Testimony prepared for hearing on the *"Evolving West,"* U.S. Congress House of Representatives, Committee on Natural Resources, February 28, 2007

Prepared by Robert G. Lee, Ph.D., Professor, Sociology of Natural Resources, University of Washington, Seattle, Washington

My name is Robert G. Lee. I hold a faculty appointment in the College of Forest Resources at the University of Washington, Seattle, Washington. I reside in Bow, Washington. I have served as a department chair, associate dean, and professor at the University of Washington, and have authored or edited three books and over 75 publications. As a professional sociologist and forester, much of my research has focused on wood-producing communities in the United States, Canada, and Japan. I grew up on a California ranch and was educated at the University of California, Berkeley (B.S. and Ph.D.) and Yale University (Masters of Forest Science). Before seeking University employment, I worked for the forest products industry, the U.S. Forest Service, and the National Park Service (as a research sociologist). My work on wood-producing communities and sustainability has received international attention, and President Clinton invited me to give testimony at his 1993 Forest Conference. I take pride in maintaining an independent and pragmatic stance on controversial natural resource management issues.

The "Evolving West" is best understood in light of its historic, current, and possible future contributions to the welfare of nation as a whole. The West has been shaped by demographic, social, economic, and political forces stemming from Eastern settlements and emerging cities of the Midwest and West. Hence, the image of the West has always been defined from the perspective of non-rural Westerners seeking to realize its economic or aesthetic value.

The West was opened by two closely linked demographic policies: removal of the Native American population and permitted settlement by farmers, ranchers, and miners. Its value was then redefined by Easterners who explored the West via railroad and consumed products moving east through Chicago, Kansas City and other emerging centers of commerce. The national forests, national parks, and other federal management authorities were established to harbor the value of public domain lands unclaimed by settlers. The Frontier closed by the beginning of the 20th Century, and administrative agencies (particularly the U.S. Forest Service and what became the Bureau of Land Management) worked closely with rural people to develop permanent settlements dependent on ranching and timbering.

The U.S. Forest Service distinguished itself by excelling in community and economic development. A social contract committing the federal government to rural social and economic welfare emerged and was maintained until the last decade of the 20th Century. Federal range allotments for ranchers and sustained-yield timber production for wood-producing communities were embodied in federal land management plans. These

federal policies were guided by a land stewardship ethic promising protection of the productive capability of the land and a flow of resources for perpetuity.

Two noteworthy changes, that would ultimately collide, accompanied the economic boom that followed World War II: timber production on federal lands was accelerated to meet the growing demand for middle class housing and emerging affluence and mobility brought recreational visitors to federal lands throughout the West. A commitment to the economic optimization of multiple resources (institutionalized by the requirements of the National Forest Management Act of 1976) ultimately displaced the historic stewardship ethic. By 1970, federal timber production was guided by an industrial model appropriate to a public enterprise. An extensive road network was pushed into previously unoccupied lands and federal agencies became increasingly dependent on revenues from timber sales. Although federal management practices enjoyed the respect of forestry professionals, the visiting public grew increasingly intolerant of extensive road-building and clearcutting. By the 1980's, the growing concern with forest aesthetics was compounded by new ecological findings suggesting that the survival of plant and animal species was threatened by extensive timber harvesting and road-building.

Advocates for termination of federal timber harvesting used ecological research to successfully challenge federal land management practices. Courts issued injunctions to halt federal timber harvesting in vast sections of the Pacific Northwest. During his 1992 campaign, presidential candidate Clinton promised to resolve this issue. Immediately after taking office, he held a "Forest Conference" in Portland, Oregon in April 1993. At that conference President Clinton initiated an interagency planning process that resulted in the Northwest Forest Plan. This plan was accompanied by related efforts throughout the West to reform policies governing timber, grazing, mining, and other permitted public uses of federal lands. The Northwest Forest Plan and its companion reforms were guided by a new ethical commitment that rejected both economic optimization and the historic stewardship ethic. Federal lands were to the greatest extent possible to be dedicated to protecting biodiversity and restoring the historic natural integrity of Western landscapes. This biologically-focused ethic was devoid of any concern for human welfare, other than the perceived benefits to humans of restoring nature to undisturbed, self-regulating ecosystems.

Sudden reductions in federal timber harvesting throughout the West adversely affected the local communities and economies that had been nurtured by previous federal policy. Industrial wage jobs were lost and resource-dependent businesses declared bankruptcy. Dislocated workers and entrepreneurs sold real assets at a fraction of their previous value. Affected citizens felt betrayed by their government for breaking the social contract, suffered political alienation, and turned to new political leadership—often advocating an anti-government sentiment. One hundred years of federal trust-building was quickly squandered, leaving a dispirited and reactionary population in its wake.

The unprecedented economic boom the 1990's caused many policy advocates to predict that the resource extraction economies of the West would be successfully replaced

by recreation, tourism, and settlement by footloose industries relying on the internet for communications. A substantial redistribution of the nation's wealth, fed by the shrinking of the middle class, provided capital for rejuvenating many of the communities and economies devastated by a decline in resource extraction. Urban to rural migration of wealthy individuals seeking a simpler and safer rural life accelerated in the 1990's, and continued into the new century.

But places without attractive amenities did not fare as well. Rural family income declined as low-paying service employment replaced family-wage jobs. Some communities were overtaken by even greater poverty, and were wracked by family instability, violence, substance abuse, and other well-known consequences of economic dislocation and political alienation. Out-migration was common.

Today we find a far more complex and heterogeneous western landscape. Some communities are thriving on imported wealth. Others have sunk into poverty, with populations that increasingly resemble urban inner cities in crime, substance abuse, and reliance on government assistance. Many of these poor communities, even in remote mountain locations, having suffered economic decline, are now occupied by growing populations of in-migrants from Central America. These new residents tend to be very poor, have substandard educational opportunities, and rely on sporadic low-wage employment in agriculture, forests, or domestic services.

