State of Wisconsin
Governor Scott Walker

**Department of Agriculture, Trade and Consumer Protection**

**Report From Agency**

**DATE:** September 20, 2017

**TO:** The Honorable Roger Roth
President, Wisconsin State Senate
Room 220 South, State Capitol
PO Box 7882
Madison, WI 53707-7882

The Honorable Robin Vos
Speaker, Wisconsin State Assembly
Room 217, West, State Capitol
PO Box 8953
Madison, WI 53708

**FROM:** Jeff Lyon, Interim Secretary
Department of Agriculture, Trade and Consumer Protection

**SUBJECT:** **Wisconsin Soil and Water Resource Management Program, ch. ATCP 50 (Clearinghouse Rule #16-083)**

***Introduction***

The Department of Agriculture, Trade and Consumer Protection (DATCP) is transmitting this rule for legislative committee review, as provided in s. 227.19 (2) and (3), Stats. DATCP will publish notice of this referral in the Wisconsin Administrative Register, as provided in s. 227.19 (2), Stats.

***Background***

This rule will modify the Soil and Water Resource Management (SWRM) Program under ch. ATCP 50, primarily for the purpose of incorporating the changes to the United States Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) 2015 version of the 590 Nutrient Management Standard (2015-590 NM Standard) for the purposes of implementing ch. NR 151 adopted by the DNR in 2011 (2011 DNR standards).[1]

[1] DNR's final rulemaking order of September 24, 2010, Administrative Rule Number WT-14-08, as well as revised fiscal estimate is available at https://health.wisconsin.gov/admrules/public/Rmo?nRmoId=1703

## *Rule Content*

This rule does all of the following:

- Replaces the farm conservation practice standard for nutrient management ("NM") and other standards for practices cost-shared in Subchapters II and VIII.

- Clarifies the requirements for farmland preservation conservation compliance consistent with the Department's voluntary approach in Subchapter III. Farmers may be required to comply with new and modified standards without receiving cost-sharing.

- Increases the associated NM cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions in Subchapter V.

- Requires annual NM plans developed according to s. ATCP 50.04(3) for local regulation in Subchapter VII. Farmers may be required to comply with new and modified standards without receiving cost-sharing.

- Clarifies that the alternative related to s. NR 151.04, the phosphorus index (PI), is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3). Meaning, the 2005 and 2015-590 NM Standard provided the PI alternative with the soil test P management strategy.

- Enables the Department to simplify the process for cancelling a conservation engineer's certification if agreed to in writing.

- Clarifies a qualified NM planner must complete a NM checklist form representing the NM plan, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent.

- Clarifies the standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

- Identifies a conflict of interest prohibition for Department certified soil testing laboratories.

The following provides more detailed analysis by subchapter.

### Soil and Water Conservation on Farms

#### Farm Conservation Practices, specifically nutrient management

To implement the 2011 DNR standards, this rule modifies the farm conservation practices as follows:

*Nutrient Management and Phosphorus Index*. This rule replaces the farm conservation practice standard for NM and other standards for practices cost-shared in Subchapters II and VIII. The alternative related to s. NR 151.04,

the phosphorus index (PI), is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3). Meaning, the 2005 and 2015-590 NM Standard provided the PI alternative with the soil test P management strategy.

The Department calculates an additional $3/acre to comply with the 2015-590 NM Standard may be appropriate for those farms that have not yet developed a NM plan. The costs for soil testing and labor have increased, and additional restrictions have been added to the 2015-590 NM Standard that may require more land to apply manure compared to the 2005-590 NM Standard, and may increase the amount of time required to develop a NM plan that complies with the 2015-590 NM Standard. The potential need for more land to apply manure is due to the additional spreading restrictions listed below.

