



Standards Oversight Council (SOC)

Developing effective technical standards that protect Wisconsin's natural resources

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NRCS 590 Nutrient Management Standard Team

MEETING AGENDA

Thursday, 22 May, 2025 ▲ 9:00am – 2:30pm ▲

Portage County Public Library - 1001 Main St, Stevens Point, WI 54481

9:00 Welcome (Jamie)

Notes:

Attendance: Cody Calkins, Jamie Patton, Sarah Walling, Andrew Craig, Dan Smith, Travis Engels, Morgan Kepler, Andrea Topper, Carl Hahn, Carl Wepking, Aaron O'Rourke, Matt Ruark

Absent: Kyle Much

9:15 Meeting Notes Review (Carl)

Review and approve 24 April 2025 meeting notes.

Approved

9:30 Review draft work from April meeting (Jamie)

- 5 acre soil sampling question (no objections to as written)
- Nitrate testing of irrigation waters
 - o Annually is currently specified – fluctuation is expected
 - o Representative sampling
 - o Sampling protocol from UW
 - o Recommendation of annually, during the growing season
 - o Trouble with UW recommendations is that some of this work was tabulated at Hancock Research Station –
 - What if it doesn't rain?
 - Plan could include language to adjust nitrogen application based on the amount of irrigation water applied
 - o Tracy Campbell et al. 2023 (Quantifying the spatiotemporal variability of nitrate in irrigation water across the Wisconsin Central Sands)
- Guidance document aside
 - o Perspective of the team that this is a useful approach to incorporating nuance and specifics
- Revisit "approved" language for DATCP approved facility for manure testing (I believe the context was 'manure')
- Analysis for leachate testing (homework for AT – see resource email, or contact Becky Larson)
 - o Separating leachate
 - o Treating leachate as = to manure

- Nutrient concentration often below detection in wash-water (e.g. egg wash from poultry facilities)
- Gleaned and pastured animals (within P loss risk assessment)
 - Address language – pasture change to grazing (grazing defined in glossary to specify livestock acquiring feed from growing plants)
 - If at any point during the grazing season, more than one animal unit is present per acre
 - Consequence of change – winter feeding risk –
 - Goal to encourage bale grazing, discourage sacrifice lot in a sensitive area
 - Should this fit within winter prohibitions
 - Homework for CW – re-write to suggest continuous grazing should be investigated and managed grazing should be generally acceptable from P perspective.
- Small farm impact of 50-100 ppm soil test P – current language is more restrictive than CAFO regulations (above 100 is in alignment with CAFO)
 - Emergent avoidance strategy is deep ploughing
 - Discussion regarding crop drawdown of P (little data) versus accumulation of P (well studied)
- 50% N addition to legume – discussed last time, no further discussion today
- 46 lb limit (context needed) – no further discussion today
- Nutrient timing – second paragraph – number of hours – 24 proposed and accepted
- Outwintering section needs fleshing out – CW and JP will take this on for next meeting

10:15 ***Break as needed***

10:30 **Resume draft discussion with topic of winter spreading (Jamie)**

Notes:

- Winter Spreading
 - Reminder National 590 does not allow winter spreading – variance required for Wisconsin
 - Suggestion that national variance may not continue, and developing a plan to comply with national before the next 590 is written for Wisconsin
 - Storage would be the solution in this instance
 - Storage cost-share would need to be boosted
 - Currently DNR-243 allows winter spreading for solid manure
 - Suggestion to add a winter spreading note added to considerations – suggest planning for storage to reduce need for winter spreading, or winter spreading during sub-optimal conditions (e.g. snow is too deep to access field to spread)
 - Definitions
 - Frozen soil
 - ½ inch to 8 inches is frozen
 - No discussion
 - Snow covered
 - 1 inch
 - No discussion
 - “Capacity” – ambiguity question
 - Winter spreading restriction regarding ‘conduits to navigable water’
 - Section missing regarding high-risk (February-March?)
 - Revisit to find this language – evidently Kate drafted this language

