The household hazardous wastes in and around your home can affect your family and pets and can be toxic to fish and wildlife. An average Georgia household generates an estimated 20 pounds of household hazardous wastes each year. That's a total of 62 million pounds – enough to fill 1,550 tractor trailers every year!

Preventing a generation of leftovers is the best way to solve the problem. Sharing the tips in this brochure with your friends to help them prevent household hazardous products from becoming wastes and potential pollutants in our streams is key.

Hazardous products include such items as:

- Paints, stains and sealers
- Used motor oil and antifreeze
- Paint strippers and paint thinners
- Cleaning agents and solvents
- Drain and oven cleaners
- Fertilizers and pesticides
- Gasoline, kerosene and propane
- Batteries
- Mercury thermometers, thermostats and fluorescent lamps
- Pool chemicals

STORM WATER & you

This brochure is one of a series dedicated to raising awareness of pollution prevention. This brochure was created through a partnership between the Clean Water Campaign and the Pollution Prevention Assistance Division (P2AD) of the Georgia Department of Natural Resources.

The disposal recommendations in this brochure do not apply to wastes generated by businesses.

P2AD

7 Martin Luther King, Jr. Drive Suite, 450
Atlanta, Georgia 30334
www.p2ad.org

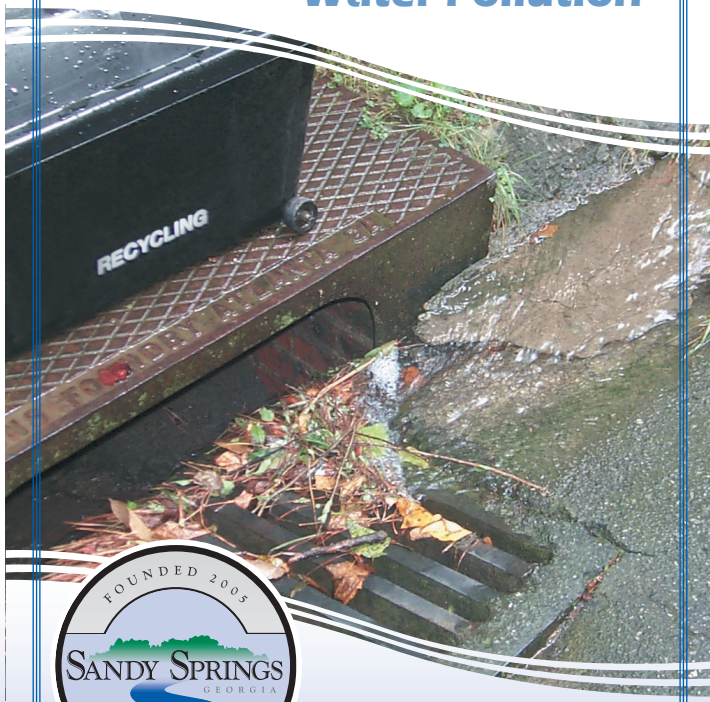
CLEAN WATER CAMPAIGN
SOLUTIONS TO STORMWATER POLLUTION

Clean Water Campaign
40 Courtland Street, NE
Atlanta, Georgia 30303
www.cleanwatercampaign.com

SANDY SPRINGS GEORGIA

Household Solutions for
Preventing Water Pollution from Hazardous Wastes

"Be A Solution to Water Pollution"



FOUNDED 2005 SANDY SPRINGS GEORGIA HONEST EFFICIENT RESPONSIVE

City of Sandy Springs
7840 Roswell Road, Building 500
Sandy Springs, GA 30350

770.730.5600
ANSWERING CALLS 24 HOURS A DAY, SEVEN DAYS A WEEK
WWW.SANDYSPRINGSGA.ORG

Follow and share these tips for reducing, recycling and disposing of different types of hazardous materials in your home.

Also remember that fertilizers, pesticides, oil and other pollutants from your yard and driveway can be washed into a storm drain and carried to a nearby stream or lake.

AUTOMOBILE

- Never dump vehicle fluids on pavement, the ground or down the storm drain.
  Collect and recycle motor oil, oil filters and other automobile fluids at vehicle service centers or parts stores listed at 1-800-CLEANUP and Earth911.com.
- Wash your vehicle at a professional car wash facility. This way the wastewater will be treated instead of possibly becoming a pollutant in a nearby steam. If you decide to wash your car at home, use a low or non-phosphate soap and wash your vehicle in a grassy area instead of on pavement.
- Regularly tune your car and fix leaks.

