WAPAC - Nutrient Management Planning Ad hoc Committee

Position Statement

Background

WAPAC members have participated in the development of many facets of nutrient management in Wisconsin since the early 1990's. This has involved the development of NRCS 590 standards, CAFO regulations, non-point rules, siting legislation as well as participating on numerous local, state and federal committees. Our collective experience has given us the unique opportunity to critically review our impact in the development and implementation of nutrient management through various programs in the state. As individuals, WAPAC members have been asked by various state and local agencies how the nutrient management process can be improved or streamlined.

In the spring of 2011, WAPAC formed an ad hoc committee to unify our individual member's experiences to develop comprehensive recommendations for state and federal agencies involved in Wisconsin nutrient management programs.

Complexity and size of Nutrient Management Plans has become an obstacle for effective implementation. Following are suggested ways Wisconsin could improve nutrient management plans, with the goal of reducing unproductive or unrealistic requirements while protecting the State's resources.

For all intents and purposes, the current structure and requirements of Nutrient Management Plans in Wisconsin are designed to satisfy the general public and the regulatory agencies, at the expense of ease of use and implementation by the grower. When Wisconsin plan writers are required to spend an inordinate amount of time writing an NMP designed for compliance verification, the focus is taken away from the primary task of delivering a plan that is understandable, implementable and results in effective resource protection by the farm client.

We need to forge a balance between resource protection, practical implementation and economic viability. Nutrient Management Planning has evolved considerably over the past 15 years, from the requirement to develop a plan that was very basic, easily implementable and affordable, to the current requirement to develop plans that are very large and contain a considerable amount of supporting

reference material to document that the plan writer understands the intent of the rules and to demonstrate that plans are based on all requirements of existing rules and regulations. These plans are very complicated, expensive, and often require legal review. It is the opinion of this committee that plans prepared today do not result in the greatest amount of resource protection for the amount of time, effort and cost it takes to develop them. We believe the following improvements can be made:

Plans should be prepared with a focus on making the plan implementable by the grower.

Plan writers should be free to spend valuable time developing components of a nutrient management plan that are designed to make the plan implementable. Any requirements to include reference materials or documentation to show that the planner has considered all available information should be eliminated. Emphasis should be placed on developing plans that only include materials needed by the grower to implement the plan, and are designed to make the plan easily understood and implementable by the grower. Plans that are customized specifically to meet the needs of the grower are more likely to be implemented rather than sitting on a shelf.

Requirements for structured documentation of compliance should be reduced.

Growers are required to fill out several forms throughout the year that need to be either maintained on site or sent to agencies in quarterly or annual reports. They include weather documentation, water table verifications, tile outlet inspections, field verifications, daily water line inspections, soil temperature documentation, calibration and inspection of application equipment, employee training logs, weekly manure storage structure inspections, weekly manure structure level monitoring, clean water diversion inspections, quarterly inspections of outdoor animal pens, barnyards and raw material storage areas, along with various proposed permit specific requirements . Although we recognize that all of these activities are important in implementing the plan, extensive recordkeeping and documentation of these activities not only adds to the amount of paper in the plan, it is also extremely time-consuming. We feel that all these records should be kept on site and not submitted to DNR annually unless annual reviews demonstrate substantial non-compliance. In that event, the producer may be required to submit specific reports until substantial compliance is achieved. This approach would allow for many reports to be less formal and allow producers to spend more time addressing specific resource concerns.

The NMP 590 and NR 243 Checklists should be used to verify substantial compliance of nutrient management plans.

The current 590 Checklist and to a greater extent, the NR 243 Checklist requires planners to include an extensive amount of reference material and documentation that can pass legal tests, but does very little in providing a grower with a usable plan. We recommend that the current

590 and NR 243 Checklists be revised and streamlined to be only used as a guide to the planner in plan development as originally intended.

In place of the current checklists, a document could be developed to certify that the planner has considered all the information required by a code, and that a plan is *substantially in compliance and meets the intent of nutrient management codes*. This would take pressure away from planners to include excessive documentation to show that the NMP meets the recordkeeping requirements of a particular nutrient management code.

The CAFO requirement to plan manure over the five year permit period could be eliminated or replaced with a more simple analysis in many situations.

We recognize that certain situations such as Greenfields (a new operation), expansions, and farms with limited land bases may be required to demonstrate a five year planning scenario. WPDES permit renewals that have a track record for compliance or farms with excess acres should be exempt from this requirement. This could save planners a substantial amount of time in the planning process allowing them to spend that time implementing plans with producers. This would substantially reduce planning costs for some producers.

Other issues with NMP requirements that should be addressed

University of Wisconsin fertility recommendations that are meant to be used as guidelines have become codified into Wisconsin Statute.

We fully support University of Wisconsin fertility recommendations. However, while we recognize the need for research based recommendations, the current recommendations do not fully meet the current and future needs of Wisconsin agriculture. Codification of University recommendations, which are intended to be guidelines, can stifle the development and implementation of new research and the consideration of new technologies which have begun developing very quickly in our dynamic industry.

While most UW soil fertility recommendations are based on fairly recent data sets, some are not. For example, it is widely recognized that current UW soil fertility recommendations for legume and manure nitrogen credits for winter wheat may not be correct. Today corn genetics are advancing at an astounding pace. Actual yields of these new hybrids are often 20% more or higher than the hybrids used to develop current phosphorus and potassium recommendations. Many farmers and agronomists feel that current UW fertility recommendations do not allow current corn hybrids to reach their maximum economic yield. The same scenario is true for other crops such as soybeans. We feel that the following changes should be made.

