

DURHAM



1869  
CITY OF MEDICINE

# TAP INTO Quality

DEPARTMENT OF WATER MANAGEMENT

DURHAM



1869  
CITY OF MEDICINE

**CITY OF DURHAM**

*Department of Water Management*

101 City Hall Plaza  
Durham, NC 27701

[www.durhamnc.gov](http://www.durhamnc.gov)

COOPERATION &  
*Collaboration*



**Important** Drinking Water Information Enclosed!

**EN ESPAÑOL** Este folleto tiene información importante acerca de la calidad del agua que provee la Ciudad de Durham. Si necesita mayor información acerca del contenido de este folleto el personal del Centro Hispano, 201 W. Main Street, Suite 100, teléfono **687-4635**, puede ayudarlo.

## Dear Durham Water Customers,

On behalf of the Department of Water Management and the entire City, we would like to thank you for the cooperation and support that you provided as Durham and the entire region weathered the historic drought that finally diminished in the Fall of 2008. In the spirit of cooperation and through collaboration with our neighbors, city and county departments, community and business leaders, Durham implemented a variety of water restrictions that achieved significant reductions in water use (see page 2). Because of these efforts, we have titled this year's annual water quality report—Cooperation and Collaboration.

In addition to embracing the water conservation practices required by mandatory restrictions, citizens demonstrated a true understanding of the value of water and supported the implementation of a new tiered rate structure for single family residential customers. The tiered rate structure has five pricing levels; the more water used, the higher the price per unit. To help educate customers about the tiered rate structure, staff rolled out a public awareness campaign using a variety of new marketing tactics. Please visit [www.DurhamSavesWater.org](http://www.DurhamSavesWater.org) to learn more about the tiered rate structure and the 111 “I Love Tips” that promote lifelong water efficient and money saving behaviors.

Managing a water system is always a balancing act; we must maintain our focus on water quality and compliance while striving to provide cost effective service. This has been especially challenging with increased costs for the chemicals used in water treatment—costs that were further impacted by the gas shortage. Despite the challenges, we maintained 100 percent compliance with state and federal drinking water standards and reporting requirements during 2008. We are also on target to comply with new regulations on the horizon for 2012. To accomplish this, we are making major upgrades at the two drinking water plants to meet future disinfection by-products rules. The upgrades will also include a new Supervisor Control and Data Acquisition (SCADA) system which will monitor key process units and other operational structures electronically.

Over the next few months, we will be rolling out new programs and initiatives to better serve our customers. Among these are new year-round irrigation regulations and the first phase installation of our automated meter reading (AMR) systems. To stay abreast of these initiatives, we encourage you to visit either the [DurhamSavesWater.org](http://DurhamSavesWater.org) Web site or the City Web site at [www.durhamnc.gov](http://www.durhamnc.gov).

Again, we express our sincere thanks for your cooperation and collaboration during the last year and as we move forward.

Regards,



Don Greeley, Director



Vicki Westbrook, Deputy Director

### QUESTIONS?

Questions regarding the information in this report should be directed to Water Management staff at the Brown Water Treatment Plant, **560-4362**. For information on water conservation or to arrange a tour of facilities, call **560-4381**. Call **560-4411** for all billing questions. For information about City operations and services, contact **Durham One Call** at **560-1200**.

### NOTICE UNDER THE AMERICANS WITH DISABILITIES ACT

The City of Durham will not discriminate against qualified individuals with disabilities on the basis of disability. Anyone who requires an auxiliary aid or service for effective communications, or assistance to participate in a City program, service, or activity, should contact the office of Stacey Poston, Acting ADA Coordinator, Voice: 919-560-4197 x254, TTY: 919-560-4809; [Stacey.Poston@durhamnc.gov](mailto:Stacey.Poston@durhamnc.gov), as soon as possible but **no later than 48 hours** before the scheduled event.

