


# WATER... FROM Source TO Sea

an educator's  
newsletter  
from the  
Massachusetts  
Water  
Resources  
Authority



## It's time for MWRA's 28th Annual Poster/Writing Contest

### What are household hazardous products?

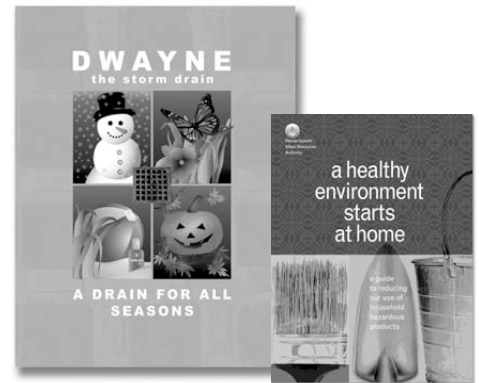


**HOUSEHOLD HAZARDOUS PRODUCTS** are products used around the house that contain chemicals that are hazardous to human and animal health or the environment. Examples include cleaners, polishes, anti-freeze, used motor oil, pesticides, batteries, paints, paint thinners, furniture strippers, and some personal grooming products. By definition, household hazardous products are consumer products that are toxic, corrosive, reactive, flammable, or explosive. Labels on a hazardous household product will contain the words caution, warning, or danger. The adverse human health effects from exposure to these products range from skin irritation and headaches, to respiratory ailments including asthma, to cancer, and in extreme cases, death. Many of these products should not be poured down drains, on the ground, or thrown away in the garbage.

### How do they affect Boston Harbor & Massachusetts Bay?

**MANY HOUSEHOLD HAZARDOUS PRODUCTS** such as acids, solvents, petroleum products, cleaners, clothing stain removers, and some pesticides can end up in Boston Harbor and Massachusetts Bay both through normal use and improper disposal. When these products are poured or rinsed down the drain in your home or garage, they travel through the sewer all the way to Deer Island Wastewater Treatment Plant which discharges into Massachusetts Bay. (If you live in Clinton or Lancaster and you are connected to the sewer, the wastewater from your house ends up at the MWRA's Clinton Wastewater Treatment Plant which discharges the treated wastewater into the South Branch of the Nashua River.) Although sewage treatment plants provide treatment to the wastewater they receive, the treatment process is not designed to remove certain substances in these products, such as heavy metals (copper, lead, zinc, etc.) or pesticides.

To meet various state and federal regulations, the Massachusetts Water Resources Authority regulates industries within its service area to minimize the amount of toxic substances coming into the treatment plant. Households are not regulated, yet they may discharge the same types of toxic materials that some industries do. Industrial discharges represent about 4% of the average daily flow to the Deer Island Treatment Plant



(industrial discharges represent about 3% of the total daily flow to the Clinton Wastewater Treatment Plant), while residential wastewater is about 33% of the average daily flow to the treatment plants. Even small amounts of pollution from homes can add up to a significant problem. Over time, heavy metals and pesticides can accumulate in marine organisms affecting their health and reproductive capabilities.



# Contest QA

(for teachers)

## Does the entire class have to participate?

While some teachers have their entire class participate, others make it optional or offer it as a means of extra credit. If you only have a few entries, we do ask that you still complete the Contest Registration Form and make sure the students fill out the Student Label and attach it securely to the back of the entry.

## Where do I get the Registration Form and Student Labels?

Information packets that include a flyer announcing the contest, a registration form, student labels, and a rules and regulations sheet should arrive at schools during the middle of January 2009. If you do not receive the information packet, please contact Jackie Floyd at [jackie.floyd@mwra.state.ma.us](mailto:jackie.floyd@mwra.state.ma.us) or 617-660-7973. You can also get information at the MWRA's website – [www.mwra.com](http://www.mwra.com). All contest information is listed on the webpage and all forms can be downloaded.

## If the entire class participates, should I sort through and only send in the best?

No, please send them all. This helps us know how many students took part in the contest and enables us to send a certificate of participation to every entrant.

## May I assist my students in any way?

We encourage class discussion to make sure the students stay on topic, but we ask that all work be done by the students themselves. We do allow teachers to assist students in grade K-2 with labeling and mounting of posters.

