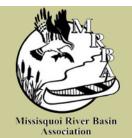
Watershed Update



INSIDE THIS ISSUE:

MRBA and VTWSR Collaboratio	n 2
Introductions	2, 3
Sampling Recommendations	3
Work Throughout the Watersho Bugworks, River Clean-Up, Tree Plantings	
Thank you!	4
Support the Watershed	6
WILL	



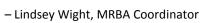
Volunteers hard at work during one of our tree planting workdays.

New Faces, Old Spaces

Greetings! I am honored that one of my first major actions with the MRBA is to introduce myself to the wonderful people who keep this organization strong. I am so pleased to have joined you as the coordinator for the MRBA; there are big shoes to fill, but there is also help at every turn. Every affiliate of this organization that I have met so far has been extremely helpful and welcoming! I'm really excited to be joining with all of you and am eager to learn more about this beautiful watershed I call home.

I've included a brief history of myself (see page 2) to serve as an introduction. I am also delighted to introduce you Jimmy Young (see page 3 for his bio), who is serving as an ECO AmeriCorps member, splitting his time between the MRBA and the Northwest Regional Planning Commission. I hope you'll ask him about this wonderful new AmeriCorps program when you see him out and about at work days!

One more bit of news is that we've relocated back to the office at 2839 VT Route 105, East Berkshire, VT 05447. I'll be there on Wednesdays and Thursdays and I hope you'll stop by to introduce yourself (and help me sort through some of these files)!





East Berkshire office – our new/old home!

Thanks and Thanks! Gratitude to Alisha Sawyer and Bethany Remmers.

Alisha Sawyer departed as MRBA Coordinator this past June after almost two years of service to the watershed organization. Alisha was an energetic, passionate and well-organized leader for our group. She efficiently juggled the set of field projects, grants, administration, and advocacy that is all part of efforts to improve water quality. This took the forms of pushing agency staff and other partners for more aggressive action, planting trees in the field with volunteers and her family, managing Board meetings and newsletters, and speaking in Montpelier as the water quality bill took shape.

Alisha strengthened collaboration between other local groups, especially the Franklin Watershed Committee and Friends of Northern Lake Champlain. Her skills and commitment to the cause are certainly missed (along with baked goods brought to meetings!) We want to offer our hearty thanks for Alisha's hard work and look forward to seeing her remain a community activist for water quality. We wish Alisha the best of luck in her new position as an afterschool programs coordinator in St. Albans.

We also express our gratitude to Bethany Remmers of the Northwest Regional Planning Commission (NRPC) for helping to fulfill our base coordinator responsibilities following Alisha's departure and prior to the arrival of our new coordinator Lindsey Wight. Bethany made sure MRBA "kept the lights on" and helped the Board with meeting grant deliverables, organizing meetings, and assisting in the new coordinator search/selection process. Bethany is also the direct supervisor to the MRBA AmeriCorps service member Jimmy Young. We appreciate NRPC supporting MRBA as a valuable community organization through this transition phase.

A Collaborative Pursuit of Preservation and Protection

It is with great relief, pride, and pleasure that we welcome our new dual-purpose coordinator, Ms. Lindsey Wight of Jay, VT. Lindsey has accepted the dual, complimentary-but-separate jobs of being the coordinators for both the MISSISQUOI RIVER BASIN ASSOCIATION, and the UPPER MISSISQUOI AND TROUT RIVERS WILD AND SCENIC STEERING COMMITTEE (What a mouth full to say when answering the phone). After a two-month process, facilitated by Ms. Bethany Remmers of the Northwest Regional Planning Commission, the combined representatives of both organizations offered the dual position to Lindsey Wight. Her background is outlined elsewhere within this newsletter. I think you will agree that she is bringing a very nice set of job skills to both organizations, and will provide a steady, gentle guiding hand to both organizations.

I want to stress the reasons and importance of having a single person at the helm of both organizations. MRBA was the supporting organization that initiated the local search for designation/recognition of our local waters as nationally recognized Wild and Scenic waterways. MRBA's primary focus is to preserve, protect, and improve if possible the quality of the waters in the Missisquoi River Watershed. This watershed stretches along 90+ miles of the main stem of the Missisquoi River, and drains the lands of 14 VT townships and several Canadian towns as well. Our watershed also drains into Lake Champlain and contributes a large chunk of pollutants to that body of water. Given the scope of our watershed, the MRBA has for twenty years worked on trying to stabilize the eroding riparian zones and monitor the water quality with a small dedicated steering committee and a large group of dedicated volunteers.