BATTERIES & MERCURY CONTAINING PRODUCTS

- Use rechargeable batteries instead of alkaline disposables. Recycle rechargeable batteries at the sites listed at 1-800-8BATTERY.
- Buy digital thermometers instead of mercury thermometers.
- Replace a mercury thermostat with a programmable, digital thermostat.

LIMITING HAZARDS FROM YOUR HOUSEHOLD

- Purchase non-hazardous or the least hazardous products for the job. As a general rule, a product with "CAUTION" on the label will be less hazardous than a product labeled "WARNING." The most potentially hazardous product is labeled "DANGER" or "POISON."
- Don't be tempted by a "buy one get one free" deal. It will probably result in having to manage twice as much hazardous waste.

LAWN CARE

- Use electric-powered lawn equipment instead of gas-powered whenever possible.
- Since it's easy to create leftovers by overestimating the gasoline necessary for a mowing season, plan to make a second purchase of a lesser amount to finish the season.
- Help fertilize your lawn by mowing 1/3 of the total grass height only and leaving the clippings on the lawn (mulching mowers and mowers with sharp blades work best).
- Use pesticides and herbicides sparingly and only when all else fails.
  - Plant native plants since they can survive without extra fertilizers, pesticides and water.
  - Pull weeds by hand or with a weeding tool.
  - If pesticides are necessary, spot treat weeds instead of applying to the whole area.
  - Pesticides/fungicides/herbicides: Use as directed and dispose of leftovers properly by donating it to a local gardening club or taking it to a collection site. As a last resort, stir into concrete mix until solid and dispose of in the trash.

PAINT

- Use latex paint instead of oil-based paint. This also eliminates the need for paint thinner.
- When painting a large area, buy a little less than you think you will need. Once the job is well underway, you will have a better idea of how much more is required. This way you can plan to have enough for touch ups, but avoid gallons of leftover paint.
- Instead of buying methyl ethyl ketone (MEK) or xylene for stripping paint, do as much as possible with sandpaper, and buy citrus oil stripper if needed.

Did you know Georgia households waste approximately four million gallons of paint each year?

- Paint/stain/varnish/sealer: If you have leftovers, find someone who will use them or take them to a collection site (if available). As a last resort, make the leftovers into a solid by mixing them with equal parts cat box litter and dispose of it in the trash.
- When preparing your house for painting, collect paint chips and dispose of them in the trash. If left on the ground, they may wash into a storm drain and be carried to a nearby stream.

THERE ARE TWO PRIMARY WAYS TO REDUCE HOUSEHOLD HAZARDOUS WASTES:

1. Think Prevention First!

2. Then, Recycle and Dispose of Wastes Properly!

For more information on HAZARDOUS WASTES, a list of recycling sites and local contacts, call 1-800-CLEANUP or go to Earth911.com. More resources can also be found at www.p2ad.org and www.cleanwatercampaign.com.

STORM WATER & you

RECAP:

HOW CAN I PROTECT BUFFER ZONES AND STREAM HEALTH ON MY PROPERTY?

- Never mow to the edge of a stream or lake; let the buffer develop naturally.
- Plant appropriate native vegetation and cuttings in the buffer zone.
- Don't dump anything in a stream, including grass clippings and other yard waste. Try home composting instead.
- Keep the water body clean by removing trash.
- Leave natural woody debris in a stream. It provides habitat and food for aquatic communities.
- Use pesticides and fertilizers sparingly in your yard and not at all in the buffer.
- Keep septic systems in good working order to prevent contaminated runoff.
- Don't change the course of a stream or try to use rocks or other materials to stop stream bank erosion yourself. You can do more harm than good.

INCREASED PROPERTY VALUE

HOW DOES MAINTAINING OR IMPROVING A STREAM INCREASE PROPERTY VALUE?

Studies have shown that:

The appraisal value of houses with natural streams is three times higher than those with channelized streams.

The closer a property is to a natural area, the higher the value.

Sixty percent of suburban residents enjoy wildlife viewing and are willing to pay a higher price for properties that are attractive to wildlife.

WHO IS RESPONSIBLE FOR WHAT?

