College of Food, Agricultural and Natural Resource Sciences (CFANS)

Position Description

Position: Post-Doctoral Associate

Reporting to: Director, Water Resources Center

Department: Water Resources Center

Classification: 9546

Position #:

Position Overview

The University of Minnesota Water Resources Center seeks a postdoc or researcher to be part of an interdisciplinary team to conduct research and analysis that will contribute to the evaluation of the engineering, hydrogeologic, economic and policy benefits of and barriers to groundwater aquifer storage and recovery (ASR). This position will support the work by completing an assessment of the economics for aquifer recharge and evaluating the existing policy barriers for aquifer recharge. Ultimately, the team will produce recommendations for recharge, an analysis of the suitability of ASR as an approach and how the state might proceed if recharge is needed for future water sustainability.

This position will support a research project funded by the LCCMR. This position is up to full-time. We are flexible on terms and availability. The term of the position is beginning December 1, 2019 through December 31, 2020. The selected applicant would be an employee of the University of Minnesota and work within the Water Resources Center.

For more information about this project and tasks, email either John Bilotta (jbilotta@umn.edu, 612-624-7708) or Lucia (Lucy) Levers (llevers@umn.edu, 612-624-7430)

About the Job

Depending on the qualifications of individual hired, this person would be responsible to lead and assist the team in performing and evaluating the economic and policy barriers to groundwater aquifer storage and recovery. Job responsibilities would include the following:

- Complete a literature review of work related to economic and policy considerations for aquifer use and recharge.
- Collect existing economic and environmental data and policies data related to groundwater aquifer storage and recovery (ASR).
- Recommend models for economic and policy analysis.
- Determine variables to consider to complete an economic analysis.
- Construct a case study of one or more of the geographic areas in Minnesota suitable for ASR chosen by team.
- Conduct a statistical and/or spatial analysis (such as hedonic analysis) of a case study of one or more of the geographic chosen geographic areas.
- Compare state and national policies related to ASR and groundwater use and recharge.
- Assist with drafting the final report and preparing peer reviewed publication(s) related to the project.

Required Qualifications:

- PhD in statistics, economics and/or environmental sciences (hydrology, water and natural resources) or related fields (or equivalent experience).
- Expertise in statistical analysis and mathematical modeling

Preferred Qualifications:

- 0-3 years post graduate experience
- Interest in groundwater management and policy
- Ability to clearly communicate both in written and verbal formats
- Ability to work with diverse investigator team