

## CRWC and DRWA Plan New Test Lab

The two river organizations hope to put a shared water testing facility in CRWC building on Bank Row in Greenfield

The Connecticut River Watershed Council and DRWA are cooperating on a plan to install a permanent water quality testing facility on the ground floor of CRWC's headquarters building on Bank Row in Greenfield, MA. The new lab will replace DRWA's small temporary lab which has lived in the basement of a member's house for the last half dozen years. The idea for the new lab was originally proposed by the DRWA water quality committee and has the endorsement of the boards of both CRWC and DRWA. The new lab is not only intended to continue DRWA's water quality testing in the Deerfield River watershed, but could provide testing facilities for other volunteer and educational organizations in the region.

Preliminary plans for the lab call for using a large portion of the now vacant street level space in the CRWC headquarters building. The space, 43 ft by 22 ft 6 in., is not only adequate for lab operations, but could be used for training small groups and holding demonstrations.

**Costly project.** Laboratory space is expensive to build. It requires solid fundamentals such as chemical-resistant sinks and counters, fume hood, eye-bath station, refrigera-

tors and a safe for storing flammable materials, plus the usual finishing of ceilings, floors, walls, heat, electrical and lighting and plumbing. Fortunately, when CRWC rebuilt the entire interior of its building, adequate fire sprinklers were installed on the ground floor, which takes care of most of one costly requirement.

The project originated early last year when DRWA's water testing committee – Françoise Walk, Marjo Iken, Michael Cole, Robert May and Ted Merrill – built up their hopes that the DRWA should have a better — and permanent — home for the lab. The committee members, who have had years of practical experience operating DRWA's testing lab and organizing volunteers, put together a basic list of requirements. They broached the idea of using the vacant space in the Bank Row building to Andrea Donlon, CRWC's River Steward, who thought it a worthwhile project. Mike Cole then put together a more detailed plan to give to CRWC Executive Director Chelsea Gwyther. She liked the idea and got a green light to proceed from her board. A combined group from DRWA and CRWC then met with Renaissance Builders, a well established regional contracting firm. They walked through the unfinished space and worked out specific requirements for the lab.

The DRWA is funding the initial costs for detailed drawings and cost estimates. But DRWA and CRWC will have to apply for big grants to carry out the actual construction of the testing facility.

"We're not going to finance this project with bake sales", says DRWA President Françoise Walk.

James Okun, CRWC Chairman of the Board, hopes to get CRWC's veteran fundraisers working on it, and commented "Well, we knew the dream lab would be expensive, and we were right. But I for one remain very excited at the prospect of making this happen!"

All agree that the location and physical space for the lab are nearly ideal, and these first steps are promising.



A laboratory would occupy most of the street level floor of the Connecticut River Watershed Council building in Greenfield.

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## Organization News

At the October 17, 2006 Annual Meeting, the membership elected 8 Directors to the Board:

Joan Adler (Treasurer), David Boles (Green River Chapter), Peter Buell (Secretary), Robert May (Vice President), Marie-Françoise Walk (President), Polly Bartlett, Ted Merrill, and Jay Rasku (at-large).

Karl Meyer stepped down from the board—we thank him for five years of dedicated service and wish him the best.

### Recent Board Highlights:

**Completed the Plan of Work** for 2007. Details can be found on our website.

**Hired long-time member Patricia Serrentino** to serve as clerk for the Board. She will work about 10-15 hours per month to take care of our mail, banking, and membership.

**Reviewed the By-Laws** and drafted proposed changes. (See box for call for special membership meeting to adopt amendments).

#### Reassigned Directors to Committees

We welcome members to join us and serve on one of the committees. See what appeals to you and where your expertise and enthusiasm can be put to good use:

**Membership/Fundraising Committee:** Look for ways to increase membership and raise funds for the Association.

**Mahican-Mohawk Trail Committee:** Recruit volunteers to maintain the trail, plan for improvements and expansion, and provide maps and public information.

**Volunteer Monitoring Committee for Water Quality and Wildlife:** Plan for short and long-term monitoring needs, pursue funding, recruit volunteers.

**Outreach/Education Committee:** Publicize the Association's work and programs, organize Hike and Bike program, help organize Riverfest, plan public forums.

