

# Virginia Nutrient Management Program and Ag BMP Incentives Program

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# VA Department of Conservation and Recreation Agency Overview

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- *Water Quality Agency for Nonpoint Source*
  - *Agricultural BMP Cost Share*
  - *Nutrient Management*
  - *Erosion and Sediment Control*
  - *Stormwater Management*
- *Chesapeake Bay Protection*
- *State Outdoor Recreation Planning*
- *Dam Safety and Floodplain Management*
- *Land Conservation*

# Nutrient Management Program

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- Field Nutrient Management Specialists
- Requirements for NMPs in Virginia
- Training and Certification Program
- Urban/Suburban Nutrient Management

# Nutrient Management Program Mission Statement

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- Encourage the proper land application and efficient use of fertilizers, manures, sewage sludges, and other nutrient sources utilized for agricultural and urban purposes, in order to protect and improve the quality of Virginia's ground and surface waters.

# Why are nutrients a problem?

- Nutrients are beneficial if we get them into plants they are intended to help.
- Some nutrients are detrimental if they run-off into streams, lakes, rivers and other waterbodies or if they seep to groundwater.



# Content of NMPs

- Plan maps - application fields, environmentally sensitive areas, setbacks for application
- Nutrient application summary sheets – What fertilizer, manure and biosolids nutrients will be applied to specific fields
- Nutrient application timing schedules
- NMP special conditions, narrative, and plan maintenance provisions

# Yield Capability of Soil and Nitrogen Rate



# Timing of Nutrient Applications

## Example Manure Spreading Schedule

CROP	JAN	FEB	MAR	APR	MA	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ALFALEA	■	■	■	■					■	■	■	■
BERMUDAGRASS	■	■	■	■					■	■	■	■
CORN	■	■	■			■	■	■	■	■	■	■
COTTON	■	■	■	■		■	■	■	■	■	■	■
SMALL GRAIN	■	■			■	■	■	■	■			■
SORGHUM	■	■	■	■				■	■	■	■	■
SOYBEANS	■	■	■	■	■		■	■	■	■	■	■
HAY **	■	■									■	■
PASTURE**	■	■									■	■
<p><b>** Excent for Alfalfa, Bermudagrass and other warm season grasses.</b></p> <p><b>Do not spread during these periods</b></p> <p><b>Poultry litter may be applied during these times provided soil conditions are accentable.</b></p> <p><b>Do not apply manure to frozen, ice or snow covered, or saturated ground.</b></p>												



# Placement of Nutrients




# Setback Distances for Manure Application in NMPs

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- 100' from wells
- 100' from surface waters with no permanent buffer
- 35' from surface waters (with vegetated buffer)
- 50' from sinkholes
- 50' from limestone outcrops
- 25' from other rock outcrops
- 10' from ag drainage ditches (5' if infected)

# Who has to have NMPs

- Virginia Pollution Abatement (VPA) permits (DEQ)
- Poultry Waste Management permits (DEQ)
- Biosolids Use Regulations (DEQ)
- State Lands NMP Requirements (DCR)
- VA Ag BMP Cost-Share Program (DCR & SWCDs)
  - Animal waste storage structures
  - Nutrient management practices
- VA Precision Nutrient & Pesticide Application Equipment Income Tax Credit (VDT & Soil and Water Conservation Board)



# Incentive Programs for the Implementation of Agricultural BMPs

# VA Agricultural BMP Cost-Share

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- Goal: To improve water quality in VA's rivers and streams
  - ★ By encouraging the voluntary installation of agricultural BMPs that reduce Ag. Non-point source pollution

# VA Agricultural Cost-Share Program

- Administered by DCR thru local SWCDs.
- SWCDs recruit and approve participants.
- Cost-share can be a flat rate, 75% of lesser of actual or estimated, or combination.
- District set cost-share cap - \$50,000 state cap.
- All individuals and business entities operating land
- Cost-Share is approved by the local SWCD based on criteria that improve water quality.
- Cost-Share payments are disbursed when a BMP is complete and certified.



# Thirty Two Practices Eligible for Cost-share Approval

- Lifespan Maintenance Requirements
- Planning, Management, Agronomic, Structural



# Animal Waste Control Facilities

*Maintained for a minimum of 10 years following the calendar year of installation.*

*Cost-share Rate*

*75% of total costs, not to exceed \$50,000 per landowner per year.*





# Livestock Stream Exclusion

*Maintained for a minimum of 10 years following the calendar year of installation.*

*Cost-share Rate*

*75% of total costs, not to exceed \$50,000 per landowner per year.*



# Stream Crossing and Hardened Access

*75% cost-share available  
if livestock are excluded.*



# Reforestation of Erodible Crop and Pasture Land

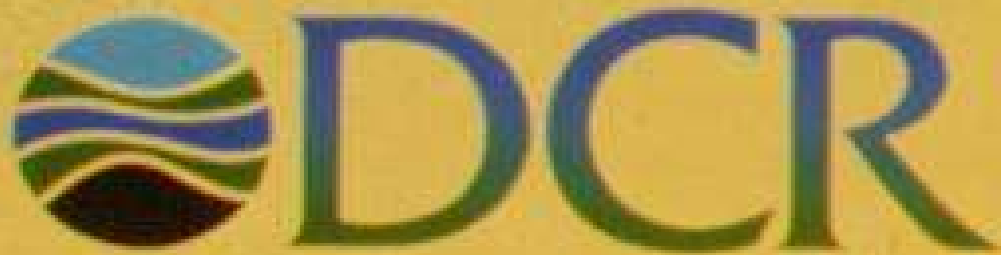
*Maintained for a minimum of 10 years following the calendar year of installation.*

*Cost-share Rate up to \$175/ acre for pine, \$250 for hardwoods*



# Agricultural Pathogen Control Practices

- Exclude livestock from streams and stream banks
- Encourage permanently vegetated buffers
- Store manure properly during periods of the year when application fields are more likely to be wet (late fall, winter) rather than land applying
- Adhere to setback distances in NMPs
- Follow proper livestock stocking rate limits on pastures so that pasture grasses remain at least 3 inches high
- Drag manure clumps in pastures periodically to expose pathogens to sunlight and drying conditions



Department of Conservation & Recreation

CONSERVING VIRGINIA'S NATURAL AND RECREATIONAL RESOURCES

# Virginia Nutrient Management Plans

- NMP content and development procedures are specified in DCR's Nutrient Management Training and Certification Regulations
- Specific technical criteria for various agronomic crops and vegetation are contained in Virginia Nutrient Management Standards and Criteria, rev Oct. 2005 – this document is part of the regulation