

# Getting in Step:

Using Outreach and Public Involvement to Meet your Stormwater Phase II Goals



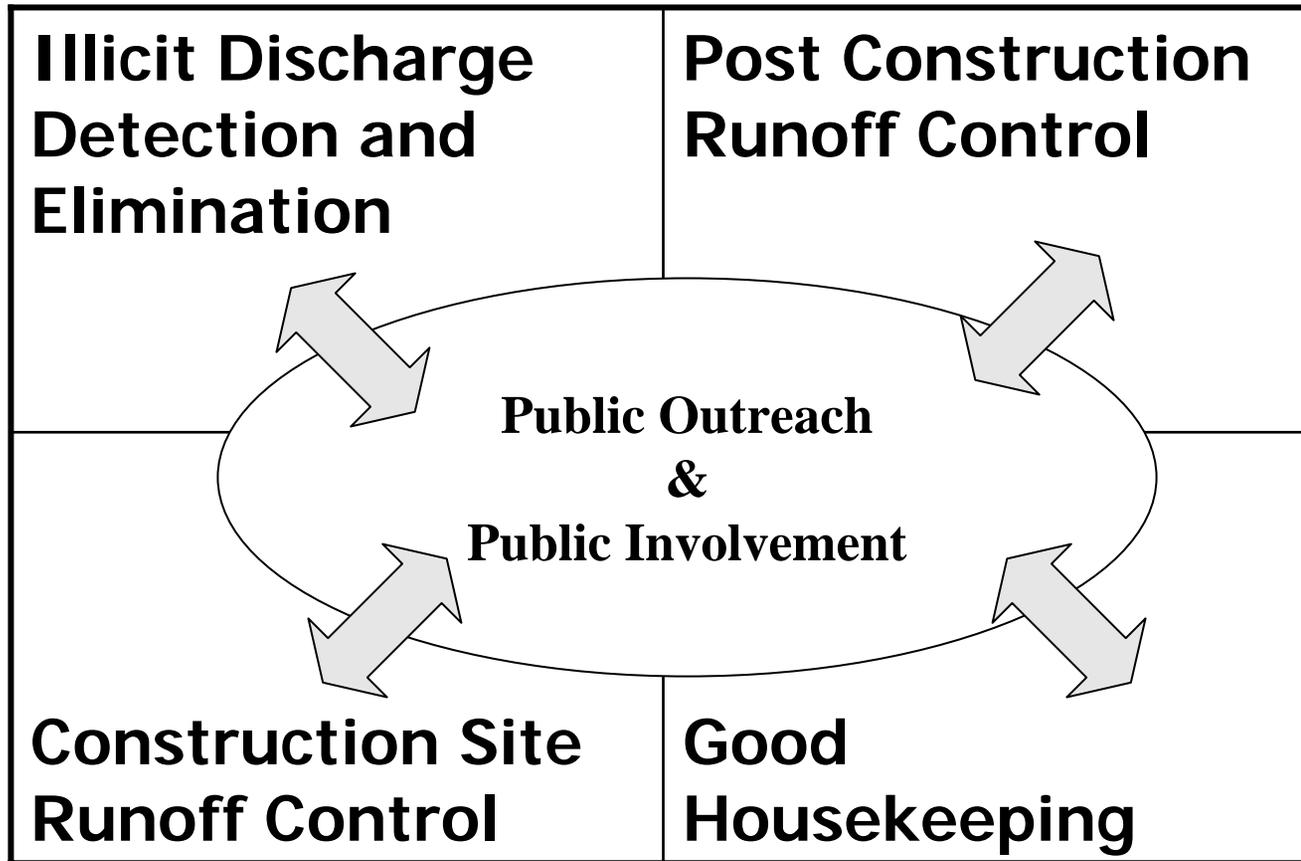
Charlie MacPherson, Tetra Tech, Inc.

Ansu John, Tetra Tech, Inc.

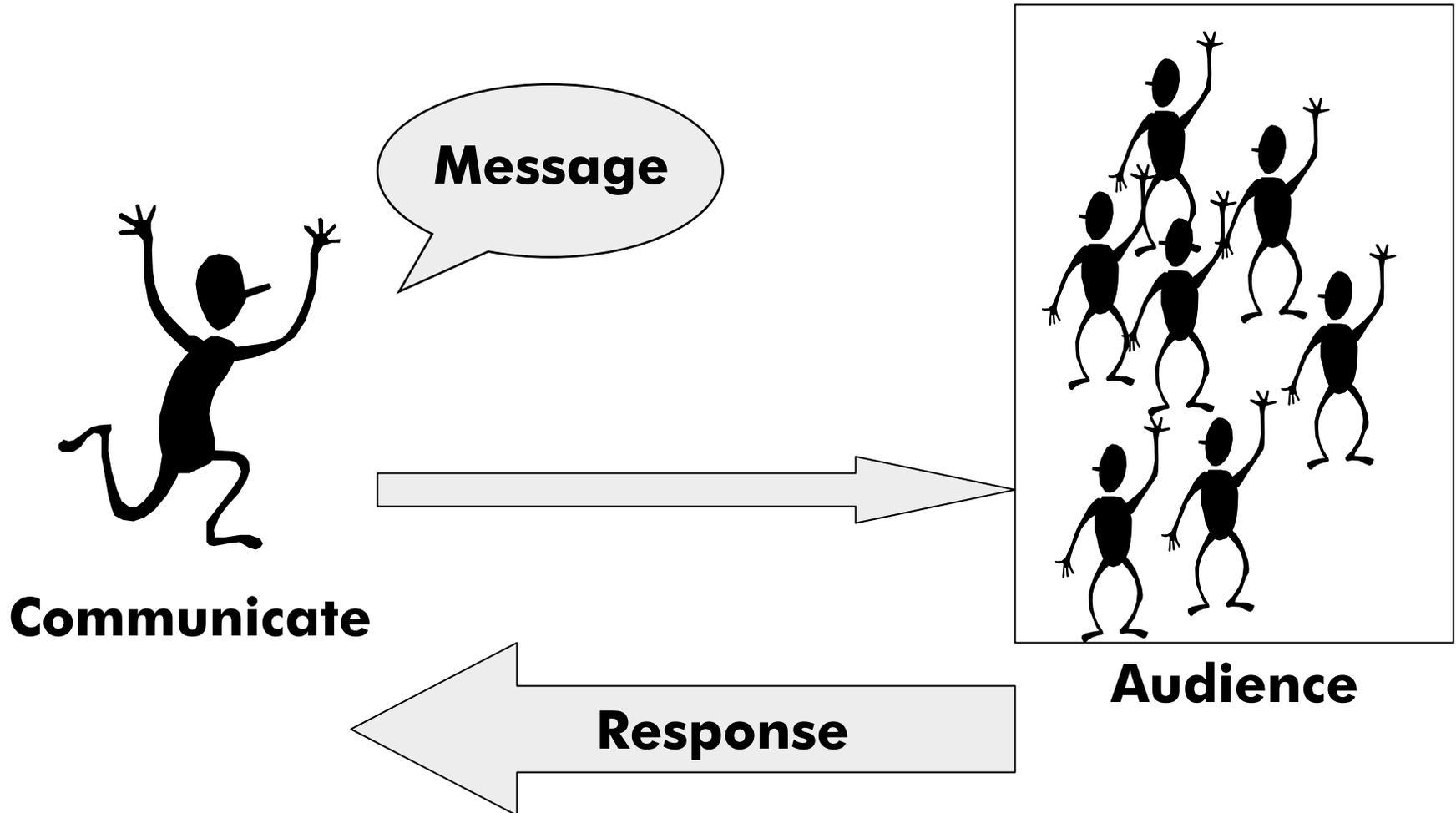
Brant Keller, City of Griffin, Georgia



# Stormwater Phase II Final Rule



# What Is Outreach?

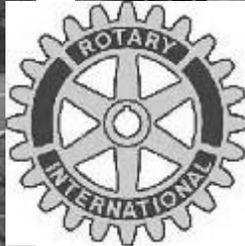


# Outreach Building Blocks



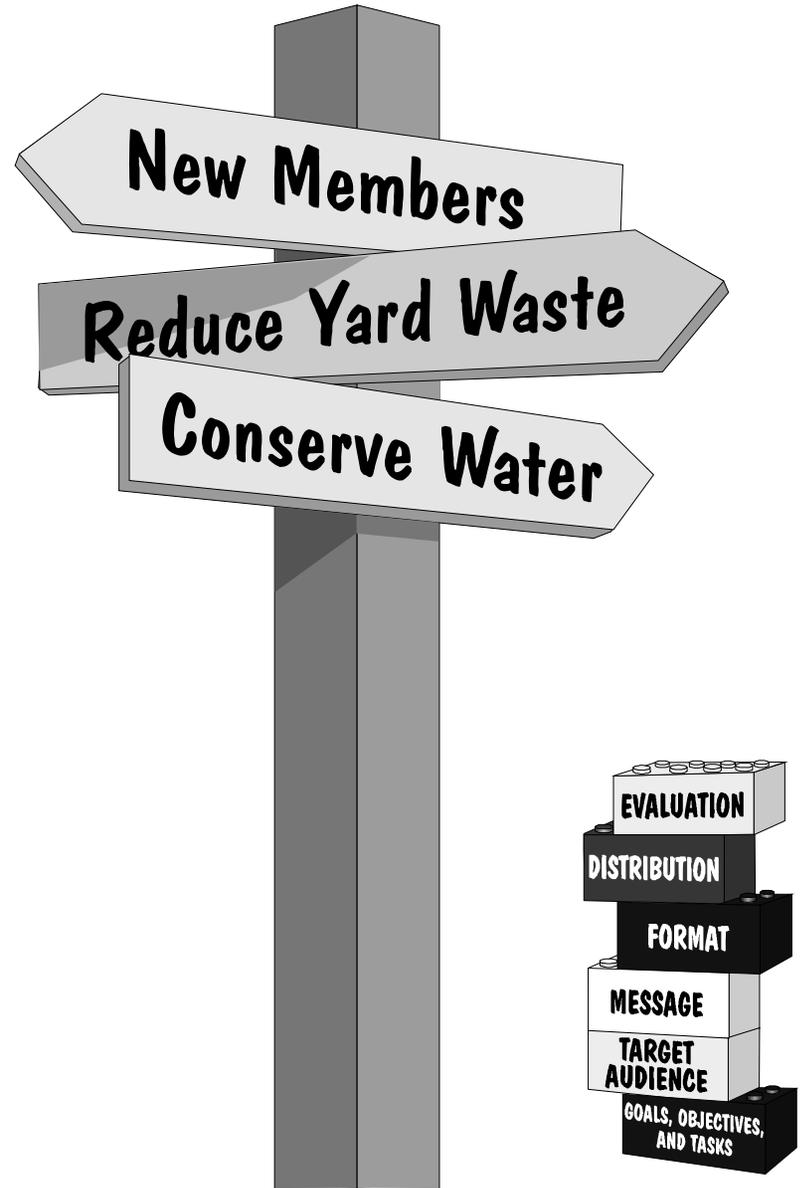


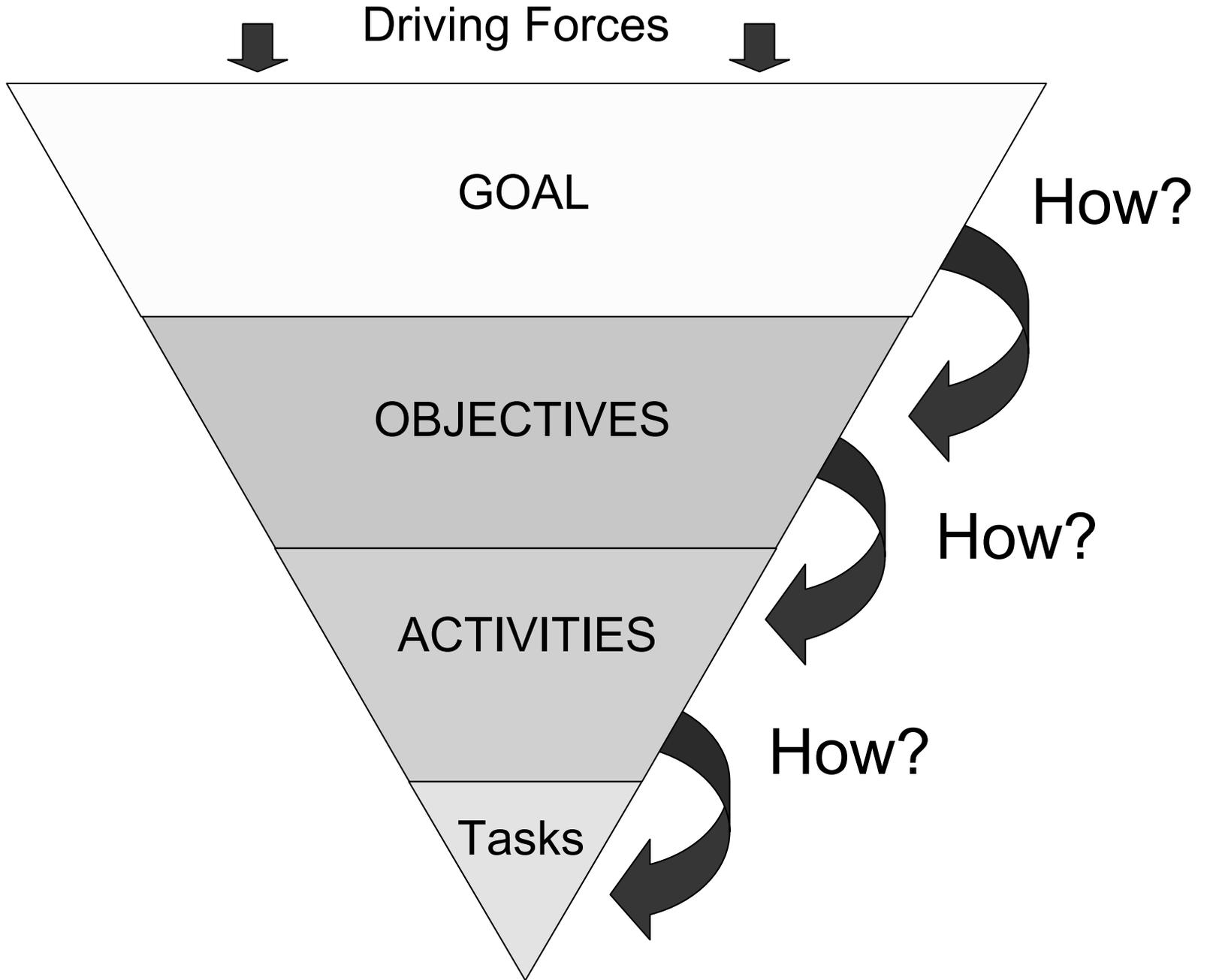
- Consider who else can help you.



