professional Societies

*American Society of Civil
Engineers - Member*

*Past President, Oregon
Section Capital Branch*