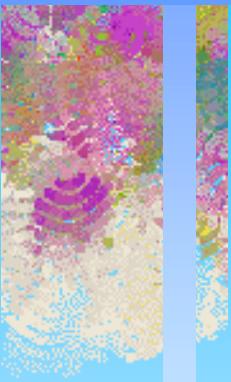
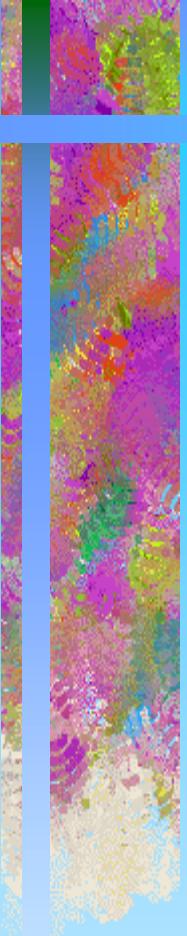


Nutrient Management Incentive and Regulatory Programs



Tim Sexton, LPSS-CNMP

**Nutrient Management Program Manager
Department of Conservation & Recreation
Div. of Soil and Water Conservation**



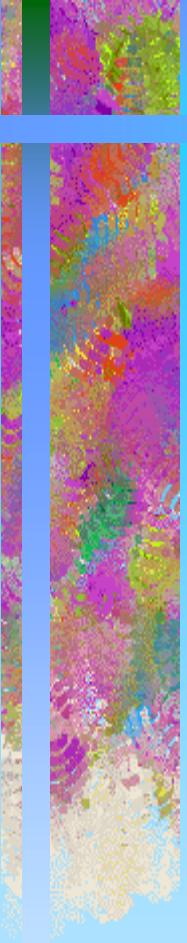
DCR's Nutrient Management Program

- **The Nutrient Management Program in Virginia is a voluntary program for both agricultural and urban land.**
- **Other Regulatory Programs require a nutrient management plan as a part of their regulations.**



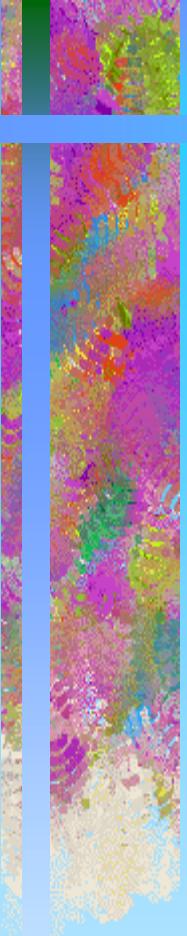
Virginia Programs Requiring Nutrient Management Plans

- **DEQ Virginia Pollution Abatement (VPA) permits**
- **DEQ Poultry Waste Management permits**
- **DEQ VPDES permits**
- **DEQ Biosolids Regulations**
- **DEQ Municipal Waste and Industrial Waste permits**
- **DEQ Water Reclamation and Reuse Regulations**



Virginia Programs Requiring Nutrient Management Plans

- **Chesapeake Bay Preservation Act**
- **DCR Ag BMP Cost-Share Program**
 - Animal waste storage structures
 - Nutrient management practices
- **VA Ag BMP Income Tax Credit**
- **VA Precision Nutrient & Pesticide Application Equipment Income Tax Credit**



Nutrient Management Training and Certification Regulations - Guiding Philosophy

- Current NM T&C Regs do not require farmers to have NMP's
 - However, it is in the farmer's best interest to make every effort to implement the plan
- DCR Regulations developed baseline standards for NMP content and technical criteria.
- NMP's required by other laws and regulations may specify additional more restrictive content and/or criteria.
- Allows for "add ons" based on existing or future laws, regulations or programs.