Now, there is another organization with a federal source of funding, and a different group of folks, who can help preserve and protect some of the upper parts of our watershed. The Wild and Scenic program is not restricted to helping just the river, but may also be involved in other things which pertain to the river as well. Both groups realized in the spring and summer of 2015 that it would be very valuable to have both groups hire the same person. The biggest reason was to create a job opportunity that could financially support an individual. Previously each group had a half time position, and that was OK. However, the MRBA lost its last coordinator to a far better job opportunity, and that got us thinking of trying to create a more stable job opportunity by combining the two organizations' needs under a single umbrella. It will be Lindsey Wight's job to keep both nonprofits pursuing their goals, while fostering the synergy between them. If you have a chance, please feel free to stop by the combined offices at 2839 VT Route 105 in East Berkshire at the corner of Rt. 105 and 118 to welcome her to her new job!

Sincerely, John Little, MRBA President

Introductions

Lindsey Wight, Coordinator

Lindsey joined the MRBA in November and has been busily learning the ropes. The amount of activities that the MRBA is involved in is both inspiring and intimidating, but she is excited about the opportunities and collaborations that lie ahead! With a background in biology and several recent years of experience as an environmental consultant, she is looking forward to both utilizing her current skill-set for the good of the watershed, as well as gaining new skills.

Lindsey has a Bachelor's degree in Animal Behavior from Bucknell University and is working on her Master's in Biology from William Paterson University (she has finished all but the writing for her thesis on roost selection of Indiana bats). Born in central Vermont, since leaving for college, Lindsey has lived and worked all over the US – from chasing bats in South Carolina swamps, to manning an active firetower lookout in Arizona, to maintaining trails and tracking spotted owls in the mountains of Oregon. She was pleased when circumstances brought her back to Vermont in 2013, though she was still travelling for work and was missing the connection to community that she remembered from her childhood. Already she can tell that this watershed is home to a fantastic and active, involved, community, and she is delighted to be a part of it!

Volunteers enjoying MRBA activities in our watershed.





Introductions (cont.)

Jimmy Young, ECO AmeriCorps member

Jimmy Young recently joined the Missisquoi River Basin Association in September of 2015 as an Outreach & Project Coordinator. Jimmy was born in White Plains, New York and lived a majority of his life in Brookfield, Connecticut with his family. In the Fall of 2011, he attended the University of Delaware to study Civil Engineering, however half way through he switched to Energy & Environmental Policy, eventually receiving his Bachelor of Science in the Spring of 2015. In August 2015, Jimmy received an acceptance letter from the Vermont Department of Environmental Conservation to serve as an ECO AmeriCorps member where he would help implement strategies to protect and improve the water quality in the Lake Champlain watershed.

He was placed at the Northwest Regional Planning Commission and the Missisquoi River Basin Association where he has done work on stormwater management and water quality improvement projects, specifically he helped develop a "Managing Runoff on Your Property: DIY Residential Site Assessment" Workshop for homeowners of the city & town of St. Albans. Also, he has recently sent in an application for the Vermont Watershed grant, hoping to receive funding for the 2016 Missisquoi Water Sampling Program, which will be one of his bigger projects for the year ahead. In his personal time, Jimmy enjoys all things nature related, such as hiking and trail running, and is extremely passionate about music, such as Bassnectar & Pretty Lights. He is very excited to experience his first Vermont winter and begin to learn how to snowboard.

Recommended Changes to MRBA Water Sampling Program

On Tuesday November 17th, Fritz Gerhardt, a conservation biologist from Pennsylvania, presented his analysis of the water quality data from the Missisquoi watershed to the Watershed Management Division at the VTDEC. His analysis focused on a subset of watersheds in the Missisquoi River Basin; therefore, all recommendations reflect only those individual watersheds and not the basin in its entirety. The five main sub-watersheds that he focused on were the Hungerford Brook, Mud Creek, Black Creek, Tyler Branch, and Godin Brook. For the purpose of this article, I will only highlight the recommendations for the two sub-watersheds with the highest phosphorus levels.

The Hungerford Brook exhibited the highest total phosphorus concentrations: upwards of 100µg/l, when the goal is set at 26µg/l. As you may all know this area is mainly agricultural land, therefore the Hungerford is stressed due to elevated nutrients and sediment. Fritz recommended the retention of 3 of the current sampling sites and the addition of five new sites, to really pinpoint and assess possible nutrient and sediment sources along the tributary. Four of the new suggested sites are: the western tributary further upstream at Hazard Road, the southern tributary upstream at Viens Road, and upstream of the two branches of the eastern tributary. This sub-watershed should be regularly sampled, but also necessary to target during rain/ high flow events.

