

Flagged by the Charles River Watershed Association

Oldest watershed group in U.S. hoists conditions for boaters

By Michelle Vaillancourt

On a recent summer day, the Charles River Basin is teeming with boating activity. Rowers slice through the water while a fleet of small sailboats tack lazily back and forth between the Boston and Cambridge shores. Amphibious duck boat tours introduce tourists to the river with a splash. On days like this, the river becomes an urban oasis that draws thousands of boaters.

Over the years, the Charles River has been plagued with poor water quality, trash and pollution. Today, the river is significantly cleaner, but on occasion, water quality conditions still reach levels that could pose a threat to public health.

To alert boaters to water quality conditions, the Charles River Watershed Association (CRWA) runs a flagging program now in its fifth season. "The program was initiated when the boating community asked CRWA to help ascertain the water quality of the river on a daily basis during the boating season," says Kathy Baskin, CRWA project manager.

Flags are posted daily in the summer months at four sampling sites. If a red flag is hoisted, bacteria levels in the water exceed state standards for safe boating. If

the samples do not exceed the state standard, a blue flag is flown. "On red flag days CRWA cautions boaters to wash immediately after they have been on the water," Baskin says.

Samples are taken two to three times a week in the lower section of the river, called the Charles River Basin, where most of the boating occurs. They are tested for fecal coliform bacteria, an indicator of human sewage and animal waste. Sample results are augmented by a predictive modeling computer program

that takes recent rainfall into account to estimate when bacteria levels are likely to exceed safe boating standards. To date,

the modeling program has been 85 percent accurate in its water quality predictions.



Courtesy of Charles River Watershed Association

As of mid-August, the association had recorded only one day where three out of the four sites monitored prompt-

ed a red flag event in the Charles River Basin, and a couple of days when red flags flew over just one of the sites, said Peggy Savage, environmental scientist for CRWA. She added that most red flag days occur after a heavy rain because storm drains and sewer systems overflow and flush pollutants into the river. CRWA research shows that the basin does not meet safe boating standards after a heavy rainfall about 13 percent of the time.

Established by a group of citizens in 1965, CRWA was founded to protect and enhance the Charles River and its tributaries years before federal water protection regulations were enacted. The river had suffered many years of abuse and was in a severely degraded condition. Landfills were caving into the river, drums and cars were dumped in tributaries, and water quality was very poor with several daily discharges of raw sewage.

Today the CRWA has more than 5,000 members and 13 staff, making it the largest watershed organization in the country.

Michelle Vaillancourt is a coastal steward and former member of the Gulf of Maine Council's Public Education and Participation Committee.