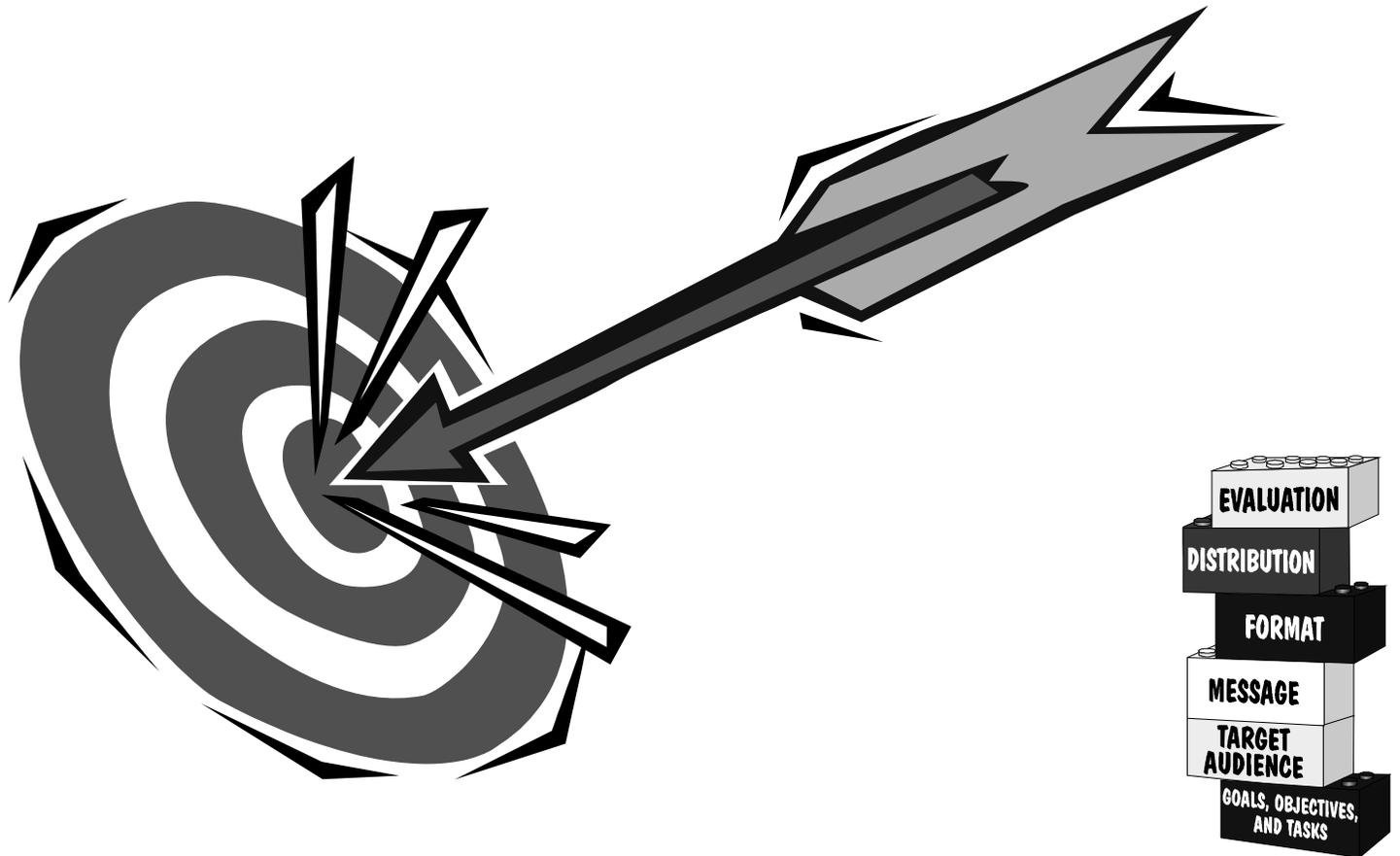
Copyright © 2004, www.knox1ada.org

# Step 1: Driving Forces Goals and Objectives





# Step 2: Target Audience



You must implement a public education program to distribute educational materials to the community or conduct equivalent outreach activities about the impacts of stormwater discharges on water bodies and the steps that the public can take to reduce pollutants in stormwater runoff.

# Who Do We Need to Reach?







- Demographics
- Knowledge of the issues
- Communication channels
- Attitudes/perceptions

- Focus groups
- Phone interviews
- Pre/post surveys
- Public agencies
- Community leaders
- Trade associations



4. What is the most common cause of pollution of streams, rivers, and oceans? Is it...	
a. Dumping of garbage by cities	14
<b>b. Surface water running off yards, city streets, paved lots, and farm fields</b>	<b>28</b>
c. Trash washed into the ocean from beaches, or	4
d. Waste dumped by factories?	45
Don't know	9

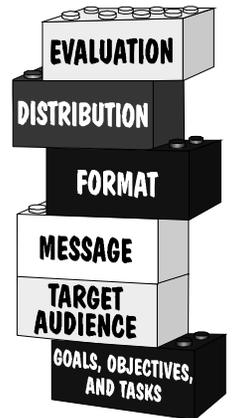
Source: NEETF. <http://www.neetf.org/roper/roper2001-d.htm>



- Do you have enough information on your audience?
- Consider involving members of the target audience in the outreach effort.

# Step 3: Message

“ ! ”



# **WE PAY YOU TO LOSE WEIGHT**

36 People Needed Who are Serious  
About Losing Weight!

- Eat Your Favorite Foods Every day
- All Natural – No Drugs
- Doctor Recommended
- Permanent Weight Loss

Call MELANY (555) 266-2079

# What is Social Marketing?

“Using marketing principles and techniques to influence a target audience to voluntarily change a behavior for the benefit of individuals, groups or society as a whole.”

- Kotler et al, 2002

# Why Social Marketing?

Knowledge is not enough.

# Popular Social Marketing Campaigns

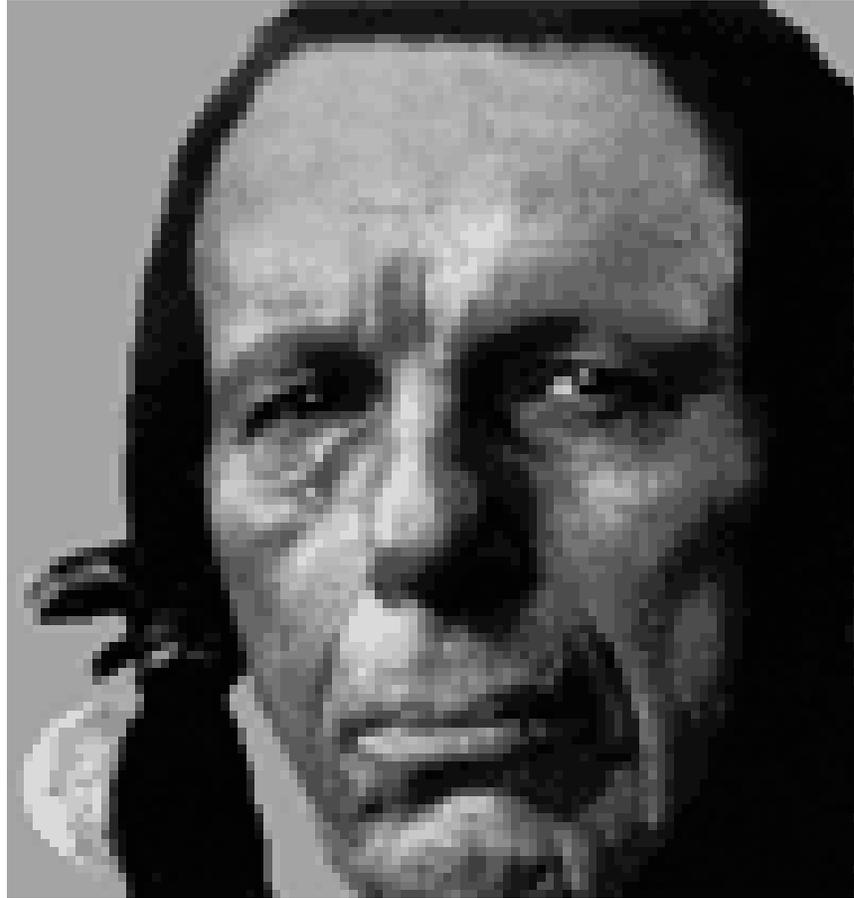


ONLY YOU CAN PREVENT WILDFIRES.



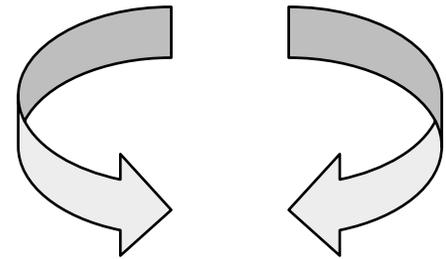
- ✓ Buckle Up America
- ✓ Smokey Bear
- ✓ Truth Campaign
- ✓ National Youth Anti-Drug Campaign

Keep America Beautiful



# Thinking Like a Marketer

- Beneficial exchange
  - Real Benefits
    - Save money
    - Save time
    - Protect health
  - Perceived Benefits
    - Fit in with others (It's cool)
    - People expect it
    - Everyone else is doing it
    - I'll get rewarded



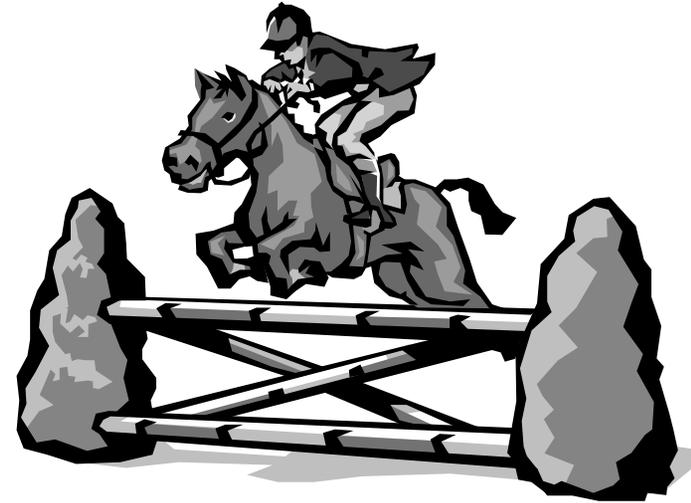
# What Barriers Prevent Behavior Change?

- Too hard to do
- Takes too long
- Added costs or no cost savings
- Don't know how to do it
- No one else is doing it
- Tried it once and it didn't work



# Overcoming Barriers

- Everyone else is doing it (or not doing it)
- We'll teach you how to do it
- Save money/get money
- It takes 5 minutes or less
- It's the cool thing to do
- You'll get a reward if you do it



### Developers

Sediment carried by stormwater runoff from construction sites in Georgia has been documented as the leading source of non-point source pollution to streams, lakes and rivers throughout Georgia. Water quality problems can be avoided if developers understand the rules of the game and are willing to follow them.

Land disturbing activities greater than 1 acre require regulation under the Georgia NPDES Stormwater Discharge Associated with Construction Activity General Permit.

### STAY OUT OF TROUBLE

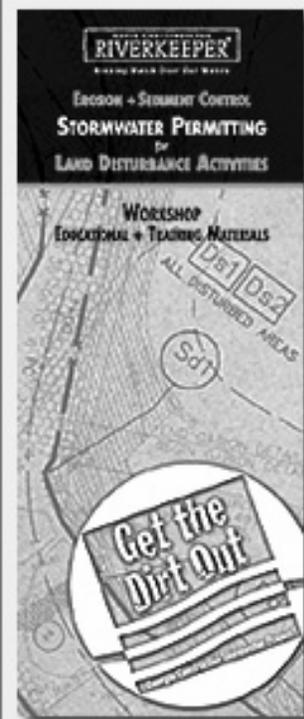
To understand the General Permit requirements, Upper Chattahoochee Riverkeeper and the Georgia Center for Law in the Public Interest have developed an Erosion and Sediment Control Stormwater Permitting Guide to Land Disturbance Activities. This "Stay Out of Trouble" guide will help you understand the requirements and help you to reduce your risk.

