# Vermont Department of Environmental Conservation
# Watershed Management Division

## Volunteer Water Quality Monitoring
## LaRosa Analytical Services Partnerships for 2015
## February 2, 2015

The Vermont Department of Environmental Conservation (VTDEC), through the LaRosa Analytical Laboratory, is pleased to make available to interested lake, river, and watershed associations sample analysis partnerships for the upcoming 2015 field season. The purpose of this program is to help volunteer associations and monitoring groups implement new and/or ongoing surface water monitoring projects for waters in need of water quality assessment. Groups are encouraged to present an action plan for the outcome of their monitoring results.

***What are laboratory services?***

Laboratory analysis is one of the most expensive elements of a monitoring program, and VTDEC recognizes that analytical costs hinder the widespread application of volunteer surface water quality monitoring in Vermont. Analytical services provided under this partnership program are essentially 'slots' for tests to be run at the State of Vermont's LaRosa Laboratory, free of charge to participants. The LaRosa Laboratory is a full-service analytical facility with capabilities for routine water quality monitoring tests. Examples of such tests include phosphorus, nitrogen, chlorophyll-a, total suspended solids, *E. coli*, turbidity, alkalinity, conductivity, pH, priority pollutants and metals, and numerous other compounds. More information about the LaRosa Laboratory's services are available online (internet address below).

***Who is eligible?***

Volunteer associations across Vermont are eligible for analytical partnerships. Such associations include river, lake, and watershed groups, and water quality and conservation committees associated with local municipalities. Post-secondary academic institutions and not for profit non-governmental organizations are eligible provided that one of the following criteria are met: 1) the project is designed jointly with a local association to assess current water quality conditions or diagnose a known water quality problem of interest to the local association; or, 2) the project assesses the extent of, or diagnoses the cause of, a water quality problem of statewide importance. Educators from elementary, middle, or high-schools who are interested in water quality monitoring are encouraged to coordinate with the University of Vermont's Watershed Alliance (http://www.uvm.edu/~watershd/), or the EPSCoR Vermont Streams Project (http://www.uvm.edu/~streams/).

***What are the eligible project types?***
Many project types are eligible for this program. Waters under evaluation should be of significant interest to the local association sponsoring the project, and to VTDEC. Waters of interest to VTDEC include impaired and state priority waters, waters on which minimal or no monitoring has been performed in the past, waters with significant public swimming use, waters where a suspected water quality problem needs to be further documented, and waters where the causes of known problems remain undiagnosed. Preference will be given to those proposals that have an implementation plan to address water quality issues to state waters. Proposals for new or existing multi-year projects will be accepted. *Continuation of existing multi-year projects is subject to availability of laboratory capacity, continuing need for the data, new modifications to account for prior lessons learned, and project performance and reporting during prior years.* Projects that have already determined that water quality issues exist need to demonstrate direct steps and community resources available to solve the problem. The Vermont Surface Water Management Strategy recognizes the tremendous importance of volunteer based monitoring. Vermont recently updated its Water Quality Monitoring Strategy that has two monitoring goals:

- To monitor and assess the physical, chemical and biological condition of Vermont's surface waters to maintain, protect, enhance and restore their integrity and uses.
- To interpret, analyze and communicate monitoring and assessment results with in the Agency of Natural Resources and outside groups to support the development of good management decisions for Vermont's surface waters.

The Agency of Natural Resources recognizes that the citizen led monitoring, through the LaRosa Partnership, is an excellent means to accomplish these goals.

As in prior years, pre-scheduling of sampling events will be necessary in order to optimize capacity at the LaRosa Laboratory. Requests for *E. coli* tests should be made only for waters that are documented to have swimming use.

***Activities not eligible under this grant program:***
Applicants, please note that no funds are disbursed through this program. Partners will be allocated a specified number of laboratory analyses, to be performed by the LaRosa Laboratory free-of-charge. The program will provide sample bottles and/or preservatives that are required for the intended tests. Transportation of samples to the LaRosa Laboratory currently on the UVM Campus in Burlington, as well as costs associated with sample collection (e.g., field personnel or vehicle/boat costs), equipment (e.g., Kemmerer, VanDorn, or suspended sediment samplers), and other project functions are ***not*** eligible under this program. VTDEC cannot assist in the delivery of samples from the field to the Hills Laboratory at UVM.

