



Standards Oversight Council (SOC)

Developing effective technical standards that protect Wisconsin's natural resources

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WDNR XXXX Urban Soil Health Standard Team

MEETING AGENDA

Thursday 28 May 2026 ▲ 9:00am – 2:30pm ▲

UW-Milwaukee School for Freshwater Science – for virtual option see zoom info below.

9:00 Brief welcome & overview (5 min; Pete, Christina & Carl)

Attendance: Neil O'Reilly, Stu Schwartz, Carl Wepking, Phil Gaebler, Doug Soldat, Andy Kaminski, Mark Polega, Pete Wood, Jamie Patton, Christina Rauh

Guests: Senarith Mouth (WDNR)

9:05 Homework follow-ups – share and discuss table updates (45 min; Pete)

Goal: reorientation with update to data backing curve numbers and runoff reduction crediting tables; finalize tables

Notes:

- Updated table 1 with input from Stu's work
- Paired down to just the soil textures that showed the most benefit
 - This is up for discussion as to whether this is the best approach
- 1 yr, 2 yr, 5 yr data available – focused on 1 year
 - Percent reductions represent difference between compacted and decompacted conditions for various soil types
 - The hope was that this would be more compatible with how a municipality might be managing this information within existing modeling structure
- RCN - runoff curve number
- Discussion regarding precision (and precision vs accuracy)
 - Worry of undersizing other supporting infrastructure, and potentially contributing to flooding – therefore more precision is better
 - Conservative safety factor could be included as well
- Credit duration – (operation and maintenance section)
 - How long would this credit be allotted for?
 - Maintenance plan being adhered to could be part of the standard
 - Retesting could be included as well (x years – 5? 10?)
- Generally – table could use a descriptive caption including:
 - Emphasis that these numbers refer to a 1-year storm
 - Which soil textures aren't included and why
 - Safety factor could be included here
- Soil textures to include in the table and why

- Percent reduction can exaggerate the benefit of decompaction for soil types that don't infiltrate much water to begin with – so should potentially exaggerated soil types be excluded?
- Soil texture and depth – there will be variation
 - Conservative approach would probably be best
 - Options:
 - Pick the most limiting soil type – i.e. most restrictive [group leaned towards this option]
 - Predominant soil texture
 - Composite approach – in practice, not much to support this option
 - Stu will work up an example comparing a diverse soil profile versus using the most restrictive soil type
 - WDNR 1002 should also be considered as an option, also verify for consistency in approach
- Credit would be allocated via 'other practice' pathway within WinSLAMM
- Crediting could include options:
 1. "Book value" from provided tables (that leans conservative)
 2. Credit based on field measured improvement (could provide a solution for complex situation that doesn't fit the table well)
- Item for considerations section – what happens if a soil is shown *not* to be compacted – point users towards operation and maintenance section to avoid future compaction.

Title brainstorm

Notes:

- Title options:
 - compaction mitigation (and urban soil health?) for stormwater management
 - Restoration of disturbed / compacted soil profiles

Homework for all – pitch some new title ideas

9:50 Top dressing discussion (55 min; Doug)

Goal: discuss the role of top dressing practice in practice standards; draft language in appropriate technical standard section (criteria versus considerations)

Notes:

- Example of Doug's front yard when moving to Madison
 - Problems with current construction practices and soil health
 - Fixing the problem is complicated by utilities
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- With compacted soil, vegetation type doesn't improve infiltration
- With uncompacted soil, vegetation type *is* an important component of infiltration
- Top dressing
 - For situations where ripping or other practice isn't possible, provides a way to improve soil health for vegetation and root zone
 - Not credit worthy
 - Move to considerations section
 - Part of companion document for homeowners
- Also add other best management type practices to the considerations section (handling of grass clippings, leaves, etc.)

10:45 Break (15 min)

11:00 Flex time – either continue top dressing discussion OR start soil properties discussion (60 min)

12:00 Lunch

12:30 Soil properties discussion (60 min; Carl)

Goal: draft language related to soil sampling and necessary soil properties to support vegetation

Notes:

- Initial goal of turf management tech standard was to avoid over fertilization
- Is a test needed in this scenario if compost addition is a component of the standard?
- Point to existing work as a good option
 - WDNR 1100
 - A2100
- Soil testing language to be added to considerations section
- Suggestion to include into criteria that you cannot add fertilizer including P unless you do soil testing first.
- Starter fertilizer can help with quicker re-vegetation

1:30 Break (15 min)

1:45 Discussion regarding next steps and what's missing (30 min; Carl)

Goal: identify gaps in the standard, discuss approach to resolve

Notes:

- Outreach need – field contractor training
 - Urban stormwater collaborative / Lake Michigan group could be interested in collaborating on this type of outreach
 - Sewerage districts as well?
- Holt Ave overpass work – work is planned for 2028.
- UW-Health site – Phil Gaebler recommendation.

2:15 Next steps & action items (15 min; Carl)

Action Items:

- Highlighted areas that relate to language that needs to be added to the standard
- Stu will work up an example comparing a diverse soil profile versus using the most restrictive soil type
- Homework for all – pitch some new title ideas
- Little interest in summer field trip type opportunities – if curious, we could reach back out to ReFlo, or Green Schools in Milwaukee for potential field trips
- For next meeting
 - Operation and Maintenance section
 - Plans and Specs section
 - Considerations section
 - Glossary

2:30 Close meeting

Items for future meetings:

- Engage with soil investigation-type company, references to justify 10% slope & investigate slope length question (Neal)

Zoom connection info:

Join Zoom Meeting

<https://us02web.zoom.us/j/83897688109?pwd=r7isXDtU5Wbfq83fY0sIS88lgobhJu.1>

Meeting ID: 838 9768 8109

Passcode: 072287