

Maryland Department of Agriculture



**NEW Nutrient Management
Regulations Relating to
Setbacks for Streams**

Effective January 1, 2014

- Nutrient Setback Requirements
 - Organic Nutrient Applications
 - Manure deposited by animals
 - 10' Setback for directed applications
 - 35' Setback for broadcast applications
 - Fencing is not a requirement of the regulation
 - The regulation applies to pasture and cropland

Nutrient Application Setbacks

- “A vegetated area of a prescribed width where nutrient containing material may not be applied, as measured from the edge of surface water, including perennial and intermittent streams”.
- “An intermittent stream means a stream or the reach of a stream that is below the local water table for at least some part of the year, and obtains its flow from both surface runoff and ground water discharge”.

Nutrient Application Setbacks

Setback applies:

- Natural and perennial or intermittent
- Channelized and perennial and;
 - Floodplain soil map unit, or
 - Hydric soil map unit, or
 - “B” slope or greater soil

Setback does not apply:

- Ditches
 - Channelized and intermittent
 - Ephemeral

Nutrient Application Setbacks

- What is a stream vs. a ditch?
- Stream
 - Naturally occurring
 - Generally sinuous
 - Generally accompanied by certain biotic and vegetative species
- Ditch
 - Man made
 - Generally straight lines

