Postdoc position in hydrologic modeling & ecosystem services at the Natural Capital Project

NatCap is hiring a new postdoc to advance our work on hydrologic modeling for ecosystem services. Please see the position description below and on our website: [https://www.naturalcapitalproject.org/opportunities/](https://www.naturalcapitalproject.org/opportunities/)

Keywords: flood risk mitigation; sedimentation; land management; Himalayas; and always lots of fun

Please feel free to share this announcement widely in your networks.

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Natural Capital Project
Postdoctoral Associate: Advancing hydrologic modeling for ecosystem services

The Natural Capital Project at Stanford seeks a creative and application-oriented hydrologist to support the assessment of hydrologic ecosystem services and targeting of land management and development choices. The focal hydrological services are water regulation (flood mitigation, baseflow regulation) and sedimentation. The postdoc will support development of a parsimonious flood risk model and application of existing watershed hydrology models in innovative ways to support two studies on the valuation and prioritization of land management activities to support ecosystem services. The position will be based with The Natural Capital Project at Stanford University, in the lab of Dr Gretchen Daily (Natural Capital Project founder and faculty mentor), and will be co-supervised by project leads Dr Adrian Vogl and Dr Perrine Hamel, and Prof David Freyberg (Department of Civil and Environmental Engineering).

The Natural Capital Project (NatCap) aims to mainstream natural capital approaches by developing practical tools and approaches to account for nature’s contributions to society, so that leaders of countries, companies, communities, and organizations worldwide can create a more sustainable future. NatCap is a partnership among Stanford University, the University of Minnesota’s Institute on the Environment, The Nature Conservancy, and World Wildlife Fund.

Responsibilities:
The postdoc will: (i) develop or refine models to link land use change with flood risk and inundation change in selected case study areas, (ii) develop or refine models to link land management with sedimentation and seasonal water regulation in the Himalayas (Nepal and Pakistan), (iii) simulate different watershed management and green infrastructure solutions to estimate their likely impacts on hydrologic services, and inform optimization/prioritization of watershed investments.

The position is funded for 12 months, with potential to extend the appointment depending on funding and performance. The post-doctoral researcher will be encouraged to collaborate on grants and pursue additional partnerships and funding opportunities through the Natural Capital Project and its partners.

Qualifications:
Required Qualifications:
Ph.D. in hydrology, geography, water resources engineering or related field.
Interest in applied conservation science and producing impactful and decision-relevant work.
Experience with hydrologic models (SWAT and InVEST preferred).
Experience with ArcGIS or other GIS software.
Interest in and affinity for working in interdisciplinary research teams.
Effective and responsive team member with track record of successful collaborative engagements.
Demonstrated excellence in written and oral communications skills.

Preferred Qualifications:
Experience working internationally and with diverse non-academic audiences.
Experience developing and adapting hydrologic models to support decisions in data-limited contexts.
Experience with open-source software and programming languages or applications (MatLab, R, python).
Experience supervising interns or undergraduate research assistants.
International travel experience and foreign language skills.

Start date: Sep 15, 2017
Duration: 12 months, with possibility of extension
Compensation: Stanford offers a competitive postdoc salary and benefits package, commensurate with experience

How to apply:
Email your CV and a cover letter describing your experience and interest to avogl@stanford.edu with HYDRO POSTDOC in the subject. Applications will be reviewed as they are received, and we expect to make a decision by Aug 31.

Stanford University is committed to equal opportunity through affirmative action in employment and we are especially eager to identify minority persons and women with appropriate qualifications. More information on the project can be found at www.naturalcapitalproject.org.