WHAT CONSTITUTES A GOOD NUTRIENT MANAGEMENT PLAN? AGENCY PERSPECTIVE

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A nutrient management plan initially involves three major people. These people constitute the core of the plan. They include: the landowner or operator of the land (OW/OP), the Certified Crop Adviser (CCA), and a conservation technician, soil conser-ationist or agronomist from the Land Conservation Department (LCD), or Natural Resource Conservation Service (NRCS).

Once all of these people are identified, it is extremely important for everyone to meet so they know who their contact person is. Putting a face to a name always makes the process run more smoothly. Therefore, to aid the communication efforts it is necessary to exchange phone numbers, e-mail addresses, and mailing addresses so that a line of communication exists. Eventually, once LCD, or NRCS staff members get to know the CCA's working in the county, the initial meeting of identifying the core group can be eliminated and done by phone.

The initial meeting is also a time that the CCA and the landowner can give cropping practice information to the county staff member. This information is necessary to write or revise a conservation plan. It is important for the county staff member to review the crop rotations and tillage information with the CCA before writing the conservation plan. Reviewing this information with the CCA can save a lot of time in the long run. The reason for this is that quite a few of the farmers are now hiring CCA's to manage their crops, and they have the cropping practices on file in their offices. Experience has it that it is easier to get in touch with the CCA than it is to get in touch with the landowner. The CCA is the one with the working knowledge of how many acres/year the landowner may need of a particular crop. Corn silage seems to be the in demand crop these days, and it is one of the more challenging crops to plan to the tolerable soil loss. So it is important for the agency staff member to have this information.

The question often arises as to whether the landowner should include rented acres. In most cases this is not even questioned. The landowner just knows they need as much land as they can get, so the rented land is automatically included in the plan. Some farms are also beginning to use neighboring land just to apply manure. All of the manure has to be accounted for whether the owner of the animals has cropping interest in the land or not. Therefore, this land also has to be included in the plan. The CCA and LCD or NRCS staff member then has to contact the landowner with the cropping interest to get the crop rotation information, and soil test reports from that land.

A plan is not a plan without two good maps. It works best to have two maps, simply

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because there is a lot of information to try to get onto one map. The two maps that are necessary to complete nutrient management plans are: an air photo map and a critical site or also referred to as a delineated soil survey map.

The air photo map has to have the following components.

- 1) Name of the landowner, tract number, township, and section.
- 2) Title of the tract of land
- 3) A field identification that will make sense to everyone in the core group. That means that if the landowner identifies his/her field as Field South of the Pond, which should be abbreviated and identified on the map. However, the county agency staff identifies land by tract and field numbers, therefore it is important to have a table to cross-reference the farmer's identification with the conservation plan identification. It works well to simplify the identification of the fields by using as few of characters as possible. The maps get cluttered fast if the identifications are long. The cross referencing table is necessary documentation in case a question arises concerning that field or plan.
- 4) Acres: Be consistent with both the conservation plan and the nutrient management plan. County staff members can get acreage from the Farm Service Agency if there is a question regarding acreage.
- 5) The air photo also corresponds to the conservation plan in that the conservation plan is planned for a resource management system (RMS). This system is a combination conservation practices and management to protect, restore, or improve the resource base of soil, water, air, plant, and animal resources. Therefore, the air photo map will have woods, wild areas, farmsteads, urban areas, etc. also identified on the map, along with corresponding acreage.
- 6) The map has to have the roads, field accesses, lanes, drainage ditches, water-ways, streams, lakes, wetlands, highly erodible land (HEL) and any other specific critical site identified.

The critical site or delineated soil survey map. (Check with your county to see if they have a mapping program to delineate these maps.) Delineated soil survey maps have the following components:

- 1) Name of landowner, tract number, township, and section.
- 2) The tract and fields with the same numbering system that is on the air photo are used

on the delineated map.

- 3) Buffered areas are identified with either one or more of the following:
 - a) Nutrient Management 590 Standard
 - b) Water Quality Management Areas (WQMA
 - c) Wisconsin Pollutant Discharge Elimination System (WPDES)
- 4) Environmentally vulnerable soils identified. These include shallow water table, high permeable soils, and low soil depths to bedrock.
- 5) Safe to winter spread sites.
- 6) All "C" slopes or higher are identified. "C" slopes range from 6-12% so check the conservation plan for the slopes. Some fields may be identified as a "C" slope but is below 9%. Those fields would be safe for winter spreading.

The final component from an agency perspective that is necessary for a good nutrient management plan is that each core member receives a copy of the universal soil loss equation (USLE) or a copy of the revised universal soil loss equation (RUSLE), depending on what the county is currently using. Both the landowner and the CCA have to have a copy of the conservation plan with the USLE on it, other wise known as a "15 Form". They have to have this information to know if they are at the tolerable soil loss ("T") for the field. The USLE shows the soil loss for that particular field compared to the "T" of that field. This in turns shows the landowner if there is flexibility to change the crop rotation by adding another row crop.

Communication cannot be stressed enough for these nutrient management plans to get written and implemented. It is also important to point out that the initial set up year is the most difficult year. The initial set up of a farm involves getting correct field boundaries and acreage, gridding soil sample sites, soil sampling, estimating annual manure production, calibrating manure spreaders, analyzing manure, and updating or writing conservation plans with updated maps. It is important for the core members not to get overwhelmed by this initial year of planning. All of the subsequent years involving updates are much easier and less time consuming. Therefore, don't give up on nutrient management plan implementation based on the initial set up year. Also, the amount of paper that goes into a plan is reference material so don't let that dissuade you either. It often looks scarier than what it really is.