# COOPERATION & *Collaboration*

The calendar year 2008 began in much the same way that 2007 ended – with lingering drought conditions and elevated concern for the region’s water supply. With a heightened sense of awareness of the importance and value of water, Durham water customers continued to cooperate and stepped up to the challenge of reducing usage which resulted in an overall decrease in system demand. Citizens embraced the water efficiency lifestyle changes promoted in the “Durham Saves Water” Campaign with the idea that simple changes in daily habits can conserve water, save money, and protect our precious natural resources. This was demonstrated by a dramatic drop in usage; for 2008, Durham customers used an average of 24.29 million gallons per day – Durham’s lowest annual daily average since 1992! Most restrictions were finally lifted in September of 2008, after almost a year of mandatory restrictions.

Throughout 2008, City staff collaborated with several of our neighboring water providers to develop regional approaches to water supply planning and drought/water shortage response. One effort formed the Regional Conservation Work Group (RCWG) with guidance from the Triangle J Council of Governments. Comprised of members from Apex, Cary, Durham, Orange Water and Sewer Authority and Raleigh, the RCWG evaluated the region’s methods of addressing both conservation and water shortage response. This

activity resulted in the adoption of similar year-round irrigation strategies (under normal conditions) and the development of a regional language for water conservation measures (see page 6). Further efforts of the group will improve the regional response to future drought events.

Another significant collaborative effort that began in 2008 was the formation of the Jordan Lake Partnership (JLP). This is a local government led initiative whose goal is to model regional cooperation in planning water supply to meet future needs. Durham is serving as the lead agency for this effort which includes Apex, Cary, Chatham County, Hillsborough, Holly Springs, Morrisville, Orange Water and Sewer Authority, Orange County, Pittsboro and Wake County. The JLP anticipates that additional partners – both upstream and downstream of Jordan Lake – will join this basin-wide planning effort in the coming year.

Although the worst of the drought seems to be behind us, drought conditions can return suddenly. Through cooperation and collaboration with water customers, civic and business groups, and neighboring water providers, Durham can work to ensure the sustainability of our water supply.



*Lake Michie*

# Durham water sources

## Tap Water Compliance History

In this 2008 edition of *Tap into Quality*, you will learn that the City of Durham's tap water had zero violations of any standards during the 2008 calendar year. The substances which were detected were all well below the levels allowed by the Environmental Protection Agency (EPA). The City is required to test for more than 100 different constituents in the drinking water, and the compounds listed in the tables on pages 4 and 5 represent just a fraction of the total number of required and voluntary analyses.

With historically high levels of organic materials in both of our water supply lakes as a result of the 2007-2008 drought, Durham did average higher than acceptable limits of Haloacetic Acids, a type of disinfection byproduct, in early 2009. The City has already taken a number of steps to optimize the water treatment process and has been successful in significantly lowering this byproduct level in the water system. Customers should be reassured that they were at minimal risk of harmful health effects. To put this in perspective, one would need to drink two liters of water with elevated levels of these compounds every day for 70 years to show any negative health effects.

## Durham Water Sources

The sources of drinking water – both tap and bottled – include rivers, lakes, streams, ponds, reservoirs, springs and wells. Durham is fortunate to have two high quality sources of raw (untreated) water. Lake Michie, built in 1926, reliably supplied approximately 19 million gallons per day (MGD) for over 80 years. Driven by rapid development in the mid 1980s, the City constructed the Little River Reservoir and Dam in 1988 to provide an additional 18 MGD of water, for a combined capacity (safe yield) of 37 MGD. In addition to having two water supplies, Durham also has two water treatment plants, the Williams Water Treatment Plant (located on Hillandale Road) and the Brown Water Treatment Plant (located on Infinity Road). Water can be transferred from the two supply lakes to the two treatment plants by gravity flow, hydropower or electric power. Terminal reservoirs at each of the water treatment plants hold about a two-to-three day supply of raw water. In 2002, the City of Durham obtained an allocation of approximately 10 million gallons of water per day from Jordan Lake, another local high quality water source. Future plans call for building a raw water intake at Jordan Lake; however current access is via the Town of Cary's water system. The City may use the Teer Quarry during water shortages.