- Prohibiting nutrient applications within 50' of all direct conduits to groundwater where only grazing and a limited amount of corn starter fertilizer may be applied. This change was added to all direct conduits to groundwater, not just wells. However the 2015-590 NM Standard deletes a 200' incorporation requirement for non-winter nutrient applications, allowing farmers to use less erosive tillage practices.
- Prohibiting applications of manure within 100' of a non-community well which includes schools, restaurants, churches, and within 1000' of a community well unless the manure is treated to reduce pathogen content.
- Prohibiting winter nutrient applications within 300' of all direct conduits to groundwater, unless manure is directly deposited by gleaning or pasturing animals. This setback increased 100' from the 200' setback in the 2005-590 Standard.
- Prohibiting liquid manure application in February or March on DNR Well Compensation Areas, or on fields with Silurian dolomite bedrock within 5' of the surface.
- Limiting manure nitrogen (N) applications in late summer or fall using the lower application rate of either the current 2012 version of UW Pub. A2809 or 2015-590 NM Standard available N per acre rate for the situation on sites vulnerable to N leaching high permeability (P) soils, or rock (R) soils with < 20 inches to bedrock, or wet (W) soils with < 12 inches to apparent water table (PRW Soils). N rates of 90 or 120 lbs. N per acre have not changed. The rates depend on the crop, manure dry matter, and soil temperature.
- Limiting winter manure applications when frozen or snow-covered soils prevent effective incorporation. The NM plan must limit these applications when slopes are > 6% and if fields have concentrated flow areas using 2 practices listed in the winter application section of the 2015-590 NM Standard. These requirements do not apply to manure deposited through winter gleaning or pasturing. Farmers will need more application acreage if they choose these practice options as either or both of the required practices for each field: Apply manure in intermittent strips on no more than 50% of field; Reduce manure application rate to 3,500 gal. or 30 lbs. $P_2O_5$, whichever is less; no manure application within 200 feet of all concentrated flow channels; Fall tillage is on the contour and slopes are lower than 6%.
- Prohibiting manure applications to areas locally delineated by the Land Conservation Committee as areas contributing runoff to direct conduits to groundwater, unless manure is substantially buried within 24 hours of application. This provision now requires incorporation to reduce the risk of runoff being intercepted by the conduit to groundwater in all seasons. Therefore, winter applications are prohibited, because the manure cannot be effectively incorporated if the ground is frozen. Farmers may need more application acreage if the field's soil loss will be too high with the required manure incorporation or if

crops are no-tilled. A conservation plan, signed by the land operator and approved by the county Land Conservation Committee, will be needed for designating winter spreading restrictions other than those specifically listed in this standard.

Not all of the changes to the 2015-590 NM Standard will require more land or add costs:

- Nutrients cannot be applied within 8' around an irrigation well, making this prohibition consistent with NR 812 well code. The 2015-590 NM Standard clarifies that an irrigation well does not require a 50' nutrient prohibition and incorporation of manure within 200' of the well.
- New options are now available to control ephemeral erosion, including contours, reduced tillage, adjusting the crop rotation, or implementing other practices to control ephemeral erosion. Existing options include using contour strips, contour buffer strips, filter strips, > 30% crop residue after planting, and establishing fall cover crops.
- Late summer or fall commercial N fertilizer applications are limited on: areas within 1,000 feet of a community well; 5 feet or less over bedrock; sites vulnerable to N leaching high permeability (P) soils, or rock (R) soils with < 20 inches to bedrock, or wet (W) soils with < 12 inches to apparent water table; to rates needed for establishment of fall seeded crops or to meet UWEX Pub. A2809 with a blended fertilizer. The fall N rate was increased from 30 to 36 lbs. of N per acre to match common blended fertilizers if other nutrients are needed. The 2015-590 NM Standard is likely to decrease the amount of N fertilizer that can be applied in the fall; but, the applications can be made in the spring.
- An additional option for use on P soils, when commercial N is applied in the spring and summer has been added. These in-season applications must follow the UWEX Pub. A2809 crop N rate guidelines and apply one of the following strategies: a split or delayed N application to apply a majority of crop N requirement after crop establishment, use a nitrification inhibitor with ammonium forms of N, or use slow and controlled release fertilizers for a majority of the crop N requirement applied near the time of planting.
- More options for mechanical applications of manure or organic by-products in the winter in the surface water quality management area (SWQMA) within 1000' of lakes/ponds or 300' of rivers. A new option allows for no-till silage if nutrient applications are made within 7 days of planting. Nutrient applications in the spring, summer, and fall limit mechanical applications to 12,000 gals/acre of unincorporated liquid manure with 11% or less dry matter where subsurface drainage is present or within the SWQMA. This will be easier to implement with a single manure rate with more gallons per acre.

