



WASHINGTON STATE DEPARTMENT OF
Natural Resources
Peter Goldmark - Commissioner of Public Lands

Earth Sciences Team for State Trust Land Management



Casey Hanell leads and manages the Earth Sciences Program, which is responsible for all geologic and hydrologic consultation on DNR-managed lands. He started with DNR in 2002 working on slope stability assessments at a landscape level. Since then, most of his work has involved landslide risk assessments for proposed management activities (timber harvest and forest road construction). He spent two years as a silviculture forester performing and overseeing forest management activities from planting through final harvest. Casey received a Bachelor of Science degree and a Master of Science degree in Geology from Western Washington University in 2001 and 2011, respectively. He is a licensed Engineering Geologist in the State of Washington (No. 2771) and a "qualified expert" under the Washington Forest Practices Rules. In his spare time, Casey enjoys camping, music, making pickles, and running (slowly).



Ana Shafer received her Bachelor's degree in Geology in 1995 from Whitman College. She is a licensed Engineering Geologist (No. 1123) with the State of Washington and a "qualified expert" under Washington's Forest Practices rules. Prior to coming to DNR in January 2003, she worked for a Puget Sound-area geotechnical engineering firm as an engineering geologist and geomorphologist for about six years. Currently, she is a State Lands geologist primarily working on forestlands issues. Since coming to the DNR, she has worked throughout Olympic and South Puget Sound Regions (primarily Jefferson, Kitsap, Mason, Snohomish, King, Pierce, and Lewis Counties), providing consultation to DNR State Lands engineers and forest managers.



Laurie Benson provides geologic support for the timber sales program in the South Puget Sound Region and provides hydrologic support for timber sales state-wide. Since joining the Department in 2006, most of her work has focused on slope stability/mass wasting risk analysis related to forest practices activities. Her experience has involved developing landslide inventories and delineating landslide hazard zones as well as slope stability risk analyses for proposed forest practices. She also conducts rain-on-snow assessments and works on timber sale-related hydrologic analyses. Laurie received a Bachelor of Science degree in Geological and Environmental Sciences from Stanford University in June 2004 and a Master of Science degree in Geological and Environmental Sciences, with a sub-discipline in Hydrogeology, from Stanford University in September 2004. She is a Licensed Geologist and Licensed Engineering Geologist in the State of Washington.



John McKenzie is the Northwest Region geologist. He has been with the Department of Natural Resources since 2007; prior to that he owned a geologic consulting business in California for 25 years. Much of his work focused on landslide investigations and mitigation. Projects varied from site-specific geologic studies to regional geologic hazards inventories and generation of hazards mitigation maps. During the last 12 years much of his work has focused on slope stability issues in forested terrain; varying in scale from timber-harvest plan evaluations to watershed-scale landslide mapping. John received a Bachelor of Arts degree in geology from San Jose State University, San Jose, California, in 1975, and a Master of Science in geology from the same institution in 1985. He is a Licensed Engineering Geologist in the State of Washington (No. 861) and is a "qualified expert" under the Washington Forest Practices Rules. John is a member of the US Coast Guard Auxiliary. In his spare time, he enjoys sailing, model ship building, model railroading, reading history and science, a glass of good wine with friends, and spending time at the coast.



John Jenkins has been the Pacific-Cascade Region geologist for the Department of Natural Resources since 2012. In this position he advises Region foresters and managers regarding unstable slopes issues as well as rock resource and road challenges. In addition he provides support to hydrology and groundwater assessment projects. Prior to joining DNR John worked primarily as a consulting engineering geologist and hydrogeologist in the private sector as well as in government service for the U.S. Geological Survey and U.S. Bureau of Reclamation. He received a Bachelor and Master's Degree in Geology from the University of Illinois and New Mexico Institute of Mining and Technology in 1980 and 1985, respectively. John is a Licensed Engineering Geologist and Licensed Hydrogeologist (No. 1818) in Washington and is a "qualified expert" under the Washington Forest Practices Rules. He enjoys backpacking and music in his spare time.



Orion George works as a geologist in the agency's Olympic Region that encompasses most of the Olympic Peninsula. He has been with the agency since 2012 and consults with DNR foresters and engineers regarding slope stability and mass wasting risk analysis related to forest practices, such as harvesting and road building on State Trust Lands. He also explores and consults with forest managers on potential aggregate sources for proprietary and commercial uses. Orion earned a Bachelor of Science, summa cum laude, in Geology from Humboldt State University (2006) and a Master of Science in Geology from Western Washington University (2012). Past work Orion is proud to be a part of was constructing and maintaining recreational trails in wilderness areas of the country's national parks and forests and working as an exploration geologist doing generative and advanced gold exploration in southwest Alaska and northeastern Nevada. Orion is a Geologist-In-Training and in the process of becoming a Licensed Geologist in the State of Washington.



Venice Goetz is the State Lands Minerals Geologist. Her main duties consist of shepherding mineral leases for the land trust, assisting with property acquisition assessments, locating rock for state forest roads, and answering geologic questions from the public pertaining to mining and prospecting on state lands. Venice graduated with a Bachelor of Science in Geology from Sonoma State University in Rohnert Park, California in 1981 and a Master of Science in Economic Geology from University of Idaho College of Mines in Moscow, Idaho in 1990. Venice is a licensed Engineering Geologist in Washington State. Her geologic experience prior to coming to DNR includes one summer at the USGS Seismology office in Menlo Park and 10 years in mineral exploration looking for precious metals in California, Nevada, Idaho, Montana, and Washington. Starting in 1991 Venice spent 2 years with the DNR Geology Division working on the state geologic map and a radon of Washington study. Then she spent 20 years with the Forest Practices Division developing training and mapping and predicting landslides in forested environments. Venice is thrilled to be the new Minerals Geologist because as a lifelong rockaholic, in this job she actually gets to look at and talk about rocks (instead of dirt). In her spare time Venice is obsessed with dancing (Argentine) tango, traveling for tango, watching tango, reading about tango, and talking about tango. She also likes photography, hiking with friends, biking, working on things at home, and playing with her photo group “Rockforms”, on Flickr. But tango always comes first.