David L Nieland

Subject: POSTDOCTORAL OPPORTUNITY IN WATERSHED MODELING

POSTDOCTORAL OPPORTUNITY IN WATERSHED MODELING (This is a re-posting - review continues until 20-Jan-2016, open until filled).

The Smithsonian's Conservation Biology Institute (SCBI) and Environmental Research Center (SERC) have an opening for a postdoctoral fellow to join a scenario modeling project for the Northern Blue Ridge region of Virginia—a 15-county area including parts of the Potomac, Shenandoah, Rappahannock and James River basins. The work of the Fellow falls in three broad areas.

First, adapt and calibrate a dynamic watershed model for water, sediment, nitrogen, and phosphorus within subwatersheds comprising the study area.

Second, integrate the watershed model and a landscape model in order to examine how alternate future land use and climate scenarios might affect valuable ecological and cultural landscape features. Third, help to organize and lead workshops with the general public and regional stakeholders to identify relevant scenarios and integrate project results into local and regional planning efforts. Applicants should have experience in watershed modeling, a Ph.D. in a relevant science discipline (e. g, ecology, hydrology, environmental engineering, or geography), peer-reviewed publications, and professional presentations. Applicants also need strong skills with geographic information system (GIS) analysis and multivariate statistics. Other desirable skills include R and Python programming, data base management, or remote sensing. The fellow will be an active participant in project planning, data analysis, scientific publications, and public outreach and must be able to work as part of an extended research team. Therefore, interdisciplinary experience is a plus. The position is for one year with possible renewal following review. The stipend is $46,000/year plus health benefits. The position will be based at SCBI (Front Royal, VA) with frequent trips to SERC (Edgewater, MD). For best consideration, send letter of application, resume, undergraduate and graduate transcripts, and names of three references (with contact information) by January 20, 2016 to Dr. William McShea (mcsheaw@si.edu).