



## **Memorandum**

*To: Stormwater Management Task Force*

*From: CDM*

*Date: August 3, 2007*

*Subject: Wake County Stormwater Task Force Meeting #15 Summary –  
Suggested Revisions to Task Force Recommendations*

On July 19, 2007, CDM and Wake County staff facilitated the fifteenth meeting for the Wake County Stormwater Management Task Force. Attendees were provided with meeting materials, including a copy of the agenda, a description of each draft idea/recommendation 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. Mr. Gardner made some brief comments before introducing the CDM project team.

### **Review and Comment on DRAFT Recommendations**

Brenan Buckley of CDM began the meeting by asking the Task Force members to participate in a dot exercise to determine which DRAFT recommendations would be the focus of the discussion. Each member was given three dots and asked to select which three DRAFT recommendations they would most like to discuss. Also, members were provided a pad of Post-It notes and were asked to post any comments they had on the selected DRAFT recommendations for discussion and record-keeping. The attached table summarizes the voting results. The tools discussed at the meeting included Post Construction Runoff Controls, Sediment and Erosion Controls, Hydrologic and Hydraulic Modeling and Risk-Based Stormwater System Maintenance. The following sections summarize the discussion on each of the selected DRAFT recommendations:

#### **Post Construction Stormwater Runoff Controls**

The Post Construction Stormwater Runoff Control recommendations received the most votes (9) during the dot exercise. The following is a summary of the comments received and response to comments during the meeting:

- Where are retrofits? Collaborate with EEP. – *Retrofits have not yet been considered as a primary component of the post construction DRAFT recommendation. A few members commented that while collaboration with EEP should not be discouraged, there has not been a lot of local success with this program in meeting the local government’s objectives for urban environments.*
- Would regional controls and LID both be recommended? – *The recommendations do consider both efforts towards pursuing regional controls as well as consideration for LID practices. However, it was acknowledged that these two approaches can have competing interests.*
- Are there going to be specific recommendations on how to implement LID? – *As written, the recommendation does consider practices consistent with an LID approach. A few members of the Task Force suggested that the LID language should be strengthened*
- Incentives for LID and Open Space – *Mr. Gardner mentioned that the Watershed Task Force promoted Conservation Subdivisions which do provide incentives for Open Space. The County has ordinances which allow this type of development, but many Towns in the County did not adopt these regulations as recommended by the Watershed Task Force.*
- Consistent recommendations across municipalities would be good – *This would reduce the fear of competing development interests from municipality to municipality. One goal of this recommendation would be to provide a more uniform standard.*
- Think smaller communities need broad support from County – *Local officials in the smaller communities have not “gotten the message” yet. Support from the County and some of the larger communities that have greater experience with stormwater could help “open some eyes.”*
- Need to include statement that inspections and maintenance required, possibly by local government – *Regardless of which measures are recommended, maintenance will be required by either the municipality or the property owner. The recommendation should address this.*
- Will Phase II really have any teeth with which to reduce runoff? – *The focus of Phase II is solely for water quality improvement. Therefore, the Phase II post construction requirements will do little, if anything at all, for flood control.*

### **Enhance Sediment and Erosion Control Programs**

The Sediment and Erosion Control recommendation received the second most votes (8) during the dot exercise. The following is a summary of the comments received and response to comments during the meeting:

- Mandatory certification for E&S installers should be moved from public education to E&S recommendations – *It was agreed that there is some overlap among all of the recommendations. The suggestion for mandatory certification will be made in both places.*

- Concerned about the increase in workload for the “risk-based” assessment – *The County intends to evaluate the current and projected work-load of erosion control inspectors to determine what changes, if any, need to be made to staff and/or case-load. Work loads will be managed with consideration for the size of the project, timing of the project and proposed inspection schedule.*
- Seems like the S&E program Enhancement recommendation hinges quite a bit on risk-based approach and on how its funded (enough to keep adequate inspections to reduce sediment) – *Prior to the next meeting, County and CDM staff will be evaluating current and projected resources to implement all of the recommendations.*
- This recommendation gets at sediment loading which is a water quality issue and something that has been impetus for lots of water in county (aka – it’s good) – *No comment.*
- Better define how the “risk based” effort would be done – *A set of criteria will be defined for the risk-based assessment. The criteria will include, but not be limited to, project size, disturbed area, proximity to natural resources, soil type, slope, and more.*
- Bi-weekly = once every two weeks – *The recommendation will clarify the definition of “bi-weekly to say “at least once every two weeks.”*

### **Hydrologic and Hydraulic (H&H) Modeling of the Stormwater System**

The H&H recommendation received the third most votes (5) during the dot exercise. The following is a summary of the comments received and response to comments during the meeting:

- List “review development plans” as a purpose of the model – *The potential recommendation for application of the models once they are developed have been described in the “Model Application” section of the DRAFT recommendation.*
- What is the ultimate goal of the tool? – *The ultimate goal of the tool would be to provide a representation of the existing and future drainage issues facing the County and local governments. With this information, stormwater managers, elected official and developers would have to necessary information to make sound decisions regarding current and potential drainage impacts.*
- Will this have the same legal requirements as FEMA zones? – *As written, the recommendation does not provide a proposed application for the model, such as floodplain regulation. However, floodplain regulation is a potential outcome.*
- Planning of this is as important as plan/site review use – *No comment*

