

The FALL 2005

Watershed News

Westfield River Watershed Association (WRWA) ~ P.O. Box 1764 ~ Westfield, MA 01086-1764 ~ (413) 532-7290 ~ www.westfieldriver.org

The President's Message

Happy Holidays and Best Wishes for a Wonderful New Year! As 2005 ends, I hope you share my sense of pride as I reflect on all that WRWA accomplished in 2005.

The public responded in an overwhelmingly positive way to "Five Feet and Rising: The Flood of '55" with over 500 people attending six showings and about 1200 copies sold or donated to schools and other nonprofits. This documentary reached a broader audience through its showings on Channel 57 (WGBY) and Westfield's Community Access cable station.

2005 marked the successful completion of the Stream Continuity Project. Along with The Nature Conservancy and other organizations, WRWA volunteers measured over 1,000 bridges and culverts in the watershed. The results of this huge undertaking will help ensure "safe passage" for aquatic life as roads are rebuilt.

Along with many other organizations and individuals, WRWA offered comments in the environmental review process of the Russell BioMass Plant. As a result, the Executive Office of Environmental Affairs decided that this project will go through a full two step environmental review meaning that the numerous environmental issues it raised will be fully explored before the plant goes forward.

In addition to these special efforts WRWA sponsored its largest river symposium ever attended by over 200 people, hosted a fishway open house with 300 visitors, staffed the fish ladder in West Springfield, conducted a river clean up with over 40 volunteers, ran a fly fishing derby, organized volunteers to stock salmon fry, sponsored the ASERP program in four schools, and offered outings, speakers and a canoe trip.

I'm excited about two major opportunities for the watershed that await us in 2006. The Five Year Westfield River Watershed Plan for the Executive Office of Environmental Affairs, which will determine state environmental funding priorities for the next five years for all 22 communities in our watershed, will be written. Meanwhile, the National Park Service plan, focusing on the river corridor of the 10 communities with the "Wild and Scenic" designation, will be revised. Together these two plans will have major impacts on funding and other environmental activities in the Westfield River Watershed for years to come. WRWA will fully participate in both of these plans.

With a great deal of regret, we accepted Gabe Khatchadourian's resignation from our Board of Directors. We thank Gabe for his leadership of WRWA events including river cleans, fishway open houses and the fly fishing derby. It isn't too early to think about your New Year's resolution. How about considering giving some time to the environment by serving on our Board. The WRWA Board of Directors now has three vacancies and WE NEED HELP.

Kathy Meyer, President

ATLANTIC SALMON IN NEW ENGLAND

By Mike Young

Dr. Stephen McCormick, a researcher at the Conte Anadromous Fish Research Center in Turner's Falls, made an excellent presentation on Atlantic Salmon to an audience of about 40 students and community members at Westfield State College on November 17. Atlantic Salmon spawn in freshwater streams in the fall, with the eggs hatching out in the spring. The young fry develop into larger striped parr and remain in their birth streams for 1-5 years before migrating to the sea as smolts, having undergone physiological changes that allow them to survive in salt water. They spend 1-3 years maturing in the ocean before returning to their native streams to complete the cycle. Pre-1800 salmon returns on the Connecticut River were in the 10,000-50,000/year range, but the construction of 15 dams on the mainstem and major tributaries by 1850 led to the extirpation of the species in the Connecticut River Watershed by about 1860.

Initial restoration efforts between 1869 and 1888 failed, but were revived in the 1960s. Through the early-mid 1990s those efforts focused on the stocking of smolts, but fry stocking was begun in the late 1980s and has replaced smolt stocking as the primary activity. Returns of adult fish were very encouraging in the early 1980s, but have since fluctuated wildly, never surpassing the peak return of more than 500 fish in 1981. The species has declined worldwide over the past couple of decades, with wild populations in Maine being placed on the Endangered Species List in 2000. Research by Dr. McCormick and other scientists has focused on the factors that are limiting the returns of mature Atlantic Salmon. Among the issues they've investigated are (1) the production of smolts from fry that have been stocked, (2) the timing of downstream migrations, and (3) the impact of dams on the downstream movement of fish.