Godin Brook exhibited the second highest total phosphorus concentration of the five Missisquoi tributaries that were analyzed. Similar to Hungerford Brook, this area is mainly agricultural land and the quality of water is stressed due to elevated bacteria, nutrients, and sediments. Fritz recommended keeping the most downstream sampling site because it gives an overall indicator of the quality of water in the whole Godin watershed. He recommended adding 3 sampling sites, if possible, at each of the downstream ends of the three major tributaries of the Godin Brook (these are located just to the west & northwest of the farm at the end of Godin Road). Similar to the Hungerford, this sub-watershed should be regularly sampled, but it is also necessary to target it during rain/ high flow events.

According to Fritz, these recommendations are based solely on each site's scientific merit and the value they provide for pinpointing and assessing nutrient and sediment problems in these sub-watersheds. These sites still need to be evaluated in terms of feasibility as sampling sites (availability of resources, capacity of watershed organizations to sample, or potential logistical challenges (i.e. accessibility or landowner permission).

Work throughout the Watershed



Bugworks participants learn about aquatic macroinvertebrates through both classroom and hands-on explorations.





Bugworks —

We're happy to report that the Bugworks program had a great year in 2015! Sixteen sessions at nine schools, camps, and festivals reached nearly 300 participants.

Bugworks is a hands-on program that enables participants to explore the aquatic ecosystems around them. Students in grades 5 and 6 are targeted, and topics covered include the definition of a watershed, aquatic food chains, ecosystem health, and introduces the idea of stewardship. Programs can be specifically designed to fit class time-constraints and interests. Bugworks meets Next Generation Science Standards.

We will continue to offer the Bugworks program throughout the watershed, to engage and train responsible watershed stewards from an early age. If you are interested in learning more about the Bugworks program, please contact us at mrba@pshift.com.

River Clean-Up .

On Saturday September 21, 2015, six people in three canoes embarked from E. Berkshire, VT to paddle on the Wild and Scenic Missisquoi River to Enosburg Falls, VT. Their purpose was to pick up as much trash from the river as possible, while having a nice paddle in the beautiful early autumn sunshine. Five hours later, the group emerged from the river with a motley assortment of junk. The haul consisted of 15 tires, along with steel pipe, cans and bottles, rusting metal parts, plastic and other odds and ends. It is interesting to note, that over the 20 plus years of pulling trash out of the Missisquoi River, the composition of what is found has changed over time, and perhaps is less in volume.

– John Little, MRBA President

Many thanks to our wonderful volunteers: (left to right) Roger Gagne, Al Stirt, Ken Whitehead, Cynthia Scott, John Little and Wendy Scott.

Look at the haul that, thanks to their efforts, is no longer in the river!



We couldn't do any of this without YOU!

Thank you for the miles you drove, the water samples you collected, the meetings you attended, the information you shared, the trees you planted, the trash you picked up, and thank you – most of all – for sharing your time with us.

Time is our most valuable asset – and we are thankful and humbled by your generosity of spirit and your continued support of the MRBA.

We are so fortunate to have you as a volunteer, and we hope you will continue to help us work toward our goal: "...to restore and maintain the ecological integrity of the Missisquoi River system so that the uses and values <u>desired by the</u> community are supported by the river and quality of its water."

Work throughout the Watershed (cont.)

Tree Planting

We were very fortunate to have an ideal fall planting season this year, with a longer than usual warm stretch, allowing us to get in a total of 4 volunteer planting days over a two-week stretch! This fall we were able to focus our efforts in the Hungerford Brook in

partnership with the Friends of Northern Lake Champlain (FNLC) and the Vermont Community Foundation (VCF). Collaboration between watershed groups and other partners is critical if we are to continue to work towards improved water quality in not only the Missisquoi but throughout Vermont.