DCR Nutrient Management Guidance Documents

- **May be written to clarify technical criteria or procedures to support consistency of plan development among planners**
- **May be used to address situations unforeseen when training and certification program was developed or to address new laws.**
- **May provide for interpretation of broader requirements in underlying laws or regulations related to nutrient management plans.**

VA Pollution Abatement (VPA) permits



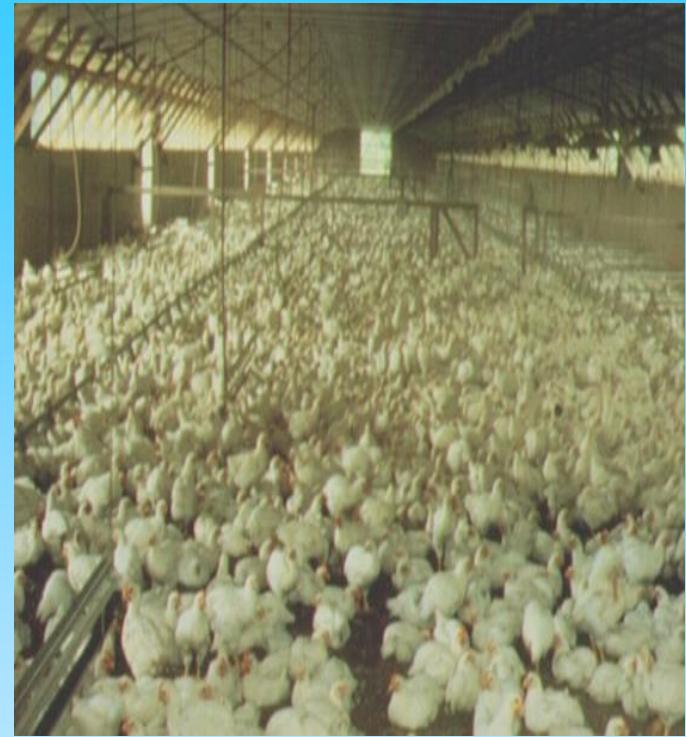
- Required for farms having 300 or more animal units (A.U.) of livestock in confinement more than 90 days
- 300 A.U. = 300 beef cattle
 = 200 dairy cattle
 = 750 swine over 55 lbs. each
- DEQ issues and enforces permit
- DCR approved NMP required for each permitted farm

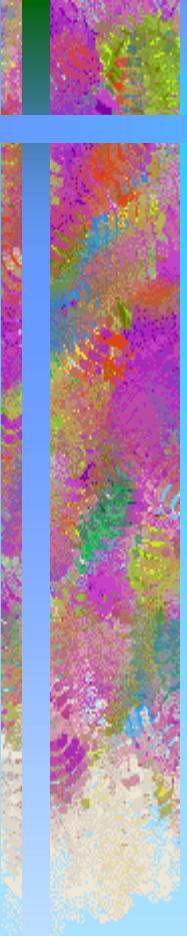
VPA Permit Requirements

- NMP is enforceable part of permit
- DEQ personnel inspect farms
- Manure storage requirements to address:
 - no discharge unless greater than a 24 hour - 25 year storm event
 - times when application won't occur when crop uptake is limited, saturated ground, or frozen ground
- Manure spreading setbacks from rock outcrops, streams, wells, etc. (see NMP Special Conditions for VPA Permit Plans)
- Farmer record keeping required for manure application fields (when, how much, crops)
- DCR plan approval letter must be filed with DEQ
- Nitrogen and Phosphorus based NMP's are required as of 1/1/2006.

Poultry Waste Management VPA Permits

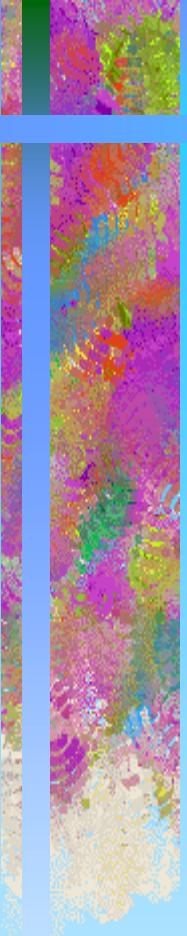
- Became effective 10/1/2001
- Impacts all poultry farms with at least 200 animal units
 - 20,000 broilers
 - 11,000 turkeys
- Similar requirements as other VPA permits
- DCR approved NMP required
- Poultry litter storage requirements in NMP
- Growers had to have P based NMP's beginning 10/1/2001





VPDES (Virginia Pollutant Discharge Elimination System) Permits for Concentrated Animal Feeding Operations

- Required for confined animal feeding operations that have had a discharge violation or other serious violation of a VPA permit.
- Operations with more than 1000 animal units
- Similar requirements as VPA permits, but can be enforced by either the state DEQ or U.S. E.P.A.
- More detailed farmer record keeping requirements