## Source Water Information Available

The North Carolina Department of Environment and Natural Resources (DENR), Public Water Supply (PWS) Section, Source Water Assessment Program (SWAP) conducted assessments for all drinking water sources across North Carolina. The purpose of the assessments was to determine the susceptibility of each drinking water source (well or surface water intake) to Potential Contaminant Sources (PCSs). The results of the assessment are available in SWAP Assessment Reports that include maps, background information and a relative susceptibility rating of Higher, Moderate or Lower. Since these reports are over 100 pages each, DENR requires only that water providers present the basic information from the report in each year's water quality report.

The relative susceptibility rating of each source for the City of Durham was determined by combining the contaminant rating (determined by the number and location of PCSs within the assessment area) and the inherent vulnerability rating (i.e., characteristics or existing conditions of the watershed and its delineated assessment area). The assessment findings are summarized in the table below:

| SUSCEPTIBILITY OF SOURCES TO POTENTIAL CONTAMINANT SOURCES (PCSs) |                       |                  |
|---|-----------------------|------------------|
| SOURCE NAME   | SUSCEPTIBILITY RATING | SWAP REPORT DATE |
| Little River Reservoir  | Moderate              | March 18, 2005   |
| Lake Michie   | Moderate              | March 18, 2005   |

The complete report for the City of Durham may be viewed on the Web at: [www.deh.enr.state.nc.us/pws/swap](http://www.deh.enr.state.nc.us/pws/swap). Or you may order a printed copy of this report by written request to: Source Water Assessment Program – Report Request, 1634 Mail Service Center, Raleigh NC 27699-1634, or emailing a request to [swap@ncmail.net](mailto:swap@ncmail.net). Please indicate the system name (City of Durham), PWSID (03-32-010), and provide your name, mailing address and phone number. If you have any questions about the report please contact the Source Water Assessment staff by phone at 919-715-2633.

It is important to understand that a susceptibility rating of “higher” does not imply poor water quality, only the systems' potential to become contaminated by PCSs in the assessment area. The City's “moderate” rating indicates a lesser potential for contamination.

