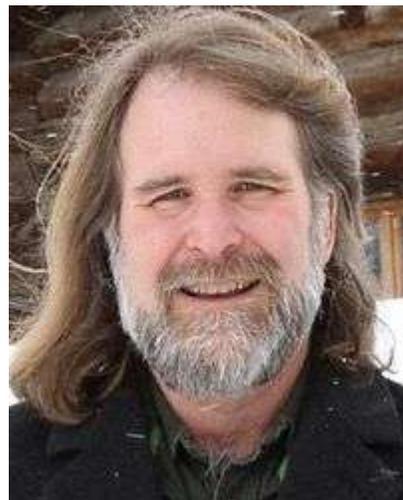


CONSERVATION VOICES

GRAVITY RULES

By David R. Montgomery

When it comes to runoff and erosion there is one simple rule: gravity rules. Watersheds are not like Vegas. What happens upstream doesn't stay upstream. This simple truth underscores the importance of protecting the headwaters of watersheds throughout the Cascades to safeguard the ecological communities — including human communities — downstream in the Puget Lowland. The rivers that rise in the Cascades provide far more than spectacular recreation opportunities. They provide cool, clear water clean enough to provide drinking water for Seattle with hardly any need for treatment straight from the rivers that supported legendary salmon runs that sustained countless generations of Native Americans.



The past century and a half saw tremendous changes to watersheds around Puget Sound as forests were cut, rivers were straightened, locked in place with levees, and cleared of large woody debris, and cities, towns, and suburbs were paved over. Recognition of the resulting loss of the majority of salmon habitat — and salmon — from lowland rivers has motivated extensive efforts to restore rivers and streams throughout Washington State. Over the past several decades, hundreds of millions of dollars have been invested in salmon recovery efforts — albeit with little in the way of a long-term strategic planning. Today, two of the greatest long-term threats to our rivers are the continuing high impact development in the lowlands; and excessive logging mining and other development in upper watersheds that protect downstream rivers.

Environmental impacts of land use are notoriously difficult to control because zoning and land use decisions tend to be decided on a local level and are usually biased toward development — by design. In a free society like ours, founded on respect for individual rights and a strong tradition of property rights, it is difficult to prevent long-term degradation of public resources from off-site activity on upslope private lands. In our zeal to protect our property rights, it is all too easy to lose sight of the counter-balancing reality of property wrongs, until clearcut slopes slide onto homes and knock out bridges during a big storm, or the debris from such slides buries farms and communities on floodplains miles downstream. It is even harder to see, appreciate the potential for, and control the longer-term, inter-generational property wrongs that result from how the day-to-day impacts of business as usual add up little-by-little to large-scale landscape change that reshapes the world our descendents will inherit.

When managed in the public interest, public lands offer the potential for uses not subject to the immediate pressures, whims, and drive of the marketplace. We can use them for long-term goals for beauty, recreation, and ecological value — not just for salmon and other animals we might

like to share the land with (or eat), but for ourselves. To preserve the qualities of life that we value today in this region, and pass them on to future generations, we need to not only slow, but reverse the degradation that has accompanied how we live on the land. In this sense, preservation of headwaters areas is not just an insurance policy, but a cornerstone of any long-term strategy to keep Puget Sound a healthy and attractive place to live well into the future. Put simply, protecting headwater environments from degradation through wilderness and Wild & Scenic Rivers protection is a prudent investment in our collective future.

As we work to reduce and reverse our historical impacts on the rivers and streams around Puget Sound we need to protect the best of what's left of our region's natural endowment. While this need not, and should not, be limited to the headwaters of our region's watersheds, it needs to begin there. Why? Because gravity rules. Simple as that.

*David R. Montgomery is an award winning scientist and 2008 MacArthur Fellow. He currently teaches at the University of Washington where he studies the evolution of topography and how geological processes shape landscapes and influence ecological systems. He has authored a number of books including *Dirt: The Erosion of Civilizations* and *King of Fish: The Thousand-Year Run of Salmon**