United States Environmental Protection Agency

This document is one of the project summaries from the EPA's Targeted Watershed Grants 2005 Annual Report published in December 2005. The reference number is EPA 840-R-06-001. You can find the entire document at **http://www.epa.gov/twg**.

EPA'S TARGETED WATERSHED GRANTS 2005 ANNUAL REPORT

December 2005

Targeted Watersheds

2003 Grantee

UPDATE

Charles River

MA

MAJOR ENVIRONMENTAL CHALLENGES

- High fecal coliform bacteria levels
- Water shortages
- Rapid development and urbanization

Cisterns help conserve water and reduce runoff.

PROJECT HIGHLIGHTS

The Charles River Watershed Association (CRWA) is committed to utilizing innovative approaches to reduce polluted discharges, increase recharge of rainwater, and restore fisheries. To help advance these restoration objectives, projects emphasize the use of flow trading, stormwater recharge, education, habitat, and research. To date, the association has:

- Installed fourteen 400-gallon, residential cistern-drywall water retention systems to allow homeowners to use stored rainwater for irrigation or other uses
- Conducted in-stream bacteriological monitoring, collected precipitation data, and implemented statistical computer models to predict water quality levels
- Continued to report water quality conditions by flying color-coded flags at boathouses during the summer recreational season
- Completed an economic analysis of flow trading in the basin and water banking model to determine subbasin water quantity deficits
- Developed a computer model of the Upper Charles River that simulates the water budget in terms of impervious areas, water consumption, drinking water withdraws, and other uses
- Helped launch stormwater mass media educational campaign

Blue flags fly over the Charles River when water quality is good.

"The Charles River Watershed Association has played a key role in improving the water quality of the Charles River for over two decades. We are seeing a cleaner Charles River every year."

– Ralph Boynton
Charles River Flagging Program volunteer