



## September 2019- August 2020 Service Year POSITION DESCRIPTION

### Position Title

Water Quality Planner

### Sponsoring Organization

Addison County Regional Planning Commission, Middlebury, VT

### Sponsoring Organization's Mission

*Planning together to improve and sustain healthy, prosperous, and beautiful communities.*

ACRPC accomplishes that mission by:

- 1) Providing a forum for municipalities to discuss and resolve mutual concerns;
- 2) Providing planning and technical assistance (during all project phases) to help communities implement projects and objectives from Town and Regional plans;
- 3) Collecting and distributing research, planning information, and expertise collaboratively; and
- 4) Developing an actionable, relevant, and visionary Regional Plan.

### Goals for the ECO AmeriCorps Position

The 2018-2019 annual core goals of the Water Quality Planner are outlined below:

- 1) Coordinate and implement water quality planning functions across transportation, emergency management, and natural resource sectors; and
- 2) Assist with projects focused on reducing/treating municipal storm water pollution. To do so, the Water Quality Planner will contribute to, prioritize and implement water quality projects identified in the 2013 Otter Creek Basin Plan and will collaborate with the Otter Creek Tactical Basin Planner to update and revise the Otter Creek Basin Plan.

### Essential Functions. Functions that the applicant must be able to perform

- 1) Support ACRPC and the Otter Creek Tactical Basin Planner with the review of water quality projects from the 2013 Otter Creek Basin Plan. Provide support with project identification and outreach during revision of Otter Creek Basin Plan;
- 2) Assist with Municipal Roads General Permit (MRGP) related projects. This will likely involve performing road inventory, prioritization, and capital budgeting tasks as well as attending/coordinating meetings with municipal road foremen and/or selectboards. Some field service will be required; specifically with inventorying roads and

training road foremen on the use of FREDI (Fulcrum Road Erosion and Drainage Inventory), an app-based data collection tool, to complete road erosion inventories. The member will be trained on how to perform road erosion inventories via FREDI.

3) Write grants and supervise project design for various municipal storm water (or other water-related) projects in various stages (preliminary design, final design, and implementation phases). This task may involve field service, specifically with assessing sites, but will mainly require writing, coordination, organization, and administering service activities.

Marginal Functions. These are secondary to Essential Functions, may be negotiable, and can be completed as time allows.

The following list details projects ACRPC would be interested in having an ECO AmeriCorps member implement during their service term. Follow through on each of these projects will be dependent on the Member's technical skills and interests in addition to the present needs of the Commission.

- 1) Assist the Town Planner with outreach to affected landowners in Addison County in regards to the 3 acre impervious surface permit. May involve development of presentation/workshop materials.
- 2) Verify and update use, height, and additional information about structures/building footprints in flood plain/river corridor/lakeshore areas. Develop a spreadsheet model to track flood/erosion damage expenses and identify properties eligible for buyout (via local, state, or federal government flood buyout programs).
- 3) Depending on skills, conduct a LiDAR analysis of river morphology changes to identify bank erosion sites. Using a prioritization schema in part developed by the ECO AmeriCorps member, determine which erosion areas are most in need of improvement. Put together a web-map visual (requires web programming/SQL skills) and create a comprehensive report discussing the findings.
- 4) Update culvert inventories on Fulcrum and VT-Culverts database to include size and angle of approach for each of the culverts in the region as a way of evaluating their efficacy during a bank-full flood event. Culvert inventories will involve field service, specifically in locating and assessing the culverts. This project may also include the development of materials to instruct future Members on how to conduct culvert assessments and update applicable databases. If possible, evaluate culvert efficacy through modeling tools, to determine which ones are in need of replacement.
- 5) Organize/coordinate an annual Conservation Commissions/River Conservancy/Nature Conservancy meeting based on watershed rather than Town boundaries to enable greater unification and collaboration on organizational projects and treatment of waters in entire watersheds. Addison County watersheds to coordinate conservation efforts include: Lemon Fair, New Haven River, Otter Creek, Dead Creek, Little Otter Creek, Middlebury River, Lewis Creek, and Lake Champlain-Direct. The Member likely could coordinate annual meetings for 1-2 watersheds.
- 6) Create a visual representation of buildings/properties impacted by increased frequency of powerful storms linked to the ACRPC website. The visual would display, with given amount of precipitation (selected by the user), the water level height that would affect properties in flood zone areas.
- 7) Compile an information document/report on ecologically-engineered best management practices (using native plantings, soil, etc) that would be effective in various Addison County communities (based on soils, elevation, etc) to treat stormwater as opposed to built infrastructure fixes (sub-surface cisterns, dry wells, etc).
- 8) Compile an information document/report on available hydro-electric power technology that could be used by Addison County communities with existing small-medium sized dams to offset fossil fuel energy demands.
- 9) Assist the Addison County River Watch Collaborative with current projects and provide capacity and organizational support in a variety of ways, which can include, but are not limited to:

- Organizing efforts to obtain written landowner permission at various sampling sites;
- Coordinating sampling activities for one of the next focus rivers; and
- Updating the River Watch website

#### Desired Qualifications

ACRPC based on personality first. We want a candidate with a passion for water quality, good interpersonal, writing and computer skills and who functions well in a small team environment. The Candidate must possess a bachelor's degree in planning or a related field with a strong ability to think independently and to use and understand plans, maps and statistics. The candidate should be able to coordinate interest groups, possess a familiarity with water quality rules and farming practices and local and regional planning. Proficiency with GIS systems and grant writing abilities are also desired.

#### Service Conditions

This is primarily an office planning position with regular hours (8am-4pm; 9am-5pm). Some field service and/or night meetings may be required.

#### 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.