

TWO POSTDOCTORAL LANDSCAPE ECOLOGY POSITIONS AT THE PACIFIC SOUTHWEST RESEARCH STATION

The Pacific Southwest (PSW) Research Station of the US Forest Service is recruiting two postdoctoral Research Ecologists to work at the GS-11/12 level with the PSW North Zone Research Team. The scientists will be members of the Biodiversity and Ecosystems (B&E) Research Area, located in Placerville, CA. The candidates will co-lead a variety of interrelated projects associated with characterizing landscape dynamics across the western US and applying knowledge gained to established decision support models to develop climate-informed strategic management solutions. The positions are well suited for those who have expertise in forest landscape modeling, fire ecology, landscape ecology, carbon dynamics, climate effects, and decision support. The position will be co-mentored by Drs. Nick Povak and Pat Manley. Remote work options may be available depending on the candidate.

Post-doc 1: Evaluating long-term landscape dynamics from simulation modeling

The position provides modeling, analysis, coding, and database support for a complex, multi-model ecological forecasting workflow. The position will lead the analysis and interpretation of outputs from landscape simulation models (e.g., LANDIS-II) and other remotely sensed data to help quantify the impacts of management on ecosystem functioning. The participant will help scale resource benefits from management to landscapes and regions. This will in turn identify spatial configurations of treatment locations to improve resilience and secure ecosystem services. Results will be incorporated into a decision support system to identify high priority treatment areas across the Sierra Nevada and elsewhere in the western US.

Post-doc 2: Characterizing multi-resource landscape conditions across the western US

This position will lead the development of a regional-level database of remotely sensed vegetation and ecosystem process data to characterize ecosystem conditions across western US forest ecosystems. The participant will develop methodology to standardize data sources across the region and develop ecoregional decision support models to guide strategic and tactical management actions. Data will be used to characterize current landscape conditions and future climate stability towards developing climate informed management strategies. Model results will also be used to diagnose socio-ecological resilience and identify synergies and tradeoffs among management strategies.

QUALIFICATIONS

Required qualifications include a PhD in forestry, ecology, geography, biology, or related discipline. The candidate should have experience with ecological modeling, spatial analysis, statistics, GIS, R and Python, and have led published research. Familiarity with landscape models (e.g., LANDIS-II) is preferred but not required.

POSITION TIMELINE, START DATE, AND BENEFITS

Duration: 1-6 years, contingent upon performance and funding. **Health benefits:** available. **Retirement (401k equivalent):** available with matching. **Start date:** Spring/Summer 2023. **Deadline:** Applications will be reviewed on a rolling basis until the position is filled. **Duty station:** Placerville, CA (*remote work will be considered*)

TO EXPRESS INTEREST

If you are interested in applying or to learn more about the position, contact Nick Povak (nicholas.povak@usda.gov) and/or Pat Manley (patricia.manley@usda.gov). To apply, send a single PDF containing a cover letter, your CV, and three professional references.