**Proposal Committee:** Review all proposals submitted by DRWA and devise recommendations for Board.

**Friends of Green River:** Organize events and people around the Green River.

**Finance Committee:** Proposes an annual budget.

**Nominating Committee:** Looks for new board members and makes recommendation to Board.

### Special Meeting to Revise By-Laws

The membership is invited to attend a special meeting at 7 PM on April 17, 2007 at the Information Center, 75 Bridge Street in Shelburne Falls, MA to vote on proposed amendments to the DRWA By-Laws. Proposed changes can be found on our website [www.deerfieldriver.org](http://www.deerfieldriver.org).

A dam operator's first hand account of the Flood of 1938 was recently rediscovered in the files of the Historical Society of Westford, MA. Written in clear, Spenserian longhand on six sheets of the New England Power Company's operator's report forms, the document is unsigned. The unknown author's description of a rampaging Deerfield River is unique. The following is an unedited transcript.

### Flood of 1938-Shelburne Falls, Mass.

It started in the afternoon of Sept. 21 at about 4:00PM with a heavy downpour. We had already had about seven inches of rain in the two previous days, and with that of the afternoon of the 21<sup>st</sup> it totaled about ten inches at the end of the storm...about 8:00PM of the same day.

I will begin my disasterous story at the Cold River bridge on the Mohawk Trail about six miles above the little town of Charlemont. The small mountain stream increased very rapidly and at the Cold River bridge at the beginning of the big climb up the mountain it started eating around this bridge and washed the road away completely on both ends of it.

It then started in on the famous Mohawk Trail highway. It kept eating into the roadway until [it] had washed away almost a mile of the macadam road. The road is completely gone at this point and the river now runs where cars once sped along over the road. At the State Park just below this point it washed away the swimming pool and ruined the Park in general.

It tore down over the rocks and around the curves until it came to the "Cozy Camps" and here it started to work again. It washed out the old famous Mohawk Trail again for about two or three thousand feet, then changed over to the other side of the stream and took out the roadway and bridge leading to the "Cozy Camps" just before joining the Deerfield just below this point.

On the Deerfield River just about six miles before this point, the river undermined the B&M railroad tracks and a huge mountain slide toppled 14 freight cars into the river. Then at the Y in the river where the Cold River joins it, it started on with its errand of destruction with the help of the Cold River. The damage was slight the rest of the way until it reached a camp which was called "The Back Porch" about two miles east of Charlemont. Here it stopped just long enough to snatch the complete building from its foundations and carry it out into the stream. A woman with a six-month old baby in her arms had just left this home of hers to take her baby up onto the hillside into one of the overnight cabins. The husband had gone to Shelburne Falls for groceries before the flood had reached them and was on his way home when the flood came upon him and he could go no further. As he was climbing to safety he looked out into the stream and saw his home go floating past him. He was terror stricken as

he thought of his wife and baby. He could not reach the spot where his wife and baby were until the next morning. Then he found them safe in the little cabin on the hillside.

About one half mile below this point, "Old Man River" decided to leap over the banks again. Here it started in on the "Indian Plaza" the home of the Indians, Indian rugs and jewelry, and operated by Mrs. Hallahan, wife of the Postmaster at Charlemont. It started demolishing the buildings here and Mr. and Mrs. Hallahan in an effort to save their valuable rugs and things, took what they could carry and started for the neighbors below them.

Just before they reached this neighbor's house Mrs. Hallahan stepped into the little stream known as "Averys Brook" and just as she did this, a large tree floated past her in the river and with one of its branches struck her in the back of the head and knocked her out into the stream and she was swept out to her death before her husband's eyes. No trace of her has been found up to this date (Oct. 12). About twenty five hundred dollars worth of rugs and things have been found on the river banks.

From here the river continued on its journey to #4 dam of the New England Power Co. At this point an effort was made to close the tunnel gates which feed through under the mountain into #4 Sta. forebay. The water came up so fast that it was impossible to get these gates closed. In the meantime the operator at the #4 Sta. was shutting the Sta. down because of water on the generator room floor. He had just shut the Sta. down and got up on the hillside when a surge of water passed through the tunnel and started eating the hillside away. Soon there was a deafening roar and the whole hillside between the Power House and forebay was carried down into the Sta., taking with it #7 line Oil Switch house which was all afire, and one of the reactors.

It filled the Sta. up to the top of the Generators which is about 9' deep, with gravel and boulders and also burying up the operators cars which were parked in front of the Sta. It soon tore away the central cables and footbridge over to the #4 Sta. switchyard.

