



Cobb County Water System

Community Partners for Healthy Streams

SERIES #3:



SERIES #3: Maintaining Equipment and Vehicles



Community Partners for Healthy Streams is a cooperative effort between the Cobb County Water System and local business community.

COMMUNITY PARTNERS FOR HEALTHY STREAMS

NOTE: This handbook is one in a series of handbooks that describe specific practices businesses can use to protect water quality. A complete list of all handbooks and fact sheets available through the Community Partners for Healthy Streams program is provided on the back cover. To obtain other handbooks in this series, contact the Cobb County Water System at the address or phone number provided below.

Becoming a “Community Partner for Healthy Streams”

We hope you'll join with the Cobb County Water System and other area businesses and institutions by participating in the Community Partners for Healthy Streams program. Through this program, businesses help protect local streams.

To participate in the program, fill out the checklist in the back of this handbook. Send it to the address below and our staff will work with you to become a Community Partner for Healthy Streams. In return for your effort, we'll publicly acknowledge your business through press releases, displays and speaking engagements. We'll also encourage consumers to look for the Community Partners logo at your business when they select services.

Community Partners for Healthy Streams Program Manager
Cobb County Water System
662 South Cobb Drive
Marietta, GA 30060

Phone: (770) 528-1482

Fax: (770) 528-1483

www.cobbstreams.org

Handbook Design and Illustration by David Zinn

This program is modeled on the Community Partners for Clean Streams program created through a US EPA Clean Water Act Grant by the Office of Washtenaw County Drain Commissioner Janis A. Bobrin, Washtenaw County, Michigan.

Directions for Completing the Water Quality Assessment Checklist Questions at the End of this Booklet

- Please Read Carefully -

1. For each question, check the appropriate answer box in the Assessment column (*Always*, *Needs Improvement*, or *Not Applicable*).
2. Next, check the corresponding box in the Action Plan column (*Plan to Continue* or *Plan to Improve*).
3. For every activity, indicate:
 - The **Responsible job or staff position(s)**. It is best to answer with a specific job position, i.e. facility manager.
 - **Schedule** or proposed date by which the activity will be completed.
 - **Action(s)** - please provide additional details regarding the implementation of a proposed activity, or explain what is already being done.
 - If the action requires ongoing employee training or commitment from management, check that box as a reminder to include it in your employee education activities.

(See example below)

THE SELF-ASSESSMENT IS NOT COMPLETE UNTIL THIS INFORMATION IS PROVIDED FOR EACH QUESTION.

4. Finally, remove completed checklist sheets from the handbook and return them to the Community Partners for Healthy Streams Program. If you need help completing the Water Quality Assessment questions, please call the number listed below.

Community Partners for Healthy Streams
Cobb County Water System
662 South Cobb Drive
Marietta, GA 30060

Phone: (770) 528-1482 Fax: (770) 528-1483

SAMPLE CHECKLIST QUESTION:

1. Steps are taken to minimize the amount of potentially polluting materials and wastes kept in storage.

ASSESSMENT

- Not applicable
 Always
 Needs Improvement

ACTION PLAN

- Plan to continue
 Plan to improve

Responsible job or staff position(s): Safety Manager

Schedule: Materials will be in place by 12/01

Action(s): Spill kits, absorbent pads, and spill response plans will be placed near all areas that have the potential for spills.

_____ Requires ongoing education/commitment



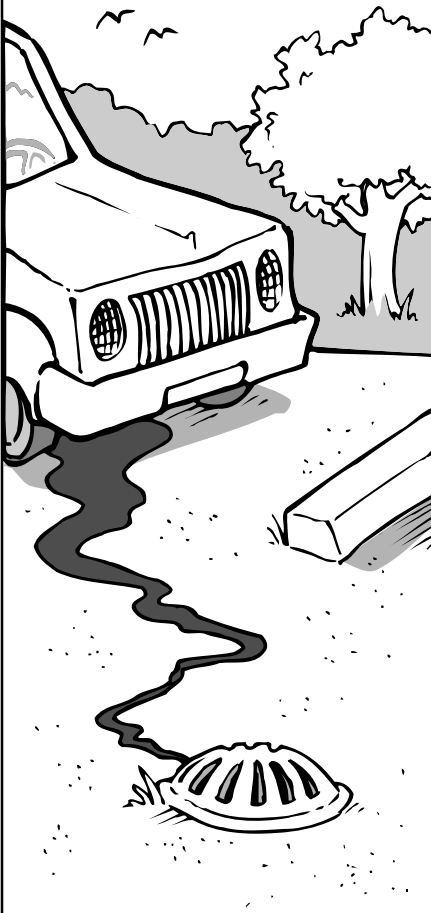
Storing and Maintaining Equipment and Vehicles



Why be concerned?

