



Watershed Update

Missisquoi River Basin Association

Spring 2011

Schedule of Activities

Here is a preliminary list of what we've got planned for this season:

Sat., April 30, 9am - 1pm: Tree planting, Montgomery Center

Sat., June 18, 9am - 3pm: River clean-up, Swanton

Sat., Aug. 27, 4-11 pm: River Festival, Montgomery Center (live music, food, portage race & more)

May-October: Water sampling every other Wednesday

For Info or To Sign Up:

Call Cynthia Scott (802) 933-9009 or mrba@pshift.com

Many more workdays are still to be scheduled for this season, please consult our website, www.troutrivernetwork.org/mrba, for an updated list of volunteer opportunities.

farmland owned by Arnold and Linda Mercy. The Mercy's have signed up for the Conservation Reserve Enhancement Program (CREP), provided by the USDA Natural Resource Conservation Service (NRCS) and the Vermont Agency of Agriculture, Food and Markets (VT AAFM). Additional technical and funding support is provided by the US Fish and Wildlife Service (USF&WS), through its Partners in Wildlife Program.

The project site was identified through a recent Phase II geomorphic assessment study and planned through a recent watershed development grant. Both efforts were supported by the VT Agency of Natural Resources, River Management Program in concert with the Clean and Clear program. The establishment of the buffer of 35-50' will provide long-term erosion control and channel stability, shading of the river and improved wildlife habitat.



Volunteers make our workdays a success

2011 Field Work

The snow is melting (at least along streams and rivers) and soon the spring planting season will arrive. This year the first workday will be on Saturday, April 30, in the Town of Montgomery along the south branch of the Trout River, on

Volunteers will plant a mixture of hardwood and softwood trees and shrubs that are well suited for riparian and floodplain areas. The species include Sugar Maple, Red Maple, Black Cherry, White Pine, Paper Birch, Basswood, Speckled Alder, Shrub Willow and Silky Dogwood. Volunteers will plant a section of this site as the overall project includes 2900 trees and shrubs on over 9 acres of buffer.

There are a number of additional sites being planned for community volunteers, businesses, students and other organizations workdays. Projects details are being finalized for sites in the towns of Fairfield, Sheldon and Highgate. Please stay tuned for additional volunteer opportunities and hope to see you out with your shovels.

Brian Jerose, MRBA Technical Advisor

Save the Date! **River Festival, August 27**



After last summer's roaring success, MRBA's River Festival will take place again this summer!

Join us for lively music, good food, activities including the popular portage race, and fun in celebrating our own Missisquoi River. Rain or shine, see you August 27, 4-11 pm, at the recreation field on Route 118 in Montgomery Center. We need lots of volunteers to staff this event – get in touch (933-9009 or mrba@pshift.com) if you would like to help out!

Public Forum Held

The annual MRBA public forum was held at the Emergency Services Building in Montgomery Center the evening of Thursday, 24 March. 15 persons attended. Jeremy and Shana Stewart Deeds presented an analysis which they had prepared of our 2010 water sampling results, including comparisons with past years, 2009 and 2005-2008. Missisquoi Bay has higher limits for phosphorus and nitrogen (25ppb) than greater Lake Champlain (10ppb). Phosphorus and nitrogen in our samples have decreased some

since sampling began. There are no large differences though. Turbidity was less than one year ago also. The written report with bar graphs, data tables, maps, and plain English commentary was very well done. Shana is coordinator of the Wild and Scenic River Study Committee for the Upper Missisquoi and Trout Rivers, with office in East Berkshire in same building as MRBA. Jeremy is a water science professional with the State of Vermont and works in Waterbury. Their work and the presentation of same to our group was donated at no cost to MRBA, except for printing, and is greatly appreciated. A special guest, Neil Kamman from the State of Vermont water quality offices in Waterbury, was on hand to field questions and offer commentary on changes happening in state programs under our new governor and his new natural resources secretary. MRBA plans to sample again in 2011. Wendy Scott says there is a need for more volunteers.

Dori Barton from Arrowwood Environmental talked about the phase 2 geomorphic assessment completed by her company on the Upper Missisquoi this past summer. One finding of note was the presence of 27 undersized bridge and culvert structures. Some Japanese knotweed was also encountered. She expressed interest in communicating with anyone knowing of recent or historical flooding in that segment of the river. They assessed 19 mainstem and 3 tributary reaches, a total of 31 miles of river altogether. The next step will be finalization of a River Corridor Plan, which she will come back to us with later in the year. MRBA is grateful to VT ANR for the Ecosystem Restoration and Protection Grant to fund this assessment.