From here it passed on down into Shelburne Falls and washed away part of the west end entrance to the bridge and left a hole in the street large enough to place two cars in. The water was five feet deep in the street on the Buckland side of the river, and the same depth over the highway bridge. On the curve at the #3 Sta. dam it washed away all of the road for about two hundred feet and then passed on over the dam and down past #3 Sta. doing no harm at #3 Sta.

There were two high tension lines out of six, that were not down, they were #3 and 4 lines between #4 switchyard and Vernon Sta. on the Conn. River at Vernon Vt. The #3 Sta. at Shelburne Falls was then used to furnish power to Brattleboro Vt. because of Vernon's low head, by feeding as far as #4 switchyard via #5 line and then out of #4 switchyard via #4 line to Vernon Sta. then into

Brattleboro via B branch feeder.

The Deerfield river then continued on down to the Gardner Falls plant of the Western Mass. Electric Co. and flooded them out, taking part of their canal along. Two operators were marooned in this Sta. all night with water about three feet deep in the Sta.

From here it passed on down into #2 Sta. pond of the New England Power Co. It hit this Sta. about 7:00 PM. I happened to be the operator on duty and was standing in front of the switchboard trying to regulate the speed surges caused by the Feeders going out, when I noticed water coming through the rear door leading to the penstocks. I at once started shutting down the Generators and clearing the switchboard and killing the Sta. Sta. was dead at 7:15 PM.

I then stepped into the telephone booth next to the window by the dam to notify the dispatcher at the Shelburne office of the condition of my Sta. when a big log struck the window and smashed it and let the river in through the window whirling the booth around and moving it out into the floor about six feet with me in it. I jumped out of the booth and got what records I could get and took them up onto the gallery. The Generator room filled up fast and the booth turned over and went out the window and down the river. The water soon went over the top of the switchboard and reached a depth of about 8 feet on the generator room floor. The normal water level at the dam is 10.0 feet but this flood reached a level of 17.6 feet.

I then took my reports of the Sta. and with boots on walked to the Shelburne office a distance of four miles. I reached there about 9:00 PM and gave a full report on the condition of my Sta.

I was told I could not get to my home on the Shelburne side of the river. However, I went up to the bridge and was soon able to pass over the bridge at my own risk. I walked into the house at about 11:00 PM.

The next day we started cleaning the mud and debris out of the Sta. and drying the equipment.

#1, 2 & 3 generators were put on the heat run Sept 25<sup>th</sup> at 6:50 PM and were taken off and phased on the system Oct. 3 at 4:07 PM one week later.

The #4 Sta. will not be able to operate for about 6 months. The Sta. is now cleaned out (Oct 8<sup>th</sup>) and they are beginning to dry out some of the equipment. The operator at Sta. #4 is in the "Dog House" at the switchyard and the Gov. man is across the river in the Sta. watching things.

This ends the flood of 1938 in Shelburne Falls.

(We hope)

*The form is not signed, ed.*

## DRWA's water quality monitoring activities expanded in 2006/2007

2006 was another productive year for our water quality monitoring program. Thanks to the efforts of more than a dozen committed and energetic volunteers, we completed a second year of **bacteria monitoring** in the North, South, and Chickley Rivers, and we performed a fall assessment of macroinvertebrate communities of the South River. This second year of bacteria monitoring revealed several sources of bacteria pollution occurring from farmlands adjacent to the North and Chickley rivers. It is our hope that the Natural Resources Conservation Service will use the results to encourage local landowners to improve their land management practices to reduce bacteria loading into our local waterways. Although not originally planned, a third year of summertime sampling has been added to this study to help determine the sources of elevated bacteria counts that have largely eluded us in the South and North rivers. Sampling will occur from June through September 2007, as it has for the last two years.

In September, Mike Cole and several volunteers sampled **macroinvertebrates** from eight locations in the South River and from four South River tributaries – Pumpkin Hollow, Chapel, Creamery, and Poland brooks. The samples are still being analyzed, so we expect to share results in the spring/summer newsletter. In the meantime, plans are underway to sample the macroinvertebrate communities of North River and its tributaries this coming September. These sampling events provide an excellent opportunity to learn about the ecology of our local rivers and to get an close-up look at many of our critters.

