



Memorandum

To: Stormwater Management Task Force

From: CDM

Date: November 22, 2006

*Subject: Wake County Stormwater Task Force Meeting #8 Summary –
Tools & Strategies Module*

On November 16, 2006, CDM and Wake County staff facilitated the eighth meeting for the Wake County Stormwater Management Task Force. Attendees were provided with meeting materials, including a copy of the agenda, a list of tools ranked by the screening criteria, materials for a voting exercise, and a PowerPoint presentation. All meeting materials can be found on the Task Force website at <http://www.wakegov.com/environment/stormwater/>.

The meeting began with a welcome by Commissioner Kenn Gardner, Chairman of the Wake County Stormwater Task Force. CDM staff then provided a brief update on the work plan status. Meeting #8 was the second meeting of the “Tools and Strategies” module. In this meeting, the Task Force began reviewing detailed evaluations of toolsets that scored well when compared to the evaluation criteria. The “Public Education” and “Assessment and Forecasting” toolsets were to be evaluated in this meeting. Before each toolset was presented however, a review of the screening criteria and scoring results were presented.

Revised Screening Criteria and Tool Ranking

CDM staff reviewed the screening criteria used to score the tools along with suggested edits to the criteria from the previous Task Force meeting. These criteria are listed below:

Evaluation Criteria

- Compliance with Goals and Objectives
- Cost
- Ease of Implementation
- Equity

The following is a list of comments provided by the Task Force in Meeting #7 regarding the evaluation criteria and the list of tools:

Suggestions Regarding Evaluation Criteria

- Does it conflict with existing ordinance or UDO?
- Is there enabling legislation?
- Concern about screening criteria – Where is criteria for effectiveness?
- Is there a bias for something that has to be built? Need check/balance.

CDM staff explained that the first two suggestions were addressed under the “Ease of Implementation” criteria. Concerning the suggested “Effectiveness” criterion, CDM staff explained that this criterion is subjective based on application of tool and level of service and was therefore not included in screening criteria. However, opinions and data on effectiveness would be discussed for each of the tools for consideration. The fourth suggestion was addressed by the “Cost” criterion.

After reviewing the evaluation criteria used to score the tools and strategies, all 34 of the tools were presented by their score and rank (please refer to the meeting handouts to see the ranking). Following the presentation of the ranking, the Task Force was given an opportunity to comment. The following is a list of comments provided by the Task Force regarding the ranking:

Comments Regarding Tool and Strategy Ranking

- Concern with lack of “Effectiveness” criterion.
- Use “Conserve” instead of “Preserve” in language for the tools.
- The following tools are similar and should be combined:
 - Strategies to reduce impervious surfaces required for new development.
 - Reducing impervious surfaces with zoning restrictions.
 - Planning and layout of development (cluster, etc.).
- Tool 19 (Preserve Stream Buffers) is a Neuse requirement and should therefore be elevated.

- Tool 15 (Illicit discharge detection and elimination) is a Phase II Requirement.
- Should there be a tool for GIS development / management?
- Elevate Tool 25 (Real estate disclosure of structural flooding).
- Concerning the following tools, forestry and horticulture should be included with agriculture:
 - Design and maintenance standards for sedimentation and erosion control devices (Tool 3).
 - Application of S&E for agricultural operations (Tool 16).
- We should combine the following tools as applicable:
 - Preserve land through open space acquisition, conservation easements, etc. (Tool 5).
 - Preserve stream buffers (Tool 19).
 - Protection of sensitive and valuable natural areas (Tool 22).
- The following tools should be elevated:
 - Inspect, maintain, and rehabilitate the sanitary sewer system (Tool 13).
 - Illicit discharge detection and elimination (Tool 15).
 - Preserve stream buffers (Tool 19).
- The following tools should be made available:
 - Site-level flood controls (Tool 28).
 - Development or watershed-level water quality controls (Tool 29).

Discussion on Public Education

Following a discussion of the tool ranking, CDM staff gave a detailed presentation on Public Education. The presentation covered the following topics: 1) definition of public education, 2) target audiences, 3) education practices in Wake County, 4) effectiveness of Wake County education practices, and 5) education practices in Mecklenburg County (a peer county). During the presentation on public education, the Task Force was given a number of

opportunities to comment. The following is a list of comments provided by the Task Force regarding public education:

Comments by Task Force Members Regarding Public Education

- Public education done correctly is expensive and funding is therefore very important.
- Illicit discharges are an important public education need.
- Phase II requirements are driving public education programs for smaller towns.
- Commercial entities, municipal employees, and contractors can be controlled through city ordinances and rules while the residential sector is harder to control.
- The residential sector is the most important target audience for public education.
- Public education programs should be focused and not piecemeal.
- Concern for distributing a unified message.
- Concern that we are not effectively using the resources that are already in place.
- Local celebrities, a mascot, etc. should be added to jazz up advertising.
- Public education should occur during teachable moments and situations.
- Promote websites at events.
- Signs in parks for pet waste pickup are helpful.
- Storm drain stenciling is effective at promoting awareness.
- A lot of public education has been directed towards wastewater treatment and may contribute to stormwater misconceptions.
- Leverage state agencies to educate teachers so they can distribute the message.
- Focus on automotive good housekeeping for residential sector.
- Stormwater advertisements via CWEP are currently running at prime time news spots.
- When charging a stormwater fee, the customers expect public information to be available.
- Faith-based organizations can be effective partners for public education.

