



## AmeriCorps Member Position Description



**Member Position / Title:** Monitoring & Remote Sensing Technician

**Member Immediate Supervisor Name:** Christa Russell

**Days / Hours of Service:** Typically, Mon. – Fri. 9:00 am – 5:00 pm.; nights and weekends for events

**Member Immediate Supervisor Title:** Coastal Scientist

**Partner Organization Name& Site Address:** Coalition to Restore Coastal Louisiana

**Organization/Agency Mission and/or Goals:** Mission: Drive bold, science-based action to sustain a dynamic coastal Louisiana through engagement and advocacy.

Purpose: To sustain as much of Louisiana's coast as possible despite climate change and other factors causing land loss. In pursuit of this overarching goal, we build support for restoration, increase public awareness of CRCL in order to extend our influence, and strengthen our organizational capacity.

**Program Mission and/or Goals:** This position is part of CRCL's Restoration Program. The Restoration Program builds support for coastal restoration amongst stakeholders by directly improving coastal habitats and serving as a platform to engage and educate the community about coastal land loss issues and solutions. The Restoration Program includes the Habitat Restoration Program (HRP) and the Oyster Shell Recycling Program (OSRP). The HRP engages volunteers and stakeholders to participate in vegetation restoration at sites across our coast. The OSRP recycles oyster shell from New Orleans-area restaurants and uses it to restore oyster reefs that protect Louisiana's eroding coastline.

**Community Need:** As the urgency of Louisiana's coastal land loss crises grows, so does our need to understand which restoration methods are most effective and why. Developing and sharing these approaches and their results with landowners and other stakeholders will help them make informed decisions for reducing land loss and flood risk in their communities. In the past three years, CRCL's HRP and OSRP have begun implementing scientific monitoring techniques to help assess the effectiveness of our restoration projects. For the last two years, resulting from the work of a Serve Louisiana project, CRCL has been using unmanned aerial vehicles (UAVs, or more commonly, drones) to gather additional monitoring data with minimal habitat disturbance. As CRCL adds more acres of restored wetlands and oyster reefs, our capacity to monitor these projects declines. One way to boost our effectiveness as a small team is to add capacity for both data collection and data analysis/interpretation. The ability to quickly and accurately gather these data and obtain and share results will benefit the community by helping us to (1) understand which types of restoration projects are worth investment, and (2) better explain the causes of failure or success.

**Member Position Summary:** The Monitoring & Remote Sensing Technician will work to add scientific capacity to CRCL's Restoration Program. The Technician will implement on-the-ground and aerial monitoring of vegetative plantings and oyster reefs according to organizational protocols. The Technician will collect, organize, enter, and analyze data under the guidance of the Coastal Scientist. The

Technician will also collaborate with the Restoration, Engagement, and Communications teams to collect useful aerial imagery for remote engagement initiatives and communicate the results of restoration projects. The Technician will also assist the Habitat Restoration Coordinator and Coastal Scientist with running volunteer events.

**Member Impact:** In the short-term, the Monitoring Technician will enable CRCL to quantify results from our restoration work in coastal forests, marshes, beaches, and oyster reefs along Louisiana's vulnerable coastline and communicate them in an engaging manner. With accurate and timely results, we can best assess project success, or identify failures early and adaptively manage projects.

**Essential Functions of Position:**

- Implement on-the-ground and UAV-based remote sensing to conduct wetland vegetation surveys
- Collect, organize, and enter data
- Analyze and interpret results
- Communicate results internally and to a lay-audience
- Maintain all equipment used in ecological monitoring
- Assist staff with volunteer restoration projects, the State of the Coast Conference, Stewardship Awards Gala, and tabling at festivals

**Required Knowledge, Skills, and Abilities**

- Interest in coastal restoration
- Familiarity with ESRI GIS/remote sensing software such as ArcMap or ArcGIS Pro
- Familiarity with wetland ecology
- Ability to accurately enter data (detail-oriented)
- Understanding of basic statistics
- Operational knowledge of Microsoft Office 365 software
- Independent and self-motivated –must be comfortable working without constant supervision
- Enthusiasm for physically demanding work outdoors in various weather/site conditions
- Comfort working in an office
- Ability to serve full time for 11 months (1700 hours).
- Ability to work atypical hours, weekends, and travel for sometimes several days at a time
- Strong verbal and written communication skills

**Required Academic and Experience Qualifications:**

- Coursework or experience in a relevant field such as Coastal Science, Environmental Science, Environmental Engineering, or Ecology
- Coursework or experience entering and analyzing data
- Coursework or experience with GIS and/or remote sensing preferred
- Valid driver's license, safe driving record, and reliable transportation.