

## **Position Announcement: Ecosystem Programmer/Modeler**

Earth Systems Institute (ESI), a non-profit R & D group in earth science and ecology, seeks a computer programmer/modeler with GIS skills for a minimum two-year position (with potential for extension). ESI has offices in Seattle, Washington and Mt. Shasta, California; the position is located in the city of Mt. Shasta at the base of a stratovolcano (4,322 m) of the same name. Mt. Shasta (population 5,000) offers a very pleasant living environment with bountiful hiking, rafting and cross country and alpine skiing.

The new employee will join an existing group of four ESI staff that are currently involved with developing coupled watershed databases and GIS-based analysis tools to support resource management, restoration and conservation. ESI's tools and databases are designed to support stream and watershed restoration, pre- and post-wildfire planning, forestry, water supply planning, environmental regulation, and ecological mapping ([www.netmaptools.org](http://www.netmaptools.org)). Current projects include design and implementation of new models for predicting erosion following wildfire across the western U.S., ecosystem analysis in the Pacific Northwest and intermountain regions, ecological mapping of island archipelagos in southeast Alaska, habitat modeling in the Copper River (Alaska), decision support tools for fish habitat management with NOAA-Fisheries, and related projects in Russia, Spain and China.

The new staff member will compliment and build on existing staff capabilities regarding the development of science, models, tools, and GIS interfaces that involve coupling of geologic, topographic, vegetative, climatic, and terrestrial and aquatic ecosystem components. Position requirements include proficiency in some combination of programming languages including Python, C, Fortran, VBA and/or VB, particularly with respect to creating model-GIS interfaces in ArcGIS (desktop) and in web server-based GIS systems. VB/VBA skills within an ArcGIS environment and use of DLL's are required as well as familiarity with GIS file formats; experience in Fortran is desirable. Other relevant capabilities include overall strong computer skills and statistical and math abilities. Some background in the natural sciences such as geology, geomorphology, hydrology, and ecology is preferred. A Masters or PhD in quantitative earth science or ecology, computer programming, and GIS or some combination thereof is recommended. Starting salary is U.S. \$70,000 and includes benefits. Starting date October 2009 or as soon as possible thereafter. ESI is an equal opportunity employer. Please send a one or two page resume plus a letter detailing how you meet the stated qualifications to Dr. Lee Benda at: [leebenda@earthsystems.net](mailto:leebenda@earthsystems.net)