MS Research Assistantship – Spatial Analysis & Human Dimensions

**Project Title:** Expanding riparian buffers: Prime prospect outreach to private landowners


**Position:** The UM College of Forestry and Conservation in Missoula, MT is seeking applicants for a one-year, MS Research Assistantship to work on novel approaches to private land use assessment and landowner outreach. The position is available beginning August 2016, provides a stipend for the academic year (10 months), and covers tuition. The successful applicant will assist with spatial analysis to couple landownership, land use/cover, and human dimensions datasets.

**Project:** Riparian forest buffers are a proven and cost-effective best management practice for improving water quality while providing additional conservation benefits. Over the past decade, public and private partners have been working with farmers and other private landowners to install thousands of acres of buffers in major watersheds. However, recent recruitment has decreased leaving conservation goals unmet. Most major watersheds are home to hundreds of thousand, sometimes millions, of private landowners with riparian frontage that would benefit from buffer installation. Efforts to partner with these landowners are challenged by the logistics and expenses of searching large audiences for willing or likely participants. This project will apply market segmentation theories and methods in a conservation context to increase efficiencies in buffer recruitment programs. We will employ spatial analysis techniques to prioritize landscapes using human and biophysical data, novel consumer (big) data analysis to identify prime prospect landowners, and human dimensions research techniques to assess outreach successes and efficiencies.

**Qualifications:** Applicants should have a bachelor’s degree in a natural resource, social science, or spatial analysis-related field, and a strong interest in watershed stewardship on private lands. Applicants should have good communication and writing skills, well-developed spatial and quantitative analysis capabilities, and a strong work ethic. Previous spatial analysis experience required. We prefer applicants have at least a 3.0 overall undergraduate GPA; GRE scores for verbal, quantitative, and analytical at or above the 60th percentile; strong letters of recommendation; well-articulated statement of interest and goals; and previous research and/or relevant experience.

**Application Information:** Applicants should send a single PDF with the following to Dr. Alexander L. Metcalf (alex.metcalf@umontana.edu): (1) a cover letter which includes a well-articulated statement of research interests and goals, previous research, and/or relevant experiences, (2) a resume (including GPA), (3) unofficial transcripts and GRE scores, and (4) contact information for three references. The selected candidate will apply to the UM College of Forestry and Conservation for admission to the Resource Conservation or Systems Ecology MS degree program. Graduate degree program requirements can be found at [http://www.cfc.umt.edu/grad/](http://www.cfc.umt.edu/grad/) and [http://www.umt.edu/grad/Apply/](http://www.umt.edu/grad/Apply/).

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