



# AmeriCorps

## 2023-24 ECO AmeriCorps

### Research Associate

Environmental Careers and Opportunities (ECO) AmeriCorps is an AmeriCorps program within the Vermont Department of Environmental Conservation (VTDEC). ECO AmeriCorps is funded in part by an AmeriCorps state grant provided through SerVermont from the Corporation for National & Community Service. Service sites will provide meaningful service opportunities, regular supervision with oversight of service hours and timesheets, office space and office equipment, orientation to the worksite, additional training (as needed) and mileage reimbursement. The 2023-2024 program will begin mid-September 2023 and end in August 2024.

### To be considered, service sites must:

- Demonstrate a commitment to DEIJ principles and provide a pathway for involvement at the host site and program level.
- Be a non-profit, municipality, state agency, tribal government, or educational institution.
- Provide a position description showcasing activities that are appropriate to the mission of ECO AmeriCorps.
- Provide a work environment that is ADA compliant, drug-free, and carries supplies and equipment necessary for members to perform their duties.
- Be able to provide the cash match and mileage reimbursement at the federal General Services Administration (GSA) rate for service-related travel for the member.
- Attend a supervisor orientation and be available for a minimum of two subsequent site visits and check-ins from ECO AmeriCorps staff.
- Clarify any additional responsibilities to the member according to your organization's policies.
- Notify ECO AmeriCorps staff about conflicts or other issues as they arise.

### Other Requirements and Responsibilities:

- Confirm member selection, on-site training, member supervision and support throughout term of service, other forms and documentation as required by AmeriCorps, mileage reimbursement for service-related travel.
- Main supervisor must attend AmeriCorps supervisor orientation (or make special arrangements).

### Host Site cost based on # of full-time employees:

*Full-Time (1,700 hours over 11 months)*

- 0-3 \$8,000
- 4-10 \$9,000
- >10 \$10,500

*Half-Time (900 hours over 6 months)*

- \$5,250 regardless of size

*Quarter-Time (450 hours over 3 months)*

- \$2,625 regardless of size

For more information about the host site application:

- Visit the ECO Website for supporting documents: [www.ecoamericorps.org](http://www.ecoamericorps.org)
- Or contact Program Supervisor, Dustin Bowman, [dustin.bowman@vermont.gov](mailto:dustin.bowman@vermont.gov), 802-461-5222

*The Vermont Department of Environmental Conservation is sponsoring AmeriCorps positions through its AmeriCorps Program. The State of Vermont is an Equal Opportunity Employer. Positions are open to all applicants without regard to race color, national origin, ethnicity, disability, age, gender, gender identity, sexual orientation, political affiliation, veteran's status, religion, or creed.*

Name of Organization or Municipality:

Rich Earth Institute

Address of Organization or Municipality:

355 Old Ferry Road Brattleboro VT 05301

Primary Supervisor Name and Title:

Jamina Shupack, Assistant Director

Primary Supervisor's email:

[Jamina@richearthinstitute.org](mailto:Jamina@richearthinstitute.org)

Primary Supervisor's phone #:

(802) 631-0196

Please provide a brief description of your role at your site:

As the Assistant Director of the Rich Earth Institute, Jamina's leadership and organizational strengths contribute to maintaining a high performance team at Rich Earth. She also supports our organization's robust platform for educating the public about the possibilities and practicalities of nutrient recycling. Jamina's role at Rich Earth focuses on program development and implementation, staff support, financial oversight, and fundraising. Specifically, these responsibilities include:

\*Oversight of active grant deliverables

- \*Contributing to grant and programmatic decisions
- \*Supervising AmeriCorps Volunteers & Rich Earth Internship Program
- \*Financial planning and oversight
- \*Supporting staff through regular meetings and evaluations
- \*Directing fundraising campaigns
- \*Portable Toilet Service Operations

Which hosting category are you applying to?

Full-Time (September-August)

What is the title of the position you are requesting?

