



Ecological Restoration Institute



Fact Sheet: Socio-economic Barriers to Landscape-scale Restoration August 2011

Socio-economic Barriers to Landscape-scale Forest Restoration

A recent [article](#) in *Restoration Ecology* by three Northern Arizona University scholars—Tong Wu, Yeon-Su Kim, and Matthew Hurteau—suggests that the full value of restored ponderosa pine ecosystems is not only unappreciated, but unaccounted for by forest policymakers and planners. This lack of larger perspective, they argue, is a critical barrier to achieving restoration at the scale needed to prevent catastrophic wildfires, such as the Wallow Fire, as well as protect communities and develop a sustainable wood products industry in northern Arizona. All together, Wu and his colleagues outline three major socio-economic obstacles to landscape-scale restoration:

- Public misconceptions about the purpose of forest restoration
- A failure to account for non-marketable ecosystem services
- Insufficient government funding for restoration-oriented treatments

The latter two points are the main focus of the authors' concern. They contend that ponderosa pine forests provide not only marketable products, such as timber and biomass, but ecosystem services that include recreational and aesthetic opportunities, erosion prevention, microclimate regulation, better water quality, and carbon sequestration. The authors also cite a study by [Kim and Wells \(2005\)](#) which found that restored forests enhance the value of adjacent real estate and make the area more attractive to professional workers. They suggest that as long as these ecosystem services remain undervalued from both an economic perspective and a policy perspective there is little chance for a concerted effort to restore forests at the landscape scale. This despite the fact that the economic value of a forest that provides such ecosystem services as well as “insurance” against catastrophic wildfires is estimated to be worth \$8,750/acre ([Mason et al. 2006](#)). This value, of course, is estimated but if actualized, it would more than justify spending government dollars to treat forests so that they would be healthier and more resilient, especially with the costs of current forest restoration treatments averaging about \$5,000/acre in the western United States.

Beyond providing ecosystem services, the authors point to the real potential landscape-scale forest restoration has to provide a green economic stimulus for the region. Citing a study by [Hjerpe and Kim \(2008\)](#), which identified more than \$40 million and 500 jobs generated in a single year from forest restoration activities, they predict that larger-scale restoration activities will produce even more revenues and jobs in the area. While these projections are quite promising, impediments remain, namely, the lack of wood products infrastructure and workforce within the region ([Fight et al. 2004](#), [Morgan and others 2006](#)) and forest management policies that create an inconsistent supply of wood and, thereby, deter economic investments to build and upgrade the wood products industry ([Hjerpe et al. 2009](#)).

The way to bridge these barriers, the authors believe, can be found in newly created collaborative efforts between the U.S. Forest Service, the wood products industry, environmentalists, and other stakeholders. For example, the ongoing collaborative effort in Arizona, known as the Four Forests Restoration Initiative (4FRI), is bringing in federal dollars through the Collaborative Landscape Forest Restoration Program to help finance restoration activities, increase the level and consistency of the wood supply, encourage the growth of a sustainable local wood products industry, and educate the public about the benefits of forest restoration. They strongly suggest that policymakers look at this situation as an opportunity to “dovetail” the national need for jobs with the regional goal of resilient forests.

The Ecological Restoration Institute is dedicated to reversing declines in the condition of forested communities throughout the Intermountain West, particularly those affected by severe wildfires and insect outbreaks. Our efforts focus on science-based research of ecological and socio-economic matters related to restoration as well as support for on-the-ground treatments, outreach, and education.

Ecological Restoration Institute, P.O. Box 15017, Flagstaff, AZ 86011, 928/523-7182, FAX 928/523-0296, www.eri.nau.edu