Every stream has two components: the water flowing in it and the land beneath and around it.

Private individuals own the land that forms the stream channel on their property. However, because it is considered a "public good," the water in the stream is owned by the State of Georgia, or all of us! This means that property owners can use the water, but not in ways that infringe on the rights of others.

What many property owners may not realize is that "using" water properly also depends on what they do on their land. If, for example, a landowner decides to armor the stream bank, culvert the stream in a pipe, remove natural bed materials or fill in a ravine, these land alterations can negatively affect:

- How the stream water flows;
- What the water contains;
- Erosion rates downstream;
- The value of the property that was "protected" or "improved"; and
- Whether the stream's inhabitants are healthy, or can even exist.

The landowner is ultimately responsible for any resulting changes downstream.

CONTACTS & REFERENCES

These are great places to start learning more!

RAIN GARDEN & RAIN COLLECTOR INFO:

http://www.lowimpactdevelopment.org/raingarden_design/links.htm

http://www.lowimpactdevelopment.org/raingarden_design/downloads/BuildRainGarden.pdf

STREAM BUFFER STEWARDSHIP:

http://www.cwp.org/Resource_Library/Restoration_and_Watershed_Stewardship/residential.htm#factsheets

http://www.cobbswcd.org/images/reveg_guide_06.pdf

LAND DISTURBANCE PERMITS/ CODES & ORDINANCES:

http://www.sandyspringsga.org
(Community Development)

Always secure proper permits prior to beginning your project.

PLEASE PICK UP THAT DOG POOP!

WHAT SHOULD YOU DO WITH THE WASTE YOU PICK UP?

There is no perfect answer, but here are a couple options:

1. Flush it down the toilet.
2. Put it in a plastic bag and throw it in the garbage can (just make sure the bag doesn't have any holes and it is tied tightly.)

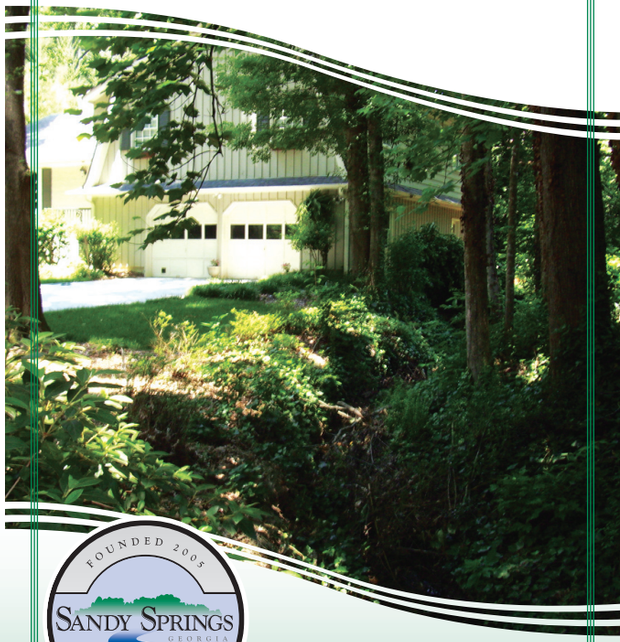
WHY SHOULD YOU PICK IT UP?

Pet waste left behind may be washed into waterways by rain. As the waste decays, it uses oxygen, releases excess nutrients that encourage weed and algae growth and, sometimes, carries disease-causing organisms, that make water unsafe for swimming or drinking.

SANDY SPRINGS
GEORGIA

Introduction to Stream Buffer Management

What Can You Do to Care for Stream Buffers?



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BENEFITS OF STREAM BUFFERS

Do you know why stream buffers are so important? Stream buffers, also known as riparian buffers, are bands of vegetation bordering a body of water that play a crucial role in promoting public health by protecting water quality. The type of vegetation in the buffer depends upon the climate and buffers the stream from anything that flows into it – polluted water, eroding soil or toxic chemicals. Many fish species need cool water, and streamside vegetation provides shade to keep streams cool. Leaves falling into the stream provide food for insects that fish eat as well as places for fish to hide from predators. Roots help stabilize stream banks and keep dirt from washing into streams. Plants on stream banks also provide shelter for wildlife as they drink from waterways.