Dirty or leaking equipment and vehicles can deposit oil, grit, coolants, and other pollutants onto the ground. These pollutants can filter through soils to the groundwater table or be washed by stormwater into a lake, river or stream.

In addition, spills may occur during fueling and other maintenance activities. Designing outdoor maintenance areas to completely contain leaks and spills is an important part of protecting water quality.



Eight Steps to Preventing Water Pollution

1 Regularly maintain equipment and vehicles

- Keep equipment and vehicles clean and regularly inspect them for leaks. Immediately repair and clean up any leaks that are found. Wash equipment and vehicles according to the recommendations in **Series #3, Fact Sheet 3.2**.
- Calibrate equipment frequently to ensure proper operation.
- Drain all the fluids from equipment and vehicles before they are placed in seasonal or long-term storage. Remove fluids only in paved areas that are designed to contain spills. Recycle or otherwise properly dispose of drained fluids.

- Pave the area to prevent pollutants from filtering into the ground.
- Construct curbs or berms around the perimeter to contain spills and prevent stormwater from washing through the area.
- Connect drains to a holding area or the sanitary sewer. Don't allow storage, fueling or other maintenance areas to drain to any part of the stormwater management system. If you aren't sure where a drain leads, call Cobb County Storm Water Management, Water Quality Section for assistance. Before allowing fluids to drain to the sanitary sewer, call the Cobb County Office of Environmental Compliance and make sure they can be accepted.

2 Perform maintenance activities only in designated areas

Maintain equipment and vehicles indoors, if possible. If maintenance activities must take place outdoors, make sure they're performed only in designated areas that are clearly marked and designed to prevent water pollution.

- Equip drains with shutoff valves in case of a spill and regularly inspect these valves to ensure they work. Alternatively, keep rubber mats or temporary plugs on hand to block drain inlets. If plugs are used, employees must be trained in advance on how to use them.

3 Properly design outdoor storage, fueling and other maintenance areas

- Don't locate outdoor storage, fueling, or maintenance areas within a floodplain or within 100 feet of any part of the stormwater management system.

- Cover storage and maintenance areas to keep rainwater from entering and mixing with pollutants. If rainwater accumulates and becomes contaminated, it must be pumped out and disposed of at an approved facility. For more information about disposing of accumulated rainwater, see **Series #1, Fact Sheet 1.1**.

(continued on other side)

(continued from other side)

4 Keep service areas clean and take steps to prevent spills

Keep drip pans and absorbent materials readily available, appropriate to the types and quantities of potential spills. If possible, buy absorbent materials that can be reused or recycled: avoid the use of cat litter, since it's relatively inabsorbent (which increases waste) and must be landfilled. For more information about preventing and cleaning up spills, see **Series #1, Fact Sheet 1.2**.

When cleaning floors, prevent pollutants from entering the storm sewer system. The following three-step process is recommended:

1. clean up spills with absorbent materials
2. sweep the floor
3. wet mop and recycle wash water or dispose of it via the sanitary sewer.

5 Prevent overfilling gas tanks

Gasoline and other fuels are toxic and can be highly flammable. Unfortunately, spills are common during fueling activities.

- Make sure that dispensing hoses are equipped with automatic shutoff valves and that these valves work.
- Post signs instructing fuel pump operators not to overfill gas tanks or leave them unattended while fueling.
- Locate temporary fuel tanks in a bermed, paved area. Design the area to completely contain at least 110% of the tank's total volume.
- Per state law, protect the area surrounding the fill pipe for underground gas tanks to prevent any spills from reaching the soil or groundwater.

6 Properly store, use and dispose of maintenance products

For information about storing maintenance products, see **Series #1, Fact Sheet 1.1**. For information about using and disposing of them, see **Series #7**.

7 Completely drain and recycle used oil filters

A used oil filter typically contains 1/3 of a quart of oil and sludge, as well as acid and heavy metals. If not properly drained, used filters can leak this contaminated oil into the environment.

Drain used oil filters for at least 24 hours and then recycle both the oil and filters. If you can't recycle them, filters can be put into the trash provided they're *not* terne-coated. (The EPA classifies oil and transmission filters as non-hazardous if they *aren't* terne-coated and they *are* completely drained.)

8 Discharge equipment condensate and "blowdown" to the sanitary sewer

Air compressors and other equipment may produce small quantities of automatic blowdown water, which contains lubricating oil and other pollutants. Prevent blowdown water from soaking into the ground or running into the storm sewer system. Connect blowdown to the sanitary sewer or, if the compressor has a frequent small bleed, use a drip pan or catchment to collect the water.

