

## The Green Movement Turns Blue

CRWA's past fifteen years of work to understand and correct the core problems in the Charles River watershed has put us center-stage in efforts to restore urban and suburban watersheds throughout the nation. Cities across the United States are beginning to recognize they are running out of water; that the cost of conventional infrastructure repairs and upgrades far outstrips the funding available; and, even as wastewater treatment plants are spending millions to reduce pollution, ever-increasing stormwater runoff is causing more and more rivers, lakes, bays and harbors to choke and die. The environmental movement and traditional infrastructure engineers are converging on the same idea: we need to focus on water.

Concepts CRWA has been promoting for years - keep water local, reconnect rainwater to groundwater, maintain a balanced water budget, design the engineered environment to work like the natural environment - are gaining new audiences as cities cope with water scarcity, combined sewer overflows, increased flooding and infrastructure failure. Our *Blue Cities Guide*, a design template and case study report for using water as a starting point to build sustainable cities, has been widely praised. This year, the US Environmental Protection Agency (EPA) has even targeted funds specifically towards "green infrastructure" projects that use techniques "designed to mimic the natural water cycle," just as our Blue Cities work recommends.

CRWA's place at the forefront of the science of sustainable urban water resource management is exciting. Our staff have opportunities to work with and learn from a small, but growing, group of scientists, engineers and resource managers around the country who are trying to do what CRWA is doing: fundamentally change the way we manage water. The Charles is where we learn what we need to do; the lessons apply everywhere.

Our approach is to move on three fronts: (1) educate people about the problems and the solutions to foster public support; (2) develop demonstration projects to actually build and assess our concepts and designs (see images); and (3) ensure that regulations and policies support the broad applications of solutions that sustain and restore the environment of our Boston-area home. All three work together, though it can be a challenge to keep all of this work moving ahead.

Our workshops, site visits and training sessions are well attended; for more than four years we have been reaching



Ashmont Grill in Peabody Square, Dorchester - above, existing conditions; below, proposed demonstration project retrofits

out to communities and explaining the importance of our Blue Cities work. In 2009, we expect to have three actual demonstration projects under construction: a retrofit of the Blackstone Town Hall in Blackstone, Massachusetts; a pilot Green Street in Peabody Square in Dorchester; and a retrofit of a school lot on Everett Street in North Allston. New stormwater regulations for both private property owners and municipalities will be issued this year, which will help to limit polluted runoff.

There is no doubt that our multi-faceted effort is effective, and that we are helping make a gradual but fundamental shift in how cities and towns across the country manage water. We know we are on the right track when we hear people say, as we did at an outreach meeting in Chelsea last month, "Why haven't we been doing this all along?"

- by Kate Bowditch

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## Welcome to new Board of Directors



**Laurie Doyle:** Senior Vice President and Portfolio Manager III, U.S. Trust, Bank of America Private Wealth Management. Laurie has served with the bank for over 20 years. She is co-chair of CRWA's Board of Advisors, and enjoys sailing at Community Boating.



**Eric W. Ekman:** Eric is a project manager in Berkeley Investments Inc. As project manager, he is responsible for the direction and coordination of all aspects of a development effort, and currently leads the Watch Factory mixed-use project in Waltham on the Charles River. He is also an avid kayaker and spends as much time as he can on the river.



**Tom Sieniewicz:** An architect, urban planner and former chair of the Cambridge Zoning Board of Appeals, Tom is never more at home than by a river, whether casting, painting a landscape from a canoe or corralling his children into kayaks. He and his family live in Cambridgeport a few blocks from the Charles, on a street that might once have been in the Charles River itself.

## Member hosted parties bring people together to learn about CRWA

New Board of Directors member Tom Sieniewicz and his wife Martha opened their home to CRWA members, volunteers, and interested friends on May 13. The evening included a lively discussion about the river, with a particular focus on issues affecting the Cambridge community.

On May 27, Board of Advisors Co-chair Beedee Ladd and her husband Ted hosted a wonderful evening where interested friends were briefed on CRWA history and the current standing of water issues in Massachusetts.

The opportunity to engage people in this format is truly unique. CRWA's work is not easily reduced to sound bites, so the chance to meet and talk with new people is very valuable to increase awareness of our work in the community.

