

## Recommendations:

### 1.) Record keeping is time consuming

#### Possible fixes:

- Add date and weather to SNAP+ (add columns to Sept. version 2012)
- Encourage all farmers to use existing templates (current and immediate)
- University creates a hand-held app for the manure haulers
- Green Tier approach that would allow review of a record keeping system that is deemed equivalent (proven performance required – would need to set up a team to review how this could be implemented)
- Computer programs that are compatible with SNAP+ and the maps that are used in a NMP and the tractor equipment format (2020)
- See step #4 for Guidance to improve the data reliability

### 2.) Reduces Yield (this may be a perception) - UW recommendations are based on economic optimum not maximum yield – fundamental underpinning of NM

#### Possible fixes:

- UW research needs to test for optimal N with high yield crops (CAFO Farmers can propose to us that they want to do an advanced ag research project to demonstrate higher applications – needs monitoring) Funding for UW is necessary.
- Revisions by NRCS to NRCS Standard 590 will consider adaptive management – on farm, on-site trial strips to track responses to variation from applying 590. (Fall of 2014).

### 3.) Process doesn't allow operational flexibility

#### Possible fixes:

- DNR develops guidance to allow flexibility under some circumstances.
- Farmer needs to be able to add fields or change plan quickly (public notice will only add time, not shorten this timeline – Sept. 2012 - for new fields and public notice guidance available).
- Five years of planning manure isn't realistic about what actually happens.
- Farmer should be able to use mass balance approach (Need to discuss with consultants, counties, agencies – start 2013).
- Review the use of planning tools for regulation.
- Lots of assumptions result in cumulative error (what other option would a farmer have if not actual data collection).

#### 4.) Make the Plans More Reliable

##### Possible fixes:

DNR develops more standard tools and templates (currently working on and ongoing)

DNR develops better guidance on:

Implementation of the general permit, L

soils and productivity (need to work with UW, have to explain any flags, have variable application) H (2014 in 590 discussions)

“W” soils – have it on a map (like network with weather), take farm data into account to determine when soil testing can stop – Update in 2014 based on newly collected data adequacy. M

bedrock, M (2012)

waterways - SWQMA, M (2012 version of SNAP+, followed by DNR guidance)

Winter spreading with revision to 590 – H (2014)

Coordinate with other county permits and field evaluations. H (need a team to look at efficiencies of use of existing data and collection of data for slopes, soils, waterways – who would do it) (590 Tech Note?- 2014)

#### 5.) Shorten the time to develop and review the plan

##### Possible fixes to make it faster and easier:

Modify SNAP+ for better manure allocation and to make it GIS based (2015)

Connect attributes to field manually (Sept 2012 version)

DNR determines when they could use a mass balance approach rather than a five year plan (see above)

DNR provides on-line file sharing and on-line application submittal and posting (Sharepoint project – 2012)

DNR commits to central intake for completeness, then one DNR reviewer until approval (2012)

Reissuance tickler from DNR (better communication) (Depends on staffing ability to do this statewide – some regions do this already)

DNR will redo NR 243 checklist (remove repetitive questions) (checklist was developed to get better plan submittals and it appears to be working)

All consultants use the standard narrative (ongoing training effort)

DNR considers the use of certified reviewers instead of DNR reviewers (DNR and DATCP cooperatively review plans – agency is responsible for the review)

DNR offers an expedited review for a fee (we'd need a statutory change to allow this – no fee at all now)

All state and federal agencies and local authorities come together to have a single set of requirements for all farms (not just CAFOs) (Would have to apply worst case to everyone to be protective, not less)

Data collection from owner needs to be standardized. (maybe an app would help)

More DNR guidance will remove some uncertainty in data interpretation. (see above)