# 2008 CITY OF DURHAM WATER QUALITY SUMMARY

| SUBSTANCE AND UNIT OF MEASUREMENT  | MAX. LEVEL DETECTED AND RANGE   | VIOLATION YES/NO | MAX. LEVEL ALLOWED (MCL) | IDEAL GOAL (MCGL) | POTENTIAL SOURCE(S) OF SUBSTANCE  |
|--|---|------------------|--------------------------|-------------------|---|
| <b>REGULATED AT THE TREATMENT PLANTS</b>   |   |                  |                          |                   |   |
| <b>Fluoride</b><br>mg/L  | 1.01<br>(0.88 – 1.01)   | NO               | 4.0                      | 4.0               | Naturally occurring mineral; also added to promote dental health                            |
| <b>Nitrate</b><br>mg/L (as Nitrogen)   | 0.80<br>(<0.10 – 0.80)  | NO               | 10.0                     | 10.0              | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| <b>Turbidity</b><br>NTU  | 0.14<br>(0.09 – 0.14)   | NO               | TT                       | N/A               | Soil runoff   |
| <b>Turbidity, % of monthly samples</b> ≤ 0.3 NTU   | 100%  | NO               | 95%                      | 100%              |   |
| <b>Total Organic Carbon, mg/L</b><br>Results show the range of TOC in both source and treated water. Durham's processes remove more than the required 50%. | Average Removal<br>56%<br>Source 11.5<br>(2.9 – 11.5)<br>Treated 4.5<br>(1.1 – 4.5) | NO               | TT<br>50%<br>removal     | N/A               | Naturally present in the environment  |
| <b>Alpha emitters</b> pCi/L<br>Samples were collected and analyzed February 2008.  | None detected<br>no range   | NO               | 15                       | 0                 | Erosion of natural deposits   |
| <b>Beta/photon emitters</b> pCi/L<br>Samples were collected and analyzed February 2008.  | None detected<br>no range   | NO               | 50                       | 0                 | Decay of natural and man-made deposits  |
| <b>REGULATED AT THE CUSTOMER'S TAP</b>   |   |                  |                          |                   |   |
| <b>Copper, mg/L</b>  | < 0.05<br>(90th Percentile)   | NO               | AL=1.3                   | 1.3               | Corrosion of household plumbing systems   |
| <b>Lead</b><br>mg/L  | < 0.003<br>(90th Percentile)  | NO               | AL=0.015                 | 0                 | Corrosion of household plumbing systems   |
| <b>REGULATED IN THE DISTRIBUTION SYSTEM</b>  |   |                  |                          |                   |   |
| <b>Chloramines</b><br>mg/L (as Cl <sub>2</sub> )   | 2.9 RAA<br>(Running Annual Average)   | NO               | MRDL<br>4.0              | MRDLG<br>4.0      | Water additive to control microbes  |
| <b>Total Coliform Bacteria</b><br>(as a percent)   | 0%<br>positive  | NO               | < 5%<br>positive         | 0%<br>positive    | Naturally present in the environment  |
| <b>Five Haloacetic Acids</b><br>(5HAA) µg/L  | 57.6 – System<br>Average<br>(2.8 – 110.0)   | NO               | 60                       | 0                 | By-product of drinking water disinfection   |
| <b>Total Trihalomethanes</b><br>(TTHM) µg/L  | 71.2 – System<br>Average<br>(26.0 – 120.0)  | NO               | 80                       | 0                 | By-product of drinking water disinfection   |
| <b>UNREGULATED SUBSTANCES</b>  |   |                  |                          |                   |   |
| <b>Chloroform</b><br>µg/L  | 120.0<br>(26.0 – 120.0)   | NO               | NR                       | NR                | Component of TTHMs  |
| <b>Bromodichloromethane</b><br>µg/L  | 9.0<br>(3.0 – 9.0)  | NO               | NR                       | NR                | Component of TTHMs  |
| <b>Dichloro-acetic Acid</b><br>µg/L  | 37.0<br>(13.0 – 37.0)   | NO               | NR                       | N/A               | Component of 5HAAs  |
| <b>Trichloro-acetic Acid</b><br>µg/L   | 59.0<br>(17.0 – 59.0)   | NO               | NR                       | N/A               | Component of 5HAAs  |
| <b>Sodium</b><br>mg/L  | 32.1<br>(19.9 – 32.1)   | NO               | NR                       | 20<br>DWEL        | Naturally occurring element in soil and water   |
| <b>Sulfate</b><br>mg/L   | 57.0<br>(24.0 – 57.0)   | NO               | NR                       | 250               | Naturally occurring mineral in soil   |

The City of Durham (PWSID # 03-32-010) routinely monitors for over 150 contaminants in your drinking water according to Federal and State laws. The table on page 4 lists all the drinking water contaminants that were *detected* during **testing conducted from January 1 through December 31, 2008**. The EPA or the State requires water providers to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, while representative of the water quality, is more than one year old.

## PHYSICAL AND MINERAL CHARACTERISTICS

| SUBSTANCE, UNIT OF MEASUREMENT                 | ANNUAL AVERAGE |
|--|----------------|
| pH, standard units - range . . . . .           | 7.5 – 7.7      |
| Alkalinity, mg/L . . . . .                     | 27.0           |
| Calcium, mg/L . . . . .                        | 5.3            |
| Chloride, mg/L . . . . .                       | 16.3           |
| Conductivity, micromhos/cm . . . . .           | 201.0          |
| Hardness - Calculated, mg/L . . . . .          | 27.0           |
| Hardness - EDTA, mg/L . . . . .                | 27.0           |
| Orthophosphate, mg/L (as phosphorus) . . . . . | 1.12           |
| Potassium, mg/L . . . . .                      | 2.3            |
| Total Solids, mg/L . . . . .                   | 133.0          |
| Zinc, mg/L . . . . .                           | 1.02           |