This rule continues to allow farmers to choose the best way to comply with this rule. A farmer may choose between conservation practices that are appropriate for the farm, as long as those practices achieve compliance. Farmers continue to have access to a range of resources such as the Department, UW-Extension, NRCS, and the county land and water conservation departments to secure technical assistance.

**Cost Sharing Required**

The Department has not changed the requirement for cost-sharing when a landowner is required to install conservation practices. Under state law, compliance with the performance standards is not required for existing nonpoint agricultural facilities and practices unless cost sharing is made available for eligible costs. This rule clarifies:

- The changes from the 2005-590 NM Standard to the 2015-590 NM Standard increases the associated cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- The Farmland Preservation section requirements seeking voluntary compliance with the rule changes to the maximum extent feasible, consistent with the Department's past approach. Farmers who wish to continue to participate in this program may be required to comply with new and modified standards without receiving cost sharing.

- A NM plan, and subsequent annual submissions for local regulation means NM plans develop according to s. ATCP 50.04(3). Farmers may be required to comply with new and modified standards without receiving cost sharing.

- The standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

**County Soil and Water Conservation Programs**

**Farmland Preservation; Conservation Standards**

The impacts from this rule on farmers participating in the farmland preservation program ("FPP") arise from the changes related to FPP implementation. In the case of the 13,500 farmers who collected $18 million in farmland preservation tax credits (based on 2015 payments for tax year 2014 claims), they may be required to comply with new and modified standards without receiving cost-sharing. Identifying impacts with precision is complicated by a number of factors including the changes in program participants over time, the compliance status of new participants, and the range of options to achieve compliance. The Department's rule revision:

- Clarifies and limits impacts on this group by providing time for program participants to comply with the new performance standards, using performance schedules.

- Clarifies that certificates of compliance issued to farmers complying with standards can be modified if some land is sold. Certificates of compliance are rendered void if all the land is under new ownership or a county land conservation committee issues a notice of noncompliance if a landowner no longer complies. Conversely, a county land conservation committee can withdraw a notice of noncompliance if the landowner is again found in compliance with standards. Also, farmers may receive cost-sharing to install conservation practices necessary to maintain their eligibility for tax credits. Last, but not least, farmers who feel the compliance burdens are too great may decide to stop collecting a tax credit rather than implement standards.

- This rule ensures that a farmer's eligibility is in part based on meeting state conservation standards that mirror DNR performance standards and prohibitions. This rule clarifies that the alternative related to s. NR 151.04, the PI, is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3) and provides that in accordance with both, the 2005-590 NM Standard and 2015-590 NM Standard , the alternative to the PI is complying with the soil test P management strategy.

**Grants for Conservation Practices**

The Department's rule revision clarifies that a cost share grant may not be used to bring a permittee into compliance with standards under Wisconsin Pollution Discharge Elimination System permit under chs. 281 and 283, Stats.

**Soil and Water Professionals**

Under s. 92.18, Stats., the Department is directed to establish, to the extent possible, requirements for certification in conformance with the federal engineering approval system. This rule includes a more flexible and responsive framework for certifying engineering practitioners that better matches the federal system, and ultimately ensures maximum capacity for design and installation of farm and other conservation practices. The Department's rule revision enables the Department to simplify the process for cancelling a conservation engineer's certification if agreed to in writing. The rule also provides for a person with the appropriate level of NRCS job approval authority to certify in writing that the practice complies with this rule.