Winter survival of fry appears to vary substantially from year to year, ranging from about 25% to as much as nearly 70%. Future research will attempt to identify the factors responsible for those variations. Counting fences, radio tagging, and the implanting of computer chips have been used to monitor the

downstream migration of smolts in tributaries. Fish have also been tested in artificial settings where the researchers were able to control a variety of environmental factors. It appears that "length of day" is the primary stimulus for fish movement, with temperature a secondary effect. Interestingly, the temperature effect appears to be related to the cumulative temperature history of the site, not to some threshold temperature as previously suspected. Acoustic tags have been used to monitor the movement of smolts down the mainstem of the Connecticut River. Those studies suggest that dams have a substantial impact, especially in low-flow years. Dams significantly slow the movement of fish, cause substantial mortality for fish passing through turbines, and also inflict significant mortality on fish that are funneled through narrow downstream passage pipes - where predatory fish wait eagerly at the outlet!



Dr. McCormick remains optimistic about the potential for successful reintroduction of Atlantic Salmon to the Connecticut River and its tributaries. He notes that wild Connecticut River salmon likely had genetic adaptations to the warmer conditions found near the southern limit of the salmon's range, and that current efforts, spanning only 3-4 generations, have had very little time to produce similar adaptations. He also believes that continued improvements to both upstream and downstream fish passage at dams could significantly improve survival rates. These efforts can only succeed, however, with public support for the programs. You can contribute by expressing your support to your local members of Congress, and by helping out with the fry stocking that takes place each April and May throughout the Westfield River Watershed. I hope you'll do both!

Thank you Gabe!

WRWA offers its thanks to Gabe Khatchadourian who recently resigned from the WRWA Board after several years of service.

WRWA YOUTH COMMITTEE

By Bill Rose

The Westfield River Watershed Association has recently established a Youth Committee and Bill Rose is the chairman. Mark Damon, Tom Condon, Bill Toomey and Joan Pearsons have agreed to be on the committee. The goal is to give the youth (children and young adults) in the area exposure to the many activities and projects the WRWA is involved with. It will take the help and ideas of everybody in the organization to get this committee on its feet. Some of the activities could include river clean-ups, storm drain stenciling, canoe trips, salmon fry stocking, the fishing derby and the events at the fish ladder. We need to get the word out by contacting schools, libraries, the YMCA, scouts, church groups, and children schooled at home. This committee is open to any suggestions, ideas, and people. You can contact Bill Rose at 413-786-0195 or brose1525@comcast.net. Together we can make this committee a strong part of the WRWA.

STREAM CONNECTIVITY SURVEY

By Mike Young

Since June, 2003 WRWA volunteers have been assisting with a survey of the watershed's culverts and bridges. Those structures, often un-noticed, play an important role by passing stream flows underneath roadways. Unfortunately, past practice has been to install structures that often posed barriers to the movement of fish and/or wildlife along stream corridors. The survey of structures in the Westfield Watershed, completed in cooperation

with the Massachusetts Riverways program and The Nature Conservancy, is one of the first of its kind in the nation, and is one of the largest projects undertaken by WRWA in recent memory. The survey instrument was developed by Scott Jackson at the University of Massachusetts, Amherst as part of an even larger project to develop crossing standards for the construction of new structures. Those standards focus on making the crossings as "invisible" as possible to fish and other wildlife. The recommendations include (1) a strong preference for open-bottom structures (e.g. bridges) or for closed structures embedded with sediment to a depth of at least two feet, (2) that structures should span more than the bankfull width of the stream, and (3) that crossings should include sediments comparable to those up- and downstream of the structure and maintain water depths and velocities similar to those outside the structure. These standards have been accepted by the Army Corps of Engineers and are now among the criteria that new crossings in Massachusetts will have to meet in order to avoid a more detailed individual review. Similar criteria have been added to Maine's standards and will likely be added in other states as well as their permitting processes are reviewed. Within a few years, once some experience with the new standards has been gained, they may also be applied to projects involving the retrofitting of older structures.