- Kids and homeowner's associations should be targeted.
- There is a difference between "information" and "education".
- Send educational information to pet owners when their dog is licensed with the city.
- Keep perspective of the problem in mind and stick to efforts that most affect water quality.
- Mecklenburg County does an excellent job of integrating public education into their school curriculum.
- Having a stormwater utility in place promotes public education since writing a check for something enhances its visibility.

Voting Exercise

The Task Force was asked by CDM staff to fill out three ballots included with their handouts. There were ballots listing public education methods for residential, non-residential, and municipal groups. The Task Force was asked to choose four education methods, three target audiences, and frequency of occurrence. The results of this voting exercise are attached and will be discussed in the next meeting.

Assessment and Forecasting

Due to time constraints, the information on Assessment and Forecasting was not presented. The information will be presented at the next meeting. If you would like a preview, please review the PowerPoint slides associated with this topic.

Wrap-Up and Path Forward

The next Task Force meeting will be held on December 14, 2006. This next meeting will continue the "Tools & Strategies" module. The Task Force will continue to review detailed evaluations of a toolsets that scored well when compared to the evaluation criteria.

Public Education Tools for Residential Audiences

Activity (Choose up to Four)		Target Audience (Choose up to Three per Activity)						Approach / Delivery Mechanism (Choose up to Four per Activity)											Frequency (Choose One per Activity)							
Votes		Adults	HS-age children	MS/ES -age children	Owners	Renters	HOA	TV / Radio	Print Media	Billing Inserts	Website	Email	HOA/ private efforts	Speaker Bureau	Staff Efforts	Posters & Give-aways	Manuals	School Curriculum	Booth at Special Events	Multiple/ week	1 X / week	1 X / month	4 X / year	2 X / year	1 X / year	
1.	Self-performed lawn care management education - fertilizer application, yard waste disposal, etc.	13	14	6	1	11	3	9	9	7	9	7	1	9		1	1		5	2	1	1	1	3	6	
2.	Household hazardous materials management - storage and disposal of chemicals.	7	8	1	3	5	6	5	6	3	4	7	1	5		1		4		1			2	5	1	
3.	Methods and benefits of reducing the volume of runoff from residential property.	12	12	5	4	9	1	10	5	6	3	9	1	7	1	4		3	5	4			4	3	3	
4.	Car washing practices to protect water quality.	4	4	4	1	1		1	2		1	3		1		1		3	2	1			1	2		
5.	Vehicle maintenance practices to protect water quality.	8	9	7	2	7	3	4	8	3	6	5		5		2		1	3		2	2		2	1	
6.	Nuisance flooding - awareness and how to eliminate impacts to personal property.	9	9	5	3	7	3	8	4	3	4	5	1	5		2		3	4	3	2		4	1	2	
7.	Structural flooding - awareness and options to eliminate impacts to personal property.	9	8	2	2	6	2	8	5	2	3	7	2	4	1	2	1	1	2	2	1	1	2	2	2	1
8.	Citizen-based stewardship programs and activities (Big Sweep, Adopt-a-Stream)	6	8	8	7	1			8	4	4	2	1	2	1	1		7	2	2		4	1	1	2	
9.	Drainage system signage and stenciling to increase citizen awareness.	13	14	10	8	4	2	4	7	5	6	8		6	1	1	3		7	4	3	2	3	1	2	2
10.	Pet waste management practices to protect water quality.	7	5	6	3	3	3	4	7	4	4	3		3			1		5	1	1	1	4			

Comments and Notes

9. Ads can be intermittent. Activity can be on-going. Consider adding intermission periods at sporting events as a media outlet.

#4 and 5 should be together.

Someone gives away motor oil at a football game, include education! Advance Auto, etc...

Billing inserts to me are ineffective, because I usually just throw them out without looking at them.

#2 Include oil from cars.

#9 Let people know it goes to drinking water.

#4 During summer.

Categories could be better defined.

The biggest impact to public education is to let people know that if it goes down the storm drain that it goes into their drinking water.

High school/college age children can be very receptive to this type of education. I think it is great to target kids because they can take the message home to their parents.

