The Department of Forest Ecosystems & Society at Oregon State University invites applications for one full-time, fixed-term Postdoctoral Scholar position in Modeling Climate Responses of Pacific Northwest Vegetation. The goal of this work is to advance forest ecosystem modeling at regional and sub-regional scales in Pacific Northwest and Alaska forest ecosystems using multiple dynamic global vegetation models (DGVMs). In collaboration with USFS technical staff, the postdoctoral scholar will use the MC2 and BioMAP DGVMs to simulate forest response to climate change using downscaled CMIP5 climate data. Furthermore, the postdoctoral scholar will evaluate these DGVMs in comparison to other terrestrial biome models such as CLM-ED and LPJ. There is a dual opportunity in this position to produce practical guidance for the regions' forest managers and policy makers, while exploring and advancing DGVM and biogeochemical modeling approaches.

Qualified applicants should have expertise in ecosystem modeling. Extensive experience with at least one vegetation and/or biogeochemical model is desirable, as is using empirical datasets for calibration, validation and/or analysis, including remote sensing products. Candidates with a strong background in forest ecology, biogeochemistry, and related fields are desired. Candidates must be able to read, revise and execute ecosystem model code. The candidate will be expected to coordinate research activities, develop refereed publications, and present research results at professional conferences.

The successful candidate will execute multiple DGVM's, with assistance from technical staff, and evaluate model skill and sensitivities to downscaled climate change projections at regional and sub-regional scales for the national forests of the US Pacific Northwest and Alaska.
This includes the following tasks:

1. Synthesize an assessment of climate change vegetation modeling approaches at the regional and subregional scale in the Pacific Northwest and Alaska.
2. Design an effective framework for comparing and evaluating models for their skill and sensitivities to downscaled climate datasets and models;
3. Identify relevant datasets for evaluating models for the Pacific Northwest and Alaska;
4. With assistance from technical staff, perform a suite of simulations of vegetation response to climate change scenarios;
5. Evaluate sensitivity of models to downscaled climate datasets;
6. Evaluate skill of vegetation models;
7. Evaluate sensitivity of vegetation models to climate datasets;
8. Identify and pursue opportunities to improve model algorithms; and
9. Publish project accomplishments in peer-reviewed journals.

Minimum/Required Qualifications:
A Ph.D. ecology, chemistry, earth system science, forestry, geography, atmospheric science, civil engineering or a related discipline from an accredited university is required.
Preferred Qualifications:
Priority will be given to those with demonstrated experience and expertise in ecosystem process model development and execution, and working knowledge of programming languages such as C, FORTRAN, R, MATLAB, or Python. Knowledge of forest ecology, hydrology, and biogeochemistry is preferred. Experience with analysis of remotely sensed and eddy covariance data is also helpful. The successful candidate will have excellent written and oral communication skills with demonstrated ability to publish in peer-reviewed journals, and to work well in a collaborative team environment.

A competitive salary is available, along with a generous benefits package, and the start date could be as early as December 2014 but should be no later than April 2015. The appointment will be made initially for one year with

possibility of extension for an additional year, conditional upon performance. Reappointment is at the discretion of the Dean of the College of Forestry at OSU.

For further information, please contact Dr. Christopher Still at chris.still@oregonstate.edu or Dr. John Kim at jbkim@fs.fed.us. Qualified applicants should send a cover letter describing their research experience and interests as they apply to this position, a curriculum vita, up to 3 representative publications, and contact information for 3-4 references to: Prof. Christopher Still, Forest Ecosystems and Society, 321 Richardson Hall, Oregon State University Corvallis, OR 97331-5752 chris.still@oregonstate.edu (email preferred). Closing date: 11-28-2014