[Stormwater Permitting for Land Disturbance Activities](#)

**To Help Keep Our Water Clean & Healthy**



**Locate Your Watershed Leader:**



# Target Your Efforts

Most likely to adopt new behavior

- 
- Innovators (risk takers)
  - Early Adopters (decisive)
  - Early Majority (cautious)
  - Late Majority (skeptical)
  - Laggards (good luck)

Least likely to adopt new behavior



# Tools for Changing Behaviors

- Social norms
- Commitments
- Prompts
- Incentives
- Simple, vivid communication



# Social Norms

Behavior perceived as normal and expected



Seat Belt Use Last Week

85%

# Commitments

- Pledges (verbal or written)
- Donations (time/money)
- Sign-ups
- Petitions



# Prompts



# Incentives

- Money, money, money, money
- Free stuff
- Recognition



# Keep it simple \* \* \* \* \*, and Vivid!

- Don't litter
- Pick up after your pets
- Only rain goes in the drain
- Dirt is a 4-letter word
- 10 things you can do...



**Stormwater Runoff**  
**READY!**

**10 Things You Can Do to Prevent Stormwater Runoff Pollution**

- ◆ Use fertilizers sparingly and sweep out of driveways, sidewalks, and roads
- ◆ Vegetate bare spots in your yard
- ◆ Compost your yard waste
- ◆ Avoid pesticides; learn about Integrated Pest Management (IPM)
- ◆ Direct downspouts away from paved surfaces
- ◆ Take your car to the car wash
- ◆ Check car for leaks, and recycle motor oil
- ◆ Never dump anything down storm drains
- ◆ Scoop your pet's poop
- ◆ Inspect and pump your septic tank regularly

 **EPA**  
United States  
Environmental Protection  
Agency

For more information, visit  
[www.epa.gov/nps](http://www.epa.gov/nps) or  
[www.epa.gov/npdes/stormwater](http://www.epa.gov/npdes/stormwater)

**CAUTION**

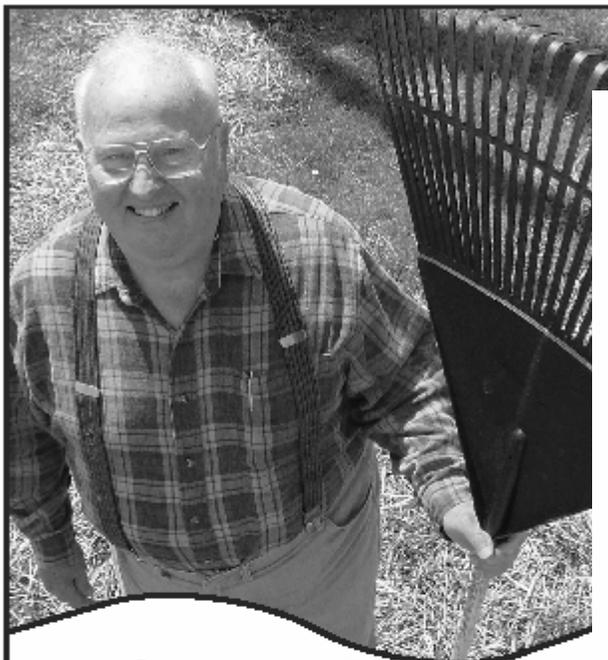
**THIS SIGN HAS  
SHARP EDGES**

**DO NOT TOUCH THE EDGES OF THIS SIGN**



**ALSO, THE BRIDGE IS OUT AHEAD**





## Cover Your Bald Spot

Does your lawn, garden, or yard have bald spots? If so, when it rains soil can wash into your lakes and streams. Soil pollution can harm fish habitat and make the water muddy.

There are three basic steps to grow in your bald spots:

- 1) *Plant* - Grass seed, wildflowers, annuals, perennials, shrubs, and trees.
- 2) *Mulch* - Bare soil and seed with grass clippings, bark, pine needles, and leaves. This reduces weeds and keeps seeds moist for germination.
- 3) *Water* - New plants or seeds frequently so they will thrive.

*Ready for a rainy day?*

For more stormwater pollution prevention tips contact us at:



426 Bay Street, Petoskey, MI 49770  
P: 231.347.1181  
[www.watershedcouncil.org](http://www.watershedcouncil.org)

Ad Sponsored By:



## Don't Get Hosed!

Hosing off the sidewalk and driveway may seem like the easiest way to clean it, but it is also the easiest way to wash pollutants into the lake.

Break out the broom and give it a sweep. Dirt and leaves can be swept back onto the yard. Save money on your water bill. Make a clean sweep for you and for the lake.

*Ready for a rainy day?*

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## Roll Out the Barrels

Some of the best things in life are free. Rainwater is one of them. Place a rain barrel beneath the downspout on your gutters to collect rainwater from your roof. Rainwater is naturally acidic and doesn't contain chlorine like tap water from municipal systems.

Use rainwater and you will:

- Reduce the runoff from your property and help protect water quality.
- Help your houseplants and gardens to thrive.
- Save money on your water bill.
- Have shiny hair (remember Grandma's beauty secret).

*Ready for a rainy day?*

For more stormwater pollution prevention tips contact us at:



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P: 231.347.1181  
[www.watershedcouncil.org](http://www.watershedcouncil.org)

Ad Sponsored By:





**IF YOU THINK  
PICKING UP  
DOG POOP  
IS UNPLEASANT,  
TRY DRINKING IT.**

Pet waste washes into storm drains, polluting our rivers, lakes and drinking water sources. Get the scoop.

1-800-CLEAN-UP





Soluciones Fáciles para  
Mantener Limpios a Nuestros  
Riachuelos, Bahías y Mar



**Attention  
Dog Guardians**

Pick up after your  
dogs. Thank you.

**Attention Dogs**

Grrrrr, bark, woof.  
Good dog.

District of North Vancouver.

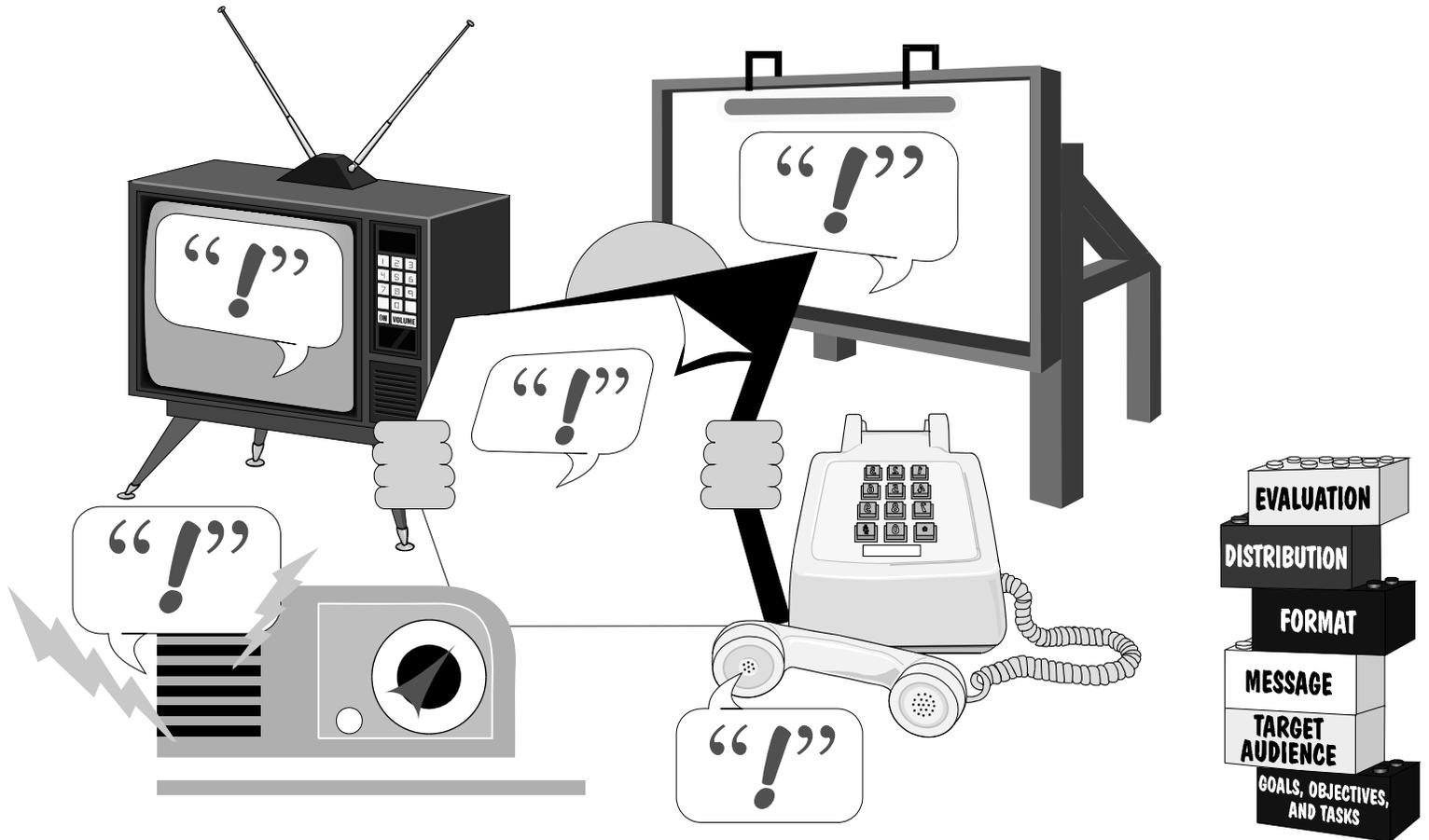
**Bylaw 5981-11(i)**



# Questions?

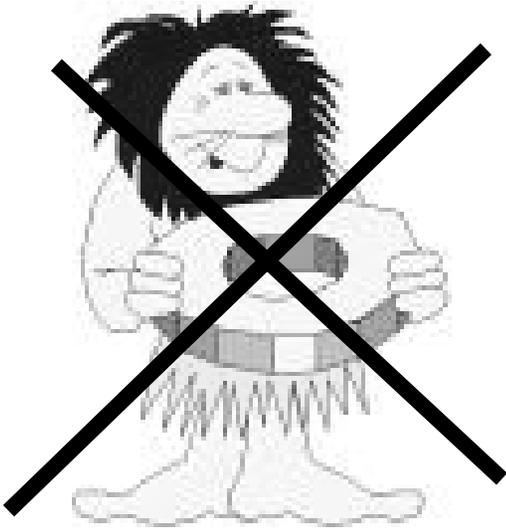


# Step 4: Format



# Format: Displaying the Message

- **Print** (newsletters/flyers/posters/ads)
- **Broadcast Media** (PSAs/news stories)
- **Electronic Media** (Web sites)
- **Stuff** (magnets/totebags/coupons/rainbarrels)
- **Training** (mini-courses/community meetings)
- **Events** (stenciling/community fairs)



**[www.epa.gov/nps/toolbox/](http://www.epa.gov/nps/toolbox/)**  
Contact Don Wayne at [wayne.don@epa.gov](mailto:wayne.don@epa.gov)  
or (202) 566-1170

For Stormwater Outreach materials visit:  
<http://cfpub.epa.gov/npdes/stormwatermonth.cfm>

# Formats

- **Brochures and Fact Sheets**
  - Can be distributed widely
  - Provide more detail on issues
  - Different shapes and sizes





# Maintaining Septic Systems



Guide No. 3

what



## Why be concerned?

Septic systems are wastewater treatment systems designed to collect all wastewater from residences where sanitary sewer systems are not available. They are typically designed to be effective over a 20-year period if properly maintained.

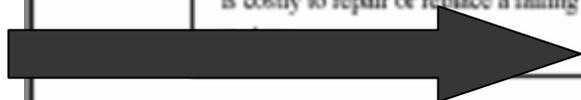
why



Poorly maintained and failing septic systems can cause serious problems. Sewage from overloaded systems can pond on the ground near the drainfield or back up into buildings. Poorly treated septic liquids can contaminate ditches, creeks and shallow drinking water supplies. Animals and people may become ill from contact with these polluted waters.

In addition to public health concerns, it is costly to repair or replace a failing

how



## How the Septic System Works

A septic system consists of a septic tank and a drainfield (Figure 1). Wastewater flows

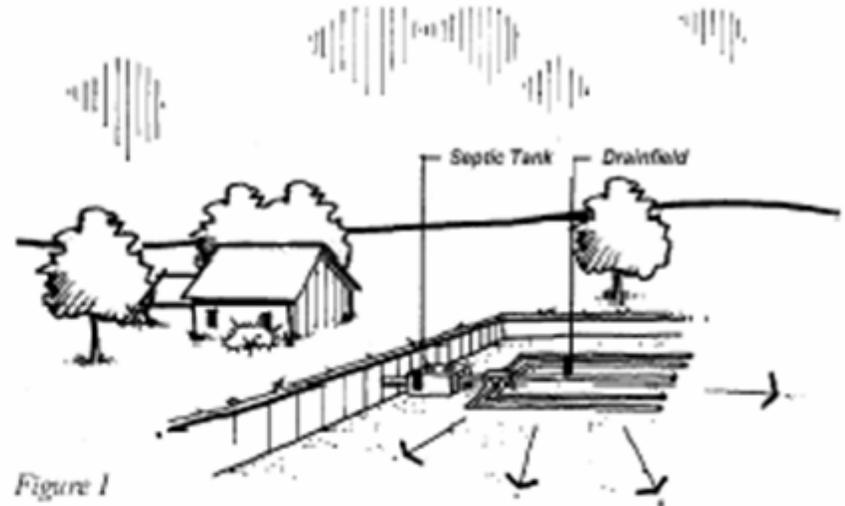


Figure 1

equally distribute the wastewater across the gravel-filled drainfield. The liquid then soaks into the soil, which acts as the final filter for treatment of wastewater received from the septic tank or from the house.

