Natural Resources Technician - Soil Health 2024 Job Description

POSITION TITLE: Natural Resources Technician

REPORTS TO: Natural Resources Coordinator

STATUS: Full time, Fair Labor Standards Act Exempt

SALARY RANGE: \$38,934 to \$58,401

PRIMARY OBJECTIVE:

The Natural Resources Technician will assist the Natural Resources Coordinator with the development and implementation of the RPBCWD's Soil Health Initiative. They will be responsible for field sampling of soils for a variety of characteristics and attributes, measuring various hydrologic and hydraulic characteristics such as infiltration rate and water holding capacity, as well as developing and maintaining a geodatabase of field and lab measured characteristics. This position will assist the RPBCWD in developing educational resources, regulatory requirements, and capital projects based upon existing and desired soil characteristics. Additionally, the Natural Resources Technician will help supervise District interns and volunteer help.

Essential Functions:

1. Assist in the development and the implementation of the RPBCWD's Soil Health Program. This will include but is not limited to:

- a. Identifying representative ecotypes throughout the RPBCWD boundaries to be used as data collection sites.
- b. Conducting filed measurements of infiltration capacity using the Modified Phillip Dunne Infiltrometer.
- c. Advancing soil observation pits to identify soil type, texture, color, and other characteristics.
- d. Collecting, preparing, and transporting soil samples for laboratory assessment of various soil characteristics in accordance with the Cornell Soil Health Laboratory Comprehensive Assessment of Soil Health.
- e. With the Assistance of the GIS Coordinator and Outreach Specialist, develop and maintain a geodatabase of sampling locations and characteristics measured.
- f. Recruit, engage, and inform residents and businesses to participate in soil inventory.
- g. Assist the Community Engagement Coordinator and the Communications Manager with the development of materials for a variety of audiences about soil health and the RPBCWD program.

2. Assist with the RPBCWD Wetland Assessment Program and WCA Administration. This will include but is not limited to:

a. Assist Natural Resources Coordinator with assessment and inventory of all wetlands with the RPBCWD boundaries.

- b. Assist Natural Resources Coordinator with the administration of the MN Wetland Conservation Act:
 - i. Attending meetings of the Technical Evaluation Panel on behalf of the RPBCWD
 - ii. Reviewing WCA applications for boundary and type determination, wetland replacement plans, and no-loss determinations
 - iii. Assist tracking of citizen contacts related to the MN WCA
- c. Assist Natural Resources Coordinator and consultants with the determination of wetland type and jurisdictional boundary as specified by the USACOE 1987 Manual and any supplements.
- d. Use Trimble GPS unit to locate and record wetland boundaries and other appurtenant information.

3. Conduct inventories of natural resources. This will include but is not limited to:

- a. Assist Natural Resources Coordinator with tree survey inventories as needed including species, DBH, and health.
- b. Assist Water Resources and Fisheries Manager with spring and seep inventory including location, GPS recordation, and database management.
- c. Assist with other data collection and inventory as needed.

4. Assist the Education and Outreach Department as needed. This will include but is not limited to:

- a. Assist in the development of materials for the RPBCWD website, mailings, posters, post cards, presentations, etc.
- b. Assist the Community Engagement Coordinator with tabling events, classroom presentations, and community events as needed.

5. Other duties. This will include but is not limited to:

- a. Conducting basic office maintenance
- b. Setting up Board Room for meetings and events
- c. Engaging with public via one-on-one interactions, written communications, and public speaking engagements.

REQUIRED KNOWLEDGE, SKILLS, and QUALIFICATIONS:

- Course work or experience with soil science
- Course work or experience in wetland ecology and/or plant identification
- Strong organizational, written, and oral communications skills
- Ability to work well with a team and independently as needed
- Must be proficient with MS Office Suite
- Strong knowledge of ArcGIS and the ability to create maps and analyze spatial data
- Self-motivation and ability to work independently without close supervision
- Willingness to travel throughout the project area and attend evening/weekend events
- Strong interpersonal skills and a collaborative attitude

ACTIVITY AND FIELD WORK COMPONENTS:

- This position requires a valid driver's license and good driving record

- Ability to drive, maneuver/handle work pickup-trucks and use them for intended purposes
- Ability to lift and carry approximately 25 pounds over uneven surfaces and slopes
- Working outdoors under all weather conditions
- Working in waters with waders
- Ability to use/operate and maintain specialty tools/equipment

MINIMUM QUALIFICATIONS

- a. A BA/BS degree in natural resource science, conservation biology, wetland/plant ecology, environmental science or another applicable field; OR three years professional experience with multiple phases of natural resource restoration and management or a related field;
- b. General knowledge of watershed management, aquatic and terrestrial ecology;
- c. General knowledge of wetland ecology;
- d. General knowledge of laboratory practices and techniques
- e. Intermediate knowledge of soil science
- f. Working knowledge of the Modified Phillip Dunne infiltrometer
- g. Ability to work and conduct surveys outdoors and under adverse weather conditions;
- h. Ability to occasionally lift articles weighing up to 50-pounds and frequently lift and/or carry objects up to 25 pounds, such as heavy tools and file boxes;
- i. Ability to walk and stand on rough terrain and the use of power tools or mechanical equipment;
- j. A valid driver's license;
- k. Ability to work some evenings and weekends.

PREFERED QUALIFICATIONS

- a. Experience with statistical analysis of data;
- b. Experience with Global Positioning Systems (GPS)
- c. Proven ability to apply scientific data and research to local projects and programs