## KEY TO ABBREVIATIONS IN TABLE

|              |   |
|--------------|---|
| <b>mg/L</b>  | milligrams per liter, or parts per million  |
| <b>MCL</b>   | Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water   |
| <b>MCLG</b>  | Maximum Contaminant Level Goal; the level of a contaminant in drinking water below which there is no known or expected risk to health   |
| <b>MRDL</b>  | Maximum Residual Disinfectant Level; the highest level of a disinfectant allowed in drinking water  |
| <b>MRDLG</b> | Maximum Residual Disinfectant Level Goal; the level of a drinking water disinfectant below which there is no known or expected risk to health   |
| <b>AL</b>    | Action Level; the concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow. Action Levels are reported at the 90th percentile for homes at greatest risk |
| <b>TT</b>    | Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water   |
| <b>µg/L</b>  | micrograms per liter, or parts per billion  |
| <b>pCi/L</b> | Picocuries per liter is a measure of the radioactivity in water   |
| <b>NTU</b>   | Nephelometric Turbidity Units; measures the clarity or cloudiness in water  |
| <b>N/A</b>   | Not Applicable  |
| <b>NR</b>    | Not Regulated   |
| <b>&lt;</b>  | Less Than   |
| <b>DWEL</b>  | North Carolina guidance Drinking Water Equivalent Level   |

**Special Note:** MCLs are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having a potentially adverse health effect.

## Special Concerns

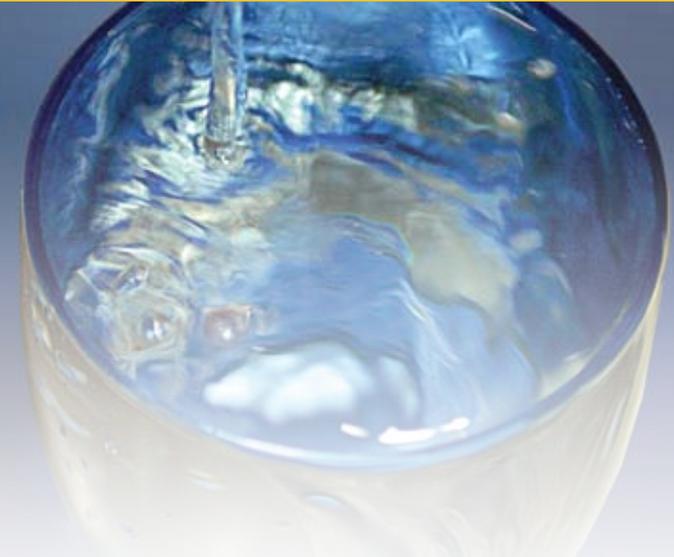
Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial organisms are available from the **Safe Drinking Water Hotline at 800-426-4791**.

## What is Cryptosporidium?

*Cryptosporidium* (*Crypto*) is a microbial parasite which occurs naturally in rivers and lakes throughout the United States and comes from animal wastes. Controlling and minimizing development and animal activities in our watershed reduces the occurrence of *Crypto* in raw water. This microscopic organism, while a concern for water providers, is typically very effectively removed by the water treatment process combination of filtration, sedimentation and disinfection. However, when ingested, *Crypto* can cause fever, diarrhea, and other gastrointestinal symptoms. As part of the EPA's Information Collection Rule, Durham monitored both supply lakes for *Crypto*. In the fall of 2006, Durham began monthly monitoring for *Crypto* at each of our water supply lakes to ensure the continuing safety of the raw water, as well as to comply with the EPA Long Term Two Enhanced Surface Water Treatment Rule (LT2ESWTR). The results of the monitoring will determine whether or not additional treatment is needed to remove these parasites from the drinking water. *Crypto* has not been detected in previous monitoring events.