NMP Special Conditions for VPA & VPDES Animal Waste and Poultry Permits

- **Address nutrient management issues relevant to all animal waste permits.**
- **More specifically explains requirements of animal waste laws and regulations as part of the NMP narrative, 4 VAC50-85-140-2. c. (3)**
- **Contains enforceable language, 4 VAC 50-85-110**
- **Special conditions must be inserted as worded for NMP's written for VPA animal waste and poultry waste permits to be approved. 4 VAC50 85-110-4**
- **DCR reserves right to amend special conditions for future plans or for specific NMP's based on site conditions or farm compliance problems.**

Biosolids Use Regulations

(Treated Sewage Sludge)

- Administered by Dept of Environmental Quality
- Permits held by land application contractor
- Land application requires NMP's.
- Most permits are for “infrequent application”
= no more than once every 3 years, or for less than 50% of agronomic rate
- “Frequent application” permits are more restrictive - additional monitoring, require an approved NMP.

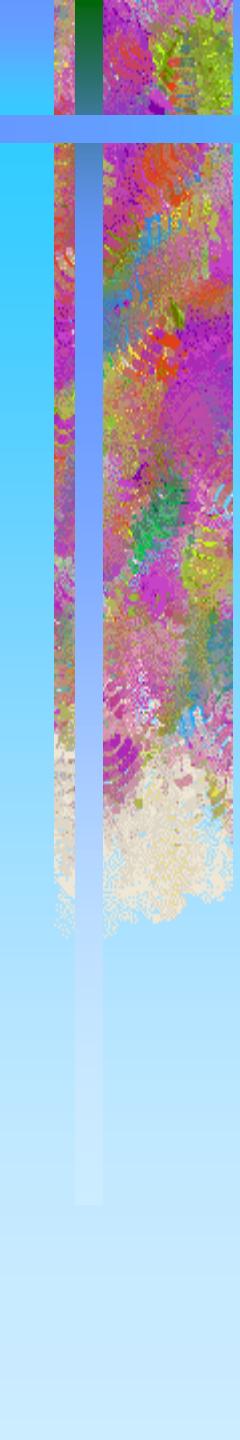


Biosolids Changes

- **New Biosolids Regulations were presented to SWCB in Dec. 2009, and approved in 2013**
- **Law changes require Biosolids Regulations to require NMP's on all application sites.**
- **Localities are now able to be reimbursed by state collected permit fees to hire biosolids monitors to observe and inspect biosolids land application activities, including soil and sludge sampling.**

Biosolids Changes

- **NMP requirement in VDH regulation became effective 12/17/07 and the Program was transferred to DEQ**
- **“A nutrient management plan shall be developed for all application sites prior to biosolids applications” (12 VAC 5-585-630A.2.)**
- **DCR Approved plans for application sites:**
 - Applications that are more frequent than once every three years or at >50% annual agronomic rate
 - Owned or operated in conjunction with a CAFO
 - Site Specific conditions which impact Water Quality



Municipal Waste and Industrial Waste VPA Permits

- **Administered by DEQ.**
- **Sewage treatment plant owner or industrial waste generator holds permitted acreage.**
- **Somewhat similar to individual VPA animal waste permits.**

Chesapeake Bay Preservation Act

- **Administered by the Chesapeake Bay Local Assistance Division of DCR**
- **31 eastern Virginia tidewater counties - mainly east of I-95**
- **Resource Protection Areas (RPA) - Requires 100 foot wooded or grass buffer from streams, wetlands, rivers, lakes connected to Chesapeake Bay when no BMP's are implemented**

Chesapeake Bay Preservation Act (cont)

- **May reduce to 50 foot buffer with sediment or nutrient BMP's**
- **May reduce to 25 feet by implementing soil and water quality conservation plan (includes nutrient management component)**
- **Other land in Resource Management Areas (RMAs), lands adjacent to RMA's, may require site assessments and plans**