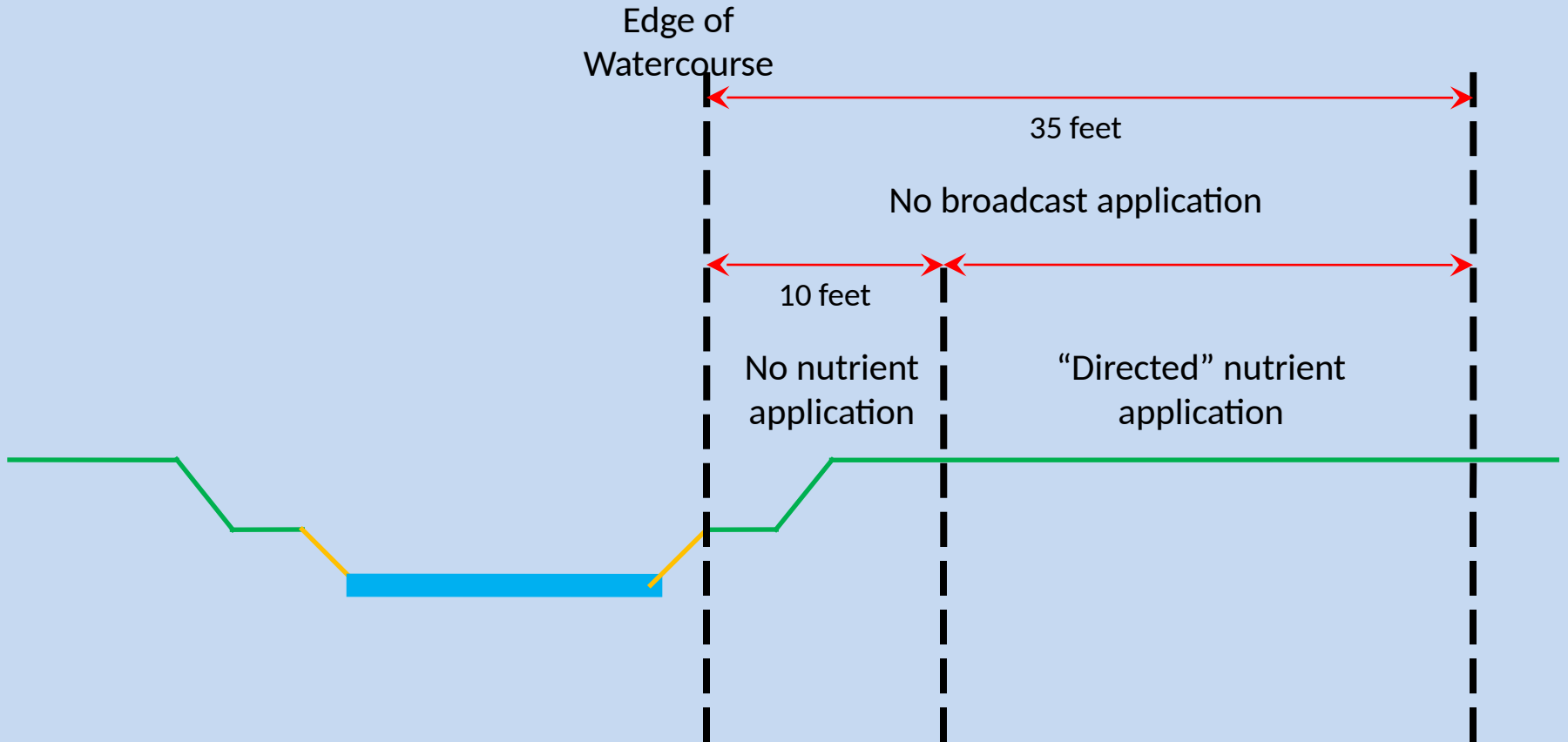
Nutrient Application Setbacks

- Definitions
 - Perennial
 - Contains water all the time
 - Influenced primarily by groundwater flow
 - Intermittent
 - Contains water or flows seasonally
 - Influenced by both groundwater & surface runoff
 - Ephemeral
 - Contains water or flows only as a result of precipitation events

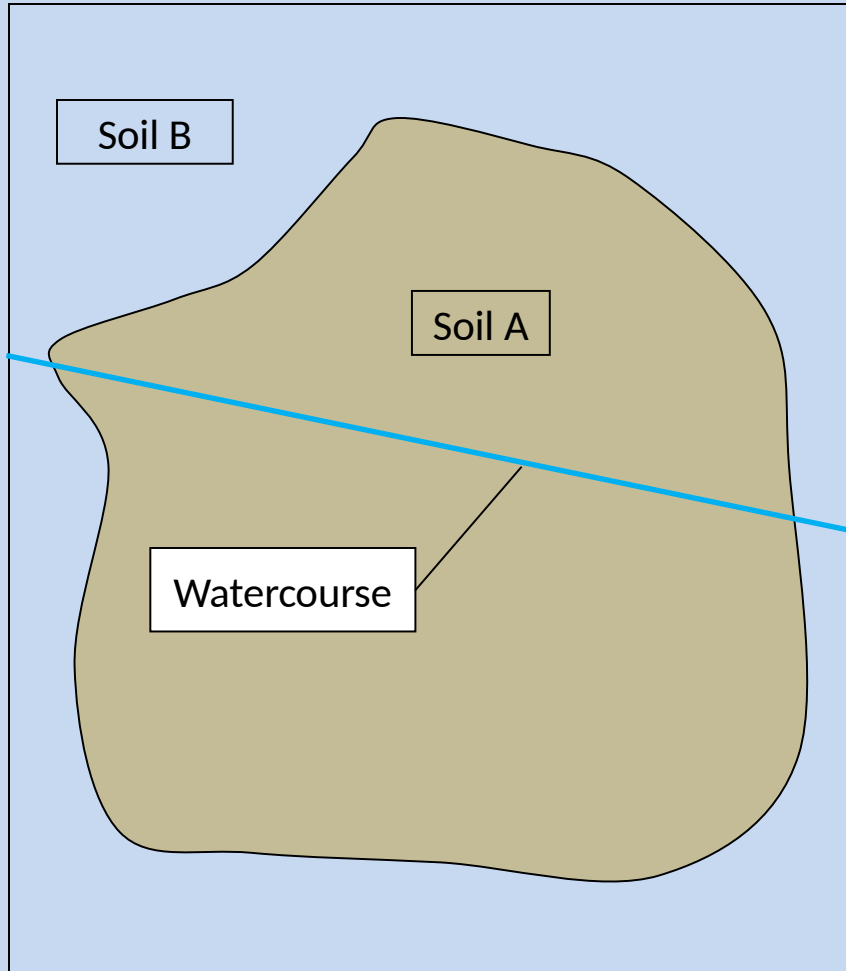
Nutrient Application Setbacks

If the watercourse is:	It is defined as a:	For crop and pasture land adjacent to the watercourse, the setbacks requirements:
Natural <u>and</u> either perennial or intermittent	Stream	Apply
Channelized <u>and</u> perennial <u>and</u> ; A.Lies within a floodplain soil map unit, or B.Lies within a hydric soil map unit “mapped as a narrow, elongated feature in a fluvial (stream-like)/floodplain position, or C. Lies within a “B” slope or greater soil	Stream	Apply
Channelized and intermittent	Ditch	Do Not Apply
Ephemeral (natural or channelized)	Ditch	Do Not Apply