## Do posters have to be labeled and mounted?

No, but posters must be no smaller than 8.5" X 11" and no larger than 18" X 24".

## Must the writing entries be done on a computer?

No, they can be written neatly in ink. Writing entries should be no longer than 2 pages and use only one side of the paper.

## When is the contest deadline?

Contest entries must be postmarked by Wednesday, March 18, 2009. Early entries are encouraged and should be mailed to:

MWRA School Contest  
Deer Island Treatment Plant  
Reception/Training Building  
190 Tafts Ave.  
Winthrop, MA 02152

## What if I still have some questions?

Check out the MWRA's webpage at [www.mwra.com](http://www.mwra.com) – click on School Program. If you still have questions; please contact Meg Tabacsko, MWRA School Program Manager, at [meg.tabacsko@mwra.state.ma.us](mailto:meg.tabacsko@mwra.state.ma.us). If you do not have access to email, please call Meg at 617-660-7975.



## Boston Water & Sewer Commission's 2nd Chance Poster Contest for Boston School Children

We realize participating in a contest is often fun for the students but extra effort and work for the teachers. For this reason, the MWRA and Boston Water & Sewer Commission (BWSC) are teaming up for the third year to offer Boston students a "Second Chance" Poster Contest.

Any non-winning poster submitted to the MWRA's 28th Annual Poster Contest will be forwarded to BWSC for a "second chance" to win. BWSC will judge and recognize additional students for their work.

In addition to the Certificate of Participation awarded by the MWRA to every student who enters the MWRA Poster Contest, BWSC will return the posters to Boston schools along with certificates recognizing each of the participating schools and students. BWSC will further select individual posters for display in its lobby during National Drinking Water Week - May of 2009.

If one of your students' posters is selected for display, you will be notified prior to National Drinking Water Week and a consent form to be completed by the student and a parent/guardian will be sent to you. All displayed posters will likewise be returned at the end of National Drinking Water Week.

If you have questions or require additional information, Jeanne Richardson, BWSC-Director of Communication, can be reached at 617-989-7355 or at [richardsonje@bwsc.org](mailto:richardsonje@bwsc.org).

# Contest QA

(for students)

## What are the prizes?

First prize in each category is a \$100.00 gift check, 2nd prize is a \$50.00 check, and 3rd prize is a \$25.00 check. In the poster contest there are (3) categories K-2, 3-5, and 6-8. In the writing contest the (3) categories are 3-5, 6-8, and 9-12. In each of the (6) categories there is a 1st, 2nd, 3rd and (3) honorable mention winners. All winners, including honorable mention winners, are invited with their families to an Awards Ceremony at Deer Island on May 22, 2009.

## What information needs to be included with my poster and /or writing entry?

All posters and writing entries must have a completed Student Label attached to the back of the entry. Labels should be taped or glued to the back of the entry (not paper clipped or stapled).

## Where do I get a Student Label?

Ask your teacher for one or you can download Student Labels from the MWRA's webpage at [www.mwra.com](http://www.mwra.com) – click on School Program.

## May I enter both the poster and writing contest?

If you are in grades 3-8, you may enter both contests.

## How will I be notified if I win?

Your teacher will receive an email no later than April 17th to let him/her know if there are any winners in the class.

## QUESTIONS ABOUT THE POSTER CONTEST

### What is the topic for this year's poster contest?

All students in K – 8 are being asked to create a poster to help others realize a healthy environment starts at home. Your poster should show ways to reduce our use of household hazardous products or encourage proper disposal methods.

### What makes a good poster?

Make sure your poster is on topic. Don't try to include too many ideas or activities on your poster. A single message, clearly illustrated, is more effective. If you use lettering, make sure it can be read from across a room.

### Can friends work on posters together?

No, only individual work will be accepted.

### Do posters have to be drawings?

No, posters can be any form of art you choose to express the topic. You can create a collage with pictures cut out of a magazine, you can use pieces of fabric or you can create a drawing using markers, crayons, paints, or charcoal. We are

looking for unique and creative works of art. Posters must be no smaller than 8.5" X 11" and no bigger than 18" X 24". Be sure to attach a Student Label to the back of your poster.