Public Education Tools for Non-Residential Audiences

Activity (Choose up to Four)		Target Audience (Choose up to Three per Activity)							Approach / Delivery Mechanisms (Choose up to Four per Activity)											Frequency (Choose one per Activity)						
Votes		Employee	Engineer	Contractor	Developer	Vocational HS Student	Tech. College Student	Owner	TV / Radio	Print Media	Posters & Give-aways	Website	Mandatory Wkshop	Cert. Process	Trade Show / Conf.	Manuals	Trade Group	Staff Efforts	HS Vocat. Training	Tech. CC Training	Multiple / week	1 X / week	1 X / month	4 X / year	2 X / year	1 X / year
1.	Lawn care management practices for commercial landscape management company employees.	13	2	9	3	1	1	8		4	1	4	7	9	2	5	8	5	1	2	3				7	3
2.	Training for hazardous and non-hazardous materials management for businesses.	7	1	6	2	2		6	2		2	7	6	2	4	2	1		1	2		2	2	1		
3.	Training for the installation and maintenance of sediment and erosion control devices.	8	4	8	4	2	1	2	2	2	4	6	8	1	3	6	2		1			2	1	2	4	
4.	Mandatory certifications for sediment and erosion control installers and operators.	13	7	13	9	2	2	2	2	3	1	5	8	11	3	5	6	3		2	2		2	3	5	1
5.	Structural flooding - awareness and options to eliminate impacts to commercial property.	8	3	7	6	2	1	3	2	4		5	4	5	1	2	3		2	1		1	2	3	1	
6.	Nuisance flooding - awareness and how to eliminate impacts to commercial property.	2		3	2	1	1	1		2		1	2	1	2	1	2						2		1	
7.	Illicit connection awareness and prevention.	7	2	3	2	2		5	2	1	3	5	3	1	2	2	4		1				3	2	2	
8.	Good housekeeping practices to reduce litter, sediments, and pollutants in stormwater runoff from parking lots.	8	1	4	3	1		8	4	6	1	3	5	2	3	2	5				2	1	1	1	3	
9.	Strategies to reduce or control runoff volume from impervious surfaces.	11	9	8	10		1	4	3	2	1	4	8	5	2	4	4	3		2	3			1	6	
10.	Vehicle and equipment fleet washing practices for commercial enterprises.	9	1	6	1	1	1	8	2	2	1	2	5	1	3	1	7	2	2	1	1			3	2	2

Comments and Notes
 3&4 - Aren't these the same? Certification will require training?
 You guys are doing a great job! Keep up the good work there at CDM.
 TV more frequent - Workshops less frequent.

Public Education Tools for Municipal Audiences

Activity		Target Audience								Approach / Delivery Mechanisms									Frequency						
(Choose up to Four)		(Choose up to Four per Activity)								(Choose up to Four per Activity)									(Choose one per Activity)						
		Streets Dept	Parks and Rec Dept	Facilities / Vehicle Maint	Utilities	Fire	Police	Schools	Building Inspect.	Posters	Website	Email	Mandatory Wkshop	Cert. Process	Trade Show / Conf.	Staff Efforts	Private Cont. Edu.	Coop Extension	HS Vocat. Training	Multiple/ week	1 X / week	1 X / month	4 X / year	2 X / year	1 X / year
1.	Lawn care management practices for municipal landscape management.	10	5	8	4	4		5	1	2	3	2	9	1	2	6		3	3	1		1	2	3	4
2.	Training for hazardous and non-hazardous materials management for municipal operations.	12	11	4	11	9	6	3	5	5	4	1	13	8		8	3	3	1	2		1	2	5	4
3.	Inter-department cross-training to identify, report, and address stormwater management concerns.	18	15	9	13	10	2	1	8	11	4	4	17	7	1	15	5	2	3	2	1	3	2	7	6
4.	Training for the inspection, installation, and maintenance of sediment and erosion control devices.	12	10	5	6	10	1	1	5	10	3	5	2	10	7	1	9	2		1	1	1	1	5	2
5.	Illicit connection awareness and prevention.	8	5	2	2	7	3	2	3	8	3	2	1	7	4	1	5	2				1	2	4	2
6.	Good housekeeping practices to reduce litter, sediments, and pollutants in stormwater runoff from parking lots.	10	8	6	7	7		1	3	5	3	3	2	9	7		7	3		1	1	2	1	3	2
7.	Strategies to reduce or control runoff volume from impervious surfaces.	8	8	4	6	4	1	1	6	6	3	4	1	8	6	1	4	3	1	1	1	1	2	3	2
8.	Vehicle and equipment fleet washing practices for municipal enterprises.	7	5	1	6	2	4	3	4		3	2	2	5	1	1	4	1	1			1	2	4	1

Comments and Notes