Stormwater Management for New Development

Session Law 2009-484
Title 15A NCAC 02B .0265
Title 15A NCAC 02B .0271

Jordan Lake Rules Workshop, Greensboro, October 5, 2009
Jordan Lake Rules Workshop, Raleigh, October 6, 2009
Stormwater Management for New Development

- The New Development Rule (2B .0265) applies to new development projects within the Jordan watershed and within the planning jurisdiction of the 8 counties and the 26 municipalities listed in Rule .0262.  
  - Excludes Forsyth & Randolph Counties
- Local governments are required to develop stormwater management programs.  
  - Can be more stringent than the state rules

Stormwater Management Programs

- Local governments shall:
  - Review and approve stormwater management plans for new development projects (.0265(3)(a))
  - Develop a plan to ensure maintenance of BMPs (.0265(3)(b))
  - Develop a plan to ensure enforcement and compliance for the life of the new development (.0265(3)(c))
- Local governments may request implementation of another stormwater program as satisfying one or more of the requirements (.0265(5)(a))
Stormwater Management Programs

Per .0265(3)(d), the following water supply watershed rules requirements apply:

- .02B .0104(f): Local governments will assume ultimate responsibility for O&M of high-density stormwater controls, enforce compliance, collect fees and other measures.

- .02B .0104(r): The variance procedures described in the water supply rules.

Model Stormwater Program

- To be developed by DWQ. First draft for comments by end of 2009. (.0265(4)(a))

- Model program will include:
  - Model local ordinance
    - Working with R. Whisnant
  - Tool to account for nutrient loading
    - Contracted to B. Hunt

DWQ must submit the model stormwater program to the EMC no later than January 2011
Stormwater Management Plans

What projects need a plan?

- Single family and duplex residential and recreational projects that disturb one acre or more of land
- Commercial, industrial, institutional, multi-family residential and local government projects that disturb \( \frac{1}{2} \) acre or more of land (.0265(3)(a))

Stormwater Management Plans

What are the requirements?

- N and P contributed by the new development shall not exceed loading rates

<table>
<thead>
<tr>
<th>Subwatershed</th>
<th>N loading rate (lbs/ac/yr)</th>
<th>P loading rate (lbs/ac/yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upper New Hope</td>
<td>2.2</td>
<td>0.82</td>
</tr>
<tr>
<td>Lower New Hope</td>
<td>4.4</td>
<td>0.78</td>
</tr>
<tr>
<td>Haw River</td>
<td>3.8</td>
<td>1.43</td>
</tr>
</tbody>
</table>

- Applicant shall determine need for engineered stormwater controls using the loading calculation tool (.0265(3)(a)(i))
Stormwater Management Plans
What are the requirements?

• Stormwater system design
  – Remove 85% TSS (SL 2009-484(5)(c)(1))
  – Control and treat runoff from 1st inch of rainfall (.0265(3)(a)(iv))
  – Treatment volume shall be drawn down pursuant to NC BMP manual (.0265(3)(a)(iv))
  – Stormwater flows shall not contribute to degradation of waters of the State (.0265(3)(a)(iv))
  – No net increase in peak flow leaving the site between the pre and post-development conditions for the one-year, 24-hour storm (.0265(3)(a)(iv))

Stormwater Management Plans
What are the requirements?

• Public road projects undertaken by local governments deemed compliant if they meet the riparian buffer rule requirements. (.0265(3)(a)(iii))
• New development subject to NPDES, water supply or other state-mandated stormwater regulations shall comply with those regulations in addition to any under the Jordan rules. (.0265(3)(a)(iii))
Stormwater Management Plans
What are the requirements?

• New development in WS-II, WS-III or WS-IV shall comply with:
  – Density based restrictions, obligations and requirements for engineered stormwater controls
  – Clustering options
  – 10/70 provisions (.0265(3)(a)(iii))

Stormwater Management Plans
What are the requirements?

• New development that would replace or expand structures (existing as of Dec. 2001)
  (.0265(3)(a)(v))

• No increase in BUA ➔ Will not have to meet nutrient loading targets; but must have at least equal controls.

• Increases in BUA ➔ Will have to reduce N&P loading; via two options: achieve % reduction goals from .0262(5), or achieve loading rate targets from .0265(3).
Stormwater Management Plans
What are the requirements?

- Applicants have the option of offsetting part of their N&P loads (0265(3)(a)(vii))
- Before using offsite offset options, must meet onsite minimum nitrogen loading requirements
  - 6 lbs/ac/yr – single family and duplex residential
  - 10 lbs/ac/yr – all other development (SL 2009-484(5)(c)(2))

Implementation

**July 2011**  Local governments must submit their stormwater program to the EMC for review and approval

**April 2012**  DWQ shall provide recommendations to the EMC on the local programs

**July 2012**  Local governments shall implement the approved management plan
Federal and State (non-DOT) Entities

- Stormwater management plans are required for projects that disturb one-half acre or more of land
  - Plan requirements are same as programs implemented by local governments  \( \text{(0271(3)(a))} \)
  - Exception: onsite minimum nitrogen loading requirements  \( \text{(0271(3)(a)(vi))} \)

- Implementation
  - Once the tool to account for nutrient loading is approved by the EMC (~Jan 2011), plans must be submitted to DWQ  \( \text{(0271(3)(a))} \)

Questions?

Stormwater Management for New Development