### How will my poster be judged?

A panel of judges scores the posters on originality, clarity of message, creative and artistic use of materials, and quality of work.

## QUESTIONS ABOUT THE WRITING CONTEST

### What is the topic for this year's writing contest?

Students in grade 3-5 are being asked to write about what you would do if you saw a friend or neighbor putting something down a storm drain on your street. How would you explain to them that storm drains are designed to drain streets of rain or melting snow and should never be used for disposing items?

Students in grade 6-8 are being asked to write about ways you and your family can make sure household hazardous wastes don't end up down the drain.

High school students are being asked to write about how a safer alternative to a common household hazardous product can have a positive impact on water quality.

### What makes a good writing entry?

First, be sure your entry addresses the question. As good as a piece might be, if it isn't on topic, it can't win a prize. Then, use your creativity to make your entry stand out. The reader should remember your work because there was something unique about it. An essay can be just as creative as a poem or dialogue if it has a clear theme and develops it cleverly.

### Where can I get information about the contest topics?

You can find plenty of information throughout the MWRA's website. There are most likely newspaper and magazine articles at your local or school library on this topic. Also, talk with your relatives and friends. They may have some personal experiences or information that may be useful.

### Do I have to write my entry on a computer?

Writing entries may be written neatly in ink and can be no longer than two pages. Please use only one side of the paper and be sure to attach a Student Label securely to the back of your entry. Audio and video entries will not be accepted.

### How will my writing entry be judged?

MWRA staff will select the best entries in each category. Copies will be given to a judging panel, who will first read and rate them and then meet to decide the winners. Writing entries will be judged on factual accuracy, creativity, originality and persuasiveness.

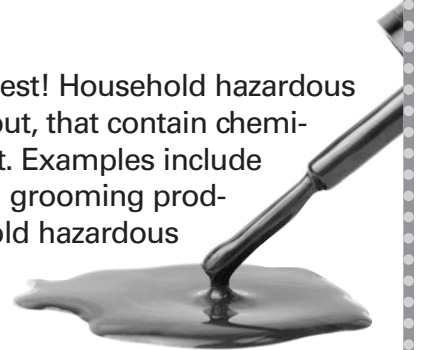


# A Healthy Environment Starts at

# HOME



Announcing the 28th Annual MWRA Poster/ Essay Contest! Household hazardous products are products used around the house, inside and out, that contain chemicals that are hazardous to human and animal health or the environment. Examples include cleaners, polishes, anti-freeze, used motor oil, paint, and some personal grooming products. These products should not be poured down drains. Many household hazardous products can end up in local water bodies, Boston Harbor and Massachusetts Bay both through normal use and improper disposal.

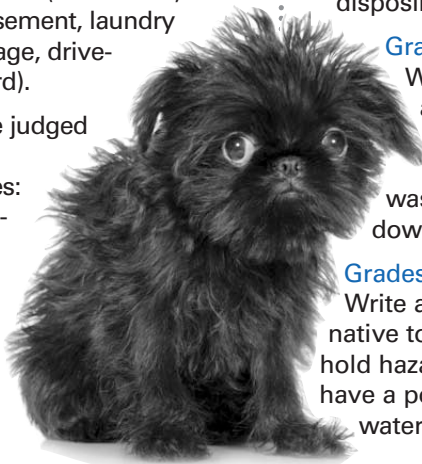


## Poster Contest

Create a poster to help others realize that a healthy environment starts at home. Your poster should show ways to reduce our use of household hazardous products or encourage proper disposal methods.

Your poster may focus in and/or around the house (the kitchen, bathroom, basement, laundry room, the garage, driveway or the yard).

Posters will be judged in three grade level categories: K-2, 3-5, and 6-8.



## Writing Contest

### Grades 3-5

Write about what you would do if you saw a friend or a neighbor putting something down a storm drain on your street. How would you explain to them that storm drains are designed to drain streets of rain or melting snow and should never be used for disposing items?

### Grade 6-8

Write about ways you and your family can make sure that household hazardous wastes don't end up down the drain.

### Grades 9-12

Write about how a safer alternative to a common household hazardous product can have a positive impact on water quality.