Thank you again to both the Sieniewiczz and the Ladds.

- by Leigh Heffernan



J. Heffernan

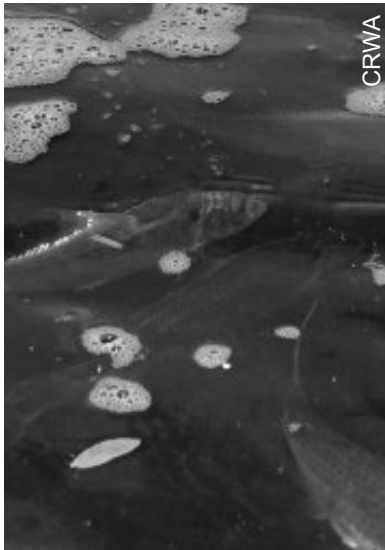


L. Heffernan



## Wildlife along the Charles

Flowers blooming, birds chirping, rowers on the river - and now Massachusetts may have a new sign of spring: shad returning to the Charles River! In an effort to restore American shad, a once-abundant native species of herring, to the Charles, the Massachusetts Division of Marine Fisheries (MassDMF) and U.S. Fish and Wildlife Service (US FWS) have released over five million juvenile shad fry into the Charles over the past three years. Shad are born in fresh-



CRWA

Herring in the Charles

water, spend the majority of their lives in the ocean and return to freshwater to spawn. Beginning this spring, MassDMF and US FWS are monitoring for shad returning to the Charles; shad released as part of this effort can be identified by a dye which colored their ear canals. Most shad do not spawn until four or five years of age, so researchers do not expect to see many released shad in the Charles this year. Monitoring will continue for the next few years using video surveillance and sampling in fishways to track returning shad, and assess the success of the stocking program.

If you see shad, river otters (see photo) or any other unusual wildlife along the Charles River please contact CRWA!



M. Eldridge

A pair of river otters made an appearance in Needham this December

### New permits could help protect Charles River flow

Two decades ago when the Water Management Act (WMA) was passed, Massachusetts Department of Environmental Protection (MassDEP) began issuing permits for large water withdrawals (over 100,000 gallons per day) in the Charles River watershed. These permits, the largest of which are for municipal withdrawals, have now expired, and MassDEP will be issuing new permits this year.

Because water withdrawals affect the amount of water in our rivers and streams, especially in the summertime when flows are already low, the new permits will have long-term consequences for watershed health and the sustainability of our water resources. Thanks to CRWA's work, far more is now known about the environmental conditions than when the permits were first issued: the watershed's hydrologic stress, low streamflows, and the dramatic decline in native river fish are well documented.

New approaches to deal with the impacts of water withdrawal, and effective conservation requirements to curb lawn watering, are both critical to protect the natural environment for fisheries, habitat, and recreation while providing water for public health and safety. Permitted water allotments must also be tied to a community's reasonable projected use, since there is a finite amount of water that can be withdrawn without environmental damage. CRWA's initial comments on the Charles permit renewals are posted on our website.

Through lawsuits and advocacy CRWA continues to push for effective implementation of the WMA by MassDEP. In May, we filed a "friend of the court" brief in the MA Supreme Judicial Court on behalf of 15 environmental organizations. We argued that it is legal for MassDEP to prescribe water conservation requirements on "registered" withdrawals, or those already-existing withdrawals which were required to file registration statements with MassDEP when the WMA was first passed. (All subsequent withdrawals - whether new or for additional quantities - require a permit, which contains conservation requirements.) Conservation-oriented measures for registered withdrawals are important since these withdrawals constitute 85 percent of the total authorized withdrawals statewide. In the Charles, about 40 percent of the total authorized water withdrawals are registered to just two municipalities - Cambridge and Wellesley. The Court's decision will thus have an enormous impact on river health.