Our first planting was held on October 23 at Bob and Mark Parent's along the Hungerford Brook in Sheldon. The planting was performed by Sheldon Elementary's 7th and 8th Grade classes and just happened to coincide with my birthday! This project was planned through an Ecosystem Restoration Program (ERP) grant held by the FNLC which is focused specifically on outreach in the Hungerford Brook sub-watershed. The planting project was funded by a grant through the VCF Lake Champlain and Tributaries Fund and administered by FNLC. Jaime Tibbits led the planting and was assisted by ECO AmeriCorps members Joe Bondi (FNLC), Jimmy Young (MRBA), and Chelsea Roston (FWC) as well as members from other local watershed organizations. The species that were planted included: shrub willow, chokecherry, black ash, beaked hazelnut, quaking aspen, red osier dogwood, balsam poplar, and red maple with all of the stock wild harvested and sourced locally from Vermont Native Nursery. We were able to plant all 150 trees and shrubs at the ½ acre site in around 2 hours.

The second planting was at a site in the Town of Swanton along the western branch of Hungerford Brook. This site is owned by the Village of Swanton and managed by Dr. Robison. Jaime Tibbits led the October 24th workday with a dedicated community volunteer group with 11 volunteers from the MRBA, FNLC, and family members who were volunteered for the cause. We were able to plant a little over 200 trees and shrubs in 3 hours. There will be a spring 2016 follow-up planting at this site, so mark your calendars and we look forward to seeing you there!

On October 31st Brian Jerose and Jaime Tibbits led a planting on a tributary to the Hungerford Brook on land adjacent to the previous planting along the main stem, owned by the Village of Swanton, managed by Dr. Robison and cropped by Green Mountain Dairy. The volunteer group consisted of an eager team of ECO AmeriCorps members as well as MRBA and community volunteers. We were successful in planting around 160 trees and shrubs at this site. Species at this site and those planted along the Main stem site were very similar and consisted of: red maple, speckled alder, gray birch, shrub willow, black willow, red osier dogwood, and nannyberry. Trees and shrubs were locally sourced through the Intervale Conservation Nursery and Vermont Native Nursery. This project was also planned through the FNLC ERP grant focused on the Hungerford Brook and implementation funded by the VCF FNLC grant.

Our final fall planting day was November 6th with the Sheldon Elementary 5th and 6th graders. This planting was led by Brian Jerose and Jaime Tibbits and was a continuation of the October 31st planting along the Hungerford Brook tributary. There were a total of approximately 327 trees and shrubs planted in some very muddy conditions!

Thanks to the Sheldon student volunteers and their teachers for their active support and to all the community volunteers and ECO AmeriCorps members who worked with us this year. We could not do this work without out you! In addition to the scheduled volunteer days, Joe, Jimmy, Chelsea, and I planted an additional 482 stems along both sites owned by the Village. We have now planted over 24,000 trees and shrubs since 1997! We have planned a spring 2016 planting to continue riparian buffer establishment along the Hungerford Brook and we are also scouting for new sites. If you are interested in participating in a planting day let us know and we look forward to seeing you out in the field.

- Submitted by Jaime Tibbits,







 Our amazing volunteers hard at work and play: improving and creating riparian buffers (rain or shine!) at several of our planting sites this fall

MRBA Assistant Technical Advisor

MRBA Accomplishments

- An integral part of setting up the Upper Missisquoi and Trout Rivers Wild & Scenic study, which led to federal designation in December 2014!
- Over 18,000 volunteer hours logged in collecting water samples, planting trees, and river clean-ups!
- Annual public forums on water quality issues held during each of the last 17 years!
- Field work at over 100 sites throughout the watershed!
- More than 24,000 trees planted to improve riparian buffers!
- Over 2,000 nutrient and sediment samples collected by volunteers in the watershed over 10 years of water quality monitoring!

We still have a lot of goals to accomplish in our watershed, and we need your help to achieve them!



Support The Watershed

Join the MRBA; encourage others to join

The more people we can communicate about the valuable resource that is our watershed, the more impact we can have. Give us a call, send us a note, or an email to join. There is no membership fee, though we happily accept donations to support our efforts in the watershed.

Volunteer

We always need volunteers to help us with tree plantings, river clean-ups, water sampling, and other events. **Let us know** that you would like to help and we'll reach out as opportunities arise.

Email us: mrba@pshift.com

Check us out online: www.mrbavt.com

Follow us on Facebook!



Donate

Donations like yours help us cover expenses and projects that are not covered by specific grants.

Suggested levels of donation:

- Creek \$10
- Brook \$35
- Stream \$100
- River \$200
- Student \$5

Donations can be made online at www.mrbavt.com, or checks can be mailed to:

Missisquoi River Basin Association 2839 VT Route 105 East Berkshire, VT 05447

MRBA is a non-profit organization with an approved and current 501(c)(3) status. Your donation is fully tax deductible.