Research dollars need to be allocated to allow the UW to keep pace with the needed research to stay current with new fertility requirements of ever increasing yields.

Research funding has been disproportionally directed at environmental research rather than crop production practices. In addition, the amount of funding directed towards soil fertility research from the fertilizer tonnage fee had remained flat for more than 30 years.

Latitude to vary from UW fertility recommendations based on experience and professional judgment should be allowed.

In agriculture, we deal with biological systems that are often unpredictable because they are affected by weather conditions. These biological cropping systems can be effectively managed if agronomists are allowed to use their professional judgment based on experience in these situations. Current planning tools force trained agronomists to ignore professional judgment by requiring them to adhere to recommendations that were never intended to be codified.

Soil Survey information that is out of date or incorrect is commonly used as a basis for Nutrient Management Planning.

There are major issues in Wisconsin with soils that are incorrectly mapped as having a shallow depth to either bedrock or groundwater. Many map units are also incorrectly mapped for slope percentage. The burden of proving that these determinations are incorrect has been placed on the farmer and the plan writer. We propose that a committee of stakeholders be formed to review the issue of incorrectly mapped soils, with the intent of developing a process to correct the designation of soil areas that are incorrectly mapped.

Nutrient recommendations may be incorrect due to outdated or incorrect yield potential ratings for particular soil types. Also, nutrient recommendations for particular soil types can vary based on county boundaries or some other arbitrarily defined boundary (i.e. highway boundary). A review of yield potential ratings of all soil types in the state is needed to ensure that a consistent method of determining yield potential ratings and the assigning of soil types to yield potential groups has been applied uniformly across the state.

There may be nutrient recommendation limitations due to the requirement to pick predominant soil types to meet conservation compliance rather than agronomic requirements. The assigning of predominant soil types for conservation planning requirements are based on choosing the most erosive soil map unit that makes up 10% or more of the field. Often times the predominant soil type for conservation compliance has a lower yield potential than the majority of soils contained in the field. This may result in under estimating the nutrient requirements for a majority of the field. The effect of under applying N can result in dramatic yield decreases.

There needs to be the option to choose the predominant soil type for nutrient recommendations separately from the predominant soil map unit for conservation compliance.

Wisconsin Nutrient Management Planners need to be able to use the best available programs, models and tools.

Wisconsin agencies should not play a custodial role in NMP program tools and models, but rather act as a facilitator for Wisconsin recommendations into all valid programs and models developed and supported by others. Over the years nutrient management planning has evolved into a complete NMP and conservation plan. However, in order to allow planners with limited conservation planning training or experience to plan upland conservation management practices, SNAP Plus gives planners a limited set of management options that overestimates the potential for erosion on most fields. Manure Management Planner (MMP), a federally funded software program, utilizes software (RUSLE2) used by NRCS and County Land Conservation personnel in the development of conservation plans. However, due to budget constraints, incorporation of the phosphorus index required by Wisconsin's NRCS 590 code has not been available in MMP, limiting its use in this state. Wisconsin nutrient management planners should have more choices of valid programs, tools or models in developing a NMP that does not rely on the use of Snap Plus to meet Phosphorus Index requirements**.**

Discrepancies in code interpretation between DNR Regions, County Agencies, and Local Township Government.

There are large discrepancies between DNR regional personnel's interpretation of NR 243. In addition, there can be differences in NMP documentation required by individual counties and townships. For planners who work in more than one county, this can be a frustrating situation providing different information for each county. This has increased the size of plans in and of itself.

Have some Wisconsin Nutrient Management Plan requirements exceeded the intent of the Wisconsin Legislature?

This Committee feels that this question needs to be investigated. We feel that there may be a disparity between the legislative intent of promulgated nutrient management requirements and the current implementation requirements. All current NMP requirements – in administrative codes, technical standards and state agency implementation guidance – should be reviewed on this basis.

These recommendations can be achieved through setting priorities at the state agency level and developing implementation plans. Many of our recommendations can and should be implemented through agency guidance or revisions of University publications, but some may require review of administrative rules.

There needs to be developed a more streamlined process for agronomists to prepare and agency personnel to review NMPs as the demand for more acres covered by NMPs grows exponentially in the near future.

We pose the following questions, which highlight some of our biggest concerns:

1. If the animal unit threshold for WPDES permit requirements were to decrease, would smaller farms be able to comply with, let alone implement, a practicable and effective NMP?
2. If more farms are covered under WPDES permits, would agency staff be able to review and approve NMPs in a timely fashion, considering budget cuts and current staffing needs?
3. If TMDLs become a reality, a much larger group of different size farms will be required to develop NMPs – will they utilize the current process which is extremely costly, cumbersome and confusing?
4. Will use of the current NMP process be sustainable given budget restraints, limited number of qualified planners, and current or reduced staffing of agency review staff?

In recent years, we have observed that the evolution of nutrient management planning has resulted in a cumbersome regulatory process, rather than a collaborative effort between agencies, agronomists and farmers to address specific environmental concerns. Although we recognize that the current regulatory process has had its successes, we feel the current process will not be economically or environmentally sustainable. There needs to be a fresh look at developing a nutrient management planning system that considers a balance between resource protection, practical implementation and economic viability.

Respectfully,

WAPAC Nutrient Management Planning ad hoc committee
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