2007 will mark the initiation of a **lakes water quality sampling program** for DRWA. We're excited about this new direction and the information it will yield. We plan to "start small" in 2007 and focus our effort on the recreationally popular Ashfield Lake. We hope to sample a number of water quality attributes from the lake over the course of the summer and into the fall and we're looking for volunteers with a boat or canoe who would like to participate in regular (monthly from April through October) sampling of the lake. Volunteers will be trained in collecting water samples and in taking various measurements such as water temperature and transparency. We thank all of the people who generously gave their time and energy to the 2006 water-quality projects and look forward to another rewarding, productive, and fun sampling season in 2007. Please contact Mike Cole at 413-475-3610 or [mcole@abrinc.com](mailto:mcole@abrinc.com) if you're interested in participating in any of these surveys:

**pH and alkalinity survey (April)**

**Ashfield Lake monitoring program (April - October)**

**Bacteria survey in the North and South Rivers (June - August)**

**North River macroinvertebrate survey (September)**

## Students to Check Road Salt Contamination in the Clesson Brook

Middle school students at Mohawk Trail Regional School are researching the Clesson Brook Watershed. Their research areas include aquatic macroinvertebrates and general water chemistry. However, their main project will focus on the possible effects of road salt contamination on the Clesson Brook.

The project designers chose Clesson Brook due to its unique topography, the fact that roads follow along its bank from beginning to end, and because people living close to the brook have had salt contamination occurring in their wells.

Throughout the spring, students will be measuring the concentration levels of chloride three times a week from a water sample taken at the Buckland Recreation Center. Samples will also be taken once a week at the Buckland Rd and Pond Rd intersection in Hawley, MA, the start of the Clesson Brook, for control samples.

So far this winter has been quiet for snow and road salt. However, if students do find high concentration levels of road salt, these findings could be used as a warning for future snowy and high road salt winters.

For many students, science is just another subject they take while they are in school. However, the sponsor of this project, STEMRAYS (Research Academies for Young Scientists), is trying to change that thought. Funded by the National Science Foundation, and working in collaboration with the University of Massachusetts Amherst and Greenfield Community College, middle school students are given the opportunity to perform authentic science research. The goal of the program is to generate a greater interest in science for students, which could then possibly lead to students pursuing a career in a science field. If you have any questions about the program feel free to visit [www.umassk12.net/rays](http://www.umassk12.net/rays) or you can contact Wayne Kermenski at [wkermenski@hotmail.com](mailto:wkermenski@hotmail.com).

Editor's note: DRWA has been pleased to help this project with some advice on stream sampling techniques.



Mike Cole samples macroinvertebrates in the Deerfield River at Old Willow (Charlemont, MA) in summer 2007.

## **DRWA Hikes and Bikes:**

### **2007 Spring and Summer Schedule**

All hikes are free and open to the public. Please register with the hike leaders as we try to limit the number of participants to minimize disturbance to the environment and make it more enjoyable for participants.

The late summer and fall schedule of hikes will be published during midsummer. Check the web site for cancellations and/or changes to the Hike and Bike Schedule.

**March 18, Sunday, 10:00 am. *Spring Hike from Davenport's Sugarhouse in Shelburne to High Ledges and Back for Brunch.*** This hike, snowshoe or cross country ski trip will depend on the weather. Often good boots are all that is necessary to enjoy this half-mile climb on snowmobile trails to the Massaemet ridge then a mile down the ridge to High Ledges with its spectacular views up the Deerfield River and down into Shelburne Falls. We then return to Davenport's Sugar House for Brunch. Register with Françoise Walk 413-774-7025

**April 29, Sunday, 10:00 am. *Mahican-Mohawk Trail Spring Clean Up.*** This will be to clean up the downed branches and trees from the winter storms. Volunteers did an excellent job last Fall and we are hoping they will return and others will join for a Spring day on the trail when the flowers will be emerging. Call Mark Benjamin at 413-625-2986 to register.

**May 5, Saturday, 10:00 am. *Northeastern Loop in the Catamounts. Caves and Early Spring Flowers, Colrain.*** Join Muriel Russell, local expert in Catamount history, for an exploration of caves and wildflowers in the Catamount State Forest. Bring flashlight to explore caves and lunch to enjoy at McLeod Pond. Directions to start: From Rte. 112 in Griswoldville, Colrain, take Adamsville Rd. to Lively Rd., then quick left onto East Catamount Rd. (steep and dirt) to end where there is parking. Register with Muriel Russell 413-624-3311

**Special: Deerfield River Trips from source to Connecticut River.** These are repeat trips from last year. Two trips for people to see and understand the flow of the river and how the power facilities work.