Chesapeake Bay Preservation Act Localities

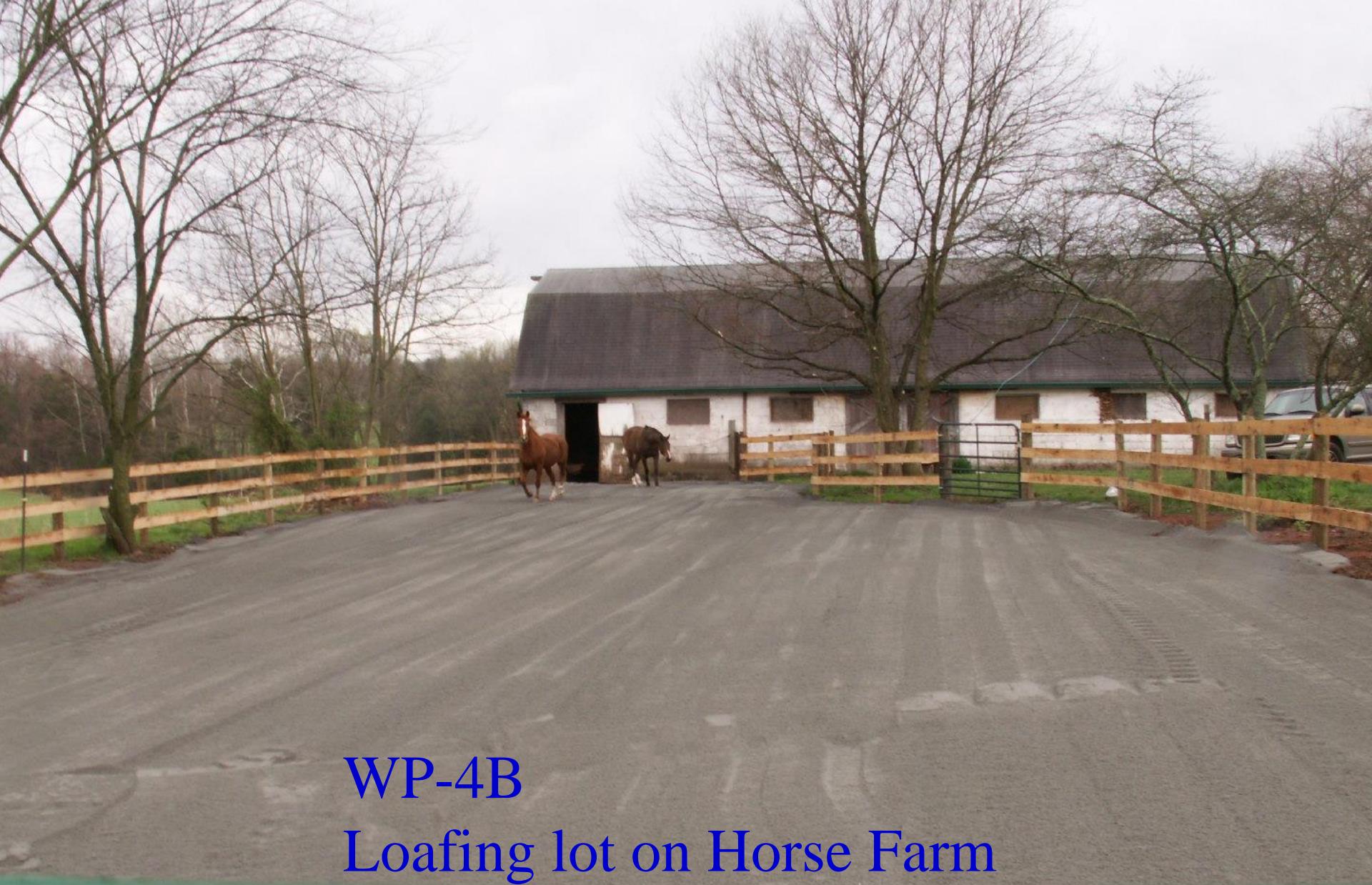


DCR Cost-Share Program

- **Administered through local soil and water conservation districts**
- **75% of eligible costs for BMPs**
- **Up to \$50,000 per producer per year**
- **Individual conservation districts may impose more restrictive payment limits**
- **Covers a number of BMPs**

DCR Cost-Share Program

- Producers participating in:
 - **SL-6A, Grazing Land Protection**
 - **WP-4, Animal Waste Control Facility**
 - **WP-4B, Loafing Lot Management System**
- **Up to \$70,000 per producer per year, for these specific practices. May not be used for other practices.**



WP-4B
Loafing lot on Horse Farm

2009.04.06

Cost-Share Practices Requiring NMP's 22 Cost share practices require an NMP2

- **NM1A - Nutrient management plan development reimbursement cost to hire a private certified planner**
- **NM3C - Split applied N on corn**
- **NM3B - Manure application to corn followed by Presidedress nitrate test**
- **NM4 - Split application of late winter/spring N to small grain**