**Nutrient Management Planners**

This rule will marginally increase the demand for professional nutrient management planners to develop nutrient management plans. Nutrient management planners who prepare plans for others must be qualified to do so. They must understand and follow record keeping requirements related to soil types, soil tests, crop nutrient requirements including University of Wisconsin recommendations, nutrient applications, nutrient contents of manure, nutrient application scheduling, and other matters related to nutrient management. Planners holding certain professional credentials are presumed to be qualified. Professionals with the knowledge and skill to use SnapPlus, a computer program critical to calculating the phosphorus index, are in a special position to capture new business. The rule also impacts planners requiring a qualified NM planner to complete a NM checklist form, provided by the Department, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent. The Department's rule revision:

- Clarifies the changes from the 2005-590 NM Standard to the 2015-590 NM Standard and increases the associated cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- Clarifies that the alternative related to s. NR 151.04, the PI, is a nutrient management plan developed in accordance with the nutrient management provisions in 50.04(3) and provides that in accordance with both, the 2005-590 NM Standard and 2015-590 NM Standard, the alternative to the PI is complying with the soil test P management strategy.

- Requires a qualified NM planner to complete a NM checklist form, provided by the Department, and provide reasonable documentation to substantiate each checklist response if requested by the Department or its agent.

**County and Local Ordinances**

In Wisconsin, the 590 Standard uses the current 2012 version of UW Pub. A2809 *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops* to determine the crop's nutrient needs and includes other restrictions required of NM plans developed for: DNR – Notice of Discharge or Wisconsin Pollution Discharge Elimination System permits for >1000 animal unit operations; Ordinances for manure storage or livestock siting; the Department cost share or Farmland Preservation; DNR cost share; USDA cost share; or voluntary reasons. The Department's rule revision clarifies that a NM plan, and subsequent annual submissions for local regulation means NM plans developed according to s. ATCP 50.04(3). Farmers may be required to comply with new and modified standards without receiving cost-sharing.

**Standards for Cost Shared Practices**

In addition to updating technical standards incorporated into this subchapter, this rule:

- Clarifies the changes from the 2005-590 NM Standard to the 2015-590 NM Standard increases the associated cost-sharing rates from $7 to $10 per acre per year due to additional costs associated with soil tests and new spreading restrictions.

- Clarifies the standards for cost-sharing, specifically that a manure storage system's capacity is based on the farm's inability to comply with the NM plan. When the facility is emptied, the manure must be applied to non-frozen soil in compliance with a NM plan under s. ATCP 50.04(3).

***Standards Incorporated by Reference***

Pursuant to s. 227.21, Stats., the Department has received permission from the Attorney General to incorporate the following standards by reference in this rule:

- NRCS technical guide standards and related documentation.

- ASCE and other private sector-developed engineering practice standards.

- State agency (DNR, DOT) erosion control standards for construction sites and storm water management.

- UW-Extension publications including fertilizer recommendations, milking center waste water management, rotational grazing, and soil and manure testing.

- NRCS standards for determining soil erosion (RUSLE 2, WEPS).

Copies of these standards will be on file with the Department and the Legislative Reference Bureau. The Department has discontinued the practice of including key documents as appendices and will utilize its website to indicate where documents may be obtained.

***Summary of, and Comparison with, Existing or Proposed Federal Statutes and Regulations***

NRCS has adopted standards for conservation practices cost shared by NRCS. Current Department rules incorporate many NRCS standards by reference. In most cases, the standards apply only to conservation practices

cost shared with Department funds. But in some cases (such as nutrient management), Department rules incorporate the NRCS standards as mandatory pollution-control standards. Enforcement of these mandatory standards is generally contingent on cost-sharing (there are limited exceptions).