Nutrient Application Setbacks



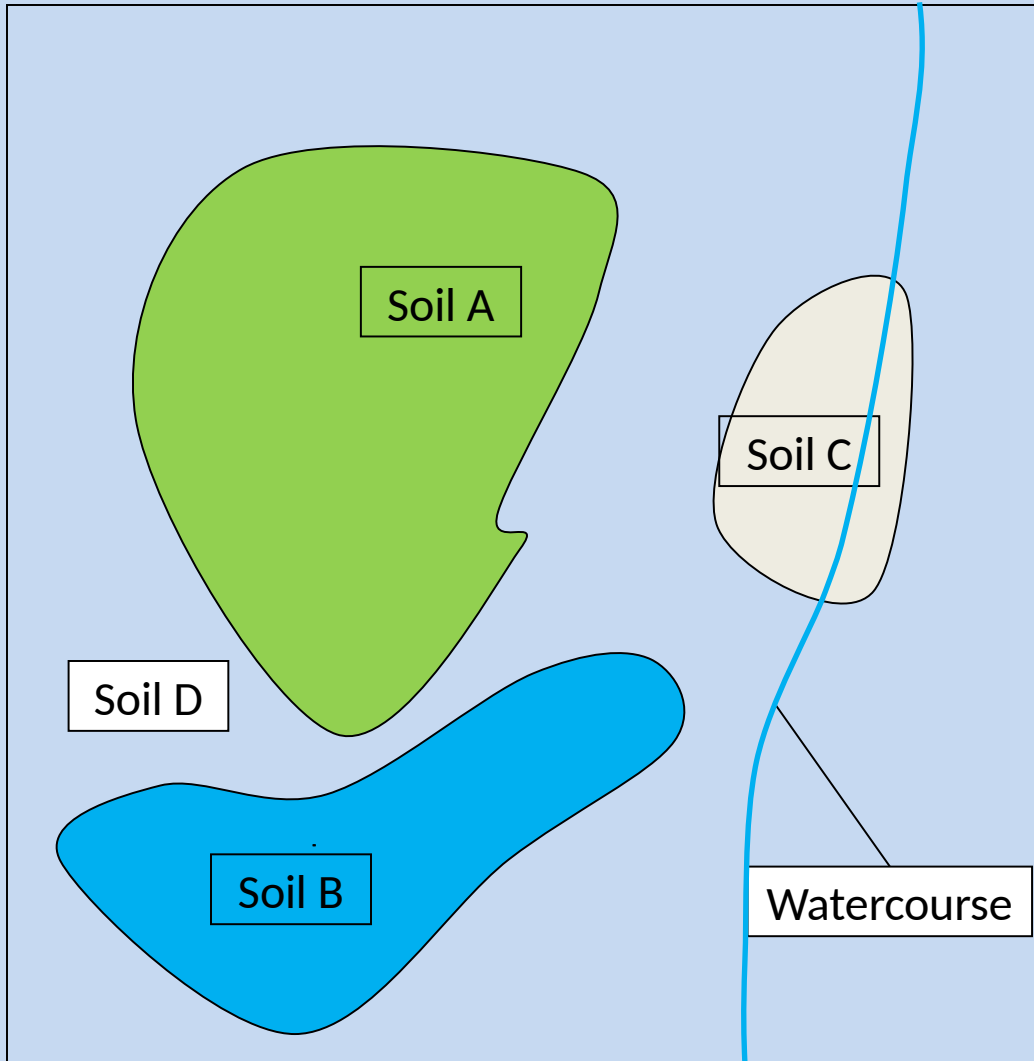
Nutrient Application Setbacks



- Watercourse is constructed drainage;
- Soil A is not hydric;