Writing entries will be judged in three grade level categories: 3-5, 6-8, and 9-12.

All entries must be postmarked by March 18, 2009.

The poster/writing contest is open to all schools located in the MWRA service area. To see if your school is eligible or to get additional information and to download forms, go to [www.mwra.com](http://www.mwra.com) and follow the link to School Program.



To help you with your poster and/or writing entry, go online to [www.mwra.com](http://www.mwra.com) to view A Healthy Environment Starts at Home – a guide to reducing our use of household hazardous products or contact Jackie Floyd at [jackie.floyd@mwra.state.ma.us](mailto:jackie.floyd@mwra.state.ma.us) or 617-660-7973 for a copy of the guide.

# WINTER 09 RESOURCE REQUEST FORM

CHECK OFF THE ITEMS YOU WOULD LIKE TO RECEIVE AND SEND COMPLETED FORM TO:

MWRA School Education Program, Deer Island Treatment Plant, 190 Tafts Ave., Winthrop, MA 02152

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

School: \_\_\_\_\_

School address: \_\_\_\_\_

City: \_\_\_\_\_ State/Zip: \_\_\_\_\_ Phone: \_\_\_\_\_

email address: \_\_\_\_\_

## Teacher Resources (one per school)

- BOSTON HARBOR PROJECT VIDEO  
28 minutes
- CLASSIC VIDEO IMAGES OF THE BOSTON HARBOR PROJECT  
2 VOLUME DVD SET
- BEST IMAGES OF THE BOSTON HARBOR PROJECT 1989-2002  
CD-ROM containing more than 500 images

## Teacher Resources (one per teacher)

- BAY STATE PLANTER KIT DATA RECORDING LOG
- CONTEST INFORMATION PACKET
- WATER QUALITY TESTING MANUAL
- WATER WATCHERS  
middle school water curriculum
- WATER WISDOM  
high school water curriculum
- DEER ISLAND PERIMETER WALK  
SCAVENGER HUNT/FIELD GUIDE

## Student Resources (indicate number needed)

- DWAYNE THE STORM DRAIN  
stormwater color/activity book
- BOOKMARKS  
one side depicts where your water comes from, the other side depicts where your wastewater goes
- A HEALTHY ENVIRONMENT STARTS AT HOME  
a guide to reducing our use of household hazardous products  
\_\_\_\_\_ English \_\_\_\_\_ Spanish
- ANNUAL DRINKING WATER CONSUMER REPORT - 2007  
2007 drinking water test results
- BAY STATE PLANTER KITS  
designed to demonstrate the use of slow-release fertilizer produced as the end product of the MWRA wastewater treatment process.
- PLEASE ADD ME TO THE MAILING LIST

## How to reach the MWRA School Program:

School Program Office: 617-660-7973  
School Program Fax: 617-660-7953  
Web address: [www.mwra.com](http://www.mwra.com) follow link to School Program

## For materials requests:

Jackie Floyd: 617-660-7973  
[jackie.floyd@mwra.state.ma.us](mailto:jackie.floyd@mwra.state.ma.us)

## MWRA's Field Based Water Quality Testing Program Workshop

Thursday,  
February 19, 2009  
at Deer Island  
Treatment Plant



To help middle and high school teachers bring important concepts related to water quality into their classrooms, the MWRA has developed a water quality testing program. It includes all the equipment needed for testing:

- Temperature
- pH
- Dissolved Oxygen (DO)
- Biochemical Oxygen Demand (BOD)
- Nitrates
- Total Dissolved Solids (TDS) and Salinity
- Turbidity
- Total Coliform Bacteria

During this “hands-on” workshop, you will have the opportunity to perform these tests. You will also receive a manual that contains background information, lesson ideas, procedures, data collection and reporting forms, suggestions for interpreting the results, and extension activities.

Workshop participants will be eligible to borrow the MWRA Water Quality Test Kits at no cost to use with their classes. Space is limited and advance registration is required. To register for the Water Quality Workshop, please email Meg Tabacsko at [megtabacsko@mwra.state.ma.us](mailto:megtabacsko@mwra.state.ma.us) or call 617-660-7975.