While NRCS sets national standards, standards vary, to some extent, between states. NRCS coordinates its Wisconsin standard-setting process with the Department, DNR, counties, and others. For purposes of Wisconsin's soil and water conservation program, the Department may incorporate NRCS standards as written or may modify the standards as appropriate.

NRCS certifies engineering practitioners who design, install, or approve conservation engineering practices cost-shared by NRCS. The Department certifies practitioners who perform similar functions under the Department's rules. The Department's rule revision enables the Department to simplify the process for cancelling a conservation engineer's certification if agreed to in writing. The rule also provides for a person with the appropriate level of NRCS job approval authority to certify in writing that the practice complies with this rule.

The U.S. Department of Agriculture administers a number of federal programs that offer voluntary conservation incentives to farmers. The Environmental Quality Incentives Program (EQIP) is a key program offering cost-sharing for conservation improvements, including nutrient management plans, manure storage improvements and other conservation practices. As a result of confidentiality requirements, federal cost-sharing provided to landowners through this and other NRCS cost share programs cannot be publicly disclosed. Without accurate historical data about past use of NRCS cost-sharing to implement state conservation standards, it is difficult to account for the role these funds may play in the future.

### *Comparison with Rules in Adjacent States*

This comparison examines how surrounding states are addressing issues related to agricultural runoff and nutrient management planning and regulation and its relationship with farmland preservation activities. In general, the adjacent states do not use statewide performance standards specifically designed to address polluted runoff from agricultural sources. However, these states have various regulations and procedures in place to address many of the polluted runoff sources that this rule revision addresses. All four states use the NRCS 590 Nutrient Management Standard to steer their implementation of agricultural nutrient management, but none use it to the extent of Wisconsin's nonpoint program. All four states use the phosphorus index in some form but none use it in the same manner as NR 151 provides. For example, nutrient management strategies in Michigan are implemented as part of the state's Generally Accepted Agricultural and Management Practices (GAAMPs). Wisconsin's approach differs from the programs in adjacent states in that it has more detail in its state nutrient management standard and applies to more small and medium size farming operations than in other states. Also, in Wisconsin, pursuant to s. 281.16, Stats., cost-sharing must be made available to existing agricultural operations before the State may require compliance with the standards. Cost sharing is often tied to compliance responsibilities in adjacent states, but there are instances where farmers must meet standards other than the phosphorus index as part of regulatory programs.

**Illinois**

Using a different framework and programming, Illinois implements several standards similar to those adopted in Wisconsin. In addition to implementing a phosphorus index for large livestock operations, Illinois

encourages voluntary participation in nutrient management for small and medium operations and only requires the use of the PI in areas draining to impaired waterbodies.

While Illinois has a statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements.

**Iowa**

Like Illinois, Iowa requires that manure management plans for livestock operations of 500 or more animal units be based on the phosphorus index. Iowa nutrient management planning includes a nitrogen leaching index and, like Wisconsin, includes restrictions on manure applications near surface water, groundwater conduits, and frozen soil. See Iowa's website at:
http://www.iowadnr.gov/portals/idnr/uploads/afo/fs_desncriteria_medcafo.pdf

While Iowa operates a county-based statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements.

**Michigan**

Michigan relies on GAAMPs [see *Generally Accepted Agricultural and Management Practices for Manure Management and Utilization* (January 2012)] to support the Michigan Agriculture Environmental Assurance Program ("MAEAP"), which includes a compliance verification process that ensures nuisance protection to farmers under Michigan's Right to Farm law. GAAMPs covers standards similar to those in Wisconsin including standards for nutrient management. These standards are implemented as part of the state's right to farm law and its complaint investigation program. The state assesses problems identified through complaints, and farmers must take corrective action to earn nuisance protection under the right to farm law. Michigan uses a risk assessment formula to rank a field's risk for runoff and allows farms to use conservation practices to reduce the risk for those fields, thereby allowing farmers to apply manure in the winter.