GETTING HELP

Cobb County Office of Environmental Compliance(770) 419-6422

Cobb County Stormwater Management ... (770) 419-6435
Water Quality Section (770) 419-6441

Community Partners for Healthy Streams (770) 528-1482



Washing Equipment and Vehicles

EQUIPMENT
and VEHICLES

Why be concerned?

Washing equipment and vehicles can generate significant amounts of polluted runoff. In addition to detergent, oil, grease, heavy metals, sediment and other pollutants, wash water can contain grease cutters, acids and other toxic chemicals. Take steps to prevent untreated wash water from soaking into the ground or from entering the stormwater management system.



Minimizing Runoff

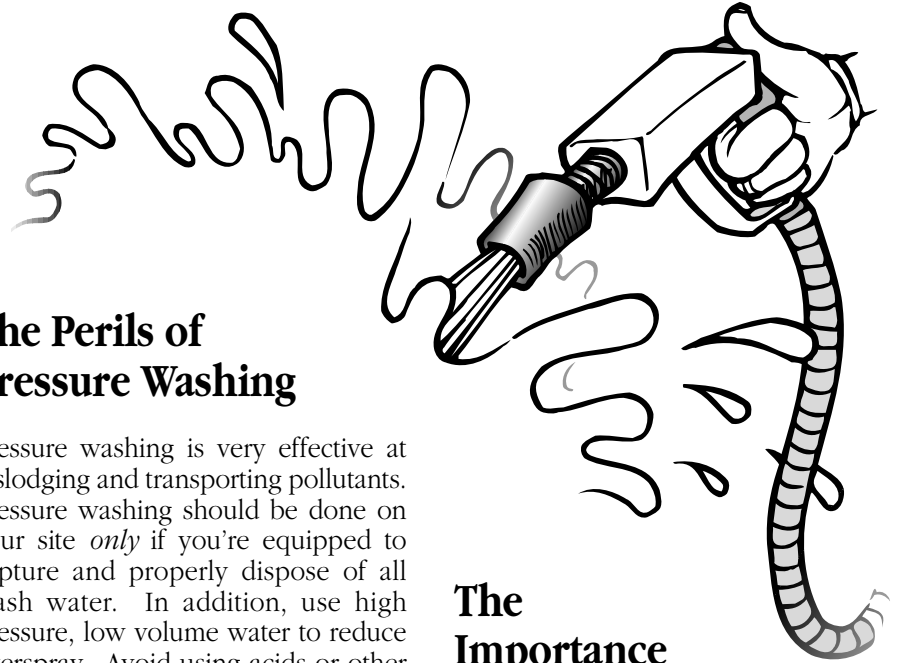
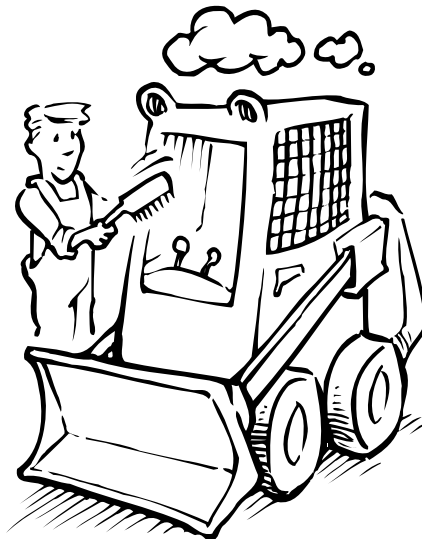
Clean field equipment and vehicles using as little water as possible. For example, remove dirt and grit with wire brushes or other dry methods before applying solvent or water. Be sure to collect the dislodged material and dispose of it properly. To determine proper disposal, call the facility where you expect the material to be taken.

The Perils of Pressure Washing

Pressure washing is very effective at dislodging and transporting pollutants. Pressure washing should be done on your site *only* if you're equipped to capture and properly dispose of all wash water. In addition, use high pressure, low volume water to reduce overspray. Avoid using acids or other harsh cleaning products and detergents that contain phosphates.

Washing: It's An Inside Job

In view of state permit requirements and potential threats to the environment, it's best to take vehicles and equipment to a commercial washing facility if you can't wash them indoors.



The Importance of Designated Wash Areas

If you must wash equipment or vehicles on-site, wash them *only* in clearly marked, designated areas that are designed to properly manage waste water. Post signs that prohibit other maintenance activities and washing with solvents.