- by Margaret Van Deusen



# RUN OF THE RIVER

## Longfellow Bridge Rehabilitation, Cambridge/Boston

CRWA is happy to see plans to rehabilitate the Longfellow Bridge moving forward; however, we fear DCR will miss this opportunity to create a thoughtful vision of how this bridge will be used for the next 75 years. In a recent comment letter on proposed plans, CRWA implored DCR to design the bridge to better promote non-automotive modes of transportation such as walking, biking and the T. Such changes will enhance the public's use and enjoyment of the Lower Basin. Additionally, the current plan provides for no treatment of polluted stormwater runoff from the bridge prior to it entering the river. CRWA is strongly opposed to the direct discharge of roadway runoff into the Charles River and advocated for incorporation of stormwater treatment measures.

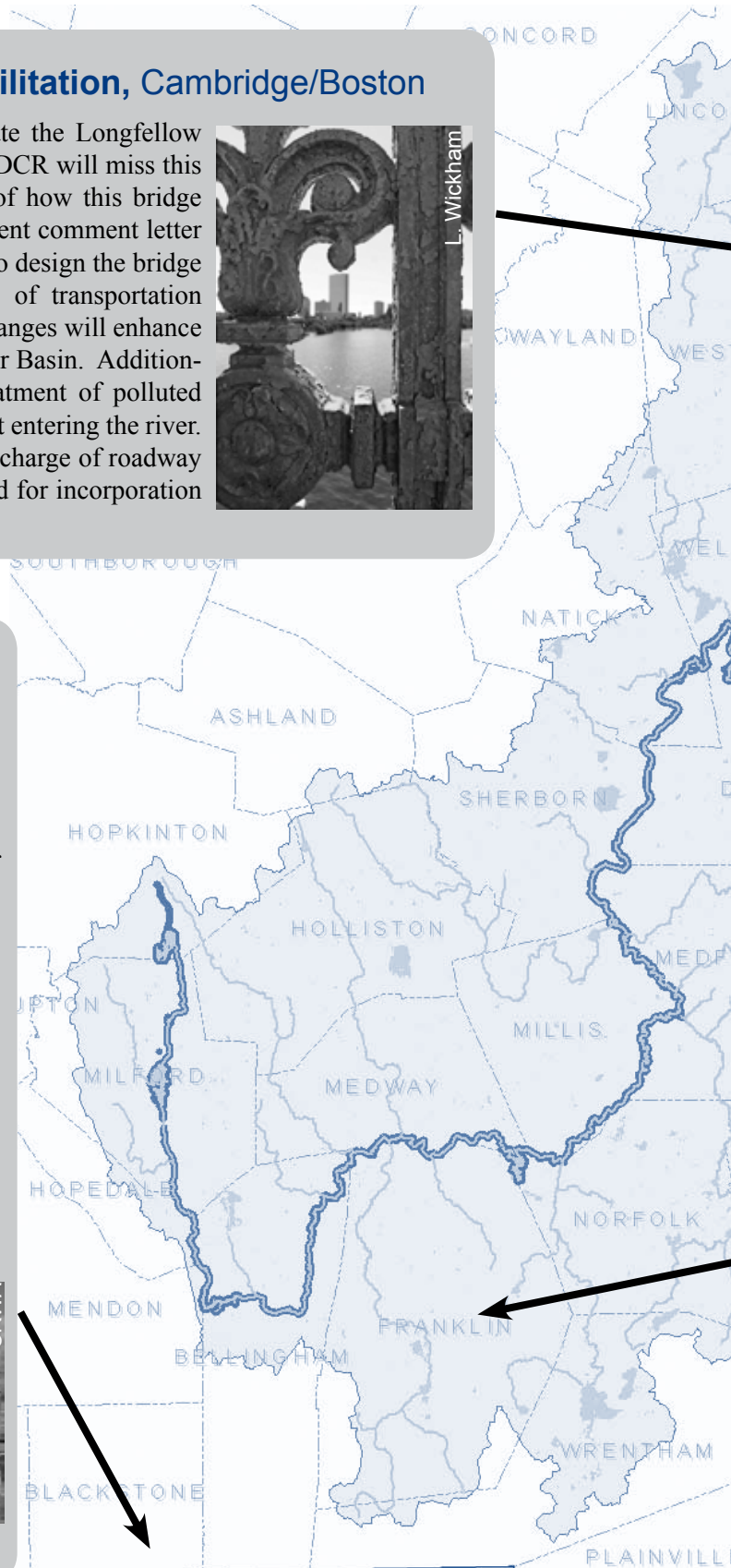


## Blackstone Town Hall Greening, Blackstone

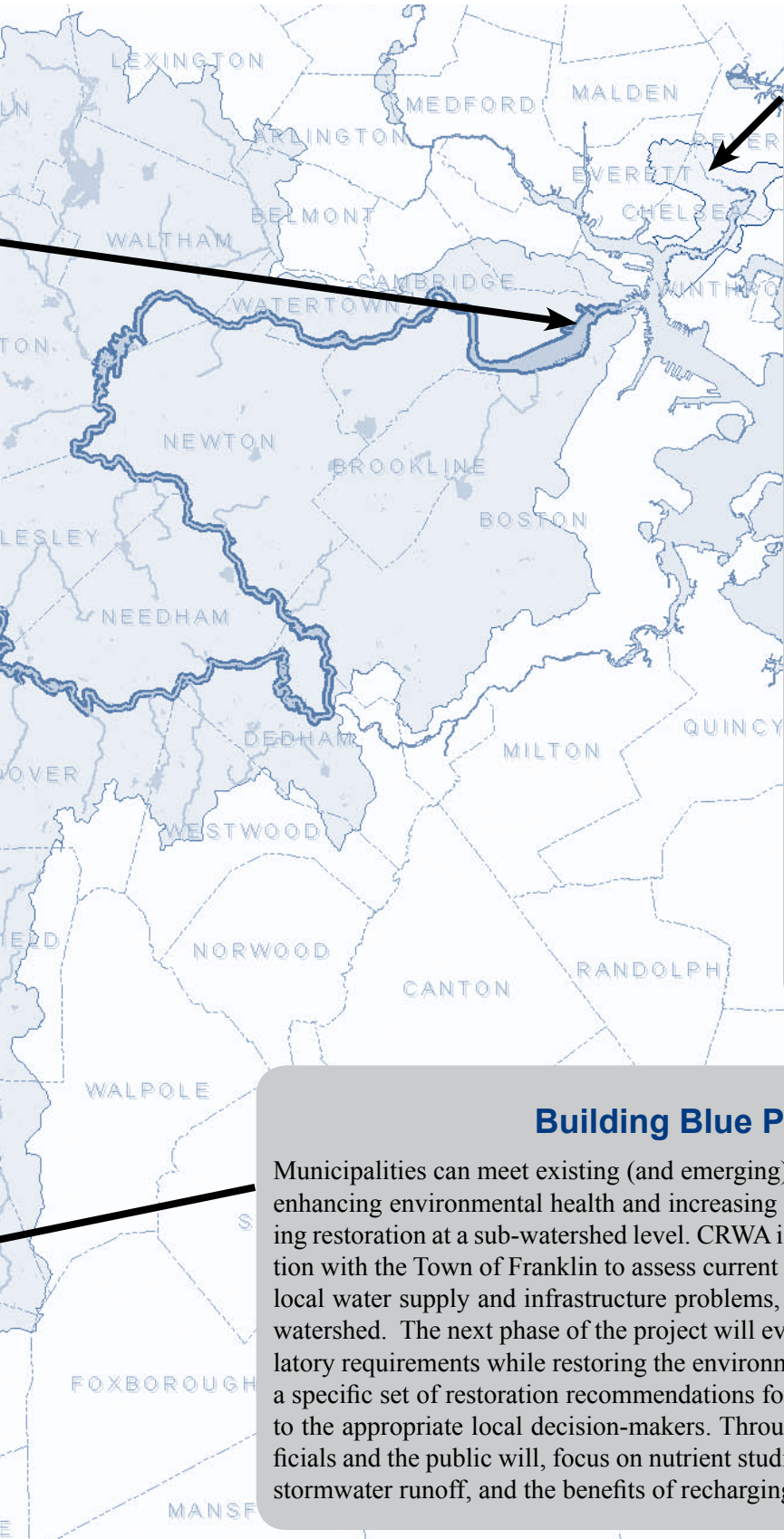
The Blackstone Town Hall site is slated for landscaped and engineered stormwater improvements through a project begun in spring 2008. CRWA's work, in collaboration with the Town of Blackstone, will improve Blackstone's stormwater runoff management, increase the recharge of water into the ground, and protect and enhance the town's water resources. This project is meant to serve as a site retrofit model for other municipalities, educate the public on stormwater retrofits, and help CRWA streamline effective promotion, and successful implementation of Low Impact Development (LID) Best Management Practices (BMPs). The Blackstone Town Hall site is ideal as it provides ample opportunity for public education, and for ongoing evaluation and monitoring. Funding for this project was provided by the American National Power Blackstone Restoration Fund. For more information on the project refer to [www.charlesriver.org](http://www.charlesriver.org).