Department, if possible.

- Connect laundry and kitchen water to the septic tank.
- Divert other sources of water, like roof drains, house footing drains and sump pumps, to lawn areas away from the septic system. Excessive water keeps the soil in the drainfield saturated and prevents adequate treatment of the waste water.
- Have your septic tank pumped out by a licensed operator every 2-3 years.
- Have the operator make sure there is a tee or baffle on the outlet of the septic tank. The baffle stops the scum

## Do's and Don'ts if You Are on a Septic System

### Do's

- Learn the location of your septic tank and drainfield. Keep a sketch of it handy with your maintenance record for service visits. Obtain a copy of your

(Continued on other side)

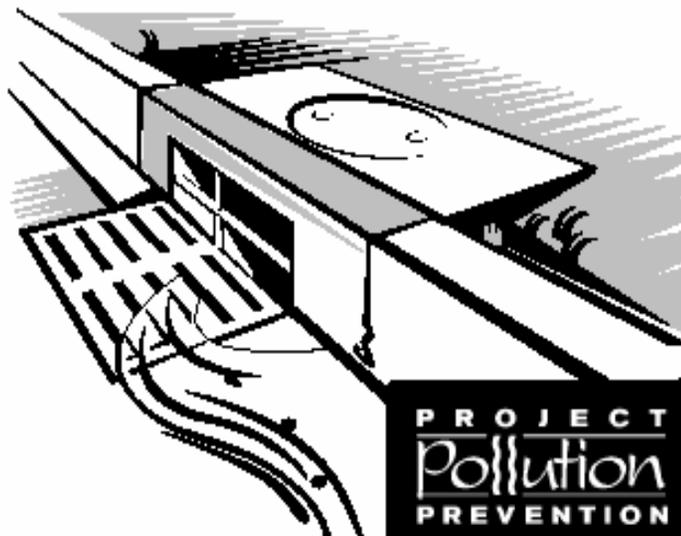
# Storm Drains are for Rain...

**M**ore than 150,000 times each month, lawns and gardens throughout LA County are overwatered. This can cause fertilizers and pesticides on grass and plants to flow into storm drains and to the ocean, untreated — harming the environment.



Please use fertilizers and pesticides wisely, not before a rain, and water carefully.

**...not fertilizer.**



**PROJECT  
Pollution  
PREVENTION**

## Does your town have a dirty little secret?



## Soil erosion could be “e-roading” your tax dollars away.

Erosion is the biggest threat to Maine's water quality. And in many towns, gravel roads are the number one cause. Erosion not only costs you, the taxpayer, money, but also causes unseen – and untold – harm to our waterways: soil hurts fishes' gills, affects water flow, and carries a lot of oil and other chemicals that contaminate the water, and lead to scummy green lakes.

So next time it rains, check out the roads in your area:

- Are they properly crowned to shed water, or does each storm leave potholes and ruts?
- Are ditches stable, or are they eroding and adding to the problem?
- Is run-off going into natural vegetated areas, or straight into lakes or wetlands?

The good news is that all these problems *can* be fixed – often at a cost that saves the taxpayers money in the long run.

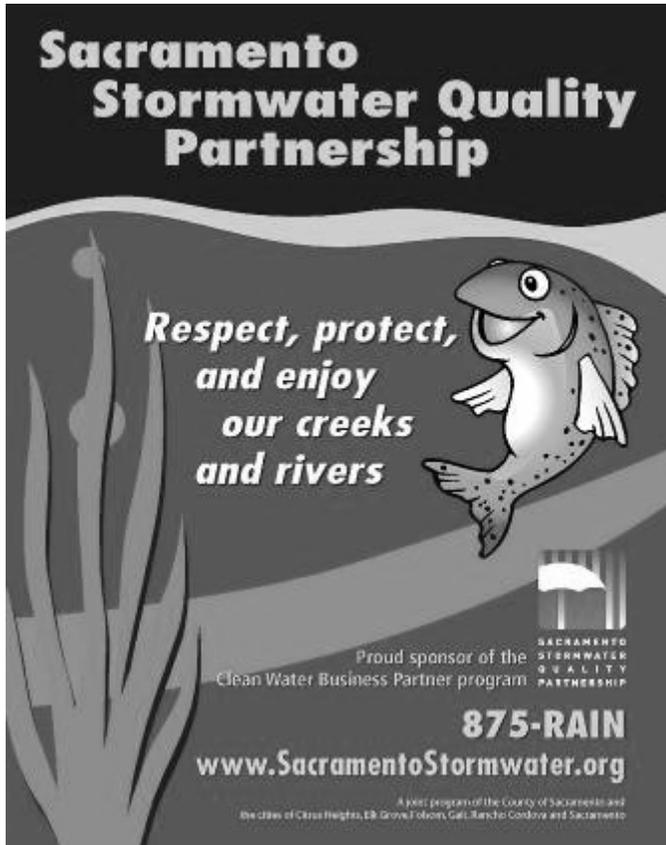
If you see erosion problems on your roads and ditches, or just have questions, talk to your town officer or call us at 1-800-452-1942.



*A program of the Maine Department of Environmental Protection*

[www.MaineDEP.com](http://www.MaineDEP.com)

# Same Artwork ....Multiple Uses



County of Sacramento and cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, and Sacramento  
\$225,000 outreach budget:

- Media outreach
- School and classroom presentations
- Integrated Pest Management (IPM)
- Local business outreach
- Residential outreach
- Storm drain marking



# Protect our water

Water pollution has many sources—dog waste, leaves, litter, oil, soil, and pesticides all contribute. Learn how you can help keep pollution out of our water.



A storm water expert will explain why storm water matters and invite citizens to join the fight against pollution. Free refreshments. For more information call 576-6721.

## Utility Bill Insert

### PUBLIC MEETING:

City of Memphis and  
Shelby County residents

**Monday, May 17**

**6:00-7:00 p.m.**

**Memphis**

**Botanic Garden**

750 Cherry Road



## Postcard

### Help Prevent Water Pollution



Call to learn more about preventing water pollution in your neighborhood.

**YOU CAN  
MAKE A DIFFERENCE  
Call 576-6721**

# Restaurant Placemat

## Take the Stormwater Runoff Challenge

### Across:

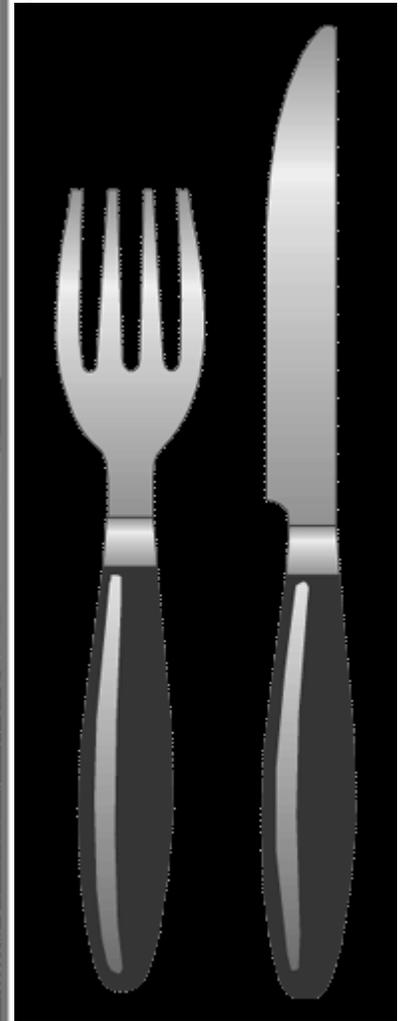
- 1) The area of land that drains into an estuary, lake, stream, or groundwater is known as a \_\_\_\_\_.
- 4) The \_\_\_\_\_ of speeding boats can erode shorelines.
- 5) Maintaining your \_\_\_\_\_ tank will help to prevent bacteria and nutrients from leaking into groundwater and surface waters.
- 7) Wetland plants act like a natural water \_\_\_\_\_, removing harmful pollutants from stormwater runoff.
- 8) Leave your grass clippings on your \_\_\_\_\_ to reduce the need for commercial fertilizers.
- 9) A single quart of motor \_\_\_\_\_, if disposed of improperly, can pollute 2 million gallons of water.
- 10) Fertilizers and animal wastes contain \_\_\_\_\_ that "feed" algae and other aquatic plants harmful to water quality.
- 12) Polluted runoff from both rural and \_\_\_\_\_ sources has a significant impact on water quality.
- 16) Storm \_\_\_\_\_ don't always connect to sewage treatment plants, so runoff can flow directly to rivers, lakes, and coastal waters.
- 18) Follow directions carefully when applying \_\_\_\_\_ on your lawn—more isn't always better.
- 19) Polluted runoff (also called \_\_\_\_\_ source pollution) comes from so many places that it's hard to "pinpoint" a source.
- 20) Yard and vegetable food waste are suitable additions to a \_\_\_\_\_ pile.

### Downs:

- 2) Don't dump used motor oil into storm drains. \_\_\_\_\_ it!
- 3) \_\_\_\_\_ of soil from barren land can cloud nearby streams.
- 4) \_\_\_\_\_ prevent flooding, improve water quality, and provide habitat for waterfowl, fish, and wildlife.
- 5) Marking "Do Not Dump, Drains to Bay" on a \_\_\_\_\_ is one way to educate people about polluted runoff.
- 6) Excess sediment, nutrients, toxics, and pathogens are all types of runoff \_\_\_\_\_.
- 11) Polluted \_\_\_\_\_ is the nation's #1 water quality problem.
- 13) The cattail is one wetland \_\_\_\_\_ that helps purify polluted runoff.
- 14) Too much \_\_\_\_\_ in water can harm aquatic life.
- 15) Proper crop and animal management on \_\_\_\_\_ helps to control water pollution.
- 17) \_\_\_\_\_ impact development helps control stormwater pollution through conservation approaches and techniques.

### Choices:

- |            |           |             |
|------------|-----------|-------------|
| compost    | nonpoint  | sediment    |
| drains     | nutrients | septic      |
| erosion    | oil       | storm drain |
| farms      | plant     | urban       |
| fertilizer | pollution | wakes       |
| filter     | recycle   | watershed   |
| lawn       | runoff    | wetlands    |
| low        |           |             |



For more information, please visit EPA's  
Polluted Runoff web site at [www.epa.gov/nps](http://www.epa.gov/nps)

Printed with soy based ink on recycled paper.

# Posters for Businesses

## Automotive Salvage Yards BEST MANAGEMENT PRACTICES



Drain all fluids from vehicles when they arrive and store them separately.  
Al recibir los vehículos, drenelos de todos los líquidos y almacénalos separadamente.



Use designated wash areas for cleaning automobile parts.  
Use las áreas designadas de lavado para limpiar las partes de automóviles.



Cover and barn auto dismantling and material storage areas.  
Cubra y haga un arcon en las áreas de desmantelar automóviles y de almacenamiento de materiales.

### How to Prevent Stormwater Pollution at an Automobile Salvage Yard



Properly dispose of hazardous waste.  
Destácese apropiadamente de los desperdicios peligrosos.



Immediately clean up spills using dry methods.  
Limpie cualquier reguero inmediatamente con materiales secos.

## Land and Air Transportation Facility BEST MANAGEMENT PRACTICES



Place drip pans under vehicles waiting for maintenance.  
Coloque el las para recoger goteras debajo de los vehículos que están esperando mantenimiento.



Clean parts and equipment only in designated wash areas.  
Limpie partes y equipo solamente en las áreas designadas de lavado.

### How to Prevent Stormwater Pollution at a Land or Air Transportation Facility



Recycle fluids and properly dispose of waste.  
Recicle líquidos y destácese de d desperdicios apropiadamente.



Maintain a clean facility by sweeping and cleaning up spills and leaks.  
Mantenga el local limpio: barra y limpie goteras y regueros.

# Objects of Everyday Utility

- **Stuff:**
  - Magnets
  - Stickers
  - Water bottles
  - Drink cozies
  - Mouse pads
  - Storm drain markers



# Calendars



It's important to remember that the water in your tap is treated with chemicals. It's important to remember that the water in your tap is treated with chemicals. It's important to remember that the water in your tap is treated with chemicals.

## April

1 9 9 7

**How's the Fishing?** **Credit: Thanks to Good Stewards!**  
 Clearly you're not just an angler for Trout fishing tournaments in Chester County, Pennsylvania. You're also a professional and avid fisherman. Dave Gerner took action. He and three friends formed the Valley Forge Chapter of Trout Unlimited. Armed with little more than rods, lugs, waders, and the knowledge they gained from local experts, the group began work.

They established existing stream banks and restored the stream's natural banks and created where fish eat, feed, and breed. They work resulted in the return of wild trout—and good fishing—to West Valley Creek. As they worked, the group began to look beyond the stream to what was happening throughout the watershed. In one case, they followed construction plans for a mill road to a creek to make sure the stream would be protected.