So, what does all this mean for the watershed? Well, now that we have data on the existing crossings and the extent of the problems they pose for stream connectivity; the next step is to

identify the most serious problems for remediation. Scott Jackson has completed a prioritization of river segments based on a variety of existing information about the quality of different streams (information from the Living Waters program, the Massachusetts BioMap project and others). Meanwhile, Alison Bowden of The Nature Conservancy has developed a scoring scheme for individual crossings based on the data collected by our volunteers and others. Those two sets of information will be compared to identify the sites that provide the greatest potential for significant improvements. Then, we'll need to work on actually modifying the structures at those sites. A first step was taken last year when an existing culvert on Tower Brook, between Chesterfield and Cummington, was modified to eliminate a significant outlet drop (where the outflow from a culvert is perched above the stream below). Over the next couple of years, I expect we'll begin to see much more activity of this sort, and we'll likely be looking for volunteers to help with those retrofits!

This project has significant potential for improving the overall connectivity of the streams within our Watershed, and wouldn't have been possible without lots of assistance from volunteers. I'd specifically like to thank those who've helped out during the 2005 summer-fall season: Sheryl Becker, Marilyn Bekech, Mark Damon, Marj Lehan, Larry Myers-McElwhee, John Riley and Beth Rothermel. Thanks again to the many others who helped out in 2003 or 2004!

ANNUAL RIVER CLEANUP

By Mark Damon

The Westfield River Watershed Association's annual River Cleanup was held Saturday, October 1, coinciding with the Connecticut River Watershed Association's Source-to-Sea cleanup. We covered a total of nine sites on the Westfield and Little Rivers, ranging from Huntington upstream to West Springfield downstream. Between 40 and 50 participants turned out, and all worked hard, as evidenced by the trash count: approximately 90 bags of trash, 18 tires, and 30 other large items (e.g. bicycles, an ironing board, various and sundry appliances,

and three Springfield Republican newspaper boxes). At each site, all the trash was left in one area to be picked up by local or state authorities. Just as important, we saw several new faces this year (not that we don't appreciate all the returning volunteers). Several were enthusiastic enough to indicate an interest in joining WRWA – a promising sign for the future.

Need Stocking Stuffers?

“Five Feet and Rising: The Flood of ‘55”	
available in VHS and DVD	\$5.00
Wild and Scenic Tee-shirts	\$12.00

Contact Kathy Meyer at 568-4252

FALL/WINTER OUTINGS

Winter Beaver Hunt *Blandford*

Date: Sunday, January 29

Time: 10:00 – 12:00

Leaders: Tom and Nancy Condon

Meeting Place: Blandford Post Office (Route 23)

Registration: Call Tom & Nancy (564-0895)

Come with us on an exploration of beaver ponds. We will carpool over to Gibbs Road in Blandford and walk short distances from the road. If well frozen, we will hike across the pond to see a few lodges and a dam. View and discuss beaver behavior, successional changes beaver alterations produce, native and exotic plant species we see, winter activities of the beaver and other natural history intrigues as they come up. Dress for the weather. Not strenuous, but plan to walk on ice.



Cross Country Skiing at Maple Corners *Granville*

Date: Sunday, February 5

Time: 10:00 – 2:00

Leaders: Tom and Nancy Condon

Meeting Place: Maple Corners – located in Granville on Beech Hill road off of Route 23.

Registration: Call Tom & Nancy (564-0895)

Join us for some cross-country skiing on the extensive trail system at Maple Corners Farm. Bring your own skis or rent them there -for all levels of skiing ability. Ski as a group or split off and ski the trails of your choice at your own abilities. Bring a lunch, or get something to eat at the snack bar. Treacherous travel weather will cancel. Fees: \$10 for trail pass; additional \$10 to rent ski equipment.