PLANNING AND CREATING A HEALTHY BUFFER ZONE

A minimum buffer width of 75' is required by the City of Sandy Springs. The buffer zone should be thought of in layers moving from the stream to the house and should be ordered: trees, shrubs, ground covers/grasses, then maintained lawn. It is helpful to sketch out a design to determine how many plants are needed. You can start your plan by drawing where you would like to plant grasses, shrubs and trees, without worrying about the exact species at this stage. Do consider the size (at maturity) of the plants you would prefer, however. Generally, you should plant ground covers 1-3' apart, shrubs 3-5' apart, small trees (up to 25' tall at maturity) 15' apart and larger trees 25' apart.

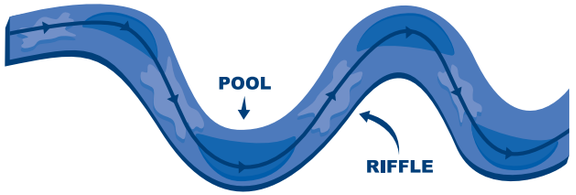
You will want to group some plants together to provide dense vegetation, better habitat and more storm water filtration at maturity. Some trees should be planted near the water's edge, but re-vegetation at the water's edge should be allowed to occur naturally. If you want to provide a path for access to the water, it should be as narrow as practical and covered with mulch or other porous material to minimize erosion.

If you want to maintain a view of the water, you can create a "view corridor" of low growing vegetation in a selected area, while still maintaining an effective buffer.

HOW STREAMS WORK

In Sandy Springs, undisturbed streams are composed of alternately spaced, deep and shallow areas called pools and riffles. Pools are deep areas that often contain fine materials such as sand, and these are a perfect resting spot for fish. Riffles are shallow, fast moving areas that often contain larger materials like cobbles and boulders. These areas provide important habitat for small aquatic animals and bugs, as well as areas for fish spawning. Another important component of streams is the floodplain. Active floodplains provide critical functions to the community and are essential for healthy streams because they:

- Reduce downstream flooding by storing excess storm water;
- Reduce pollution by allowing sediment, bacteria and fertilizers to settle out and be utilized by plants;
- Recharge and filter groundwater so streams can maintain flow in dry weather; and
- Reduce stream bank erosion by relieving energy in the channel.



WHY DO STREAMS MEANDER?

It's a balancing act. All streams transport water along with bed materials like soil and rocks. By meandering, streams can balance the work involved in carrying the bed materials and the energy of transporting the water.

HOW MUCH WILL A STREAM MEANDER?

The size of the meander is related to the slope of the stream and the size of the watershed (area of land draining to the stream). Steep mountain streams hardly meander at all, while large rivers in flat valleys often have large meanders.

Buffer encroachment and bank erosion

WHAT HAPPENS WHEN A STREAM UN-MEANDERS?

Streams are not pipes. When we eliminate natural meanders in streams, and attempt to "nail" the stream into a straight line, the effects are often dramatic. Excessive energy often becomes trapped in the stream channel. Erosion increases as the stream attempts to recreate the missing meanders. Floodplains often become disconnected from the stream, and downstream landowners are at a greater risk of flooding and erosion.

IS STREAM BANK EROSION NATURAL?

Even streams in balance erode, but usually not in a way that degrades the stream. In a healthy stream, the amount of material eroded equals the amount of material deposited. If a stream begins to erode excessively, it may be out of balance. Increased stormwater runoff up-stream may start a downward cutting process, which leads to unstable, eroding stream banks.

PROFESSIONAL HELP

If your stream is already severely eroded and has vertical banks more than a couple of feet tall, your solution will likely involve expert guidance. Major work done improperly on a stream bank can make problems worse or violate local and state laws governing what may or may not be done in the buffer zone. Always contact Community Development (770-730-5600) and apply for necessary permits and, if necessary, submit work plans for review. The permitting program is inexpensive and proper procedures prevent fines from violations.

Find a qualified local civil engineering or landscaping design firm you feel comfortable with to assist in the process of assessing the issue, creating a sound solution, as well as obtaining the proper permitting and permission to complete drastic alterations to the stream bank.

WWW.SANDYSPRINGSGA.ORG

ENVIRONMENTAL IMPACTS OF FOG

Sanitary sewer overflows not only cost residents financially, they also have a negative impact on the environment through the contamination of natural waterways. Overflowed sewage flows into storm drains and on into ponds, streams and rivers. This can destroy aquatic life and cause health risk concerns for residents using these waterways for recreational activities. Backed-up sewage and accumulated food residue are perfect breeding grounds for bacteria, insects and other vermin.

