**Watersheds United Vermont: Water Quality Monitoring Data Analysis Support**

**Project Guidelines and Application for Water Quality Monitoring Groups**

Due: July 2, 2019

Watersheds United Vermont (WUV) has received a Partnership Train-the-Trainer Grant from the Department of Environmental Conservation (DEC) to provide one-on-one consultant support for watershed groups to help analyze water quality monitoring data. The consultant support can be used to assist groups in reviewing existing data, answering questions related to data trends, pinpointing potential sources of water quality issues, validating existing sampling designs and creating opportunities for future improvements or new approaches.

If you are interested in receiving consultant support for WQ Monitoring Data Analysis, please fill out the application on pages 3 - 5. While we would like to be able to provide consulting support for all interested watershed groups, we are limited in our funding through the DEC train-the-trainer grant. WUV will be able to provide consulting support for 8 to 12 groups depending on the time needed for each group.

Project Partners

WUV is working directly with two consultants with expertise in water quality monitoring data analysis to provide the one-on-one support for watershed groups:

**Becky Tharp**, Ph.D., Water Quality Program Manager, Watershed Consulting

**Kristen L. Underwood,** Ph.D., PG, Principal Hydrogeologist, South Mountain Research & Consulting.

Program Overview

The WQ Monitoring Data Analysis Support project will provide a stipend for watershed groups (if the consultant is working with a paid staff person) and will cover the consultant’s time working with your organization. The funding will cover 8 to 12 hours for both the watershed group and for the consultant. WUV will inform groups of the allocated hours and stipend amount if selected. If your organization is all volunteer, WUV will be able to fund the consultant’s time but will not be able to provide a stipend for your time. All consulting time must be completed between the summer of 2019 and March of 2020. Watershed groups who are part of the program will also be expected to attend a follow-up workshop in the winter/early spring of 2020 with the consultants and other water quality monitoring groups. WUV will provide a stipend for roughly 3 hours for the follow-up workshop. Groups will also need to provide approximately 3 hours of match and can use preparation time, volunteer hours or travel time as these match dollars.

Consultants can assist watershed groups in:

1. Reviewing historic and current datasets to identify trends, pinpoint areas of concern.
2. Working to identify and articulate goals of the monitoring program including interest in identifying implementation sites or determining success of past projects.
3. Providing guidance on adjustments for a group’s water quality monitoring program, making sure that the questions of concern are addressed and standard methods and protocols are followed.
4. Assisting groups to establish systems for future data collection and analysis using DEC templates or other tools to build capacity and knowledge in groups for the future.

Selection

WUV and the project consultants will select groups based on: 1) which groups we feel the consultants can best assist in improving water quality monitoring data analysis, and 2) where we feel that the support will lead to the most benefit in terms of water quality and/or education and outreach.

We will inform all groups by mid-July if they have been selected for support, which consultant you will be working with, and how many hours of consultant time you have been allocated. If your group is not selected this year and DEC offers this grant program again next year, WUV hopes to be able to support additional groups at that time. In a few cases, there may be opportunities for a consultant to work with more than one group at once, and we will inform you at the time of selection if that is the recommendation.

Payment and Reporting

If your group is selected for consulting time, we will ask you to commit to the hours allocated to your group. It will be up to you and the consultant to schedule and arrange consulting time within the grant period.

As with all DEC grants, this is a cost reimbursable program. WUV will provide the stipend for your time (for staffed organizations) once you have completed your work with the consultant. Payments will be a set stipend amount based on the hours you have been allocated. As soon as WUV receives payment from DEC, WUV will reimburse you. WUV will pay the consultants for their time directly. Travel time will not be included as part of the grant time but can be used as match.

We will ask groups to provide a brief summary of your consulting time including any specific learning, water quality issues or trends identified, and any changes in water quality monitoring protocols or analysis from the training. We will provide more details on reporting once groups have been selected.

**Water Quality Monitoring Data Analysis Support**

**WUV Train-the-Trainer Questionnaire and Application**

Email completed application as a Word document or PDF by July 2, 2019 to:

Lyn Munno at [watershedsunited@gmail.com](mailto:watershedsunited@gmail.com)

**APPLICANT INFORMATION**

Organization name:

Point of contact name and title:

Mailing Address:

Telephone:

Email:

Person or people the consultant will be working with (if different than point of contact):

**QUESTIONS ON ORGANIZATION’S WATER QUALITY MONITORING PROGRAM**

A. Briefly describe your current monitoring program: number of sites and subwatershed location, parameters you are monitoring for, and method of data collection (grab sampling, hand-held probe measurement, in-situ probe measurement etc.)

B. What are the goals of your monitoring effort? Do you have a research question/s?

C. Do you feel that your monitoring effort is meeting those goals?

D. How many years has your organization been conducting water quality monitoring?

E. Have these years of monitoring been focused on the same river or reach? If no, when and why did it change?

**QUESTIONS ON CONSULTING SUPPORT INTEREST AND NEEDS**

F. How many years have you (or the person in charge of the monitoring program) been conducting water quality monitoring?

G. How proficient are you (or the person in charge of the monitoring program) in the following programs: (0=no proficiency -- 5=highly skilled)

\_\_\_MS Excel

\_\_\_Arc GIS

\_\_\_IWIS

\_\_\_Database querying

\_\_\_VTANR Atlas

\_\_\_Any statistical analysis software

H. Has your organization received professional support for your water quality monitoring program before? If yes, please describe briefly. Include whether you are still receiving support.

I. Do you analyze your own data or do you provide partners with the raw data? Please describe.

J. Does your organization do water quality implementation projects?

K. Does your organization do education and outreach?

L. Why are you interested in working with a consultant? How do you think working with a consultant would change your water quality monitoring program or change any implementation and/or education efforts?

M. Please check all areas that you are interested in working with a consultant. Please use a **P** (priority) or a **S** (secondary) and leave any blank if not interested/applicable:

\_\_\_Reviewing past data

\_\_\_Developing an answerable question/s

\_\_\_Sampling plan review

\_\_\_Sampling plan development

\_\_\_Data preparation/storage techniques

\_\_\_Training in data analysis

\_\_\_Data interpretation for implementation   
\_\_\_Data interpretation for education and outreach

\_\_\_Other (please describe)

**QUESTIONS ON LOGISTICS**

N. How much time would you be interested in working with a consultant? (3 - 6 hours, 7 - 9 hours, 10 - 12 hours)?

O. Is your organization all volunteer or do you have paid staff?

P. If you have paid staff, are you interested in funding to cover your staff time to work with a consultant?

Q. Would you be able/willing to travel to meet with the consultant?

R. Given your organization’s schedule, what time of year would be preferable to meet and work with a consultant: Summer 2019, Fall 2019, Winter 2019/2020, Early Spring 2020, doesn't matter? We would expect groups to have 2 to 3 meetings with consultants.

S. Would you be open to pairing your consultant time with another group based on experience level, geography, or sampling program type?