

Phase 6.0 Nutrient Application Management Expert Panel:

“Sea Change” in Science, Practice
and Verification (we hope)

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Why can this be a “Sea Change” panel?

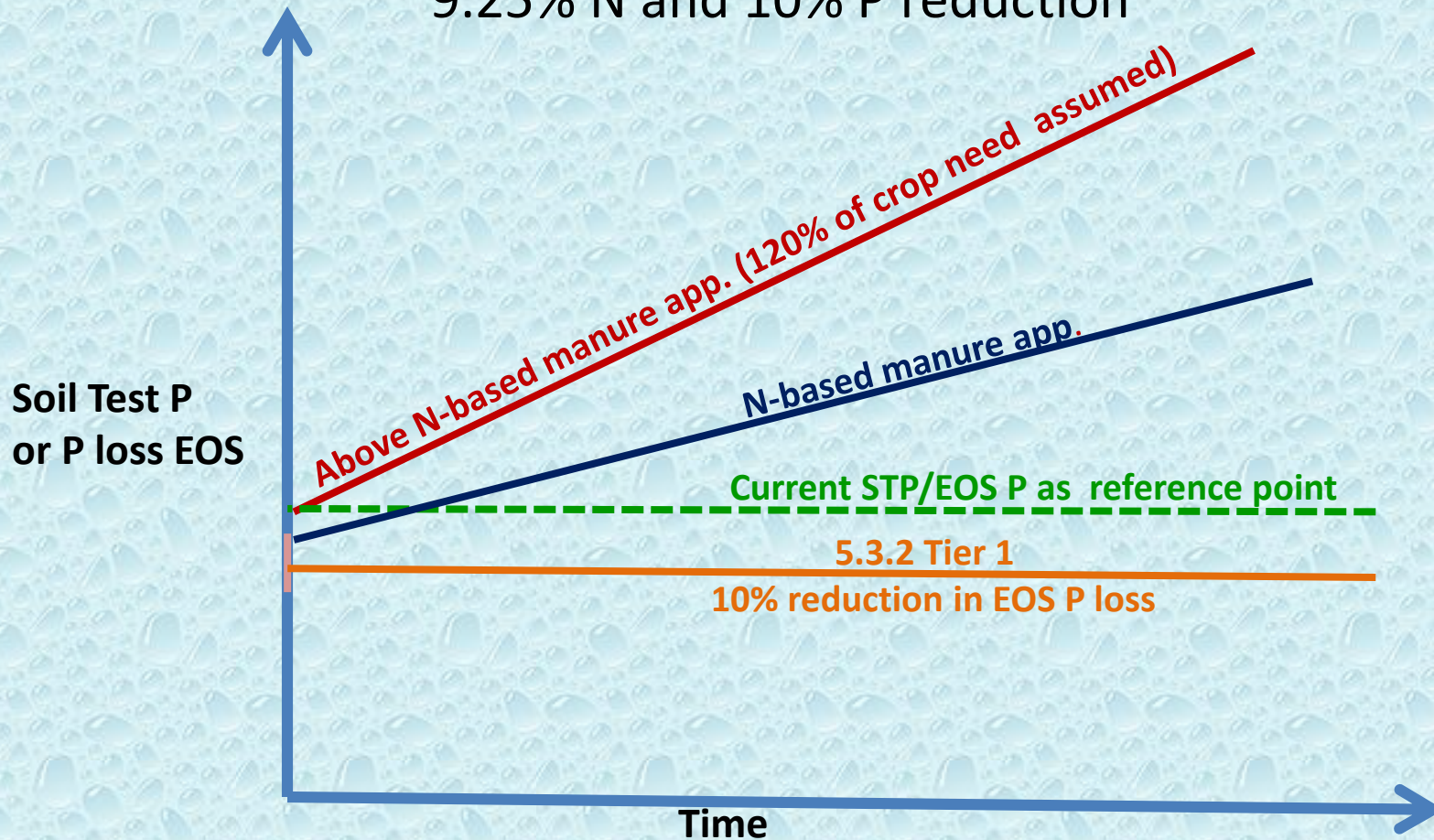
- Independent Scientists EP (?)
- Past history of WSM vs Ph. 6.0 (particularly for P)
- Address directionally incorrect 5.3.2 Tier 1 efficiencies
- More emphasis on verification

Problems with 5.3.2 NAM

- 5.3.2 not yet approved; expected approval w/minor T2 changes
- Ph. 6 – “start from scratch” – good idea but unusual; unlikely
- Tier 1 was deemed “approved in 2013” in 5.3.2 EP report
 - *Tier 1 used as base for Tier 2 and 3(N) efficiencies*
 - Concerns during 2013 development and panel reviews in 2014 & 2015
 - In last version, accepted responsibility for Tier 1 but made no changes
- *Is N-based manure application a STP and P loss reduction tool?*
 - *N-based manure application will increase STP and P loss over time*

Tier 1

9.25% N and 10% P reduction



Relative STP/EOS P loss
under different manure management approaches

Tier 2

- N-based manure application with use of any P risk assessment tool to determine P limits
 - No assessment of efficacy of P risk assessment tool used
 - Differences in tools across watershed not considered
- 66% increase in P reduction from T1
- 42% increase in N reduction from T1
- Meets definition of basic NM and close to 4Rs (method and timing not really addressed in 5.3.2)
 - *Should this be Tier 1 – is it basic NM during the last decade?*

Tier 3

- Current reductions for N only
- Can be applied to either T1 or T2 reductions
- 30% increase from T1 and 23% from T2
- 5 different T3 N management tools get same reduction; some widely used in NM (e.g. PSNT)
 - PSNT to variable rate have same efficiency
- Science base for efficiency and lumping is unclear

Suggestions for Phase 6 Panel

- “*Start from scratch*”: No obligation to use current Tier approach or:
- Elimination/major revisions of Tier 1
- Develop literature based efficiencies for Tier 2 that justify increased efficiencies (or Tier 2 as base NM)
- Separate efficiencies for different Tier 3 N practices
 - Create a T3 P – drawdown practice(?)

Suggested “ground rules” for panel

- Rigorous science base
 - Use your knowledge/experience to develop “Best Available Knowledge” NM definitions and efficiencies
- Do not accept “Ph. 6 model cannot handle this” if “this” is science-based and real world
- Stay with the science, not policy managers or interest group preferences
- Members need to stay engaged, active, current

Summary

- Address Tier 1 problem early and offer your improvements for 5.3.2 NM efficiencies to avoid later “clash” with Ph. 6.0
- Be an independent science-based Expert Panel
- Is Tier 2 really Tier 1?
- Are all Tier 3 N practices equal in efficiency?
- Should alternative approach to tiers be used?
- Many scientists and non-scientists will be watching

Questions on “Closed Panel” Process

- Will substance/draft recommendation information rather than process/progress updates be publicly available following meetings?
- Are there opportunities for input/comment between “open session” and “final draft review”?

Thank You for Serving on This Panel!

Base Your Work on Science and the Real World

Good Luck!!!

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