Position Title: PhD graduate students – Energy, Environment and Society

Position summary:

The Human-Environment Systems research group at Boise State University will be accepting a cohort of four PhD students for a team-based research project focused at the intersection of energy, environment and society in the western United States. There is an increasing demand for energy in the western US as population and industry grows. The overarching goal of the project is to identify solutions for safe and reliable energy production and delivery without compromising environmental integrity, ecosystem services, or societal well-being.

Potential major advisors and research areas include:

Jodi Brandt - jodibrandt@boisestate.edu: How has the energy sector influenced land use and land cover change in the American West? Where is population growth and land use change most likely to occur in the future? What are optimal land use decisions for maximizing biodiversity and ecosystem services?

Neil Carter - neilcarter@boisestate.edu: Assessing and spatially predicting impacts of energy development on wildlife across individual, population, and community levels. Methods for integrating information on wildlife and their habitats into decision-support tools, such as online dynamic maps.

John Gardner - jgardner@boisestate.edu: How can local communication networks make the grid more resilient and allow for better integration of renewable and distributed energy resources? What motivates individuals to alter their energy use to achieve broader goals?

Nancy Glenn - nancyglenn@boisestate.edu: Remote sensing in both urban and rural environments for optimizing energy development and natural resources.

Vicken Hillis - vickenhillis@boisestate.edu: Mechanisms of individual and collective decision making in the transition to renewable energy. Role of social identity and environmental values in the optimal siting of energy infrastructure. Diffusion and resilience in multiplex social-infrastructural networks.

Kelly Hopping - kellyhopping@boisestate.edu: Interactions between rural livelihoods, ecosystems, and energy development in the context of global change. The role of green roofs in meeting environmental and energy goals.

In addition to their major advisor, the students will have the opportunity to work with other HES faculty, diverse faculty across the Boise State campus, and our partners in National Laboratories.

The students can use a number of approaches including, but not limited to, experimental manipulation, scenario or other computational modeling, remote sensing, Geographic Information Systems, network analysis, and stakeholder participation.

Depending on the emphasis of the project, the graduate students can enter different programs including Ecology, Evolution, and Behavior (PhD), Geosciences (PhD), or Computing (PhD). Funding (stipend, tuition, and health insurance) is available for up to four years and may be provided by both Research and Teaching Assistantships.

Boise State University provides a number of benefits, including: excellent technical facilities; the opportunity to conduct both basic and applied research; work in interdisciplinary teams; access to national and international research and conservation networks; a vibrant region with a high quality of life and exciting career opportunities.

Minimum qualifications:

- Bachelor of Science or Arts (B.S. or B.A.) in Biology, Conservation, Ecology, Geography, Engineering, Geosciences, or related field.
- Strong quantitative skills, including proficiency using R and ArcGIS, or other statistical and geospatial software.
- Experience and interest working in collaborative teams.

Preferred qualifications:

- Master of Science (M.S.) in Biology, Computer Science, Conservation, Ecology, Geography, Engineering, Geosciences, or related field.
- Experience with biophysical models, modeling biodiversity and/or wildlife dynamics, and/or collecting, compiling, and analyzing large datasets.
- Experience evaluating energy and infrastructure networks.
- Demonstrated research success through peer-reviewed publications

Application instructions:

Please submit a cover letter indicating which of the topics listed above, or other related topics, you would be interested in pursuing, how your experience and skills would enable you to be successful in a team-based, interdisciplinary project, and the faculty advisor you are interested in working with. Attach a Curriculum Vitae that includes employment history (including dates of employment) and three professional references with contact information, and transcripts (unofficial is fine).

Required documents should be emailed to the major advisor that you are interested to work with. In the subject line of the email, put: PhD position - Energy, Environment and Society.

Boise State University embraces and welcomes diversity in its faculty, student body, and staff. Accordingly, applicants who would add to the diversity and excellence of our academic community are encouraged to apply.

Deadline:

Review of documents will begin November 15, 2018, and will continue until finalists are identified. Applications received after that point may be considered if the position is not filled from the finalist pool.

Additional information:

Nestled in the foothills of the Rocky Mountains and the capital of the state of Idaho, Boise is frequently featured as a top-ranked metropolis. The city has ample opportunities for world-class outdoor activities year-round and a thriving arts and entertainment culture. In 2016, US News and World report ranked Boise the 6th best city to live in the United States.

About the University: http://www.boisestate.edu
About the City of Boise: http://www.boisechamber.org
About the Human-Environment Systems Center at BSU: https://cid.boisestate.edu/hes