Research Associate

Describe your proposed service project.

*[Note: performance measures are based on improved acres of public land, improved miles of waterways or trails, number of Vermonters provided environmental stewardship education or training, and number of members placed in green jobs after completing their AmeriCorps service. Capacity- building activities are allowed. Please describe any projected impact.]*

## OVERVIEW

The Rich Earth Institute operates the first community scale urine recycling network in the United States to produce a legally-approved sanitized Class A fertilizer product. Our organization promotes nutrient recycling activities and related educational resources at multiple levels from local to international. Our ECO Americorps Service Member directly supports many of the activities related to carrying out these activities, building our networks and gathering data about the outputs of our work.

## ESSENTIAL FUNCTIONS

Rich Earth advances the field of ecological sanitation through research, hands-on application, and education. There is a steady flow of projects in each of these arenas for an ECO Service Member to support and potentially lead. The ECO position will be tailored to the skill set and interests of the Service Member. Some possible projects for this position include and are not limited to:

- Data collection and analysis from lab trials, field tests, and social research interviews
- Application of pasteurized urine as fertilizer in agricultural settings
- Designing materials and lesson plans for educational and outreach projects
- Reviewing literature of cutting edge research in ecological sanitation
- Engaging in the regulatory process to support widespread adoption of sanitation justice practices
- Supporting Rich Earth's portable composting-toilet service

- Tending Rich Earth's demonstration garden

What data collection tools will the member use to record the impacts of their service activity?

Our AmeriCorps Service Member will have access to a variety of tracking tools that will be used to record and quantify the impacts of the service term.

Rich Earth gathers information about the impacts of our programs and services through several different methods. Our educational programs distribute follow up questionnaires through Survey Monkey, which allow participants to offer feedback, ask questions, and document their participation in nutrient recycling. We also document overall participation in our educational programming through attendance records and Zoom registration reports.

Our team also tracks the reach of communications through newsletter contacts, social media followers, donors to our annual appeal, and households on our mailing list. We have created spreadsheets that are regularly updated to track metrics such as email inquiries received, educational events hosted, sites served by our portable toilet service, and progress on installations.

Additionally, Rich Earth tracks the total volume of urine we recycle through logs on our pasteurizer, and this data allows our team to calculate the following outcomes:

\*Total water conserved by preventing toilet flushes

\*Total volume of nitrogen and phosphorus diverted from the wastewater stream

\*Total volume of fertilizer applied to our region's farmland

Please provide any additional information (data, statistics, reports, etc.) that demonstrates the compelling need for the proposed position:

\*Rich Earth coordinates a growing network of stakeholders who participate in nutrient recycling to protect waterways, conserve water, and support local agriculture. This network consists of urine donors, farms, municipal agencies, academic institutions, public events, media outlets, and regulators.

\*Our work is directly supported by over 200 regular urine donors and thousands of participants at events served by our fleet of urine diverting portable toilets. We also receive nutrients that are collected through urine diversion installations at residential, commercial, and public facilities.

\*Cumulatively, our organization has conserved over 2.3 million gallons of water through preventing toilet flushes. In 2021, we collected over 12,000 gallons of urine, which is our highest annual total to date. From our work in 2021 alone, we diverted 3,147 pounds of nitrogen and 184 pounds of phosphorus from the Connecticut River watershed.

\*Rich Earth currently partners with farmers in Windham County who apply our fertilizer on hay fields and crop soils. These farms support Rich Earth's Research and Demonstration efforts through federally funded projects.

\*Rich Earth's annual calendar of education events includes hosting webinars, leading a global Research Summit, tabling at local public events, welcoming groups for tours of our Research Center, and presenting at conferences.

What initiatives does your organization take to support diversity, equity, inclusion, and environmental justice (DEIJ)? Please include any historical data or details for on-going strategic plans, partnerships, and projects, as relevant.