For more information on Clean Water practices and Stormwater management, please refer to:

City of Sandy Springs
Public Works
Stormwater Division
770-730-5600
sandyspringsga.org/stormwater

STORM WATER & you

REPORTING A SEWER OVERFLOW

To report report a sewer overflow, contact Fulton County.

Fulton County
Public Works Department
Water Services Division
North Fulton Office – 770-640-3040
South Fulton Office – 770-995-2976

For more information about the **FOG** program and education outreach opportunities, contact:

Fernell Patterson
404-612-8110
fernell.patterson@fultoncountyga.gov

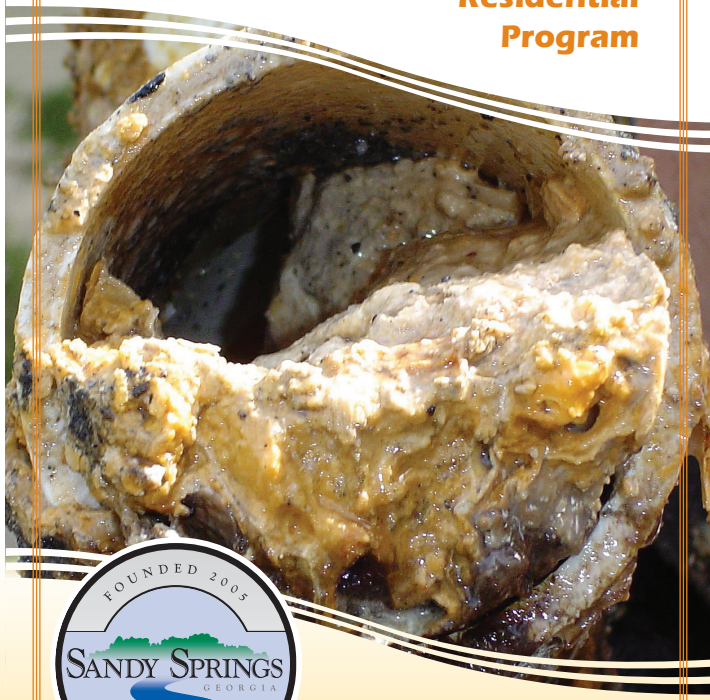
or

The Georgia **FOG** Alliance website:
www.georgiafog.com

SANDY SPRINGS
GEORGIA

FOG
FATS OIL GREASE

Residential Program



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A PUBLIC-PRIVATE PARTNERSHIP

The City of Sandy Springs needs your help to control **FOG**.

FOG, or fats, oils and grease **cost Sandy Springs taxpayers thousands of dollars every year** because of the damage caused to sanitary sewer lines. The impacted lines cause sanitary sewer manhole overflows and sewage back-ups in both residential and commercial areas. Sewer back-ups damage City infrastructure, create health hazards and threaten the natural environment. Ultimately, it is the residents of Sandy Springs that end up bearing the unnecessary cost of cleanup and repair.

WHERE DOES FOG COME FROM?

Fats, oils, and grease are by-products of many foods and are used in the cooking of food. Grease is the common term for animal fats and vegetable oil. Grease can be found in such foods as:

- Meats
- Sauces
- Marinades
- Salad dressings
- Mayonnaise
- Gravy
- Cooking Oils
- Cookies & pastries
- Cheese
- Butter & Margarine
- Shortening
- Ice cream

PREVENT FOG DAMAGE TO THE SEWER SYSTEM

FOG enters your plumbing system through home garbage disposals, kitchen sinks and dishwashers. **FOG** coats the inside of your plumbing drain pipes. It then empties into the Fulton County sewer system.

Think of **FOG** as "hardening of the arteries." When cholesterol builds up in the human bloodstream, it causes a heart attack. When **FOG** hardens in the sewer, it causes a sanitary system overflow.

DON'T POUR FOG DOWN THE DRAIN

Fats, oils and grease entering the sewer system increase the cost of maintaining and operating water and sewer services. **The increased cost is ultimately passed on to you, the consumer**.

