

The United States Geological Survey (USGS) is recruiting a postdoctoral fellow at the interface of landscape ecology, ecosystem services, and land-change science. The post-doc will research topics relevant to a project aimed at evaluating the landscape-scale effects of energy development and wildfire on wildlife and ecosystem services.

Funding is for 2 years, subject to renewal for 2 additional years, pending the availability of funds. Remuneration is ~US \$74,000/yr, plus benefits. The post-doc will work at the USGS Geosciences and Environmental Change Science Center in Lakewood, CO (<http://gec.cr.usgs.gov/>) with the following project co-leads: Jay Diffendorfer, Research Ecologist and Darius Semmens, Research Physical Scientist and collaborators: Ken Bagstad, Research Economist; Steve Garman, Research Ecologist; and Todd Hawbaker, Research Ecologist.

We are particularly interested in candidates who can apply landscape ecology concepts and methods to assess the responses of species, ecological communities, and ecosystem services to habitat loss and fragmentation, and who can portray assessment results to a broad audience, including land managers and non-scientists. Candidates will support the project by developing statistical approaches, geospatial analyses, and/or simulation models to link land transformation caused by energy development and wildfire to changes in ecosystem services, individual species, and ecological communities. Changes in the provision of ecosystem services will be modeled using the ARIES (<http://www.ariesonline.org/>) platform. The research will also require developing methods to understand and summarize patterns that emerge in complex spatial and temporal datasets, including the measurement and visualization of uncertainty across space and time.

Candidates should have a strong interest in, and evidence of, publishing research results in peer-reviewed journals, and presenting research results at national and international meetings. Initially, this project will investigate the role of energy development and wildfire on ecosystem services in southwest Wyoming, where existing research and geospatial data are extensive (<http://www.wlci.gov/>). The candidate will have latitude to pursue novel approaches and work with a broad set of researchers across fields of geology, economics, ecology, and biophysical modeling.

Applicants will ideally have experience in any of the following: landscape ecology, geography, land-change science, ecosystem services, or conservation biology. Furthermore, skills in geospatial analyses using GIS, strong statistical skills, and a proven record of publications are necessary. Coding expertise is not required, but exposure to and the use of R, Python, Java and/or C++, is desirable. The position will be filled as soon as a suitable candidate is found.

To apply, please prepare a cover letter, curriculum vitae, transcripts, and contact information for three references. Please send your application via email, subject line "Landscape Ecology Post-doc" to dsemmens@usgs.gov. Applicants must have received their doctoral or equivalent graduate degree within the past five years. The degree must be in hand by the selectees starting date. Any questions should be directed to:

Darius Semmens, dsemmens@usgs.gov, 303-578-6966, or
Jay Diffendorfer, jediffendorfer@usgs.gov, 303-236-5369