**You can take action to promote clean water in your own area! What kinds of things can you do?**

- Collect and test water samples as part of a volunteer monitoring group.
- Take part in a stream or beach cleanup.
- Spend a Saturday planting trees with a local restoration organization.
- Join a watershed group and take an active role in making decisions about local waters.
- Promote the protection of streams, lakes, and wetlands in your community.
- Get involved in a phone-based monitoring program to educate people about the dangers of dumping contaminants into storm drains.



- **Public Meetings**
- **(Call them community forums)**



# Fairs...



# Clean ups

# Volunteer monitoring



# Stormdrain Stenciling



# Give Awards...

**WHATCOM WATERSHEDS PLEDGE**

[Pledge Home](#)

[Residents](#) [Businesses](#) [Boats](#)  
[Farms](#)

[WA Dept. of Ecology](#)

**Pledge Businesses**

**Business Checklist**

**P2 Manual**

**Newsletters**

**Links**

## The Business Pledge

The Whatcom Watersheds Business Pledge helps Whatcom County businesses prevent pollution to their watersheds. ([click here to see our brochure-534kb](#)). Businesses that adopt some of the pollution prevention practices we recommend receive an attractive pledge plaque to display in their store or office, recognition in local publications and access to additional incentives.

# The Media

## News Media

Radio

Newspaper

Television

Magazines

## Electronic media

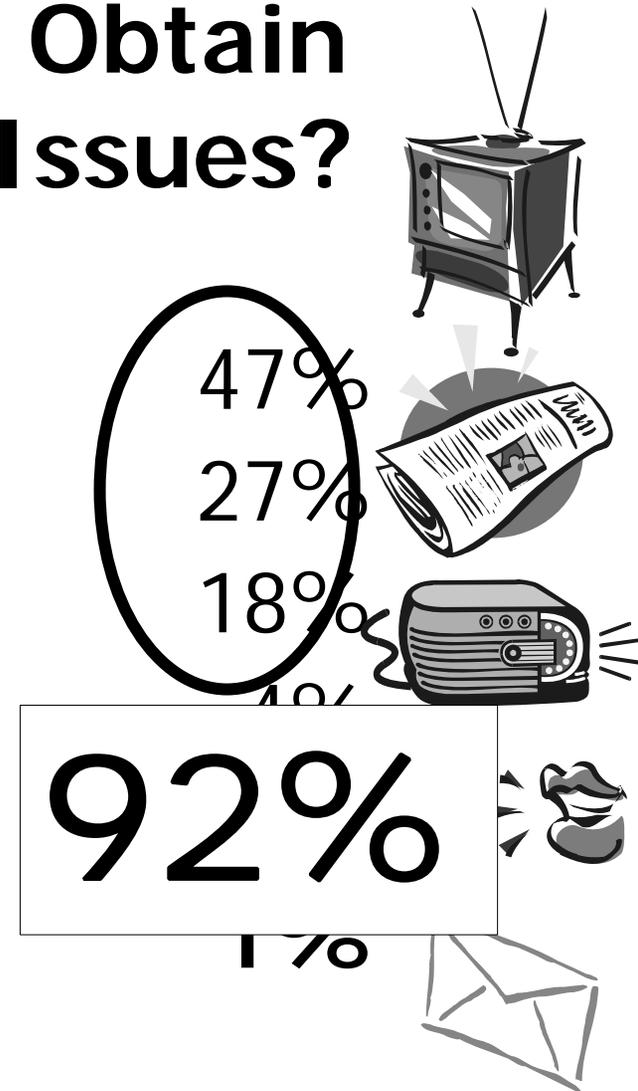
Listservers

Web sites

CD-ROMs

# Where Does the Public Obtain Information on Water Issues?

- Local television news
- Local newspapers
- Radio news programs
- Friends, family, neighbors
- Environmental mailings
- Community leaders



*Source: Lake Research Inc; for the Upper Mississippi Basin*

# Tips for working with reporters

- Establish a relationship beforehand
- Return calls, respect deadlines
- Be open and accessible
- Provide appropriate background info
- Be proactive rather than reactive
- Provide feedback on coverage

# Partnering with local TV stations to add content to 'Weather PLUS' broadcasts

The screenshot shows the WCNC.com WATERWise website. At the top left is the WCNC.com logo with the NBC peacock and the text "CAROLINAS' NEWS CHANNEL". To its right is the "WATERWise" logo. Further right are four headshots of people and the "6 NEWS Weather PLUS" logo. Below these is a navigation bar with links: "BOOKMARK THIS SITE | PRINT THIS PAGE | ABOUT THIS SITE | PARTNERS | FEEDBACK". Below that is the "ENVIROCAST" logo and a main navigation menu: "| Home | Our Watersheds | Learning Center | Resources | Media | Environmental News |".

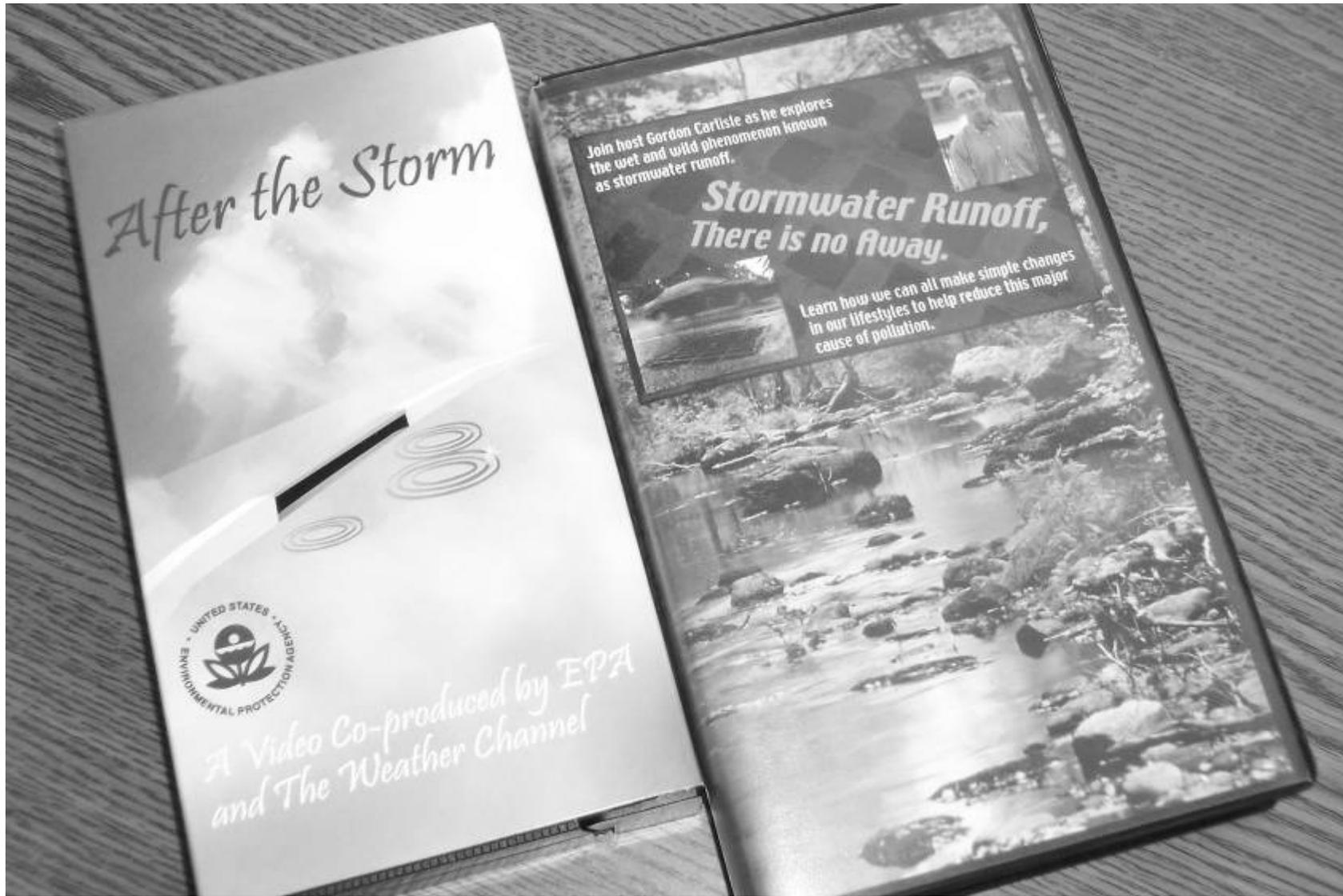
The main content area is titled "Charlotte-Mecklenburg" and features a large circular graphic of a dam. To the left of the dam are five menu items: "Find Your Watershed", "News & Features", "Watershed Watch", "Learning Center", "Special Features", and "About this Site".

On the left sidebar, there is a "KID'S CENTER" with a cartoon character and a "LEARNING CENTER" with a landscape image and the text "Visit the Learning Center to learn About Watersheds." Below that is "ENVIROCAST® On-Line" with a satellite image.

On the right sidebar, there is a "6 NEWS NEWS FEATURES" section with a photo of a road and the text "WaterWise: Preparing for hurricanes" and a "More ..." link. Below that is a "FLY THE WATERSHED" section with a map of "Charlotte-Mecklenburg Local Watersheds" and the text "Fly the Catawba River Watershed" and a "More ..." link. At the bottom right is an "ENVIRONMENTAL NEWS" section with a small image of a recycling symbol.

At the bottom of the page, a message reads: "Welcome to our WATER WISE website. Use the Flash".

# Videos



[www.epa.gov/weatherchannel](http://www.epa.gov/weatherchannel)

# Movie Theater Slide from Santa Rosa, CA

"Only Rain Down The Storm Drain"

Soapy runoff from washing your car can harm creek life even if biodegradable soaps are used.



Wash your car on gravel or grass or use a commercial car wash.



City of Santa Rosa  
Public Works Department  
Phone: 543-3467

Visit our website under Storm Water

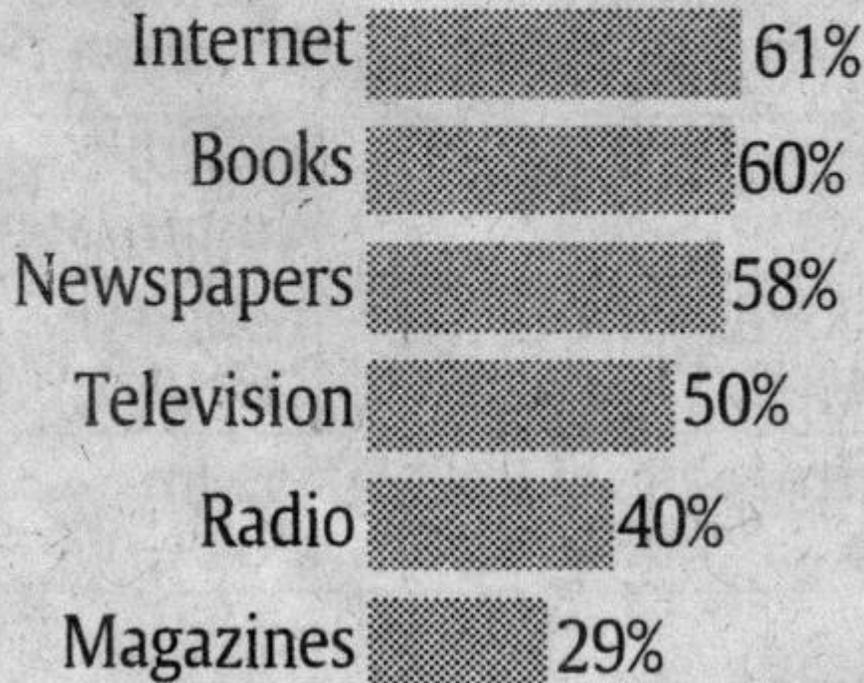


# Formats

- Web Sites
  - Reach larger audiences
  - Adaptable/changeable
  - Beyond the 30-second spot

# Net gains credibility

The percentage of Internet users who consider these sources of information important:



Source: UCLA Internet project

**In 2002, 61 percent of all users considered the Internet to be a very important or extremely important source of information.**

**Add those who said the Internet is a moderately important source of information, and the total increases to 91 percent.**

**Source: UCLA World Internet Project, [www.ccp.ucla.edu](http://www.ccp.ucla.edu)**



Charlotte-Mecklenburg  
**Storm Water Services**  
704-336-RAIN

- About Us
- CMSWS or Water Co.
- Easements
- Flood Safety
- Floodplain Permits
- Forms
- Lakes
- Pollution Prevention
- Service Requests
- Volunteer

Departments / Storm Water

**Charlotte-Mecklenburg Storm Water Services works to:**

- Control storm water runoff
- Prevent or reduce flood risks
- Restore the natural and beneficial functions of the floodplain
- Protect the quality of water in our creeks and lakes
- Maintain storm drainage systems



[Why is there a storm water fee?](#)

[Drainage and flooding problems](#)

[Report pollution in a creek or lake](#)

[What not to put in a storm drain](#)

[Is my property in a flood zone?](#)

[Storm water projects](#)

[Get involved!](#)



- [View Text-Only](#)
- [Print This Page](#)
- [Events Calendar](#)
- [311 Web Requests](#)
- [Maps/GIS Locator](#)
- [Notify Me](#)
- [Site Help](#)

[Proposed Changes to Floodplain Ordinance](#)

[Floodplain Mailer](#)

[Developers, Contractors, Engineers & Regulators](#)

[Sediment and Erosion Control](#)

[Educational Resources](#)

**Send Feedback**

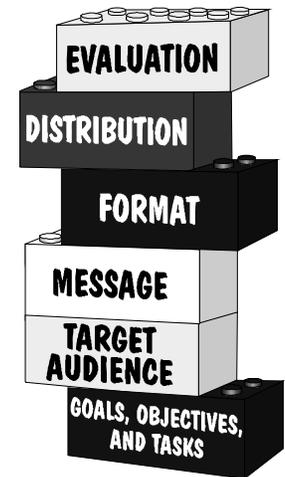
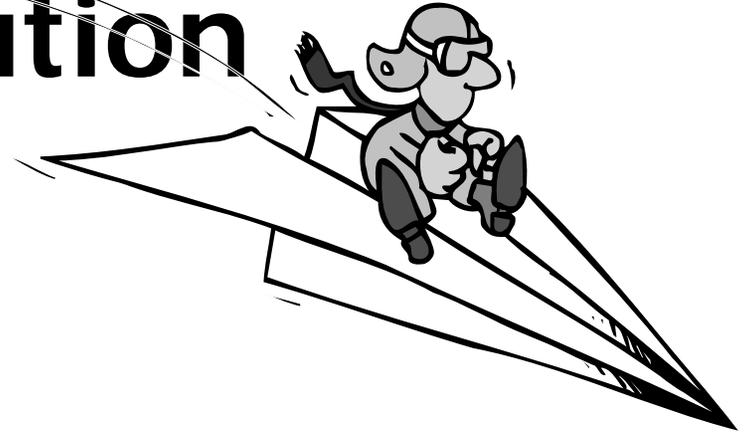
Include email for reply

Send



# Step 5: Distribution

- How will you distribute your materials?
- Who will distribute the message?