- JP and CW will investigate (might have included some winter restriction language -)
- Driftless issues regarding winter spreading restrictions – too restrictive to be adhered to
 - Hard to define what 25% of the field is?
 - e.g. application would be one spreader pass across a serpentine field – hard to find subsequently
 - Suggested new language – slope and ‘winter spreadable management unit’
 - ‘Winter spreadable management unit’ likely needs a glossary definition
- Concentrated flow channel restrictions
 - Suggestion to make 200 feet border a necessity
 - And pick one additional practice
 - Suggestion to remove practices that are not practical / implementable
 - Does maintaining crop residue reduce runoff?
 - Suggestion to change language for this practice to include a qualifier of ‘in long-term no-till systems.’
 - Team will address the complications of contours
- Discussion regarding applying manure – opted to remove language regarding proportionality of manure addition
- Time elapsed for sequential manure applications – suggestion to make it longer than 24 hours.
 - 590 from 2015 specifies 14 days
 - Runoff risk advisory should be followed
 - Can this be removed? Is it too difficult to implement?
 - Suggestion to remove, and re-word the previous bullet point
 - Suggestion to mandate RRAF use and removing all other options
 - 72-hour suggestion (3-days)
 - Language will be re-worked
- Additional suggestion – only two requirements – remove all others
 - 30 lbs P₂O₅
 - 200-foot border
- Revisit winter spreading after lunch or at the next meeting so that we have time to find the language that got lost between draft edits
- Nutrient placement
 - “Areas contributing runoff” – some LCCs are more effective than others at mapping and determining these at-risk zones.
 - Decision to include verbiage regarding LCC’s having their own say over additional restrictions (sensitive areas)
 - “Waters of the State”
 - Change language to “navigable water or conduit to navigable waters” from ‘Waters of the State’
 - [missed notes while tracking down lunch]
- Ephemeral erosion
- Prohibitions & SWQMAs
 - Are commercial fertilizers an issue regarding SWQMAs?
 - Suggestion – start over on this section
 - We can set aside manure given that we already have SWQMA restrictions for manure
 - Solid manures are missing – further hunting needed (JP)

- Add flood zones & periodically flooded areas
- Suggestion that a previous decision was made regarding using CAFO restrictions for SWQMAs (need to find previous language).

12:00 Lunch, provided

12:30 Resume draft discussion (Jamie)

Notes:

- Revisiting winter spreading
 - Adding 'high risk runoff period' (01 Feb – 31 March) or when RRAF shows high risk language that had been previously discussed by the group
 - Questions regarding the specifics of this language, the intent, and best practices
 - Liquid vs solid manure (16% cutoff -- because 16% is stackable)
 - How do we frame the language to encourage farmers to spread manure during the least-risky times?
 - RRAF – availability question (Amish, Mennonite, poor cell signal)
 - Slopes 6-12%
 - Revisiting after lunch
 - Is in-field movement of P (i.e. moving from a 'smoother' part of the field to a 'rougher' part) what we're trying to avoid? Or is it any movement at all (i.e. we don't want it to move within field)?
 - Revisiting the liquid vs solid discussion
 - Decision to lead with the 'intent' – i.e. if it's intended to be used as a liquid, but it's over 16%, treat it with liquid guidelines
 - Need definition of "dominant field slope"
- Nutrient placement
 - Wells
 - No applications within 50 feet of all potable wells
 - Group decided to remove exception for grazing livestock
 - 100 feet of a non-community potable well
 - 1000 feet of a community potable well
 - SWQMA (revisiting whether we need to re-write this whole section)
 - Removed bullet point regarding manure given that it's already described elsewhere
 - What are we trying to protect with this question of commercial fertilizer use within SWQMAs?
 - P to water
 - Decision – simplify language – lean on flood forecasting, but put a pin in the topic to bring back up at a future meeting
- Review of SWQMA manure language from DNR-243.
 - Group agreed to strive for consistency with DNR-243.
 - Group agreed to simplify the language within 243 to eliminate options that are less likely to be utilized (specifically option 4, regarding filter strips)
 - 2015 version of 590 has 'subsurface drainage' included within SWQMA section
 - "Sequential" statement
 - Not to exceed capacity
- Additional criteria to minimize ag nonpoint source pollution of surface water (section title)

- N restricted
 - Shallow bedrock soils –
 - why 5-feet, not 24 inches? (either 20" or 24" – move to align with CAFO rules)
 - There is a layer for this criteria within Snap Plus.
 - Snap Plus has a 5' layer & a 24" layer (20"?)
 - Decision to remove 5-foot language
 - Decision to go with 24" depth
 - W soils
 - Within 24" – group agreed
 - N-inhibitor was removed for spring and summer applications
 - N-to-N language changed to 'applying nitrogen to N restricted soils'
- Early Fall Applications (within groundwater criteria)
 - Don't apply commercial fertilizer unless to a fall crop
 - Don't apply manure unless it's for a cover crop within certain parameters
 - To establish a cover crop
 - To an existing cover crop
 - Manure can also be applied to a fall crop
 - This language was crafted in April of 2024 – Dan Smith has this language.
 - Avoiding smothering a crop was mentioned -- Is smothering a practical concern?

2:15 Closing wrap-up

Establish action items

Discuss meeting frequency

Notes:

- Group will get back together virtually in 2 weeks (scheduling poll will be sent out)
- Homework will be circulated
- Resume next time at "Early Fall Applications"

2:30 End