While Michigan has a statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements

**Minnesota**

Minnesota requires a manure management plan for farms greater than 100 animal units if the farm requests a permit for one of several state programs. Like Wisconsin, the plans do not need to be submitted annually but need to be available upon request. Minnesota also utilizes setback from surface and groundwater features to reduce the risk of nonpoint contamination.

Under its feedlot program, Minnesota imposes mandatory requirements on about 25,000 registered feedlots. This program requires feedlot owners, ranging in size from small farms to large-scale commercial livestock operations, to "register with the MPCA, and meet the requirements for runoff discharge, manure application and storage, and processed wastewater."

While Minnesota has a statewide farmland preservation program in which landowners may restrict the use of their land to agricultural or related uses in exchange for tax credits, the program does not include conservation compliance requirements.

### *Summary of Factual Data and Analytical Methodologies*

The Department participated in the Wisconsin USDA NRCS development of the 2015 version of the Wisconsin 590 Nutrient Management Standard with technical assistance from agronomists, farmers, UW scientists, and agency staff. In Wisconsin, the 590 Standard uses the current 2012 version of UW Pub. A2809 *Nutrient Application Guidelines for Field, Vegetable and Fruit Crops* to determine the crop's nutrient needs and includes other restrictions required of NM plans developed for: DNR – Notice of Discharge or Wisconsin Pollution Discharge Elimination System permits for >1000 animal unit operations; ordinances for manure storage or livestock siting; Department cost share or Farmland Preservation; DNR cost share; USDA cost share; or voluntary reasons. Currently about 2.9 million acres are implementing nutrient management plans, which leaves 6.27 million acres yet to have plans developed. The cost share rates of $7 per acre increased to $10 per acre due to the additional costs and spreading restrictions. With 6.27 million acres yet to have a NM plan, at $3 per acre, an additional $19 million estimate for the cost of full implementation or $1.9 million annually for the next ten years. If these landowners are offered 70% cost-sharing, they would be responsible for paying 30% of the $10 cost per acre or about $2.7 million annually.

### *Small Business Regulatory Review Board Report*

The Small Business Regulatory Review Board did not issue a report on this rule.

### *Effect on Small Business*

This rule will have a moderate impact on farms in this state. Many of these farms are "small businesses." This rule may also affect the following businesses:

- Nutrient management planners, including private crop consultants, farm cooperatives, and farm supply organizations that provide nutrient management planning.
- Soil and manure testing laboratories and businesses that haul manure.
- Commercial fertilizer dealers.
- Businesses that design and install farm conservation practices.

This rule will have the greatest impact on livestock operations, which may incur additional costs related to the disposal of manure (provides more phosphorus than nitrogen, compared to crop needs). Additional costs will be mainly related to manure hauling. The cost for an individual livestock operation will depend on a number of factors, but the existing level of soil test phosphorus and soil erosion is critical. If these levels are reduced, costs will be lower over time.

This rule continues to allow farmers to choose the best way to comply. A farmer may choose among conservation practices that are appropriate for the farm. Farmers continue to have access to a range of resources such as the

Department, UW-Extension, NRCS, and the county land and water conservation departments to secure technical assistance.

The Department has not changed the requirement for cost-sharing when a landowner is required to install conservation practices. Under state law, compliance with the performance standards is not required for existing nonpoint agricultural facilities and practices unless cost sharing is made available for eligible costs.

### *Analysis and Supporting Documents Used to Determine Effect on Small Business*

The Department worked with all federal and state agencies and stakeholders, including farmers, agronomists, and conservation staff to update the current federal 590 Nutrient Management Standard, which resulted in the 2015-590 Nutrient Management Standard. Adopting the 2015-590 Standard was recommended based on the desire for one standard to apply to farms rather than varying federal and state standards. The changes from the 2005-590 to the 2015-590 were compared for cost of implementation.