The long-term impact of our work advances the global movements for food and water sovereignty by providing resources to communities that enable water conservation and low-cost fertilizer production. More immediately, Rich Earth serves as a hub of information to foster the development of localized nutrient recycling networks. Our website's repository of educational documents and videos are available to the public free of charge, including open-access simple technological designs. Almost every day, our staff receives and responds to inquiries from diverse constituents in the global community asking questions about Rich Earth's research and implementation efforts. Our team has also worked to maintain the accessibility of our technology by distributing low-tech household collection systems (which we work to make accessible to people of all genders, ages, and abilities) on a donation basis and using grant funding to subsidize nutrient recycling installations.

Outline how DEIJ principles can be incorporated into your organization's work moving forward. (Provide examples of any trainings, workshops, projects, partnerships, etc.)

Rich Earth is committed to supporting movements for food and land equity by fostering local nutrient sovereignty in communities around the world. Our work supports sanitation justice for communities, including in places that currently lack consistent access to modern plumbing systems. Rich Earth understands that BIPOC communities in the United States have historically experienced systemic discrimination affecting their land ownership and control over food production. We are therefore committed to collaborating with organizations whose work focuses on redressing these historical inequities. In this vein, we have and will continue to partner with groups such as the Container Based Sanitation Alliance, SOIL (based in Haiti), and farmer education initiatives in Niger and Kenya to support their work.

Describe specific challenges that your organization has faced while integrating DEIJ Principles.

In our history as an organization, Rich Earth has operated with representation from people of color on both our staff and board teams. However, we currently do not have BIPOC members either on our staff or board teams. Accordingly, we recognize that Rich Earth could be making better overall progress with cultivating diversity as our organization grows in the months and years ahead. As an organization operating within a predominantly white region of the country, we welcome the opportunity to bring more people of color onto our staff and board teams. The challenges we encounter in realizing this intention are complex, as Rich Earth's programs and services operate in a specific niche within the environmental sector. People hired by our organization must be comfortable discussing and sometimes safely handling human waste. We also seek candidates who have relevant backgrounds in the fields of sanitation, research, or agriculture. Rich Earth has historically found that our public job postings generate only a small pool of applicants. Most of our recent hires have been completed by extending job offers to recent AmeriCorps Service Members and interns.

How will the ECO member be included or supported in on-going or future DEIJ work at the organization, if they so choose?

Rich Earth recognizes how defining and advancing our equity and justice is an ongoing and evolving process. Members of our team have formed an Equity and Justice committee, which meets throughout the

year. This committee has produced our organization's Equity and Justice statement, provided input on Rich Earth's newly complete strategic plan, and built partnerships with organizations for collaboratively pursuing environmental justice funding. Rich Earth invites our ECO AmeriCorps Service Members to join our Equity & Justice Committee, which includes two of our previous Service Members, Julia Cavicchi and Jamina Shupack. Rich Earth also invites Service Members to share their learnings from any equity and justice training or events they participate in through the ECO AmeriCorps network.

Does the supervisor have adequate time and leadership experience to manage an ECO member? Please explain how:

As the supervisor of this service project, Jamina Shupack has adequate time and leadership experience to manage an ECO AmeriCorps member. Jamina's experience of coordinating the Rich Earth Internship Program coupled with being a recent ECO AmeriCorps alum uniquely qualifies her with a deep understanding of both Rich Earth as an organization as well as what it takes to have a successful AmeriCorps experience. While Jamina will be the Service Project supervisor, our growing team of personnel at Rich Earth will assist Jamina with training and workflow for our 2023 full-time ECO AmeriCorps Service Member. Serving with different members of our team will provide opportunities for a Service Member to learn about a range of topics including public engagement, project management, science/research, agricultural practices, environmental stewardship, and technology development.

The Rich Earth team has extensive experience providing training to new staff members, and we have developed a functional model for managing our division of labor. Jamina's leadership continues to develop and sustain Rich Earth's daily operations, staff team, public image/branding, strategic planning, and network of project partners/supporters.