Lair Mountain Hike Tolland

Date: Sunday, March 12 Time: 9:00 – 3:00
Leaders: Tom and Nancy Condon
Meeting Place: Blandford Post Office (Route 23)

Join us in Tolland State Forest to hike Lair Mountain trail as we look for early signs of spring. This trail on the south end of Otis Reservoir winds through beautiful hardwood as well as hemlock forests. The trail has some rocky sections and may be wet and muddy this time of year or may still have snow – come prepared with proper footwear. Expect inclines. Bring a lunch and drinking water.

U p c o m i n g E v e n t s

Russell BioMass Debate, Thursday, February 16 at 7:00 p.m. at Westfield State College. For location and further details contact Mike Vorwerk at 572-5305.

12th Annual Westfield River Symposium
April 1st at WSC
Visit www.westfieldriver.org for details.

WILD AND SCENIC UPDATE

By Bob Thompson Chairman, Westfield River Wild and Scenic Advisory Committee

On October 29, 2005 the Westfield River Wild and Scenic Advisory Committee held its first Retreat. The Retreat took place at the Cummington Community House and was attended by most of the Committee members and alternates. John Moore of the National Parks Service (NPS) served as facilitator.

The purpose of the gathering was multifold, but the central theme was to define a direction for the future activities of the Committee. Mr. Moore did a masterful job of guiding the group through a variety of exercises that allowed each of us to understand each other's interests, skills and abilities. We explored the Committee's past successes and weaknesses. Emphasis was placed on defining the means and methods to recreate the positive experiences while avoiding the pitfalls.

We created lists of pressing and long-term issues related to Westfield River resource protection, as well as tools and partnerships available to support our mission. A portion of the discussion dealt with opportunities lost over the years. At the end of the day there was a menu of current and potential projects, but the ranking of these projects was left to future meetings.



Since the retreat the Committee has met and began to assign priorities to the lists that were created in October. The first priority that we needed to deal with was the creation of a "White Paper" for Congressman Olver seeking funds for the Westfield River Wild and Scenic Advisory Committee. Last year we achieved "Partnership River" status, but were not funded in the past Federal budget. Hopefully this will change in the near future. Carrie Banks, Bill Toomey, and Matt Baron deserve special thanks for their efforts in getting this important work done.

In closing, I would like to thank everyone who gave up their Saturday to attend the Retreat. I hope that the commitment and enthusiasm generated at this Retreat will continue in the coming year. Also, don't forget the "Photo Contest". We are looking forward to seeing the great images of the watershed. Look at "River Notes" on the WRWA web site under "What's Up in the Watershed" section.

Best Wishes and Happy Holidays (is it that time of the year already?)

WILD AND SCENIC PHOTO CONTEST

The Westfield River Wild and Scenic Advisory Committee invites you to submit photos of the National Wild & Scenic Westfield River & the remarkable scenic, cultural, historic, recreational and natural resources of the Westfield River Valley. Photos will be exhibited in locations throughout the watershed. Submission of photos releases images for future use in WRWSAC publications, such as newsletters, postcards, calendars and posters. Prizes to be announced. Submit photos by May 31, 2006. For more information and submittal forms, please call the Westfield River Wild & Scenic Advisory Committee at (413) 268-3129 or visit www.westfieldriver.org.



WHAT EXACTLY IS MEPA

By Matt DelMonte

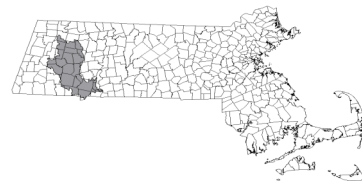
By now you've probably heard about the 50MW biomass-fired power plant proposed for Russell, MA. More recently, you may have heard or read that the Secretary of Environmental Affairs has required, through the Massachusetts Environmental Policy Act (MEPA), that the proponents complete an Environmental Impact Report (EIR) for the project. So what exactly is the MEPA and an EIR?