# Distribution

## Delivering the message . . .

Mail

Phone

Door-to-door

Events

Presentations

Piggybacking

Media

Stakeholder-stakeholder

Conferences/workshops

Targeted businesses

# Who is your messenger?

- Who does your audience trust?
- Who does your audience believe?



*Conservation Cowboy from Grapevine, Texas.*

- **Great program awareness builder**
- **Has fans**
- **Draws audiences**

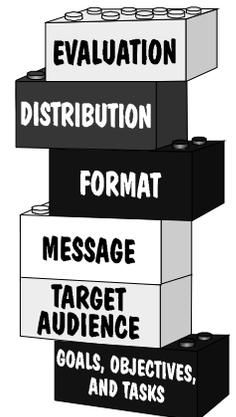


**MASCOT:  
Eddy  
Trout**



- Will your materials elicit the reaction you want?
- How do you know?

# Step 6: Evaluation





**Close**  
*to*  
**Home**

WEDNESDAY  
JULY

**10**

Maybe our price is too high.

# Why evaluate?

- To meet reporting requirements
- Understand what went right and wrong
- Helps with your annual report!

# When do you evaluate your program?

- ✓ Before
- ✓ During
- ✓ After



# Before ...

- Are the objectives consistent with the goals?
- Will the message be accepted and understood by the target audience?
- Will you be able to measure the objectives?
- Do you have enough resources to implement the activities?

# During...

- Those indicators related to the execution of the outreach campaign itself.
  - Did you meet your activity target dates?
  - Did you allocate enough staff?
  - Did you keep to the budget?
  - Stats!
    - # of brochures
    - # of web site hits
    - # of newspapers running the ads and readership
    - # of storm drains stenciled
    - # of volunteers attending activities



# After...

- Did we meet our milestones?
- “What happened for the money spent?”
- Did the target audience change their behavior?
  - Pounds of household hazardous waste collected
  - Number of calls reporting illicit discharges
  - Number of people surveyed with increased knowledge of stormwater issues
  - Number of people surveyed with changes in behavior
- Are there water quality improvements?



- Did you plan to do baseline research?

# 2004 Survey of Tampa Residents

- After the watershed education effort, 30% of residents said they live in a watershed.
  - A 58% increase!



# Write it down

- Assign responsibilities
- Assign costs
- Develop timelines



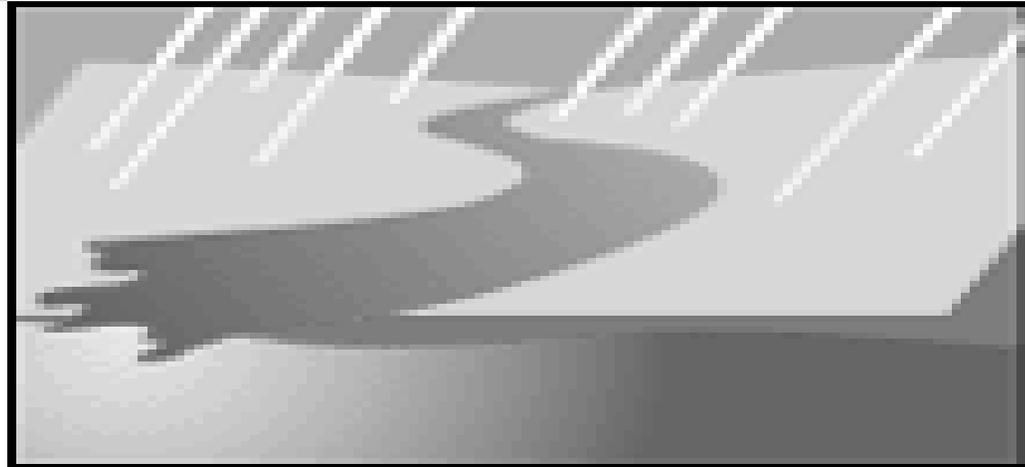
**For more information go to...**

- [www.epa.gov/npdes/  
stormwater/menuofbmps](http://www.epa.gov/npdes/stormwater/menuofbmps)

# Vermont's Regional Stormwater Education Program

[www.Smartwaterways.org](http://www.Smartwaterways.org)

SMART  
WaterWAYS



Add Up to Cleaner Water

# Questions?



# Team Effort



Brant D. Keller PhD  
Director Public Works & Utilities

# Branding

What do People I identify  
Your Program “With”





City of Griffin  
StormWater Department

NOW ENTERING THE  
WASP CREEK WATERSHED

**Create the Vision**

# Printed News Media

# A Picture is Worth A "10000" Words





# Stormwater Utility Funds Hard At Work





### *Dear Fellow Citizens,*

Water is life. Protection of this precious resource is everyone's responsibility. Health of our drinking & recreational water resources and ecosystem is linked to quality of stormwater runoff leaving our streets, yards, rooftops, commercial operations, industrial operations, and associated activities. Pollutants in stormwater discharges continue to remain a significant source of environmental impact to the

stormwater discharge permit requirements and facing funding dilemmas, the City of Griffin has an ongoing proactive nationally recognized stormwater management program that made it straightforward for Griffin to adopt required control measures. Again thanks to the City of Griffin stormwater utility that provides a required stable funding source. We have several challenges ahead but with your help and support we will succeed in achieving end results. The City of Griffin Stormwater Utility has been and will continue to be a proac-

### *The City of Griffin Stormwater Utility*

#### *Mission:*

*To enhance quality of life in Griffin by alleviating flooding, improving water quality and enhancing the natural resources of the community through proactively providing safe, efficient, and cost-effective stormwater management in an environmentally responsible, professionally acceptable and aesthetically pleasing manner.*

#### *Goals:*

- (1) Operate a customer service oriented stormwater program to serve the citizens of Griffin in an efficient, cost-effective and professional manner.*
- (2) Develop and maintain a self-regulating dynamic watershed based stormwater management program that will provide means to restore and maintain quality of our water resources and ecosystem.*
- (3) Maintain stormwater conveyance system to its functional capacity to minimize flooding and protect life and health.*
- (4) Guide development and encourage better site design and low impact developments.*
- (5) Maintain stormwater sewer system compliance with Phase 2 MS4 NPDES permit conditions.*
- (6) Develop outreach and public education program.*

#### *Staff:*

- 2 GIS Coordinator & GIS Analyst*
- 9 Drainage Maintenance / Construction*

# 14,000 Reports Distributed Annually

# SHS student pursues Eagle Scout honor with storm drain project

*Labels will remind residents that drains need to be kept clear of debris for water safety*

By **JERRY GUTLON**  
jgutlon@griffindailymet.com  
Daily News Staff Writer

As if 14-year-old Spalding High freshman Brett Upson didn't have enough on his plate, he's poised to become Griffin's next Eagle Scout.

To complete the rigorous requirements demanded to become an Eagle Scout, Upson is coordinating a project to mark all the storm drains in Griffin. He said the idea was first broached by Griffin Public Works Director Brant Keller.

"I was on a duck hunting trip with Mr. Brant," Upson said, "and I asked him what kind of project I could do for my Eagle Scout, and he suggested this one. So I thought about it and told him I was going to do it. Then he gave me all the supplies for the project."

The project entails placing warnings on literally thousands of storm drains throughout the city. The decals and stenciled advisories warn residents not to dump trash, litter, law cuttings and toxic liquids into the city storm drains.

Not only can the refuse clog up the drains, increasing the possibility of flooding, but any toxic substances could contaminate the city's drinking water.

David Borkowski, the city's deputy director of stormwater, said Upson's contribution to the well-being of Griffin's water supply is invaluable.

"I think it's a great project. It's one of the ways we can get information out to the public concerning what you shouldn't dump into storm drains," Borkowski said. It's illegal to dump into storm drains, and the project will contribute to the city's compliance with the new regulations.

Borkowski said sooner or later the pollutants end up in the water supply.

"Litter, plastic bags, Styrofoam cups, Grass clippings are considered litter. It can clog up the sewers. People

change oil and dump it in the rains because it's convenient."

"It all ends up in the creeks and streams. Even if it doesn't go straight into the water, it may go in the neighbor's yard first, but it will end up in one of our major creeks, either Cabin Creek or Potato Creek. It's going to be in somebody's drinking water eventually. Everybody lives downstream."

As of Oct. 20, Upson has overseen the placement of 1,300 warning labels on city storm drains. All told, he obtained support from his mother and 17 other Scouts. A member of the Boy Scouts of America since he was a Cub Scout at age 5, Upson is also working toward an

extremely prestigious award no one in the BSA's Flint River Council has ever won: The Hornaday Award.

It's an award for meritorious service in the realm of benefiting the ecology, and only 1,500 have ever been given out, worldwide.

He said he'll finish the project by early November.

"I will be done by Nov. 2 because that's my birthday and my Dad said I can't get my learner's permit until I finish for my Eagle Scout. And I want my learner's permit."

The youth is an honor student at Spalding, and plays football, soccer and golf. He never kicked a football until last summer.

Please see **SCOUT** on 3A

News Papers



**GUEST EDITORIAL**

**Credibility**

*By Brant D. Keller*

search the  
**BUYERS GUIDE**

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**BUYERS GUIDE**

I have had the opportunity to fly over all major rivers, tributaries, and lakes in my state both during wet-weather events and through three years of drought. It was not a surprise to see sediment and tons of it. Stream and river channels are reshaped by sediment loading. Properties that once were areas of sustainable use have been turned into barren waste created by urbanization and agricultural transported sediment.

Erosion and sediment are not new issues in the nonpoint-source arena. America has been attempting to cope with erosion since the days of the Dust Bowl. The 305(b) and 303(d) lists are full of stream segments not meeting water-quality standards because of sediment loading, not to mention the other pollutants captured by the sediment as it moves downstream.

The tragedy of this sequence of loading events is that erosion and sediment controls are not new phenomena in the world of stormwater runoff. During the Dust Bowl era, we should have learned a valuable lesson about wind and sheet erosion. In the 1970s, many states created erosion and sediment control manuals designed to address these problems. At that time, it appeared we were going to get the job done and keep sediment out of our streams and rivers. Wrong! Watershed assessments and stream walks prove that the legacy of erosion still exists today.