In this case, setbacks requirements do not apply

Nutrient Application Setbacks



- Watercourse is natural and intermittent;
- Soil C is hydric;

In this case, setbacks apply

SETBACKS FOR NUTRIENT APPLICATION

Surface water does not include:

1. Ephemeral streams

defined as streams which flow only in direct response to precipitation in the immediate watershed and which have a channel bottom that is always above the local water table;

2. Irrigation and treatment ditches

3. Field ditches, which, for purposes of this exception, are defined as channelized waterways that, as provided in the USDA-NRCS National Cooperative Soil Survey, are not within:

- a. A floodplain soil mapping unit;
- b. A hydric soil unit and mapped as a narrow, elongated feature in a fluvial/floodplain position; or
- c. A soil mapping unit that has a "B" slope class or steeper

SETBACKS FOR NUTRIENT APPLICATION

Effective January 1, 2014, a person who uses nutrients shall implement the following nutrient application setback requirements:

- 1 . An application using a **broadcast method** (e.g., spinners, splashers) either with or without incorporation requires a **35-foot setback**.
2. A **directed spray application or injection** of crop nutrients requires a **10-foot setback**.
3. Excepting perennial forage crops grown for hay or pasture, **vegetation in the 10-foot setback area may not include crop plants**.
4. **Pastures and hayfields are subject to a 10-foot setback**.

SETBACKS FOR NUTRIENT APPLICATION (con't)

5. Nutrients may not be applied mechanically within the setback. Livestock shall be excluded from the setback to prevent direct deposition of nutrients within the setback.
6. As an alternative to fencing livestock from the setback area, a person shall work with the soil conservation district to develop and implement a Soil Conservation and Water Quality Plan with (BMPs) such as stream crossings, alternative watering facilities, pasture management or other MDA-approved BMPs.
7. As an alternative to a nutrient application setback, MDA may approve other BMPs that it finds equally protective of water quality and stream health. MDA will work with USDA-NRCS, University of Maryland or other land grant universities to establish the effectiveness of these practices.
8. Sacrifice lots (less than 75% grass or grass legume mix) shall maintain a 35-foot set back.

Nutrient Application Setbacks

Setback for livestock:

- Livestock shall be excluded from the 10' setback to prevent direct deposition of nutrients within the setback, excepting BMP's under SCWQ plan
- **Fencing alternative:**
 - Contact the soil conservation district
 - Document the scheduled approach and practices for implementation in the nutrient management plan
 - Follow BMP's to be in compliance

Nutrient Application Setbacks

Application setback alternative:

- MDA may approve other BMP's including:
 - USDA or NRCS practice standards
 - UM or other land grant university research & demonstration establishing the effectiveness of those practices

Practical Applications

- Flash Grazing? MDA will be discussing this option as a component of a pasture program.
- Fencing? We do not require permanent fencing, temporary electric is fine.
- Alternative BMPs? We suggest you consult the local SCD. Any BMP that the farmer and the SCD agree could work can be installed. But, it must work. If alternative BMPs do not prevent animal access, fencing may still be required.

Compliance and Enforcement

- MDA has had an MOU with the MD Department of the Environment (MDE) since 2000 to provide joint inspections of farms when a citizen complaint alleging a water quality violation is received by MDE.
- Complaint driven process- this will probably be our biggest priority, we are obligated to respond.
- Checking during random Implementation Reviews, we may end up walking streams. We will be anxious to evaluate alternative BMPs for effectiveness.

Cost-Share Funding

- The Maryland Agricultural Cost-Share Program provides funding that can cover up to 87.5% of the cost to install certain agricultural BMPs including stream fencing, stream crossings, watering troughs, spring developments and water wells to exclude animals from streams.
- Beginning 7/1/13 a newly funded practice was announced that provides up to 87.5% of the cost to establish a pasture to be used within a management intensive grazing system or to convert or renovate a pasture previously used for continuous grazing. The maximum allowed for this practice is \$50,000/farm.

Maryland Department of Agriculture



Dwight Dotterer
Administrator
Nutrient Management Program