Blackstone Town Hall senior center & police station parking lot - left, existing conditions; right, proposed improvements



## CHARLES RIVER WATERSHED ASSOCIATION'S REPORT OF WHAT'S HAPPENING ON AND AROUND THE CHARLES



### Mystic River Collaborative Project, Chelsea/Everett/Revere

CRWA is undertaking an assessment of the Chelsea Creek sub-watershed (a drainage area within the watershed, where all the surface water flows to a particular point), including parts of Chelsea, Everett, Revere and East Boston, with the goal of improving water quality and access to the Creek. The assessment will include identification of priority subareas for restoration and key properties for redevelopment that could be designed to incorporate green infrastructure. CRWA is working in partnership with the Mystic River Watershed Association, Conservation Law Foundation, and



Chelsea Collaborative in Chelsea, Neighborhood of Affordable Housing in East Boston and La Comunidad in Everett to promote the joint goals of the Collaborative. The project was initiated in December 2008 and is funded through an anonymous grant.

### Building Blue Project, Franklin

Municipalities can meet existing (and emerging) environmental regulatory requirements while enhancing environmental health and increasing water resource sustainability, through promoting restoration at a sub-watershed level. CRWA is demonstrating this through work in coordination with the Town of Franklin to assess current environmental conditions and water functions, local water supply and infrastructure problems, and restoration goals in the Spruce Pond sub-watershed. The next phase of the project will evaluate a range of options for meeting the regulatory requirements while restoring the environment. CRWA will evaluate the options, develop a specific set of restoration recommendations for the sub-watershed area, and present this plan to the appropriate local decision-makers. Throughout the project, education for municipal officials and the public will, focus on nutrient studies for the Charles, the need to control polluted stormwater runoff, and the benefits of recharging stormwater into the ground locally.

## 10th Annual Earth Day Charles River Cleanup

Approximately 3,000 volunteers joined together on a beautiful Saturday morning to make the 10th Annual Earth Day Charles River Cleanup a great success - and the largest Cleanup yet! On April 25, volunteers from 140 different schools, businesses, neighborhoods, and clubs helped pick up litter at sites in 19 cities and towns in the watershed, gathering an estimated 20 tons of trash. Debris removed included thousands of cigarette butts and plastic bags, more than 30 tires, assorted car parts, a kiddie pool, and a kitchen sink.

A highlight of this year's event was the announcement of the 2008 Charles River Report Card grade by the U.S. Environmental Protection Agency: at the Cleanup kickoff, the EPA revealed the river's grade of B+. This grade, which has stayed steady for the past five years, indicates good water quality, though the river is still in need of improvement to be consistently safe for boating and swimming.

The Cleanup was sponsored by New Balance Foundation, The Cadmus Group, Mix98.5, Hyatt Regency Cambridge, and more than 40 local businesses and institutions. Check out CRWA's website for more information and a video of volunteers -

- by Rebecca Scibek Wickham

## 27th Run of the Charles Canoe and Kayak Race



On April 26, the annual Run of the Charles event drew thousands of spectators of all ages for an enjoyable sunny April afternoon along the Charles. The Run was one of two events that took place during CRWA's Weekend on the Charles, aimed at increasing Greater Boston's appreciation of the river. This year, nearly 1250 boaters registered to compete in the four levels of canoe and kayak races ranging from a 6 mile loop race to a 26 mile Pro Marathon, which began in Riverdale Park in Dedham and ended at Brighton's Artesani Park. Spectators at the finish line enjoyed a range of family-friendly environmental activities including

several informational booths, day long music, a raffle, and refreshments. This year's major sponsor, Boston Duck Tours, also made an appearance at the finish line with one of their tour boats.