- Too expensive – identifies needs/problems but offers no solutions other than no development – *While modeling can be expensive, the results provide information that can be used for future cost avoidance, which can be very significant. The results may also help to prioritize existing problems.*
- Make tool part of public information for buying homes, etc – *This will be considered in the public education recommendation.*
- Need to consider the impacts of assumptions in models – *The model is only as good as the assumptions. Careful planning must go into the analysis of future conditions and these assumptions should be revisited frequently to update and modify.*
- Concern about placing extra burden on new development – *Depending on the chosen model applications, the results can lead to additional regulation or development requirements. However, the model results also identify existing problems for local governments to address with public funds.*
- Consider water quality modeling? – *Without significant monitoring data, it would be difficult to cost effectively develop accurate water quality models at this time. Therefore, the current focus regarding water quality would be to collect baseline water quality data first before exploring the development of any water quality models.*

### **Risk-Based Approach to Stormwater System Maintenance**

The Stormwater System Maintenance recommendation also received the third most votes (5) during the dot exercise. The following is a summary of the comments received and response to comments during the meeting:

- I would argue that this tool does not really address “environmental impacts due to stream degradation (or only does in a minor way) – *The CDM team explained that the intent of this recommendations would be to consider impacts to the entire system, including the natural stream channel. The example provided during the meeting was the stabilization/repair of an eroding streambank to reduce the amount of sediment load to the stream system. However, it was acknowledged that maximizing the capacity of culverts to convey flow can compete with the goal of reducing stream velocities that can potential erode stream channels.*
- This really needs to be done first to see how many of the existing problems can be fixed – *No comment.*
- For routine maintenance and for emergency preparedness planning – *It was suggested that this recommendations should also include consideration of benefits to emergency planning. This modification will be made.*

### **Other Notes**

The remaining recommendations were not formally discussed at the meeting. However, Task Force members were asked to place Post-It notes on the recommendations to document any comments they may have. The following is a summary of comments received. County and CDM staff will consider these comments when revising the DRAFT recommendations:

#### *County-wide Call Center*

- Should be combined with risk-based assessment
- Good because it takes workload off inspectors – major complaint I’ve heard from staff at these meetings
- Could be combined with 311 system for entire county that would include ALL services

#### *Collaboration on Phase II Programs*

- How soon will the county implement all recommendations so jurisdictions can plan on using these resources to implement the six minimum measures of the NPDES Phase II permit?
- How will the comprehensive stormwater program work? Smaller towns do not have the resources to implement these programs. I think collaboration with larger groups will be beneficial to all. At the same time, smaller towns would want to keep some ownership and control of local issues

#### *Environmental Monitoring*

- Offers information on needs/problems but offers no solutions
- Please collaborate with UNRBA on this recommendation

#### *Public Education*

- Good – gets at homeowners and existing problems which a lot of the others options don’t get at.

#### *On-Site Wastewater Systems*

- I don’t remember having an in-depth discussion on this
- Where did this come from?

## **Identification of Priority Draft Recommendations**

A second dot exercise was performed towards the end of the meeting. Task Force members were provided with dots and were asked to identify the three tools that would be the highest priority for them if they were "King/Queen for a Day." The attached table provides a summary of the voting. The S&E, Stormwater Maintenance and Collaboration on Phase II recommendations received the highest vote totals while Post Construction and Public Education finished a close second. The following reasons were provided for the priority voting:

1. These provide the most bang for the buck.
2. These are programs that can be started right away with existing staff and resources
3. The results could be a reflection of those in attendance and priorities may differ otherwise.

## **Next Steps**

Between now and the next meeting (reminder...no meeting in August, but next meeting in September), Wake County and CDM staff will work to modify the recommendations based on comments received and will develop cost/resource estimates for the proposed ideas. Staff will also identify implementation ideas for each of the DRAFT recommendations. During this time, the project team will also convene a meeting with local Stormwater Managers to perform a similar exercise of retrieving comments and identifying priorities.

**Wake County, North Carolina  
Stormwater Management Task Force  
DOT Exercise Results from Meeting #15**

Proposed Rec. #	Proposed DRAFT Recommendations	Priority Voting
1	Hydrologic and Hydraulic Modeling of the Stormwater System	4
2	Post Construction Stormwater Runoff Controls	8
3	Enhance Sediment and Erosion Control Programs County-wide	9
4	Implement County-Wide Call Center for Stormwater Issues	4
5	Risk-based Approach to Stormwater System Maintenance	9
6	Collaboration with County on NDPES Phase II Minimum Measures	9
7	Environmental Monitoring (Quantity and Quality)	1
8	Collaboration on Public Education Programs	8
9	Maintenance and Inspection of On-Site Wastewater Systems	0