Follow These Easy Steps For Disposal:

- Allow **FOG** to cool and place in a sealed container. Place container in garbage.
- Wipe and scrape excess **FOG** from plates, pots, pans, utensils and cooking surfaces before washing.
- Put greasy paper towels in the garbage.
- Don't flush grease down drains with hot water.
- Don't unnecessarily dispose of foods in garbage disposals

Stop and Think, Not Down the Sink!

STORM WATER & you

DID YOU KNOW?

The quality of metro Atlanta's streams, rivers and lakes is threatened by the daily activities of residents and businesses across the region. More than 1,000 stream miles in the metropolitan Atlanta area are in violation of state water quality standards due to urban stormwater runoff. The only way to combat the adverse effects of pollution is through knowledge and action. The leading threat to our water quality is stormwater pollution.

City of Sandy Springs
Public Works Department
Stormwater Division
770-730-5600
sandyspringsga.org/stormwater

10 THINGS YOU CAN DO TO BE A "SOLUTION TO STORMWATER POLLUTION"

1. Never dump anything on the street, down a storm drain or in a drainage ditch. Put litter in trash cans.
2. Scoop up after your pet. Bag the refuse and dispose of it in the trash.
3. Compost grass clippings and leaves or bag them for curbside collection. Do not blow them into the street.
4. Use fertilizers and pesticides sparingly. Do not apply them on paved areas.
5. Check your vehicles for leaks and repair them. Recycle motor oil and other vehicle fluids.
6. Reduce, reuse and recycle cleaning and maintenance chemicals used at home.
7. Wash cars at a commercial car wash or on a grassy area and not your driveway.
8. Wipe and scrape excess fats, oils and grease from plates before washing.
9. Properly maintain septic tanks by reducing water use, avoiding grease, minimize using disposal and pumping the tank periodically.
10. Tell a friend or neighbor about how to prevent stormwater pollution and get involved.

SANDY SPRINGS
GEORGIA

CLEAN WATER CAMPAIGN

SOLUTIONS TO STORMWATER POLLUTION

Residential and Business Program

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WHAT IS THE CLEAN WATER CAMPAIGN?

The Clean Water Campaign is a cooperative, multi-agency public education initiative spearheaded by local governments in metro Atlanta. It is supported by the Metropolitan North Georgia Water Planning District and managed by the Atlanta Regional Commission. Its mission is to build awareness of water quality problems and solutions in the 16-county district.

WHY SHOULD YOU CARE ABOUT CLEAN WATER?

Imagine no longer being able to fish, swim or wade through your favorite stream, river or lake. It might surprise you, but many waters in the metro-Atlanta area are degraded due to polluted stormwater runoff.

Each time it rains, the resulting stormwater runoff picks up debris such as litter, pesticides, chemicals, motor oil and dirt as it flows across rooftops, lawns, streets and parking lots. These pollutants are deposited, untreated, into our waterways. Increased runoff from developed areas can also cause flooding and erosion of stream banks, which creates even more sediment that enters our streams.

Stormwater pollution can make monitoring and treatment of our drinking water more difficult and costly. In addition, it can hinder the health of the aquatic ecosystem. If polluted stormwater contaminates our water sources, the result can be the closing of our rivers, lakes and streams to public access.

PUBLIC EDUCATION AND AWARENESS PROGRAM

Now there is a way you can help spread the word to your friends, neighbors and local businesses about how we can be a solution to stormwater pollution.

The Clean Water Campaign hopes to reach Sandy Springs residents through a broad-based public information and education effort that includes:

- A web site, www.cleanwatercampaign.com;
- Storm drain stenciling program;
- Fact sheets and brochures;
- Corporate partnerships;
- A media and public service campaign; and
- A community workshop program.

We need your help to expand this effort and make clean water in Sandy Springs a reality!

HOW CAN I GET INVOLVED?

There are many opportunities for involvement in the Clean Water Campaign. Here are just a few:

- Invite a speaker from the Speakers Bureau to your next civic club or neighborhood association meeting.
- Visit www.cleanwatercampaign.com for more detailed information on stormwater pollution prevention.
- Become a volunteer.
- Become a corporate sponsor.

CONTACT INFORMATION

Clean Water Campaign
40 Courtland Street, NE, Atlanta, GA 30303
404.463.3259
www.cleanwatercampaign.com

CLEAN WATER CAMPAIGN
SOLUTIONS TO STORMWATER POLLUTION