## Community Participation

How can you be involved in decisions regarding Durham's water system or other City issues? Citizens are welcome to attend regularly scheduled meetings of Durham's City Council. Council meetings are held the first and third Monday of each month at 7 p.m. City Council members also have regular work sessions to prepare for Council meetings. These sessions occur on Thursdays – two weeks prior to each regular Council meeting. Work sessions are held at 1 p.m. in the Council's Committee Room on the second floor of City Hall. Council meetings are held at City Hall in the Council Chambers on the first floor. Check the City's Web site to confirm meetings at [www.durhamnc.gov](http://www.durhamnc.gov). City Hall is located in downtown Durham at 101 City Hall Plaza.



## *Durham's New Water Efficiency Requirements*

The City of Durham has adopted new requirements to help make our community a more sustainable place to live. These watering requirements are consistent with irrigation schedules in most of our neighboring communities.

Landscape irrigation makes up a large portion of our consumption, particularly during the warmer months of the year. In fact, irrigation during summer months can increase demand on the treatment plants between 20 and 40 percent. By improving the efficiency of our irrigation practices, we can reduce consumption, save money, and preserve this precious resource.

The most significant aspect of the new requirements is a specific irrigation schedule. The new schedule will allow customers to irrigate their landscapes up to three days per week, based on their address.

- Customers with odd-numbered street addresses may spray irrigate only on Tuesdays, Thursdays and Saturdays.
- Customers with even-numbered street addresses may spray irrigate only on Wednesdays, Fridays and Sundays.
- No spray irrigation is permitted between 10 a.m. and 6 p.m. on any day.
- Hand watering and drip systems are NOT limited in any way.

Simply because you may water three days per week, does not mean you should. It's important to evaluate the needs of your landscape and adjust the frequency of watering based on what will keep your landscape thriving. In many cases, just once per week may be sufficient for established landscapes.

In addition to the year-round irrigation schedule provided by these requirements, new irrigation systems must be equipped with properly operating rain or soil moisture sensors in appropriate locations to prevent irrigation during rain events or when there is sufficient moisture in the ground for plant health and survival. Existing automated irrigation systems must be retrofitted with moisture or rain sensors by November 30, 2009.

The City has also adopted requirements to help eliminate water waste. These rules prohibit excessive run-off as a result of irrigation, incorrectly positioned spray-heads, and allowing leaks to go unrepaired. By limiting the amount of water that is wasted, Durham can help to conserve the existing supply and help ensure that wise water use becomes a part of every day life.

For more information on these requirements, and for more tips on additional ways to use water wisely, visit [www.DurhamSavesWater.org](http://www.DurhamSavesWater.org).

### **How does water travel?**

As water travels over the surface of the land or through the ground, minerals and other materials are dissolved naturally. Water can also pick up substances that are the result of animal or human activity. Source water may contain microbial contaminants, such as viruses and bacteria; inorganic contaminants such as salts and metals; pesticides and herbicides from agriculture or urban run-off; organic chemicals from industrial processes or run-off; and radioactive contaminants which can be naturally occurring.

### **How is Durham's water treated?**

Both the Williams Water Treatment Plant (built in 1927, current capacity of 22 MGD) and the Brown Water Treatment Plant (built in 1977, current capacity of 30 MGD) operate using optimized conventional water treatment processes. At the water treatment facilities, raw water is mixed with caustic to adjust the pH and ferric sulfate to coagulate particles. After mixing, the water flows into settling basins where the particles stick together (coagulation), become heavy, and settle to the bottom of the basins (flocculation). After disinfection through chloramination, the clearer water flows through filters, removing the remaining particles. Fluoride is then added prior to distribution to our customers.