How do these changes prepare the West for the future? While I will not pretend to predict the future of the West, three historical forces are likely to work in combination to bring sustainable development to the West in the coming decades. First, attempts to limit climate change caused by global warming will stimulate efforts to substitute green energy for fossil fuels. Bioenergy appears to be a promising green alternative, since it is carbon neutral (carbon absorbed by growing plants is equal to carbon released when plants are consumed for energy). Second, the petroleum stocks that have fueled the industrial era are growing increasingly scarce. Unless an inexpensive alternative source of energy is soon discovered, progressively rising energy prices will stimulate discovery and exploitation of remaining oil, gas, and coal deposits. Higher prices for oil will increase the economic feasibility of alternative energy sources, including biofuels. Third, the declining value of the dollar will increase the demand for domestic natural resources, including food, energy, and materials.

Forests are critical sources of carbon storage. Existing technologies permit us to manage forests for carbon conservation while protecting biodiversity. Carbon can be effectively stored in living trees or wood products in use by society. Active, ecologically informed management of forests is necessary to achieve efficient carbon conservation. Current forest management policies on federal lands favor a hands-off, passive approach with minimal intervention. As a result, vast areas of the West remain occupied by overcrowded trees. These unhealthy forests are vulnerable to catastrophic outbreaks of insects, disease, and wildfire. Such outbreaks contribute to global warming by releasing carbon dioxide from trees that could have remained living or been converted to wood in use by society. More active management of federal forests necessitates the development

of rural wood-based industries appropriate to a society concerned with environmental protection, carbon conservation, and green energy sources.

Oil, gas, and coal resources in the West will become increasingly important for meeting the nation's energy needs as world oil deposits are depleted. The Rocky Mountain region appears to have the highest potential for resource discovery and exploitation. Existing knowledge and technology permits energy extraction while also protecting endangered species. In addition, volcanically active areas of the West offer potential for geothermal power.

Active management of forests throughout the West will provide opportunities for joint production of biofuels and wood products, providing multiple benefits in carbon conservation, green energy production, healthy ecosystems, and wood products. Other benefits will accrue by containing run-away fire suppression costs as more forests come under active management.

Current federal land management policies were adopted during a robust economy when the dollar was relatively strong relative to foreign currencies. Resource exploitation was exported to other nations in order to satisfy the demands of affluent urban citizens for environmental protection and restoration in the United States. Well-functioning global markets permitted the nation to substitute foreign for domestic sources of wood, food, and energy. Domestic forests, rangelands, and fossil fuel deposits could be set aside without adverse affects on the national economy. A weakening of the dollar, particularly if coupled with a weakening of the economy, could result in increasing demand for domestic natural resources abundant in the West.

Sustainable development of the West would face several obstacles. Some of these obstacles could be overcome by concerted federal action. Others would require slower changes in political culture. Foremost among these obstacles is a heterogeneous rural population.

Development of a sustainable resource-based economy in the West will require use of new technologies and scientific information. The existing workforce is inadequate. The skilled rural industrial workforce of the past been degraded or no longer exists. Dislocated workers moved to jobs in urban areas, entered the service sector, dropped out of the economy, or retired. In-migrants are either retirees occupying with cheaper housing, wealthy urbanites seeking to reenact a romantic vision of the West, or Central Americans seeking a better life. The latter provide a valuable potential workforce, but could only fill this role only with the assistance of a substantial public investment in basic education and advanced training. Appropriate educational and training investments would also be necessary to up-grade the skills of those who have remained underemployed in rural communities following economic dislocation.

Growing shortages of oil could increase the costs of transportation to the point where living in rural areas will be prohibitively expensive for those with fixed or modest incomes. Demographic shifts could occur, with accelerated migration to population centers where public transportation was available. This would leave rural areas to those employed in natural resource industries, stranded poor, and wealthy in-migrants, exaggerating current trends in rural class stratification.

Economically independent in-migrants seeking a rural lifestyle, along with urban residents committed to the protection of undisturbed landscapes, are the most likely to resist sustainable development of the West. Resistance would stem from the romantic ethic of undisturbed nature in which ecological self-regulating substitutes for human intervention. This ethic is embodied in current federal land management plans. Challenges of climate change, energy transitions, and sustenance from domestic resources can only be met if Americans learn to live in harmony *with* nature, not *separate* from it. A return to the earlier stewardship or economic optimization ethics is unlikely, and would not meet current challenges. As a result, federal land management agencies need to begin now to engage the full spectrum of stakeholders and policy advocates in an ongoing dialogue to reach new agreements about how to manage the natural landscapes of the West. Land management ethics and policies adopted in the 1990's cannot meet the emerging challenges of the 21st Century.

Another challenge facing the evolving West are weak relationships between the federal government and rural communities and businesses shocked by the sudden shift in federal land management policy in the 1990's. Sustainable development of the West will be most effective with active rural entrepreneurship. Residual resentment and lack of trust in the federal government inhibits investment in rural enterprises. Insecurity of property rights and federal resource supplies is a barrier to economic initiative. Federal action is required to establish the political and legal basis for rebuilding trust in federal land management.

The world of the 21st Century demands a more pragmatic and principled approach to federal land management. The nation's experiment with protecting self-regulating ecosystems of the West for a privileged minority is costly, impractical, and fails to satisfy principles guiding sustainable land use. To illustrate conditions necessary for sustainable land use, I am submitting for the Record a part of a chapter from *Broken Trust, Broken Land: Freeing Ourselves from the War over the Environment*—a book I wrote in response to the formulation of current land management policies in 1994.