Never locate wash areas within a floodplain or within 100 feet of a drinking water well, wetland, lake, stream or any other part of the stormwater management system.

Managing Wash Water

Discharge wash water only to the sanitary sewer, an enclosed holding tank, or, if it's relatively clean, a grassy area where the water will be *contained*. Don't allow it to drain off-site via a roadside ditch, stormwater management system, or local stream.

(continued on other side)

(continued from other side)

- Before discharging wash water to the sanitary sewer, call the Cobb County Office of Environmental Compliance to make sure it can be accepted. Certain materials are prohibited due to health and safety risks. In addition, water used to wash muddy trucks or equipment can contain high volumes of sediment that may clog sewer lines.

- Wash water that can't be discharged to the sanitary sewer should be drained the area to an enclosed holding tank. The tank's contents must be removed periodically by a licensed waste hauler. While businesses that use a holding tank incur the cost of regular pumpouts, they avoid the risk of costly environmental cleanups.

- Install an oil/water separator to remove oil and grit from runoff before routing to a holding tank or sanitary sewer.

- If you're washing relatively clean vehicles *with water only*, wash water can be diverted to a large grassy area. This will allow it to filter into the ground. *Be aware, however, that any dislodged pollutants or cleaning products that are used can also filter down to drinking water supplies.*

Alternatives to Engine Cleaning

- Avoid cleaning engines for aesthetic purposes only.
- Instead of cleaning the entire engine to locate oil leaks, try using rags and solvent to clean small portions of the engine.

GETTING HELP

Cobb County Office
of Environmental
Compliance(770) 528-3380

Cobb County
Stormwater Management ... (770) 419-6435
Water Quality Section (770) 419-6441

Community Partners
for Healthy Streams(770) 528-1482

Community Partners for Healthy Streams WATER QUALITY ACTION PLAN

Series #3: Maintaining Equipment and
Vehicles - Fact Sheets 3.1 and 3.2

Completing Your Water Quality Assessment and Action Plan

Assessment and action planning requires respondents to assess their current activities and identify any specific actions needed to prevent pollution and improve water quality stewardship.

To create your own "Water Quality Action Plan," please fill out the following checklist. Directions are included on the other side of this page. The "Actions" in this checklist directly correspond to recommendations made within this handbook. If you have any questions or would like help completing this form, please contact the Community Partners for Healthy Streams Program Manager at (770) 528-1482. Send completed checklists to:

Community Partners for Healthy Streams
Cobb County Water System
662 South Cobb Drive
Marietta, GA 30060
Fax: (770) 528-1483

NOTE: To become a "Community Partner for Healthy Streams," all checklists that apply to your business must be completed and returned. A complete listing of all program handbooks/checklists is provided on the inside of the back cover. To obtain copies, contact the Community Partners Program Manager.

Business Information

Business name: _____
Type of Business: _____ No. of employees: _____
Address: _____
_____ Zip: _____
Contact person: _____
Title: _____ Phone: _____
Water Quality Action Plan prepared by: _____ Date: _____
e-mail: _____ Fax: _____

Business Activities That Can Affect Water Quality

Please check the activities that your business is responsible for:

- | | |
|--|--|
| <input type="checkbox"/> Storing materials | <input type="checkbox"/> Maintaining buildings/pavement |
| <input type="checkbox"/> Spill containment and response | <input type="checkbox"/> Maintaining constructed stormwater controls |
| <input type="checkbox"/> Site design and/or construction | <input type="checkbox"/> Maintaining landscapes |
| <input type="checkbox"/> Managing wastes | <input type="checkbox"/> Managing employees |

IMPORTANT!

Directions for Completing this Checklist:

1. For each question, check the appropriate answer box in the Assessment column (*Always, Needs Improvement, or Not Applicable*).
2. Next, check the corresponding box in the Action Plan column (*Plan to Continue or Plan to Improve*).
3. For every activity, indicate:
 - The **Responsible job or staff position(s)**. It is best to answer with a specific job position, i.e. facility manager.
 - **Schedule** or proposed date by which the activity will be completed.
 - **Action(s)** - please provide additional details regarding the implementation of a proposed activity, or explain what is already being done.
 - If the action requires ongoing employee training or commitment from management, check that box as a reminder to include it in your employee education activities.

(See example below)

THE SELF-ASSESSMENT IS NOT COMPLETE UNTIL THIS INFORMATION IS PROVIDED FOR EACH QUESTION.

4. Finally, remove completed checklist sheets from the handbook and return them to the Community Partners for Healthy Streams Program. If you need help completing the Water Quality Assessment questions, please call the number listed below.