MEPA was established in the late 1970s to outline a review process in order to reduce the harm to the environment from construction and other development. MEPA was created to provide government agencies with the information to help determine whether projects have the potential to harm the environment. MEPA is not a permitting process and does not pass judgment on a project; it simply requires public study, disclosure, and development of feasible mitigation options for a project. MEPA review occurs before the permitting process so government and permitting officials are aware of the potential environmental impacts of a project.

The MEPA review process begins if a project exceeds certain threshold criteria. For example:

alteration of 5,000 or more square feet of bordering vegetated wetlands or creation of a new road longer than ¼ miles in length. If minimum thresholds are exceeded, the proponent must complete an Environmental Notification Form (ENF). The ENF contains a detailed description of the project, environmental thresholds exceeded, and any required permits. Portions of the ENF are then published in a publication called *The Environmental Monitor* (available online only). In addition, the proponent must provide public notice of the project in a local newspaper with copies to local government agencies. After the ENF is published, a 20-day review and comment period begins in which comments are sent to the Secretary of Environmental Affairs. After the 20-day comment period, the Secretary must decide whether environmental harm from the project warrants full MEPA review - an Environmental Impact Report (EIR). Due to the nature of certain projects, an EIR is automatically warranted. For example, alteration of 10 or more acres of wetlands requires a mandatory ENF and EIR. EIRs can be quite expensive to develop and may be hundreds of pages in length and include several volumes.

If an EIR is warranted, most proponents develop a draft EIR and then, a final EIR. Notice of the draft and final EIRs must be published in the *Environmental Monitor*. These reports both carry a 30-day comment period; after which, the Secretary decides whether information is sufficient. In the final EIR, the proponent must address comments from the Secretary, government agencies, and the general public. The Secretary then has 7 days to decide whether the report adequately addresses all the issues and concerns. For more information about the MEPA process, visit the website at <http://www.mass.gov/envir/mepa/>.



If you would like to get this Newsletter (and the other benefits of membership in the WRWA), please join the Westfield River Watershed Association. Membership applications are available on our website (www.westfieldriver.org) or by calling Carl Grobe at 572-5304.

WRWA Board of Director meetings are held on the fourth Monday of the month at the Geology Museum (3rd floor, Wilson Hall) of Westfield State College. All WRWA members are welcome.

Contact Kathy Meyer at 568-4252 for further information. 2006 dates are:

Monday, Jan. 23	6:00 - 9:00 p.m.
Monday, Feb. 27	7:00 - 8:30 p.m.
Monday, March 27	7:00 - 8:30 p.m.
Monday, April 24	7:00 - 8:30 p.m.
Monday, May 22	7:00 - 8:30 p.m.

**Here are the names and addresses of our officers and directors for 2005
Feel free to communicate with any one or with our headquarters at (413) 532-7290**

Officers

President	Kathy Meyer	87 Old Farm Road	Westfield	01085	568-4252
Vice President	Vacant				
Second Vice President	Mark Damon	54 Pleasant Street	Westfield	01085	572-9991
Treasurer	Kenneth Taylor	8 Greylock Street	Westfield	01085	562-4947
Secretary	Michael Young	721 West Road	Westfield	01085	562-8498

Directors

Henry Warchol	2 Sackville Road	Westfield	01085	562-3467
Carl Grobe	314 Russell Road	Westfield	01085	572-5304
Joan Pearsons	59 Van Horn Street	West Springfield	01089	736-5208
Michael Vorwerk	10 Basket Street	Huntington	01050	572-5305
Eileen Rannenber	95 Regency Park Drive	Agawam	01001	786-5902
Tom Condon	80 General Knox Road	Russell	01071	564-0895
Bob Thompson	10 Lyon Hill Road	Chester	01011	354-9636
Bill Toomey	12 Brooker Hill Road	Becket	01223	623-0275
William Rose	39 Sunset Terrace	Feeding Hills	01030	

Honorary Director

Dave Pardoe	25 Sampson Road	Huntington	01050
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