Cost-Share Practices Requiring NMP's

- **SL-3 – Strip Cropping Systems**
- **SL-3B – Buffer Strip-cropping**
- **SL-4 - Terrace Systems**
- **SL-6A – Small Acreage Grazing System**
- **WQ-4 - Legume Cover Crop Systems**

Enhanced NM Practices

- **NM-5-N Nitrogen**
 - **Variable Rate Application**
 - **Applying less than NMP calls for**
 - **Multiple Split Applications (More than 2)**
 - **Zone Application of N**
 - **Following Recommendations of PSNT**

Enhanced NM Practices

- **NM-5-P**
 - Zone Application of P based upon Zone Soil Samples
 - Application of P at less than recommended Rate
 - Application Of P at less than Crop Removal
 - Following Recommendations of P-Index

Enhanced NM Practices

- **Whole Farm Nutrient Balance**
- **NM-6 Manure Injection**
 - Credit for Both N & P Reductions

A photograph of a lush green pasture. Scattered throughout the grass are numerous small, bright yellow flowers, likely buttercups. On the right side of the frame, a portion of a wooden fence is visible, consisting of vertical posts and horizontal rails. The background is filled with dense green trees and bushes.

SL-6N
Buffer Strip for Pasture

Cost-Share Practices Requiring NMP's

- **SL 8B – Small Grain Cover Crop for NM and Residue Management (Largest participation in \$ in Va.)**
- **SL -9 Grazing Land Management**
- **SL 15A – Continuous No-Till**
- **SL 15B – Continuous No-Till Forage Prod.**
- **LT-CNT – Long Term Continuous No-Till Planting Systems**

Cost-Share Practices Requiring NMP's

- **WP-4 - Animal Waste Control Facilities**
 - storage pits, lagoons, tanks
 - poultry mortality composter
- **WP-4B – Loafing Lot Mgt. Systems**
- **WP-4C – Composting Facilities**
- **WP-4D – Soil Test in Support of a NMP**
- **WP-4F – Animal Mortality Incinerator Facility**
- **WP-8 Relocation of Confined Feeding Operation from Environmentally Sensitive Areas**

A photograph of a grassy hillside. On the left side, there is a narrow, well-maintained strip of green grass, likely a filter strip, bordered by small wooden stakes. The rest of the hillside is covered in dry, brownish-green grass. In the background, there is a dense forest of dark trees.

CP-21
Filter Strip

State Income Tax Credit on Precision Nutrient & Pesticide Application Equipment

- Equipment must meet state criteria**
- 25% of the purchase cost**
- Maximum credit of \$3,750 = \$15,000 purchase**
- May carryover unused tax credit for 5 years**
- Requires NMP approved by conservation district**
- Must be engaged in agricultural production for market**



Tax Credit Equipment Categories

- 1. Sprayers for pesticides and liquid fertilizers**
- 2. Pneumatic fertilizer applicators**
- 3. Manure applicators**
- 4. Tramline adapters**
- 5. Starter fertilizer banding attachments for planters**
- 6. Variable rate application equipment using spatial positioning systems**
- 7. GPS Guidance Equip**

DCR Revenue Opportunities

Direct Payment Program for Nutrient Management Plans on Animal Operations

**Continuous sign up at \$4.00/acre/year for on farm
generated manure**

\$2.00/acre/year for imported manure or fertilizer only acres

Limit of \$5000.00 per plan written over 3 yr period

Same payment rate for revised acres as new acres

CONDITIONS

Farmer plan written for is NOT eligible for NM-1 cost share !

**Planner must meet with farmer each year and either make necessary
revisions, or have farmer sign statement that planner met with him and
no changes in farming practices have occurred**

DCR Revenue Opportunities

Request for Bids or Requests for Proposals

Bids and Proposals accepted at specific rate/acre/year. No limit in amount of acreage involved. One & Two year contracts- renewable.

Same payment for revised acres as new acres

CONDITIONS

Farmer plan written for is NOT eligible for NM-1 cost share !

Planner must meet with farmer each year and either make necessary revisions, or have farmer sign statement that planner met with him and no changes in farming practices have occurred

Questions ?

Thank You

**Tim Sexton, Nutrient Management Program
Manager**

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