The team of Rudnitsky and Kisner were the overall winners of this year's Pro Race, taking home the first place honor in the \$5,000 Professional Flatwater Canoe marathon. For the 7th year in a row, the Quinobequin Canoe club posted the winning title in the 24 mile race, finishing nearly 11 minutes faster than their time from last year. The Quagliata boat, paddling fastest in the Masters category, finished first in the 19 mile race. Graeme Rockett celebrated his fifth victory in the 9 mile race, and Wesley Echols finished the 6 mile race first.



-by CRWA Intern Katie Fisher

## Eco-Boat Trip for families

Over 100 people climbed aboard the Charles I Riverboat for one of our Eco Boat Trips during the finish line festivities at Herter Park. Children had an opportunity to conduct water testing experiments, participate in games that encourage environmental stewardship with a team from REI, and enjoy beautiful views of the river. CRWA's Eco Boat Trips were made possible by the Charles Riverboat Company, Massachusetts Water Resources Authority, and REI.

- by Leigh Heffernan



Children try their hand at water testing on the Eco-Boat Trip





C. Hudson

C. Hudson

T. Keppler

M. Kenney

A. Tanimoto

Top, Liberty Hotel volunteers on the Esplanade, Boston; bottom left, East End Neighbors with their pile of trash in Watertown; bottom center, boys with Brownie Troop 1347 in Bellingham; bottom right, CDM volunteers working in Cambridge.

## Proposed EPA and DEP Stormwater Regulations

CRWA, in cooperation with other local environmental organizations, supports both U.S. Environmental Protection Agency and MA Department of Environmental Protection's efforts to address stormwater runoff from upland and existing properties with large areas of pavement. In our comment letters on the regulations, CRWA suggested changes to both regulatory mechanisms to make them more cohesive, effective and easily enforced. Highlights include our encouragement of both agencies to expand the breadth of the proposed regulations by lowering the threshold for the amount of impervious area on a property requiring it to be subject to the regulations. Additionally, CRWA encouraged the two agencies to work together to simplify and clarify stormwater regulations at the federal, state and local levels.

### DONATE TO CHARLES RIVER WATERSHED ASSOCIATION

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone: \_\_\_\_\_

Email \_\_\_\_\_

Please make check payable to CRWA or charge to:

MC  Visa Card expires \_\_\_/\_\_\_/\_\_\_

Card # \_\_\_\_\_

Signature \_\_\_\_\_

- Headwater Society \$1000
- River Steward \$500
- River Friend \$100
- River Sponsor \$50
- Basic Membership \$35

Yes, I want to receive CRWA's twice monthly e-newsletter, the *River Current* (we do not sell email addresses).

I am interested in volunteering. Please contact me.

Please fill in completely and return to: CRWA, Attn: Membership, 190 Park Road, Weston MA 02493





**Charles River Watershed Association**  
190 Park Road  
Weston, MA 02493

## Upcoming Charles River Watershed Association Events

### *Champions of the Charles*

To Honor Douglas Foy

**Friday, October 2, 2009**

Community Rowing, Brighton

Celebrate Autumn Along the Charles  
at this Evening Gala

### **ANNUAL MEETING**

Join CRWA Members and Friends

**Wednesday, November 18, 2009**

Marriott Hotel, Newton

Celebrate CRWA's Accomplishments and the  
Presentation of our Annual Awards

*For more information or to purchase tickets, call 781-788-0007 x231 or visit [www.charlesriver.org](http://www.charlesriver.org)*

## Volunteer!

**Help pull invasive water chestnuts from the Charles River in Newton during the month of July. Form a group with neighbors or colleagues and choose your own time slot, or join us at one of these public events:**

Tuesday, July 7, 5:30-8pm

Saturday, July 11, 10am-2pm

Sunday, July 19, 10am-2pm

*For more information or to sign up, contact 781-788-0007 or [charles@crwa.org](mailto:charles@crwa.org)*