Will the member have access to networking opportunities in this position? Please explain:

As a community-based organization, Rich Earth presents different opportunities for networking and public engagement. Rich Earth's ECO AmeriCorps Service Members develop community relationships across southern Vermont through serving with our organization. As part of a collaborative research team, our ECO AmeriCorps Service Member builds relationships with farmers, representatives from installation sites, Rich Earth's institutional partners, local media outlets, and participants at both public and digital events. Specifically, the ECO AmeriCorps Service Member at Rich Earth will have access to networking opportunities as they:

- \*Represent our team at digital events including webinars, conferences, and meetings

- \*Help coordinate urine diversion system installations at public and private facilities

- \*Contribute to organizing Rich Earth's stakeholder engagement events and community outreach

- \*Be a part of the team that fields inquiries from different groups around the world and represents Rich Earth within our community

- \*Develop working relations with a high functioning Board of Directors

- \*Assist with tabling at festivals/public events

- \*Network with a multitude of organizations in the Brattleboro area

Does your organization currently host or plan to host an AmeriCorps member from another program? If yes, briefly describe the duties of this other position.

No

Please list any clothing/equipment the member will need that you cannot provide (e.g., hiking boots, waders, raingear, etc.). Is a reliable vehicle expected? As the host site, you are responsible for providing all tools and technical equipment needed for the position (e.g., computer, phone, GPS, etc.).

A Service Member will need a reliable vehicle as well as appropriate clothing for three seasons (Spring/Summer/Fall) of outdoor agricultural research in the field. Rich Earth has a desktop computer at our Research Center, which could be available for a Service Member to use. However, it is highly recommended that they bring their own laptop.

Is there someone in your organization's network that might be interested in mentoring your ECO service member? \*Note, 1-2 hours per month, not required

Maybe

Are you willing to search with program staff over the summer to help your ECO member secure affordable and safe housing?

Yes

Many of our members are not from Vermont and are seeking a sense of community away from home. In what ways would you be willing to help them establish community connections? (Housing, peer networks, affinity spaces, local resources, fun places to go)

Rich Earth has supported the housing search for all of our AmeriCorps Service Members thus far, and we will continue to do so for any future Service Members. We provide all new team members with a community orientation document that contains numerous local resources including community-building events and groups. The community orientation provided to team members who are new residents in our area also includes a tour of Brattleboro during the first week on our team. Our staff members are well networked in the community and are also able to provide recommendations for additional community connections. We have a weekly staff meeting where personal check-ins often include invitations to events outside of Rich Earth's operations that involve members of our team. These events include small gatherings where members of our staff team spend time together in social settings.

Water Quality and Trail Improvement - Please project Impact Numbers on miles of river/stream/trail treated and/or improved.

138 miles of river

Land Conservation and Remediation - Please project impact numbers on acres of public parks or other public, publicly managed or tribal lands improved.

12 Acres of Farmland

Community Engagement Outreach and Education - Please project number of individuals receiving environmental stewardship education or training.

15,000

#### Sponsoring Organization's Mission:

The mission of the Rich Earth Institute is to advance the use of human waste as a resource by engaging in research, education, and technological innovation. We envision a world with abundant and widely distributed clean water and fertile soil, achieved in part by reclaiming the nutrients from our bodies as elements in a life sustaining cycle.

#### Goals for the ECO AmeriCorps Position:

\*Host Rich Earth's fifth consecutive ECO AmeriCorps Service Term between September 2023 and August 2024 as an enriching professional development experience within Vermont's environmental sector.

\*Provide technical training and guidance in order to enable an ECO AmeriCorps Service Member to contribute to the research, education, and demonstration activities of the Rich Earth Institute.

\*Implement a flexible strength-based approach to tailor the scope of our ECO AmeriCorps Service position to align the interests, ideas, and skills of the Service Member.

