Rule Making Petition – Division Response

- Interaction of Ground Waters and Surface Waters
- Evaluation of Existing Non-discharge Data
- Review of Technical Issues
- Overview of Proposed Rules

Division of Water Quality

"To preserve, protect and enhance North Carolina’s water..."
Non-Discharge Wastewater Facility Groundwater Nitrate Monitoring

Legend
- Monitoring data exceeds 10ppm NO3
- Monitoring data less than 10ppm NO3
- Yet to submit data
Percentage of Non-discharge Wastewater Facilities with Nitrate Values > 10 ppm

Source: Basinwide Information Management System
Cross Section of Surficial Aquifer

Harden, S.L., and Spruill, T.B., 2008 Factors Affecting Nitrate Delivery to Streams From Shallow Ground Water in the NC Coastal Plain, USGS SIR 2008-5021
Cross Section of Surficial Aquifer

EXPLANATION

- Monitoring well (LSD) and piezometer (GR148) and number
- Median nitrate (bold) and dissolved oxygen (0.3), in milligrams per liter, and recharge age (where available)
- Generalized direction of ground-water flow
- Generalized direction of ground-water flow in confined aquifer

Harden, S.L., and Spruill, T.B., 2008 Factors Affecting Nitrate Delivery to Streams From Shallow Ground Water in the NC Coastal Plain, USGS SIR 2008-5021
Proposed Monitoring Rule – 2T .1310

- Surface Water Monitoring
  - Waste Discharge Monitoring
  - Routine Monitoring
- Monitoring Coalitions
- Groundwater Monitoring
- Reporting (annual)
Waste Discharge Monitoring

- Based on Current NPDES General Permit Requirements
- New Visual Observations for Subsurface Drains
- Two Visual Observations Per Year
  - One after land application
  - One after land application and subsequent rainfall event
- Take Samples If Needed
Routine Surface Water Monitoring

- General Criteria Provided
- Site by Site Evaluation
- Rule Gives Basis for Decisions
- Implementation Schedule in Rule .1311
- Monitoring Coalitions (optional)
Permitted Active Animal Operations in the Neuse River Basin

Legend
- Facilities Reporting Subsurface Drains
- Facilities With Poorly Draining Soils
- Facilities Not Reporting Subsurface Drains
Routine Surface Water Monitoring

- Increase or Decrease (including elimination) Monitoring
- Based on Results and Other Available Data
  - From on-site data
  - Based on applicable data of BMPs, buffers
Groundwater Monitoring

- Reflects Current Policy
- Risk Based
- Monitoring Changes Similar to SW
Proposed Implementation Rule – 2T .1311

- Notification to Submit Plan
- Rule Provides Basis
- Emphasis
  - Nutrient impaired watersheds
  - Presence of drains, ditches, etc.
  - Lack of riparian buffers
  - Number of operations in basin
- Flexibility to Adjust Priorities
Division Recommendation

The Division recommends granting the petition by initiating the rule making process with the Division proposed rules 15A NCAC 02T .1310 and 15A NCAC 02T .1311.