



H2Ohio

Voluntary Nutrient Management Plans Development & Implementation



Compatible Practices:

- Variable Rate Phosphorus Application
- Subsurface Phosphorus Placement
- Manure Incorporation
- Conservation Crop Rotation-Small Grains
- Conservation Crop Rotation-Forages
- Overwintering Cover Crops
- Drainage Water Management

A Voluntary Nutrient Management Plan is...

The gateway practice for H2Ohio and will be required to participate in the other agricultural cropland practices.

How it works

- Producer agrees to develop and implement a Voluntary Nutrient Management Plan consistent with ORC 905.31(DD)
- VNMP can be developed by 4R Certified Dealer, Certified Crop Advisor, SWCD or producer
- Producer submits completed VNMP to SWCD for review and approval
- Producer submits nutrient application records annually for review by SWCD

Benefits for Farmers

- Nutrient recommendations based on current soil tests and Tri-State Fertilizer Recommendations
- Producer may apply for up to 4 years funding
- Producer will receive \$2 per acre upon approval of VNMP and \$2 per acre, per year

Partners in the H2Ohio Program include:



How to Apply?

If interested, contact your local soil and water conservation district:

H2Ohio

Variable Rate Phosphorus Application



Variable Rate Phosphorus Application is....

Applying phosphorus fertilizer based on the specific agronomic needs of the grid or zone within the field.

How it works

- Producer has an approved VNMP based on grid (six acres or less) or zone (12 acres or less) soil tests
- All phosphorus nutrients are variable rate applied
- Where fertilizer prescription calls for no phosphorus, none will be applied
- Producer may broadcast apply using variable rate capable machines or in conjunction with subsurface placement technology, or manure injection

Benefits for Farmers

- VRT can reduce the total phosphorus applied to a field by only applying it where it is needed based on soil tests and Tri-State Fertilizer recommendations
- Producer may apply for up to four years of funding for this practice
- Producer will receive \$8 per acre, per year for covered acres

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Subsurface Phosphorus Placement



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Subsurface Phosphorus Placement is....

Utilizing nutrient application equipment to place nutrients below the surface of the soil.

How it works

- All fertilizer prescriptions are based on an approved Voluntary Nutrient Management Plan (VNMP)
- All phosphorus fertilizer is placed a minimum of 2" below the soil surface
- Producer is paid for acres where phosphorus fertilizer is actually applied

Benefits for Farmers

- Placing nutrients below the soil surface reduces risk of nutrient loss
- Producer may apply for up to four years of funding for this practice
- Producer will receive \$30 per acre, per year for actual acres where phosphorus is applied

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Manure Incorporation



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Manure Incorporation is....

Applying livestock waste either directly into the soil or incorporating it within 24 hours of application.

How it works

- Manure applications are based on an approved VNMP or CNMP
- Manure is applied to fields that demonstrate an agronomic need for phosphorus
- Manure can be injected directly into the soil or incorporated within 24 hours of application
- Manure is either side dress applied to a growing corn crop or applied at a time of year that reduces the risk of nutrient runoff
- Soil tests must be 50ppm (Bray P1) or less

Benefits for Farmers

- Promotes the transfer of manure to fields that demonstrate an agronomic need for phosphorus
- Promotes utilization of the nutrients in the manure by an existing crop or a cover crop
- Producer may apply for up to four years of funding for this practice
- Producer will receive \$35 per acre, per year for poultry manure or \$60 per acre, per year for all other manure based on actual acres where manure is applied

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Conservation Crop Rotation— Small Grains



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Small Grains—Conservation Crop Rotation is....

Establishing a small grain (wheat, rye, barley, etc.) into an existing crop rotation to reduce erosion, improve soil health, increase cropping diversity and reduce water quality degradation due to excess nutrient loss.

How it works

- All nutrients are applied based on an approved VNMP
- Producer plants a winter annual small grain crop and harvests it for grain
- Producer plants a subsequent cover crop or double crop
- Crop residue or cover crop are maintained until March 15 of the following year

Benefits for Farmers

- Crop diversity and rotation are increased
- Allows for nutrient application in the summer and early fall which reduces the risk of nutrient loss through runoff
- Producer may apply for up to four years of funding for this practice
- Producer will receive \$35 per acre per, year

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Conservation Crop Rotation - Forages



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Conservation Crop Rotation - Forages is....

Establishing a soil conserving forage crop into an existing crop rotation to reduce erosion, improve soil health, increase cropping diversity and reduce water quality degradation due to excess nutrient loss.

How it works

- All nutrients are applied based on an approved VNMP
- Producer establishes a perennial forage crop
- Residual forage must be maintained during the non-growing season
- Producer maintains the forage for a minimum of two years

Benefits for Farmers

- Crop diversity and rotation are increased
- Allows for nutrient application in the summer and early fall which reduces the risk of nutrient loss through runoff
- Producer may apply for up to four years of funding for this practice
- Producer will receive \$35 per acre, per year

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Overwintering Cover Crops



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Overwintering Cover Crops are....

Establishing a soil conserving overwintering cover crop into an existing crop rotation to reduce erosion, improve soil health, increase cropping diversity and reduce water quality degradation due to excess nutrient loss.

How it works

- All nutrients are applied based on an approved VNMP prior to establishment or after March
- Producer establishes an overwintering cover crop by October 15
- Cover crop are maintained until March 15 of the following year

Benefits for Farmers

- Crop diversity and rotation are increased
- Cover crop can be harvested or grazed after March 15 of the following year
- Producer may apply for up to four years of funding for this practice
- Producer will receive \$25 per acre, per year

Partners in the H2Ohio Program include:



How to Apply?

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OSU, 2020

H2Ohio

Drainage Water Management



OSU, 2020

Drainage Water Management is....

The practice of using a water control structure in a tile drain or submain drain to raise the drainage outlet to reduce nutrient runoff.

How it works

- Producer installs water control structure that controls a minimum of 10 acres for installations without a submain or a minimum of 20 acres for installations with a submain
- Producer manages the structure to reduce nutrient runoff in the non-growing season

Benefits for Farmers

- Plant available water may be increased in fields where structures are managed during the growing season
- Producer may apply for up to four years of funding for this practice
- Producer will receive for each structure: \$1500 per site without submain installation or \$4000 per site with submain installation
- Producer will receive \$200 per site, in the 2nd, 3rd and 4th year, for managing the structure according to the Operation and Management Plan

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Ohio Department
of Agriculture

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