Essential Functions. Functions that applicant must be able to perform. These may be listed in bullet form:

The ECO position will be tailored to the skill set and interests of the Service Member. Some possible projects include and are not limited to:

- Data collection and analysis from lab trials, field tests, and social research interviews
- Application of pasteurized urine on local farmland as fertilizer
- Designing materials and lesson plans for educational and outreach projects
- Reviewing literature of cutting edge research in ecological sanitation
- Engaging in the regulatory process around sustainable sanitation
- Supporting Rich Earth's portable compost-toilet service
- Tending Rich Earth's demonstration garden

What are the secondary functions? These are projects or tasks that may be accomplished as time allows or applicant's interests evolve.

- Attend events to meet local urine donors, as well as farmers, Rich Earth's staff, and Rich Earth's Board of Directors.
- Collect, organize, and manage data by interacting with spreadsheet calculations and graphing as well as taking notes about the set up and execution of different experiments.
- Document research results so the information can be used in peer-reviewed publications.



## Desired Qualifications:

Depending on the interests and skill sets of the Service Member, the following qualifications would be useful for joining our Rich Earth team as a Service Member:

- Bachelor's degree or higher in one or more of the following fields: Chemistry, Biology, Research, Water Quality, Engineering, Environmental Science, Ecology, Community Organizing, Science and Technology Studies, Anthropology
- Ability to collaborate with a team, to take initiative, and to engage in open communication
- Enthusiasm for creative approaches to community engagement and storytelling
- Laboratory or field experience; precise & consistent execution of procedures and data management
- Commitment to ongoing learning about the field of nutrient recycling and related ideas
- Computer coding, academic writing, scientific research, or mechanical electronic systems
- Mechanical or carpentry skills, and familiarity with basic shop tools and materials

## Minimum Qualifications:

- Be a US citizen, a national, or legal permanent resident alien of the U.S.;
- Be at least 18 years of age upon entering the Pre-Service Orientation (there is no upper age limit);
- Be a high school graduate or have a GED certificate or be willing to work towards their GED as part of their service-year successful completion requirement. A member cannot have dropped out of high school to join AmeriCorps. If a member has a documented medical reason/professional opinion why they cannot finish high school, they might be eligible; call in this case;
- Has not been convicted of murder or sexual assault and is willing to undergo a National Service Criminal History Check;
- Must submit to Agency of Human Services checks, i.e. Adult Abuse and Child Abuse Prevention;
- Be committed to the ECO AmeriCorps program, and its ethic of service and personal and professional development of its participants;
- Have the ability and enthusiasm to drive to, attend, and participate in required trainings and events, and be prepared to drive up to 2-3 hours each way

Service Conditions (will the position be largely outside, office based, hybrid or seasonally/project dependent, in schools, etc.) \*

The Rich Earth Research Center will be the primary space where service activities are performed. The temperature in our Research Center varies with the seasons. Some service activities will be able to be performed from home. Additionally, some service activities will be in other locations including outdoors in agricultural settings, in classroom environments, and at community events.

Will the member have access to "vulnerable populations"? This includes youth, elderly and individuals with disabilities.

Yes

#### Time Requirements:

Full time: will need to complete a minimum of 1700 service hours, serving approximately 40 hours/week over the course of the 11-month service term, September 13, 2023 - August 9, 2024

#### Orientation and Training:

ECO will provide members with orientation at the beginning of the service term. Host sites are expected to provide additional on-boarding training as well. Throughout the service term, ECO will provide in-person and virtual trainings to members on a variety of topics.

#### Benefits:

- Education award of \$6,895 (pre-tax) upon successful completion of service
- \$23,000 Living Allowance, paid bi-weekly
- Training
- Childcare assistance, if eligible
- Health Coverage
- Access to AmeriCorps Alumni Network
- Student loan forbearance and interest payments, if eligible

#### Evaluation and Reporting:

Mid and final performance reviews, quarterly reports, weekly

timesheets, and end of service survey. Thank you for your interest in AmeriCorps!