Community Partners for Healthy Streams
 Cobb County Water System
 662 South Cobb Drive
 Marietta, GA 30060
 Fax: (770) 528-1483
 Phone: (770) 528-1482

SAMPLE CHECKLIST QUESTION:

1. Steps are taken to minimize the amount of potentially polluting materials and wastes kept in storage.

ASSESSMENT

- Not applicable
 Always.....
 Needs Improvement.....

ACTION PLAN

- Plan to continue
 Plan to improve

Responsible job or staff position(s): Safety Manager

Schedule: Materials will be in place by 12/01

Action(s): Spill kits, absorbent pads, and spill response plans will be placed near all areas that have the potential for spills.

Requires ongoing education/commitment

MAINTAINING EQUIPMENT AND VEHICLES (FACT SHEETS 3.1 AND 3.2)

1. The least hazardous products and procedures are identified and used whenever possible.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment

2. Vehicles and Equipment are regularly inspected for leaks; any leaks that are found are repaired immediately.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment

3. Application equipment (e.g., salt, irrigation and fertilizer) is calibrated to ensure proper coverage patterns and rates.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment

4. Washing and other maintenance activities are performed *only* in designated areas that drain to the sanitary sewer or an enclosed holding tank. Tank is pumped and contents disposed of properly.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment

5. Fueling, washing, and other maintenance areas are covered by a nonflammable roof, paved and designed to contain wash water and/or spills.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment

6. Fluids are completely drained from equipment and vehicles kept in long-term storage.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment

7. Fluids are recycled/disposed of properly.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment

8. Vehicle/equipment storage areas are designed to contain leaks and spills. If storage areas aren't covered, any rainwater that accumulates is pumped and disposed of at an appropriate site.

- | ASSESSMENT | ACTION PLAN |
|--|---|
| <input type="checkbox"/> Not applicable | |
| <input type="checkbox"/> Always | <input type="checkbox"/> Plan to continue |
| <input type="checkbox"/> Needs Improvement | <input type="checkbox"/> Plan to improve |

Responsible job or staff position(s): _____
Schedule: _____
Action(s): _____
_____ Requires ongoing education/commitment



Community Partners for Healthy Streams Fact Sheets



SERIES #1 - HOUSEKEEPING PRACTICES

- Fact Sheet 1.1 Storing Materials and Wastes
- Fact Sheet 1.2 Preventing and Cleaning Up Spills



SERIES #2 - MAINTAINING ENGINEERED STORMWATER CONTROLS

- Fact Sheet 2.1 Catch Basin Care
- Fact Sheet 2.2 Maintaining Stormwater Management Systems



SERIES #3 - MAINTAINING EQUIPMENT AND VEHICLES

- Fact Sheet 3.1 Storing and Maintaining Equipment and Vehicles
- Fact Sheet 3.2 Washing Equipment and Vehicles



SERIES #4 - MAINTAINING BUILDINGS AND PAVEMENT

- Fact Sheet 4.1 Outdoor Pressure Washing
- Fact Sheet 4.2 Maintaining Building Facades
- Fact Sheet 4.3 Maintaining Paved Areas
- Fact Sheet 4.4 Using and Storing Deicing Systems
- Fact Sheet 4.5 Cooling Water Systems



SERIES #5 - MAINTAINING LANDSCAPES

- Fact Sheet 5.1 Maintaining Healthy Lawns, Shrubs and Trees
- Fact Sheet 5.2 Using Fertilizer
- Fact Sheet 5.3 Integrated Pest Management
- Fact Sheet 5.4 Using Pesticides



SERIES #6 - SITE DESIGN AND CONSTRUCTION

- Fact Sheet 6.1 Designing Landscapes for Water Quality
- Fact Sheet 6.2 Designing Stormwater Management Systems
- Fact Sheet 6.3 Clearing and Grading Land



SERIES #7 - MANAGING WASTES

- Fact Sheet 7.1 Minimizing Waste
- Fact Sheet 7.2 Recycling
- Fact Sheet 7.3 Waste Disposal



SERIES #8 - EDUCATION

- Fact Sheet 8.1 Education and Community Leadership



Cobb County...Expect the Best!

This is an official publication
of the Cobb County Board of Commissioners.

Sam Olens, *Chairman*

Helen Goreham, *District One*

Bob Ott, *District Two*

Tim Lee, *District Three*

G. Woody Thompson, *District Four*

David Hankerson, *County Manager*

COBB COUNTY - GEORGIA

Cobb County Water System

www.cobbcounty.org

662 South Cobb Drive, Marietta, GA 30060