Wisconsin has 9.1 million acres of cropland, not including pastures. Currently about 2.9 million acres are implementing nutrient management plans, which leaves 6.27 million acres yet to have plans developed. The cost share rate of $7 per acre will increase to $10 per acre due to the additional costs and spreading restrictions. The increase in the cost share rate for 2015-590 NM plans is attributed to an increase in costs for soil testing and labor, additional restrictions in the 2015-590 NM Standard that may require more land to apply manure compared to the 2005-590 NM Standard, and a potential increase in the amount of time spent by NM planners to develop a NM plan that complies with the 2015-590 NM Standard. The potential need for more land to apply manure is due to the additional spreading restrictions; however, not all farms will be impacted to the same degree by these restrictions. If these landowners are offered 70% cost-sharing, they would be responsible for paying 30% of the $10 cost per acre.

### *Environmental Impact*

This rule will implement the 2011 DNR performance standards and make improvements in Department programs, which will facilitate implementation of these standards. Overall, this rule will have a positive effect on the environment. However, implementation of conservation practices will depend on available cost-sharing. There are no preferable alternatives to this rule. This rule is not a "major action significantly affecting the quality of the environment," for purposes of Wis. Stat. § 1.11. No environmental impact statement is required under Wis. Stat. § 1.11, or Wis. Admin. Code ch. ATCP 3.

Additional spreading restrictions include:

- Prohibiting nutrient applications within 50' of all direct conduits to groundwater where only grazing and a limited amount of corn starter fertilizer may be applied.

- Prohibiting applications of manure within 100' of a non-community well, which includes schools, restaurants, churches, and within 1000' of a community well, unless the manure is treated to reduce pathogen content.

- Prohibiting winter nutrient applications within 300' of all direct conduits to groundwater, unless manure is directly deposited by gleaning or pasturing animals. This setback increased from the 200' setback in the 2005-590 NM Standard.

- Prohibiting liquid manure application in February or March on DNR Well Compensation Areas, or on fields with Silurian Dolomite bedrock within 5' of the surface.

- Limiting winter manure applications when frozen or snow-covered soils prevent effective incorporation. The NM plan must limit these applications when slopes are > 6% and if fields have concentrated flow areas using 2 practices listed in the winter application section of the 2015-590 NM Standard.

- Limiting late summer or fall commercial N fertilizer applications are limited in areas within 1,000 feet of a community well, 5 feet or less over bedrock, sites vulnerable to N leaching high permeability ("P") soils, rock ("R") soils with < 20 inches to bedrock, or wet ("W") soils with < 12 inches to apparent water table. The fall N rate was increased from 30 to 36 lbs. of N per acre to match common blended fertilizers if other nutrients are needed. Manure N rates of 90 or 120 lbs. N per acre depending on the crop, manure dry matter, and soil temperature.

### *Land and Water Conservation Board*

The Land and Water Conservation Board has reviewed this rule as required by s. 92.04(3)(a), Stats.

### *Public Hearings*

DATCP held public hearings at four locations on the proposed rule as follows:

- **Monday Jan. 9, Eau Claire** - Chippewa Valley Technical College
- **Thursday Jan. 19, Platteville** - UW Platteville Student Center
- **Monday Jan. 23, Appleton** - Fox Valley Technical College
- **Thursday Jan. 26, Madison** – Wisconsin Department of Agriculture, Trade and Consumer Protection

DATCP accepted written comments until February 9, 2017. Eighty people attended the public hearings. Five people publically testified. Twenty-nine people submitted written comments. DATCP received both general comments related to the rule as a whole and specific comments related to certain provisions within the rule. A summary of public hearing attendance and comments received can be found in Attachment 1.

### *Rule Changes in Response to Public Hearings and Rules Clearinghouse Comments*

The Department incorporated all of the editorial changes suggested by the Legislative Council Rules Clearinghouse. These changes were not substantive. Minor technical changes were made to update standards for cost-shared practices in subchapter VIII. Comments related to implementing the 2015 590 NM standard will be addressed through the 2015-590 NM Standard Checklist and the SnapPlus Nutrient Management Planning software. The comments receive at public hearing did not result in changes to the proposed rule.