***How to apply:***
This is a competitive partnership program. Proposals will be evaluated based on project need and pollution abatement/implementation plans, technical merit, integration with other local or watershed-based efforts, integration with statewide needs, aggregate

request, and prior Partnership performance. In mid-2005, VTDEC published guidance to volunteer monitoring groups for project design and implementation. Section one of this document, called the Vermont Volunteer Surface Water Monitoring Guide (internet link below), provides a checklist/form that can guide the development of your program. Applicants should use this form as guidance in preparing their project proposal, and should also confer with the VTDEC Watershed Coordinator working in the basin of interest. Your regional Watershed Coordinators are your initial contacts. Please send inquiries and proposals to them. Here is a list of VTDEC's Watershed Coordinators:

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| **Ethan Swift**<br>Watershed Coordinator<br>Office: Rutland 802.786.2503<br>ethan.swift@state.vt.us | Watershed planning and watershed restoration projects in the Poultney Mettowee watershed, Batten Kill, Hoosic, Wallomsac and Otter Creek watershed. |
| **Karen Bates**<br>Watershed Coordinator<br>Office: Essex 802.879.2339<br>karen.bates@state.vt.us | Watershed planning and watershed restoration projects in the Missisquoi, Winooski River Basin and the northern Lake Champlain watershed. |
| **Marie Levesque Caduto**<br>Watershed Coordinator<br>Office:<br>Springfield 802.885.8958<br>marie.caduto@state.vt.us | Watershed planning and watershed restoration projects in the West, Williams and Saxtons Rivers, the Ottauquechee and Black Rivers, the Deerfield and the Lower Connecticut River. |
| **Ben Copans**<br>Watershed Coordinator<br>Office:<br>St. Johnsbury 802.751.2610<br>ben.copans@state.vt.us | Watershed planning and watershed restoration projects in the Passumpsic, Upper Direct Connecticut, Stevens, Waits, Wells and Ompompanoosuc watershed, and Lake Memphremagog watershed. |
| **Jim Ryan**<br>Watershed Coordinator<br>Office: Barre 802.476.0132<br>jim.ryan@state.vt.us | Watershed planning and watershed restoration projects in the Lamoille River watershed, and White River watershed. |

Proposals should not exceed four pages in length. Please include the address, telephone number and email address of a project contact, and identify the project coordinator who will interact regularly with VTDEC. Projects selected to participate in the laboratory services partnerships program will need to prepare a USEPA-approvable quality assurance project plan, as described below.

Project proposals must include:

1) A description of the project waters;
2) Needs for the data and intended data usage;
3) Sample collection methods, locations, analytical tests, and numbers and timing of samples. Specificity is necessary here. State how many samples and how many stations are being requested.
4) A description of how the resulting data will be summarized and reported;
5) Anticipated outcomes and efforts to inform the local public of project results;
6) Implementation plans leading to beneficial improvement in project waters, and,
7) Parties involved and project contact(s), including address, telephone, and email.

***Timeline and application deadline:***

Please provide an electronic copy of application materials to your Watershed Coordinators by the close of business Monday March 9, 2015. The Watershed Coordinators will review the applications within their respective watersheds and then send these to the Watershed Management Division by March 13, 2015. Successful applicants should plan on submitting their quality assurance project plan at least two weeks prior to the beginning of field work. We encourage all participants in the program to attend a training session at the Jeffords Building on the UVM Campus in May of 2015, but this is mandatory for new project's staff after which time sampling can begin. For existing, and re-approved projects, earlier start dates are possible by prior arrangement.

***Information regarding quality assurance project plans:***

USEPA regulations require that environmental monitoring data collected and/or analyzed in part or whole using EPA funds must be collected in accordance with an approved Quality Assurance Project Plan (QAPP). QAPPs are documents that describe in detail how a project is to be carried out, including project design, type and timing of sampling and analytical procedures, and quality assurance procedures. For projects participating in the Laboratory Services Grants Program, a pre-established and pre-approved "generic" QAPP is available that covers the majority of activities likely to be carried out under the program. Successful applicants are provided with copies of this document to fill out and return to Jim Kellogg (jim.kellogg@state.vt.us) at VTDEC prior to beginning their field sampling. Additional information regarding the purpose of QAPPs and how to prepare them is provided online (see below).

***Questions:***

Please direct all inquiries/proposals to your local watershed coordinator listed above.

**Watershed and Project Coordinators**: Please send completed proposals or QAPPs to:
Jim Kellogg (jim.kellogg@state.vt.us) – Environmental Scientist
Department of Environmental Conservation
Watershed Management Division-
Biomonitoring and Aquatic Studies Section
1 National Life Drive
Main Building, 2nd Floor
Montpelier, VT 05602-3522
1 (802) 490-6146

***Additional proposal and QAPP preparation resources:***

Vermont Volunteer Surface Water Monitoring Guide
http://www.vtwaterquality.org/lakes/htm/lp_monitoringguide.htm

"The Volunteer Monitor's Guide to Quality Assurance Project Plans":
http://www.epa.gov/owow/monitoring/volunteer/qappcovr.htm

The LaRosa Laboratory website:
http://www.anr.state.vt.us/dec/lab/index.htm

Vermont Lists of Impaired and Priority Waters:
http://www.vtwaterquality.org/mapp/docs/mp_2008.303d_Final.pdf

Vermont Surface Water Monitoring Strategy
http://www.anr.state.vt.us/dec/waterq/wqd_mgtplan/waterqmstrat.htm

Vermont Surface Water Management Strategy
http://www.anr.state.vt.us/dec/waterq/swms.html