Getting People Involved

# 9 Person Watershed Council



## **Coordinating Regional Council:**

An Environmental Advisory Committee (EAC) was established by the McIntosh Trail RDC early in 2001 to address the fecal coliform TMDL. This EAC consisted of Potato Creek Watershed stakeholders, including the six participating governmental entities and RDC members: City of Griffin, City of Thomaston, Lamar County, Spalding County, Pike County, and Upson County. Other EAC members included the Technical Partners and the Natural Resources Conservation Service. A preliminary TMDL IP for Potato Creek was produced by the RDC and submitted to EPD in March of 2001. This plan incorporated input and comment from the EAC and reflected the desire of the EAC to address fecal bacterial pollution throughout the Potato Creek Watershed. The RDC and EAC were unaware of the specific source(s) of fecal bacteria, so the most appropriate BMPs for reducing source inputs were unknown at that time. Therefore, the RDC committed to sponsoring a project, with the assistance of the EAC, to first identify the sources of fecal bacterial pollution in the Potato Creek Watershed, and then to identify the appropriate BMPs to achieve the desired pollutant load reduction. Specific project objectives, as identified in the 319 grant application, included:

Characterize all fecal coliform sources to the Potato Creek Watershed through a Bacterial Source Tracking (BST) program  
Identify appropriate watershed-wide and site-specific BMPs that will be used to effectively control and reduce the inputs of fecal coliform identified under Objective A

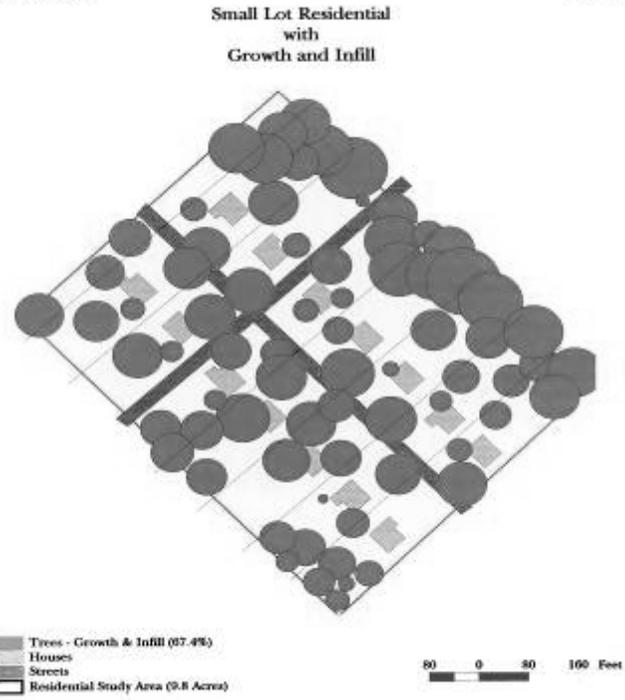
Through coordination with the EAC, produce a revised Potato Creek TMDL IP



*CITYgreen* Stormwater Analysis  
Griffin, Georgia

September 30, 1997  
Figure 6

# Plant the Future



Department of Public Works  
Griffin, Georgia

Dudley R. Hartel  
Consulting Urban Forester



102 Tons

Annual Stream Clean Up

"Priceless"



Fellowship Pays Big Dividends



**37 Contacts**

Griffin has E/S Training Site for Developers and Builders



358 Training Sessions One on One in 2005



**Welcome to the Home Page for The City of Griffin's  
Stormwater, Water & Wastewater, and GIS Departments.  
Please click on a department banner below to enter.**



**City of Griffin Stormwater Department**



**City of Griffin Water & Wastewater Department**



**City of Griffin GIS Department**



**City of Griffin Stormwater Division  
Comprehensive Stormwater  
General Public Survey**

*Please take a few moments to complete this brief survey. Your opinion of Griffin's Stormwater Division will be very valuable in planning future projects and evaluating the effectiveness of our Stormwater Program. Please return this survey with your utility bill or drop the survey in the "Drop Box" at the MEAG Power office by June 30, 2004.*

1. Do you live within the City Limits of Griffin?  
YES  NO
2. Did you know that the City of Griffin has a Stormwater Utility to address problems associated with street run-off?  
YES  NO
3. Have you ever reported a problem to the Stormwater Utility?  
YES  NO
4. If you answered yes to question 3, was your problem resolved in a timely manner?  
YES  NO
5. If you answered no to question 4, were you provided with a reason why it could not be resolved?  
YES  NO
6. Did you know that the Stormwater Division is responsible for floodplain management, erosion control and the discharge of pollutants into the City's streams?  
YES  NO
7. Did you know that the City is required by the Georgia Environmental Protection Division to clean stormwater run-off to the maximum extent practicable?  
YES  NO
8. Do you feel that the monthly Stormwater fee is a tax and not a user fee?  
YES  NO
9. Did you live in Griffin before the Stormwater Utility started in 1997?  
YES  NO
10. Have you noticed a decrease in flooding within the City and an improvement in the way the City handles stormwater problems since 1997?  
YES  NO

11. What do you feel should be a **priority** with the City's Stormwater Utility? Rank from highest priority to lowest priority, 1 being the highest and 6 being the lowest.
  - a. Flood improvement projects (larger pipes, detention ponds, etc.)
  - b. Water quality improvement projects (enhancing the fishing and recreational quality of streams, etc.)
  - c. Stream channel enhancements (repairing eroding banks, removing debris, etc.)
  - d. Public education on how to reduce pollution in stormwater run-off
  - e. Repairing and maintaining the current drainage system (cleaning culverts and catchbasins of debris, cutting vegetation in ditches, and sweeping streets, etc.)
  - f. Stopping people from dumping debris and contaminants into storm drains
12. Would you be willing to pay more in your stormwater utility bill for increased funding of the highest priority you selected in question 11?  
YES  NO
13. Would you be willing to serve on the Watershed Advisory Council to provide input in the community?  
YES  NO
14. Would you be willing to participate once a year in a stream cleanup program?  
YES  NO

*Thank you for taking the time to complete this survey! The information we receive will greatly help us to improve our program. Feel free to write any additional comments on the back of this survey.*

*Please check our website ([www.griffinstorm.com](http://www.griffinstorm.com)) for additional information about our program and the results of this survey.*



# And the Survey "Said"

## 2004 Stormwater Survey Results

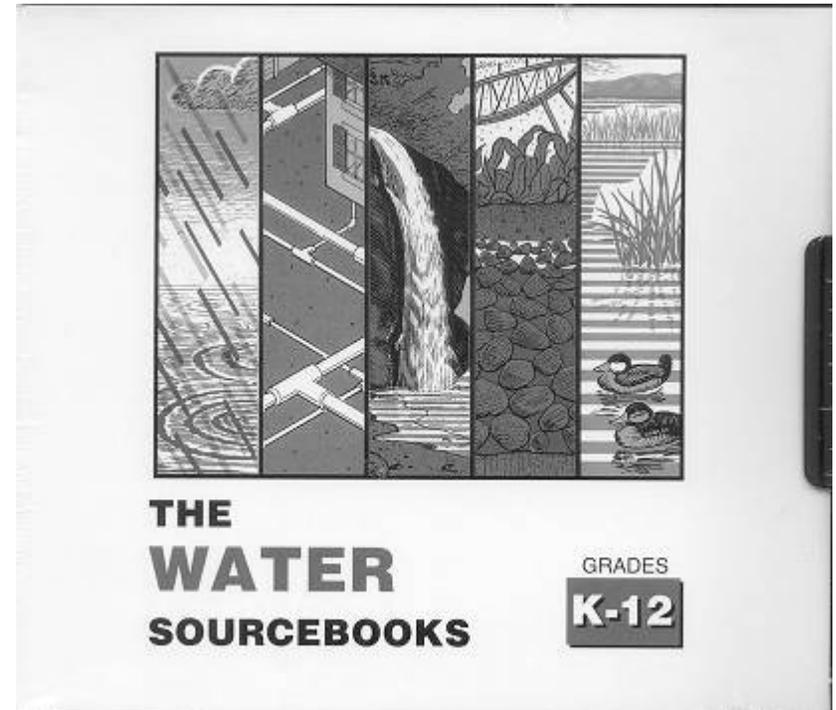
CITY					COUNTY					OVERALL				
	YES	NO	% YES	% NO		YES	NO	% YES	% NO		YES	NO	% YES	% NO
1	715	0	100%	0%	1	0	588	0%	100%	1	715	588	56%	44%
2	454	249	65%	35%	2	226	332	41%	59%	2	690	581	54%	46%
3	93	615	13%	87%	3	37	525	7%	93%	3	130	1130	10%	90%
4	50	57	47%	53%	4	16	46	26%	74%	4	66	103	39%	61%
5	17	52	25%	75%	5	5	54	8%	92%	5	22	106	17%	83%
6	388	308	56%	44%	6	203	332	38%	62%	6	591	640	48%	52%
7	381	328	52%	48%	7	224	316	41%	59%	7	595	634	48%	52%
8	458	194	70%	30%	8	292	153	66%	34%	8	750	347	68%	32%
9	530	177	75%	25%	9	312	228	58%	42%	9	842	405	68%	32%
10	202	398	34%	66%	10	128	337	28%	72%	10	330	735	31%	69%
TOTALS RANK					TOTALS RANK					TOTALS RANK				
A	1824			3rd	A	1354			3rd	A	3178			3rd
B	1995			5th	B	1382			5th	B	3377			5th
C	1940			4th	C	1357			4th	C	3297			4th
D	2058			8th	D	1557			8th	D	3615			8th
E	1086			1st	E	898			1st	E	1982			1st
F	1398			2nd	F	1058			2nd	F	2454			2nd
YES NO % YES % NO					YES NO % YES % NO					YES NO % YES % NO				
12	142	526	21%	79%	12	122	365	25%	75%	12	264	891	23%	77%
13	152	514	23%	77%	13	107	387	22%	78%	13	259	901	22%	78%
14	273	400	41%	59%	14	169	310	38%	62%	14	462	710	39%	61%

17,000 Bill Stuffer ... 3600 Surveys Returned = 21%



Over 800  
Students  
Demonstrated  
Hands On

12,578 Students  
K-12 Grades  
Correlated in  
Curriculums Weekly



City of Griffin  
WaterWise™ Program

Sponsored by:

# WaterWise



Program Summary Report  
School Year 2005-2006

Submitted By:

Resource Action Programs\*



June 2006

578 5<sup>th</sup> Graders  
For  
10 Years



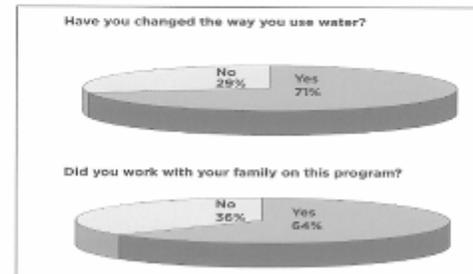
## Program Impact

The City of Griffin WaterWise™ Resource Action Program has had a significant impact within the community. As illustrated below, the Program successfully educated a portion of the community about water and energy efficiency while installing resource efficient technologies in homes and collecting data to better understand future trends and usage. The following results were compiled from actual student and family reports:

### A. Water Adventure Report

Upon completion of the program, participating families are asked to complete a Water Adventure Report (WAR) to assess their resource use, verify product installation and measure participation rates. A few samples are below while a complete summary of all responses is included in the appendices.

Did you like the program?	Yes - 90%
Did you work with your family on this program?	Yes - 64%
Have you changed the way you use water?	Yes - 71%





ROW YOUR OWN BOAT!

Evaporation

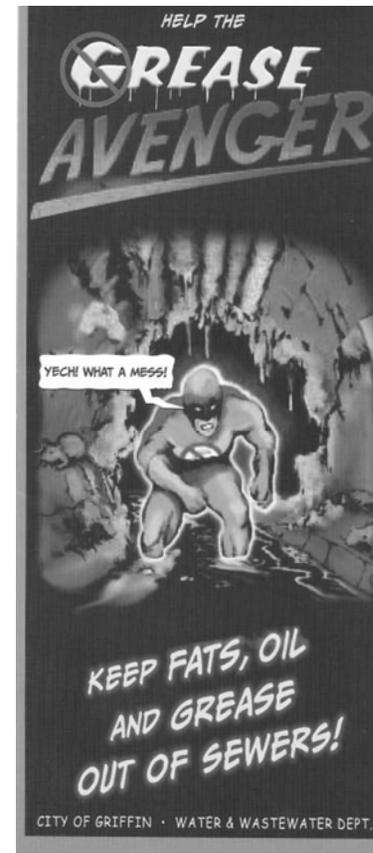
Precipitation

Make new friends... READ!

**Homophone**

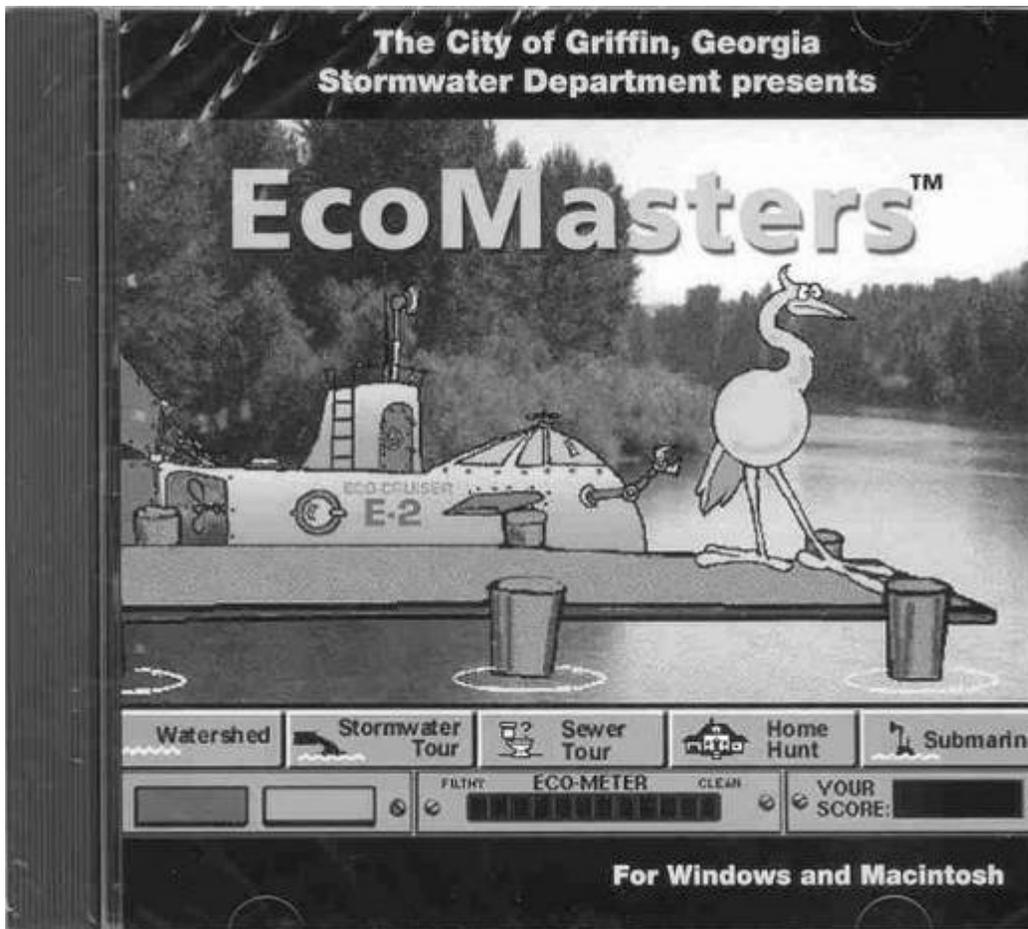
Words that sound the same but have different meanings and usually different spellings.

