

Water Quality Enhancement Activity– WQL10 – Plant a cover crop that will scavenge residual nitrogen



Enhancement Description

Plant a cover crop that will scavenge nitrogen left in the soil after the harvest of a previous crop. Suitable cover crops include those with at least a “Very Good” rating for scavenging nitrogen as documented in *“Managing Cover Crops Profitably, 3rd Edition”* (Sarrantonio, 1998), Chart 2 Performance & Roles, pg 67. Examples include cereal rye, barley, forage radish and sorghum sudan.

Land Use Applicability

This enhancement is applicable on cropland.

Benefits

Planting an annual cover crop to scavenge residual nutrients from cropland after the harvest of a previous crop effectively utilizes residual nutrient resources to supply following crops with nutrients required to efficiently produce food, forage, fiber, and cover while minimizing environmental degradation.

Criteria for Planting a Cover Crop That Will Scavenge Residual Nitrogen:

Implementation of this enhancement requires:

- 1) The cover crop selected shall have the growth rate and rooting depth required to scavenge excess nitrogen from the root zone of the previous crop. Suitable cover crops include those with at least a “Very Good” rating for scavenging nitrogen as documented in *Managing Cover Crops Profitably, 3rd Edition, Chart 2 Performance & Roles, pg 67*. Examples include cereal rye, barley, forage radish and sorghum sudan.
- 2) Timing of planting and seeding rates for cover crops shall follow the recommendations in the respective NRCS Field Office Technical Guide (FOTG).
- 3) The producer must have a current soil test (no more than 3 years old).
- 4) Nitrogen application rates for the crop following the cover crop must be reduced by at least 15% from the “Land Grant University (LGU) recommendations to account for the recycling of N by the cover crop.
- 5) The producer shall not increase soil surface disturbance over existing benchmark conditions.



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Documentation Requirements

Documentation for each Treatment area (field) and year of this enhancement describing these items:

- a. Cover crop species planted
 - b. Cover crop planting date
 - c. Cover crop seeding rate (bu/ac)
 - d. Annual crop planted
 - e. Nitrogen application rates/amounts for the annual crop
 - f. Treatment acres
- 2) A map showing where the activities are applied.



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NH State Supplement
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Cover Crops to Scavenge Residual Nitrogen

Species	Rate ^{a,b} lbs/acre	Latest Seeding Date*	
		North	South
Winter Rye	120	Sep 15	Oct 1
Triticale	120	Sep 15	Oct 1
Spring /Winter Wheat	120	May 31/Sep 15	May 31/Oct 1
Spring/Winter Barley	120	May 31/Sep 1	May 31/Sep 15
Spring/Winter Oats	120	May 31/Sep 1	May 31/Sep 15
Annual Ryegrass	20-30	Sep 1	Sep 15
Sorghum Sudangrass	40-50	Jun 30	Jun 30
Forage Radish	10-20	Aug 15	Aug 25
Forage Turnip	10-15	Aug 15	Aug 25
Oilseed Rape	10-20	Aug 15	Aug 25
Mustard	10-15	Aug 15	Aug 25
Arugula	4	Aug 15	Aug 25

* North = Coos, Grafton, and Carroll counties, South = all other counties

^aFor cereal grains that are broadcast and disked into the soil, increase seeding rate by 30%

^bFor cereal grains mixtures, decrease seeding rate of grain by 30%

Use lower rates for drilling, higher rates for broadcast seeding