### **What can you expect of your Drinking Water?**

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration establishes regulations for contaminants in bottled water that must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

## PUBLIC EDUCATION:

# Water Heroes

Each year, the Department of Water Management sponsors a water conservation poster contest for local students, grades K through 8. The theme for 2008 was Water Heroes. Water Management received over 400 posters, proving that Durham's students are indeed water heroes in their own right! Congratulations to our 2008 winners:

### GRADES K - 2

|           |                 |           |                        |
|-----------|-----------------|-----------|------------------------|
| 1st Place | Annie Chen      | 2nd Grade | Forest View Elementary |
| 2nd Place | Bailey Hutchins | 2nd Grade | Hope Valley Elementary |
| 3rd Place | David Scott     | 2nd Grade | Hope Valley Elementary |

### GRADES 3 - 5

|                 |                 |           |                            |
|-----------------|-----------------|-----------|----------------------------|
| 1st Place       | Edie Evans      | 4th Grade | Durham Academy             |
| 2nd Place       | Madeleine Samet | 4th Grade | Durham Academy             |
| 3rd Place (tie) | Ryan Samet      | 4th Grade | Durham Academy             |
| 3rd Place (tie) | Marlen Valencia | 5th Grade | G. Watts Montessori Magnet |

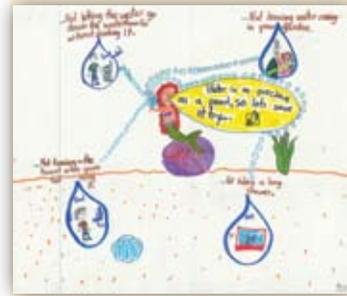
### GRADES 6 - 8

|           |                                |           |                          |
|-----------|--------------------------------|-----------|--------------------------|
| 1st Place | Cameron Walsh                  | 6th Grade | Carrington Middle School |
| 2nd Place | Stella Jayala & Brenea Tillman | 6th Grade | WG Pearson Magnet Middle |
| 3rd Place | Clarice Baker                  | 6th Grade | WG Pearson Magnet Middle |

Additional congratulations go to those students who also won at the statewide Water Conservation poster contest, sponsored by the NC American Water Works – Water Environment Association. Both Edie Evans and Cameron Walsh won First Place for their grade divisions. Annie Chen, Madeleine Samet, Stella Jayalla and Brenea Tillman won Second Place for their grade divisions. Marlen Valencia and Clarice Baker won Third Place for their grade divisions.

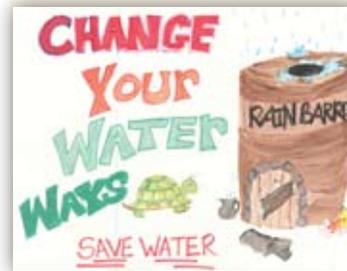
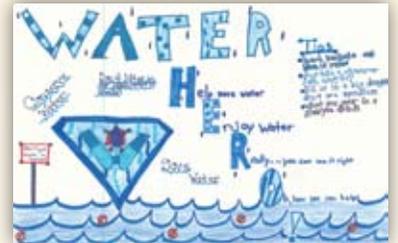
### Lead and Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Department of Water Management is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead) or the City's Lead Information page at [www.durhamnc.gov/departments/wm/lead.cfm](http://www.durhamnc.gov/departments/wm/lead.cfm).



Annie Chen  
1st Place,  
Grades K-2

Edie Evans  
1st Place  
Grades 3-5



Cameron Walsh  
1st Place  
Grades 6-8

### Education Programs

The department has an ongoing public education and outreach program that covers a wide variety of topics, from conservation to water quality to careers in the field. Our program seeks to provide the community with important and timely tips and information about drinking water and to make sure customers understand the significance of the work the Department of Water Management does. Staff participates in a number of city-wide events throughout the year such as the Durham Earth Day Festival and CenterFest, as well as smaller events such as the Parks and Recreation Community Days. Additionally, staff provides presentations and facility tours to groups of many ages.

In 2008, the department launched a new, Web-based phase of its education program encouraging residents to curb water use, save money and conserve the City's water supply. The new phase employs new media tactics, including maintaining a presence on popular social networking sites such as MySpace and Facebook, and video-sharing site YouTube. Citizens are encouraged to join our online communities—search for keyword “Durham Saves Water” on Facebook, YouTube, MySpace, Twitter, and RSS our blogs.