BULLDOGS



Water and Wastewater Department  
Gets Involved in Illicit Discharge  
Fats, Oils and Grease Program

156 Restaurants, 46 Churches and 21 Schools



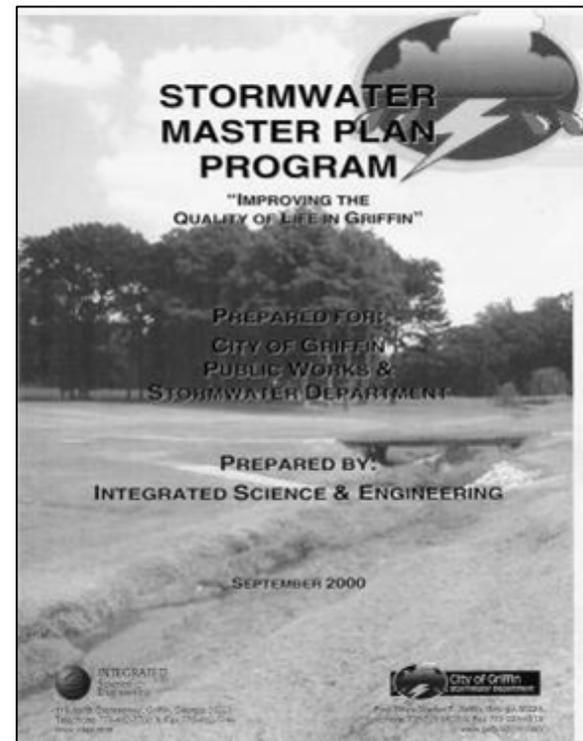
## Interactive Watershed Game

2000 Copies  
Distributed



# Speaker's Bureau

Over 125 Local  
Presentations



**Comprehensive Stormwater  
Master Plan**

# Town Hall Meetings



101 Concerned Citizens

One on One



# "Website Can Not Be Static"

Our Site get 70,000 to 150,000 Hits Monthly  
And an average of 5:01 Minutes per Visit

Address <http://www.griffinstorm.com/>

## City of Griffin Stormwater Department

Home About Us What's New Reporting Problems Contact Us

- Stormwater Utility
- NPDES Phase II
- Projects
- Education
- Resources
- Floodplain Management
- Water Quality
- Water Conservation & Reuse
- Links

### News

#### EPA NSF Environmental Testing Verification Project (ETV)

The ETV project will utilize data collected in the TEA-21 project to determine the efficiency of various structural BMP's. The project test plan is developed in accordance with NSF's current testing protocol. The City of Griffin serves as the test site and Integrated Science & Engineering, Inc. (ISE) is the Field Testing Organization (FTO). The project will commence Summer of 2002 and should be completed by early 2003.

#### TEA-21 - City of Griffin Effectiveness of Urban Stormwater Best Management Practices Project

The City of Griffin received a Transportation Enhancement Actives of the 21st Century (TEA-21) grant from the Federal Highway Administration (FHWA) administered through the Georgia Department of Transportation (GDOT) to evaluate the stormwater runoff from an urban highway corridor. The scope of the project is to provide quantitative data regarding the effectiveness of various traditional and high-tech treatment best management practices (BMP's).

[Full Story](#)

#### COE Section 206

The City of Griffin and the Army Corps of Engineers Mobile District (ACOE) are evaluating the feasibility of performing Aquatic Ecosystem Restoration under Section 206 of the 1986 Water Resources Development Act. The City initiated the study by submitting a study request letter to the ACOE. The Project will focus on restoring degraded aquatic ecosystems in the City's watershed and extending to the upper reaches in the County if the initial investigation shows that restoration will improve the environment, is in the public interest and is cost-effective.

#### Development Services

- [Control Point Network](#)
- [Stormwater Design Manual](#)
- [Stormwater Master Plan](#)
- [Credit Manual](#)
- [Ordinance - E&S](#)
- [Ordinance - Illicit Discharge](#)

Get Acrobat  
Help Reader

**Welcome to the Home Page for The City of Griffin's  
Stormwater, Water & Wastewater, and GIS  
Departments.**

**Please click on a department banner below to enter.**



**City of Griffin Stormwater Department**



**City of Griffin Water & Wastewater Department**



**City of Griffin GIS Department**



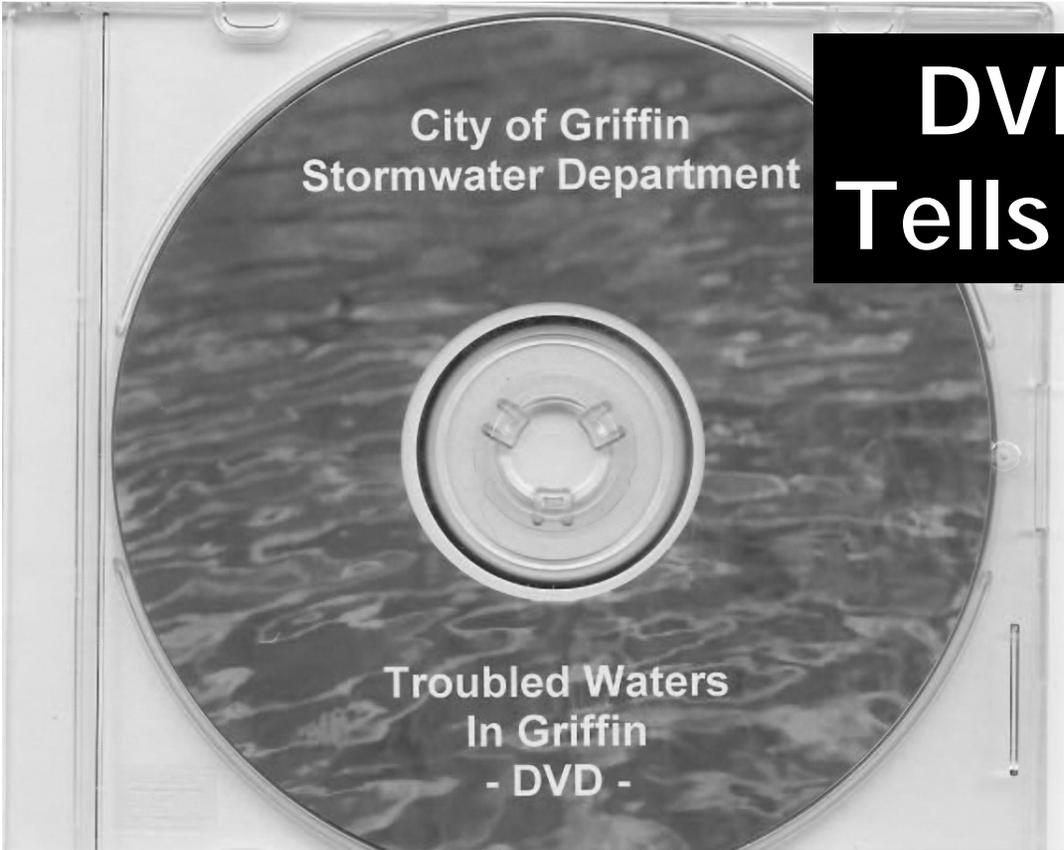


10,000 Exposures  
Annually

Mobile Public Information Booth

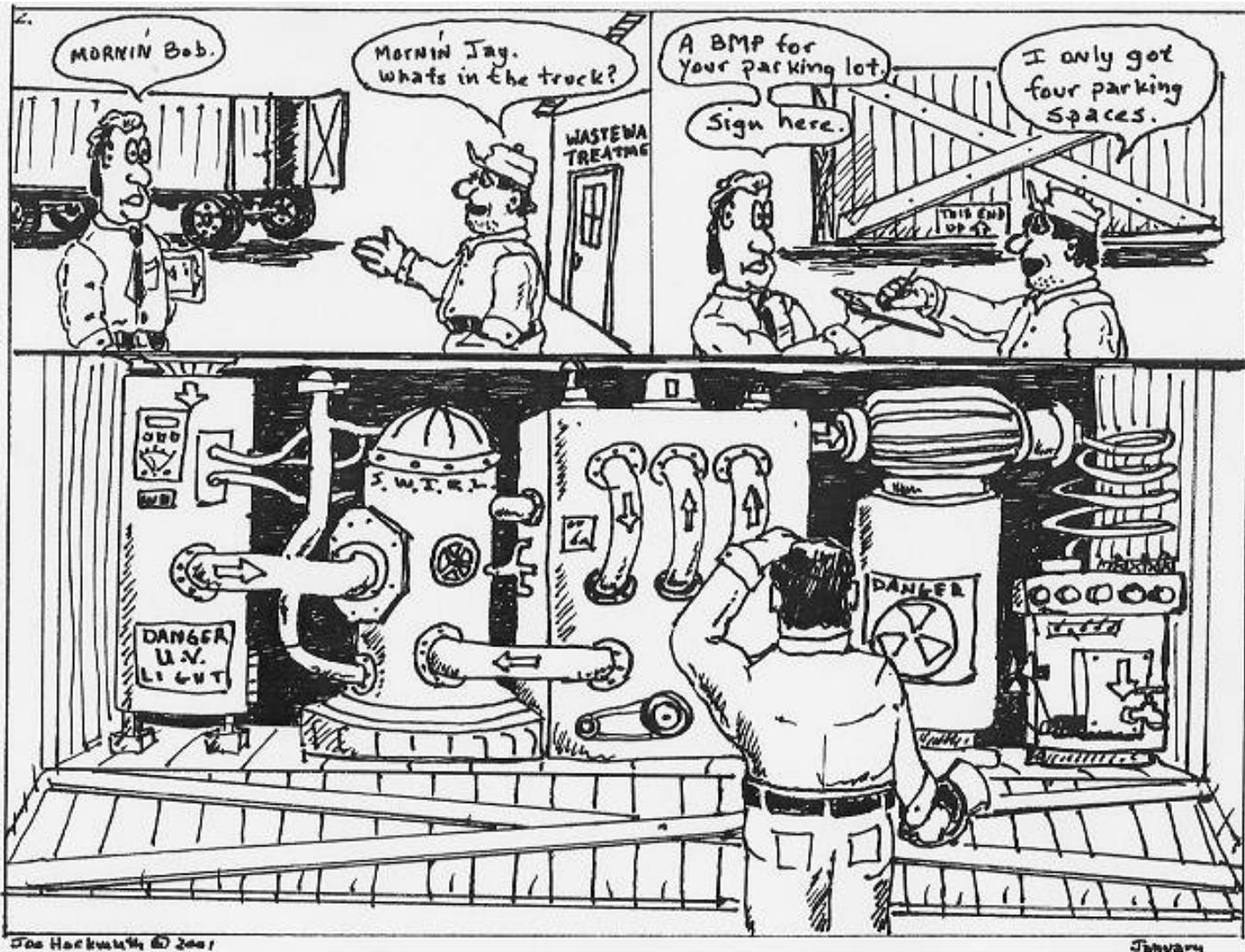
Booth Moves Bi-Monthly and Changed Annually

# DVD Movies Tells the Story



Viewed by  
3000 or more Folks



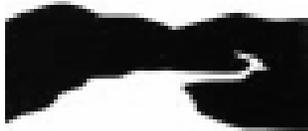


Who is your Audience "Just another Way to Get the Message Across"

**Education is a  
Team Effort**



BRINGING RIVERS TO LIFE



*American Rivers*  
FOUNDED 1970



# Georgia Department of Community Affairs

**Smart Growth  
America**  
Better Choices for Our Communities



**EPA** U.S. Environmental Protection Agency  
Region 4

**USGS** U.S. Geological Service



U.S. Fish & Wildlife Service



**INTEGRATED**  
Science & Engineering



## Georgia Stormwater Management Manual

# **The Job has Only Just Started**

**Continuous Evaluation of your Audience  
And Your Message**



**7,500  
Given Out**

CITY OF GRIFFIN

Inform People

STORMWATER UTILITY  
 POLLUTION HOTLINE:  
 770-229-6603

In the event that a lawn care or other service company working at your location has discharged any material into the street, please contact us so we may work with the company to help eliminate future violations. The information we would like is: the company name, primary task, date of work, phone number, company address and name of contact person.

**REMEMBER:**  
 STORM DRAINS ARE DESIGNED TO COLLECT RAINWATER RUNOFF.  
 DO NOT PUT ANYTHING DOWN A STORM DRAIN THAT YOU WOULD NOT WANT TO DRINK OR SWIM IN.



**City of Griffin**  
Stormwater Department

"Protecting Natural Resources for the Future"

**3,000  
Given Out**



**City of Griffin**  
Stormwater Department

— Sorry we missed you.  
Please contact in 24-Hrs. at 229-6603 if you have any questions.

— We will be working in your neighborhood.

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**1,700  
Given Out**

**Questions?**