WQGIT NM Report Review

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VT/VADCR
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Tier 1 Non-Visual Assessment

- 1. Plan is available in electronic or paper format.
- 2. Plan is developed cooperatively by a trained professional and the farmer.
- 3. Plan expiration date is no longer than three years after written.
- 4. Plan uses soil lab analysis from farm samples to inform application rates of nutrients.
- 5. Plan is implemented and followed according to the CGNAM definition and the intent where:
 - Crop yields are estimated based on records or soil productivity estimates for the entire farm;
 - Nutrient applications adhere to contemporary LGU specifications for N rate;
 - P fertilizers are applied at a rate consistent with the contemporary LGU recommendations; and
 - Nutrient application timing is considered to further reduce N and P losses.

Tier 2 Non-Visual Assessment

Tier 2 includes <u>all</u> elements of a Tier 1 plan, and the enhancements bolded below.

- Plan uses soil lab analysis from farm samples to inform application rates of nutrients.
 - If soil test levels of P warrant a P risk assessment (or P-index), one is performed and the recommendations to reduce losses are followed for the entirety of the plan.
- 2. Plan is implemented and followed according to the FLNAM definition and the intent where:
 - Crop yields are estimated based on records or soil productivity estimates for each field using contemporary guidelines from state programs;
 - Nutrient application rates do not exceed contemporary LGU specifications for N and P (including manure); and
 - Fertilizer and manure applications are **timed** and placed (e.g., lower risk times for runoff and leaching, setbacks, incorporation, etc.) to reduce risk of N and P loss.

Tier 3 Non-Visual Assessment

Tier 3 includes <u>all</u> elements of a Tier 2 plan, and supplementary records showing either:

- Variable rate applications of N on each field were performed resulting in a net change in N rates for the field; or
- 2. An Illinois Soil Nitrogen Test (ISNT), Corn Stalk Nitrate Test (CSNT), Pre-side dress Nitrate Test (PSNT), or Fall Soil Nitrate Test (FSNT) was performed resulting in a net change in N rates for the field.

Row Crop efficiencies:

• 46% of ag

Practice Tier	Stand- Alone Efficiencie s	Initial Load	Pass- Through Load	Combined Efficiencie s
1N	0.0925	100	90.75	9.25%
1P	0.1	100	90	10.00%
2N	0.044	90.75	86.757	13.24%
2 P	0.066	90	84.06	15.94%
3N	0.028	86.757	84.3278	15.67%

8/20/2015

Hay land efficiencies:

- 24% of ag
- 2N & 3N Ineligible for alfalfa (1/2 of hay)

Practice Tier	Stand- Alone Efficiencie s	Initial Load	Pass- Through Load	Combined Efficiencie s
1N	0.05	100	95	5.00%
1P	0.08	100	92	8.00%
2N (no alf)	0.028	95	92.34	7.66%
2P	0.066	92	85.928	14.07%

8/20/2015

Recommended & final efficiency values

		High-Till with Manure	Low-Till with Manure	High-Till without Manure	Pasture	Hay with Nutrients	Alfalfa	Nursery
Tier 1 Reduction	TN	9.25	9.25	5	5	5	5	5
from no NMP	TP	10	10	8	8	8	8	8
Tier 2 Reduction	TN	13.24	13.24	N/A	N/A	7.66	N/A	N/A
from no BMP	TP	15.94	15.94	N/A	N/A	14.07	14.07	N/A
Tier 3 Reduction from no	TN	15.67	15.67	N/A	N/A	N/A	N/A	N/A

Applicable land uses by Tier

Tier 1 92% Ag max

- Row w/ manure
 - HWM
 - LWM
- Specialty row crops (HOM)
- Pasture (PAS)
- Nursery (NUR)
- Hay w/ nutrients (HYW)
- Alfalfa (ALF)

Tier 2N – 58% Ag	Tier 2P – 66%
max	Ag max
•Row w/ manure •HWM •LWM •Hay w/ nutrients (HYW)	 Row w/ manure HWM LWM Hay w/ nutrients (HYW) Alfalfa (ALF)

Tier 3N – 41% Ag max

- Row w/ manure
 - HWM
 - LWM

Overarching questions and concerns

- Does the combined Tier 1 + Tier 2 Phosphorus recommended efficiencies OVER credit for nutrient management?
- Is the Phase 6.0 Expert
 Panel confined or limited
 by the recommendations
 of the Phase 5.3.2 Panel?
- How will the States interpret the definitions and report their respective programs?

➤ Tier 2 benefits will apply to a SUBSET of acres that are eligible under Tier 1.

- ➤ The Phase 6.0 Nutrient Management Panel will benefit from the work of the 5.3.2 Panel but will be working with an entirely different set of assumptions related to ag land uses and model considerations. No constraints or limitations, but definitely advantages from the work of the 5.3.2. Panel.
- ➤ The AgWG will work with the states in the months ahead to hear how their programs are being interpreted in respect to the Tiers. The NM EP suggests this be done in a subcommittee.