**June 16, Saturday.** We will meet in Shelburne Falls and (the first 15 people to register) will ride in a van to Somerset Reservoir in Vermont. The flow regulations will be explained by Matt Cole, Community Relations Officer for the TransCanada Hydro Northeast Inc. power company. We will follow the river and its many diversions and power plants to the Massachusetts line. Although we will not be hiking the many trails which parallel the Deerfield River, we will take note of their trail heads for future enjoyment.

- more -

**July 21, Saturday.** The second trip will tour the facilities from the Massachusetts line to the Number Two power station. These trips are by reservation only. If you are interested, please contact Polly Bartlett, 413-625-6628 or e-mail at [dbartlet@crocker.com](mailto:dbartlet@crocker.com).

**Other trips and hikes may be scheduled.** Check the [www.deerfieldriver.org](http://www.deerfieldriver.org) or send Pat Serrentino ([pserr@crocker.com](mailto:pserr@crocker.com)) your email address and you will be notified of schedule changes and new hikes.

## **Mahican-Mohawk TRAIL REPORT**

The Mahican-Mohawk trail continues to be a popular walking venue and a very successful work party did some big tree clearing last Fall.

There will be a work party to do spring clean up on Sunday April 30 (see Hikes schedule for more details). There still is no satisfactory way to cross the South River in Conway. The bridge we have been working on for ten years is still in a state of limbo.

Dragon Brook in Shelburne may be difficult to cross in times other than very low water.

We are very fortunate to have a crew of talented Student Conservation Association workers funded by AmeriCorps coming in May to improve the Dragon Brook Crossing and do other jobs utilizing their skills and man and woman power.

## ***RiverFest Scheduled for June 9***

This year's 19th RiverFest, an educational celebration of the Deerfield River, will be on Saturday June 9, 2007. This year's RiverFest committee has added members of the community who have enjoyed RiverFest in the past and are already working on new ideas for this year's community event. As usual we will have the Frog and Flower parade which grows bigger every year, and the "Bug Table" displaying the creatures that live in our river. Also featured will be a guided "tour" of the potholes led by Geology Professor Richard Little, quiet river raft rides provided by Zoar Outdoor, many displays by local conservation agencies, sidewalk vendors, games for children, contests, store sales and performing musicians all during the day. Later Pot Hole Pictures will show "An Inconvenient Truth".

This educational celebration of the Deerfield River is a party for the whole community and is paid for completely by donations from local businesses, organizations and the Local Cultural Councils of Ashfield, Buckland, Colrain, Conway, Greenfield, Hawley/Charlemont, Heath, Rowe and Shelburne. We hope that you will want to be part of the festivities, join in the parade, or come to a committee meeting and share your ideas. Contact Polly Bartlett at 413-625-6628.

## Change in DRWA Mailing Address

The Deerfield River Watershed Association's mailing address has been changed to:

**15 Bank Row,  
Greenfield, MA 01301**

The change is necessary to meet the requirements of government taxing authorities and some delivery services, which will not accept Post Office Box addresses.

Please make a note of the change and remove the PO Box 13 address in Shelburne Falls from your records.

DRWA does not have a physical office at this time, and this address is for mail purposes only. If you go there, you will find the Connecticut River Watershed Council offices, but no representative of DRWA.

## DEERFIELD RIVER CURRENT

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Editor, Ted Merrill

The Deerfield River Watershed Association is a volunteer organization dedicated to the preservation, protection and care of the Deerfield River and its tributaries in the interests of its adjacent communities. Its activities include water quality monitoring, educational programs, administration of volunteer programs and participation in regulatory matters.

### **Officers:**

Marie-Françoise Walk, *President*

Robert May, *Vice President*

Peter Buell, *Secretary*

Joan Adler, *Treasurer*

### **At-Large Board Members:**

Polly Bartlett, David Boles,

Ted Merrill, Jay Rasku

**[www.deerfieldriver.org](http://www.deerfieldriver.org)**



Green River Cleanup on September 30, 2006

## Green River Chapter Notes

Friends of the Green River will meet Tuesday April 24, 2007 at 6:30pm in the meeting room of the Connecticut River Watershed Council at 15 Bank Row in Greenfield, MA. On the agenda are the July Green River Festival and the September Green River Cleanup. Anyone with an interest in the Green River is invited.

We have created a web page dedicated to Friends of the Green River at [www.deerfieldriver.org/GreenRiver](http://www.deerfieldriver.org/GreenRiver). Check it out for updates and projects on the Green River!

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**Deerfield River Watershed Association, Inc.**  
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