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<b>Job Title</b>	Postdoctoral Research Associate
<b>PVN ID</b>	RC-2110-004329
<b>Category</b>	Research
<b>Location</b>	CUNY-ADVANCED SCIENCE RESEARCH CENTER
<b>Department</b>	Environmental Sciences Initiative
<b>Status</b>	Full Time
<b>Salary</b>	Depends on qualifications
<b>Hour(s) a Week</b>	35
<b>Closing Date</b>	Dec 18, 2021 (Or Until Filled)

## General Description

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A Postdoctoral Research Associate is sought to join a consortium of academic partners analyzing contemporary and future challenges to food-energy-water systems (FEWS) of the Northeastern and Midwestern United States. Extreme weather will continue to challenge the performance of FEWS-related engineered and natural infrastructure, and serve as a major force shaping future decisions on environment, economy, and national security. This project responds to this imperative by creating the C-FEWS (Climate-induced extremes on the linked Food, Energy, Water System) research framework to advance modeling, data integration and assessment capabilities in support of hypothesis-based research on regional FEWS dynamics. It is also designed to support policy-making by identifying alternative management strategies under changing climate and weather extremes over multitemporal time horizons to 2100.

The project is seeking a creative, self-motivated, and energetic post-doctoral fellow assist, coordinate various aspects of, and be trained for a leadership position in the field.

### Eligible fields of expertise:

Modeling, numerical methods and/or geospatial data analysis training in any of the following areas: hydrology, environmental systems analysis, environmental engineering, energy assessment, ecosystem services evaluation.

### Primary responsibilities:

- Execute large-scale food-water-energy nexus modeling studies;
- Data integration from Earth System science and human dimensions perspectives;
- Analyze role of traditional engineering assets and ecosystem services in regional food-energy-water systems;
- Under the general supervision of the Senior Research Director and PIs, perform simple-to-complex research tasks, investigations, and analytical activities independently;
- Formulate scenarios of potential future trajectories of FEWS conditions and management responses;
- Integrate across individual project elements (models, data) by helping to create and apply a holistic analysis framework.

#### **Qualifications and skills sought:**

- Strong numerical skills;
- Modeling, data visualization geospatial analysis (GIS);
- Ability to write clearly, including technical reports & peer-reviewed scientific publications;
- Presentation skills for internal team meetings and scientific conferences;
- Capacity to participate in team-based research and lead various aspects of the work, including project management.

**Starting salary: \$60,000**

## **Other Duties**

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- In coordination with project lead, execute project management on various aspects of project;
- Interdisciplinary interactions with a modeling team;
- Consultation with other researchers and authorities in the field as appropriate;
- Interact and help mentor graduate and undergraduate students who are affiliated with the project;
- Ability to travel domestically;
- Work well in team environment but with ability to perform research independently;
- Preparation of annual and other administrative reports;
- Organize planning meetings and events, web-based communications as necessary.

## **Qualifications**

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Candidate should have completed a Ph.D. by the time of appointment in an appropriate field of study, or specialty, from an accredited institution in project-related fields.