



# AQUATIC FLOWS

Climate Adaptation  
Postdoctoral Fellows

Looking to Make Your Climate Science Matter?

## We Have the Post-Doc for You!

[JOBS.OU.EDU](https://jobs.ou.edu) | JOB NUMBER: 222812

The South Central CASC and USGS Climate Adaptation Postdoctoral Fellowship is looking for a postdoctoral researcher at the University of Oklahoma.

**Principal Investigator:** Jennifer Koch

**Topic:** Mesoscale socio-environmental systems modeling of water availability across the Mississippi River Basin.



**SOUTH CENTRAL**  
CLIMATE ADAPTATION SCIENCE CENTER

 **USGS**  
*science for a changing world*

## **Climate Adaptation Postdoctoral Fellow -**

**Job Location:** Oklahoma-Norman-Norman Campus

**Schedule:** Full-time 8 AM-5 PM, Mon-Fri

**Salary Range:** Targeted salary \$60,000 annually, based on experience plus benefits

**Required Attachments:** Cover Letter, Curriculum Vitae, Examples of Work, Other Document (See Job Requirements for details)

### **RESEARCH FOCUS:**

The CAP postdoctoral researcher will conduct research related to conceptual modeling and associated geospatial data synthesis for the Mississippi River Basin (MRB) socio-environmental system. The objectives of the scholar's research are to 1) describe and visualize the MRB socio-environmental system in a conceptual model and 2) synthesize and integrate spatial and temporal information on the MRB socio-environmental system from a multitude of scattered data sources into an object-relational database.

We are looking for an innovative and motivated researcher with solid systems thinking and geospatial analysis skills and a passion for interdisciplinary collaborations that support decision-making regarding using common pool resources. We are especially interested in applicants with experience in quantitative and qualitative research methods and data as well as experience participating in interdisciplinary research projects.

In addition to research duties, the successful candidate is expected to interact with natural resources managers, manage data and metadata for the project and document research status through regular reporting in a professional and timely manner.

### **TRAINING:**

As part of the CAP program, and through work with mentors at the South Central CASC, the CAP scholar will also engage in training, professional development, and mentoring activities on topics like tribal data sovereignty, the co-production of actionable science with natural resource decision-makers, team science and interdisciplinary collaboration, traditional ecological knowledge, and science communication.

## **Job Requirements**

### **Required Education:**

- A PhD (at time of employment) in geography, environmental sciences, environmental engineering, Earth sciences, or another relevant discipline.

### **Skills:**

- Demonstrated experience in conducting geospatial data analysis using GIS, including (but not limited to) PostGIS, QGIS, GRASS GIS, or ArcGIS Pro.
- Demonstrated capacity to conduct quantitative analysis with geo-spatial data, including (but not limited to) experience with scripting languages (R or Python), machine-learning techniques, numerical simulation approaches, or experience with physical process-based models.
- Experience communicating technical or scientific information to government officials, environmental officials, or tribal and other communities.
- The willingness and temperament to work efficiently in a remote teamwork setting, to complete tasks with high-quality work, and to coordinate efforts and share results with team members frequently.
- Experience (or a demonstrated interest in) working with decision-makers to produce actionable science for informing natural resource management.
- Be able to pass a background check.

### **Department Preferences:**

- Experience with qualitative research methods.
- Experience with version control and data management.
- Experience writing proposals, governmental reports, or publicity materials.
- A strong record of relevant peer-reviewed publications.