Mike Manahan

Water Sampling

Point source and Non-point source run-off

Water testing through the LaRosa Grant has been going on for six years. The purpose of this water testing is to (locate and identify) POINT SOURCE and NON-POINT SOURCE pollution in the Missisquoi River Watershed. After more than six years of testing through volunteer time and effort, what has been accomplished? How many POINT SOURCE and NON-POINT SOURCE locations have been identified? Has anything been done to eliminate any POINT SOURCE and NON-POINT SOURCE pollution identified

through this testing? As a Board Member of MRBA I will be looking at and discussing with other Board Members the effectiveness of our labors and going over the process that led to the selection of the present sites being tested.

What is a Conductivity Meter and what happens to the data being collected from this test? Can we use this meter to better locate and identify POINT SOURCE and NON-POINT SOURCE pollution? In my discussions with the Board I will try to bring the water testing for POINT SOURCE and NON-POINT SOURCE pollution to a more effective and pin point process to help us in our attempts to identify those locations of high pollution. With the use of the Conductivity Meter I will be testing present sites and testing other locations for comparison data.



Collecting water sample to be tested for phosphorus

Farm run-off occurs during spring thaw, during major summer rain/storm events, and in the fall during pre-winter rain/storm events. These are the prominent times off farm run-off being delivered to rivers, lakes and streams. MRBA volunteers work at collecting water samples along the Missisquoi River and its tributaries in the summer months during times of low flow and during clear water periods. Is this period during the summer giving us the right data? I will discuss with the MRBA Board of Directors the time periods being used for sampling to see if these periods of time are the most effective for meeting the goals of identifying POINT SOURCE and NON-POINT SOURCE pollution. I will make a report in a future MRBA newsletter to keep all volunteer water testers informed and to deliver with clarity my findings.

Ray Giroux

Water Sampling Volunteers Needed

We are about to embark on our 7th season of sampling the tributaries and main stem of the Missisquoi watershed. Thanks to the wonderful volunteers of the past six years, we have been able to collect an impressive amount of data to share with the state, local communities and

landowners in the watershed. This data has helped direct our efforts for tree planting and stream bank stabilization. It has also been useful to various state agencies to figure out how to distribute their resources.

We are interested in getting names of people willing to collect samples every other week at various locations in the watershed from Lowell all the way to Swanton.

Volunteers could offer their help for a few sample dates or commit to the entire sampling season, whatever suits their schedule and availability. If you are interested in helping MRBA in this endeavor, please call Wendy Scott at 933-2125.

This project has been made possible thanks to grants from the Lake Champlain Basin Program and the LaRosa Lab.

Wendy Scott

River Clean-up on June 18

Please join us for our annual river clean-up, this year scheduled for Saturday, June 18 at 9 am in Swanton! We will go out in canoes and kayaks to pick up trash, old tires, ag plastic, and assorted 'finds' along the banks of the Missisquoi River.



Pulling plastic from the river last year in the Westfield-Troy area

This is always a fun outing, giving you the chance to get out on the river and to improve its visual appeal for other paddlers and anglers by

removing unsightly items. Participants should provide their own canoe/ kayak, PFD, and picnic lunch. Trash bags will be supplied.

Contact MRBA at 933-9009 or mrba@pshift.com for the meeting place or more info.

Bugworks



Kids love bugs! Even if they aren't excited at first and think bugs are gross, they are soon won over by catching them, looking at them, and even feeling the bugs wiggle through their fingers. Many 5th and 6th grade classrooms in the

Missisquoi watershed have been able to experience hands-on learning through "Bugworks", a program offered by MRBA to local schools.

This year Jane Williams, retired science and first grade teacher (in photo), will be offering the course free of charge to 5th and 6th grade classes in the watershed. Students are taught

identification of inverts at various stages of development and then are able to evaluate the health of a stream or pond.

To schedule your "Bugworks" session contact: Jane Williams at 802-827-3879 or janiewilliams@surfglobal.net

We are very appreciative for the support received from the Lake Champlain Basin Program to fund this program.

Town Appropriations

The MRBA is most grateful to the citizens of Bakersfield, Enosburgh, Montgomery, Richford, Sheldon, Swanton and Westfield for their support of our organization through an appropriation approved at their March 2011 Town Meeting.

The financial support is extremely helpful for a volunteer group such as ours which operates exclusively on grants and donations. But even more meaningful to us, is the expression of appreciation for our efforts to improve water quality that your votes conveys.

Thank you so much!