



Standards Oversight Council (SOC)

Developing effective technical standards that protect Wisconsin's natural resources

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NRCS Stream Restoration Standards Team

MEETING NOTES

Thursday, January 14, 2021 ▲ 9:00am – 12:30 pm ▲

Online Meeting

9:00 Welcome (Kate, Team)

Goal: Welcome, attendance, meeting goal.

Confirmation of attendance:

Attendance: Kate, Steve, Bob, Jeff H, Joe, Jeff S, Bart, Ken, Mike, Stacy, Ben, Nate, Faith, Seth

Absent: Marty

Guests: None

Meeting goal: start review and discuss updates to the Draft 1 text for CPS 582 Open Channel.

Review Draft 1 of CPS 582 Open Channel (Steve, Team)

Goal: Review proposed draft supplemental language and discuss alternate options as a team.

Prior to this meeting, Kate emailed the team a “Draft 1” of the 582 standard for team review. Steve prepared this document from discussions at our previous team meetings and team work by Bart, Faith, Marty, Stacy and Ben. In addition, earlier today, Kate forwarded a previous redline version from the subgroup that prepared the “Additional requirements for Stream Restoration”. We may refer to this previous redline in our discussion today.

What is the threshold for when CPS 582 applies:

Team acknowledges there is still an issue with what the cutoff is for 580, or when a project gets bumped into 582 (e.g. more assessment and design). This remains an open issue from the 1/12 meeting.

- Tentative language we were starting with was a project area of 600 lineal feet (or more?) in a ¼ mile reach (or ½ mi?), though this has not been agreed upon. One subgroup looked at other possible triggers for referral criteria - slope %, sediment transport, and location in the watershed. Team could also add width into referral criteria (e.g. 10x the width), as it's used in other definitions.
- NRCS is inclined to drop the 600 LF requirement and allowing NRCS regional judgment to decide where the division is specific to each project? **Steve** will draft some language for the team to respond to.
- Could the requirement for a more expansive assessment be based upon intent rather than LF?
- Existing resources can help point us in certain direction—previous WI state standards, TR-25, and other existing technical documents guides that provide the breakpoints for threshold channels. What are these existing technical guides saying about breakpoints (e.g. bank stabilization vs channel)?
- It may help define the threshold decision to define **protection** versus **restoration**. A simple split suggested (based on solution): Toe rock to address an eroding bank is protection. If a habitat structure is added it becomes restoration.
- Cost sharing shouldn't dictate changes to our standard but team should keep in mind the funding part of implementation. Some work would be less likely to be completed if the 582 cost sharing wouldn't apply.
- There could also be a basic assessment for all projects and then define triggers (that would result from the basic assessment) that would then refer user to Open Channel. Additional evaluation on larger projects is logical; however, team would not want the standards to become too prescriptive.
- A sample of successful stream projects (some were completed 10-15 years ago and have survived many storm events) are in these TU project summaries: <http://nohrtu.org/projects.htm>. These are nearly all along cropland where loss of land is not an option. The rock may just be toe rock then shaped back above that. We could also approach this from: what is the intent of the standard and what were we doing wrong in the past?
- Steve is going to turn to the NRCS State Tech Committee (meeting next week) to help define the line of regulation. Bob and possibly Jeff H will also be at this meeting to support the conversation.

- Clarifying the details of a tech standard implementation is also a training issue (which is in turn related to timing and budget).
- What are other states doing for stream work and stream restoration projects?

There's still discussion to be had before the team can decide and vote on what the threshold looks like to trigger Open Channel. The big question that remains for future discussion: *How do we define the referral criteria to go from 580 to 582 (and the associated assessment and design required)?*

Conversation moves on to CPS 582 text:

Steve reviews the supplemental language on-screen and the team discusses. NRCS doesn't allow the purpose to change. The Definition and Purpose are set on the national level, tied in to resource concerns for the practice.

Team reviews Draft on screen and some edits made based on team discussion. Some key points of this discussion on Condition Where Practice Applies:

- Proposed language regarding work near bridges is removed. Critical site condition refers back to the standard so this is already covered.
- Regarding 390 square mile drainage area – DATCP and NRCS will discuss off-line. NRCS has this in federal standard and would like to keep it in; at a minimum this should be left in for the public comment to test this language more widely.

Some key points of this discussion on Criteria:

- Proposed list for possible approvals and permits will be pulled out. There are other checklists and tools in place so this isn't necessary language and it's harder to maintain up-to-date and complete in a standard.
- Regulatory compliance – clarified with point sources like septic systems.
- Some detail regarding floodplain mapping resources is removed and other clarified.
- Capacity – language included related to 100-year flood since we are seeing more frequent and heavier rainfalls WI has seen in recent years. Research and requirements for a stable channel are related to velocity; the inclusion of "100-year flood or flow on the highest active floodplain bench" is empirical equivalent. **Steve** will wordsmith this language a bit more to make sure it encompasses the small channels that don't have floodplains defined.
- Mannings n-values – Some resources are discussed and adjusted. **Steve** will look into adding citations for the WI-specific design tools spreadsheet (EFH 210-WI-77 from 1997) and/or a USGS paper by Arcement and Schneider from 1989.

Ben reviews the supplemental language from Ben, Marty and Stacy's subgroup on-screen and the team discusses. The intention wasn't for this to be copied verbatim into the standard as prescriptive methods, but a lot of the language is appropriate as Criteria, and some has already been pulled into Draft 1 under Additional Criteria for Stream Restoration. Some key points of this discussion:

- Channel evolution is part of Rosgen but shouldn't be locked into just Rosgen.
- There are already many companion documents available in EFH Chapter 16 which include assessment tools and how to use them. Analysis is an important step to include so the data isn't just collected and submitted without evaluation.
- What to do with the assessment materials is an ongoing problem. It's partly a training issue so equivalent tools are used. Project types differ across the state so there may not be consistency.
- Requiring lots of data collection is concerning in lower risk areas. Collecting lots of data (with associated expense) may not meaningfully inform the design and we could be discouraging stream projects by requiring a detailed assessment for every stream and even every section of a stream. For example, upper reaches of the watersheds or other sensitive areas or more extensive work with channel modification may warrant the additional work more.

Sticking Points for CPS 582 Criteria and Considerations (Kate, Team)

Goal: Identify any substantial remaining areas of discussion and refinement.

There are topics outstanding to discuss and decide regarding CPS 582 (captured from today and previous meeting Parking Lot list):

- 580 – project referral to 582. Based on discussions this week, Steve will adjust this language to be less rigid in forthcoming Draft 3 version of CPS 580.
- Assessment detail – avoid this being too expansive to require for ALL projects. Can we avoid being too prescriptive?
- Possible issues with encouraging a meandering stream: Not all landowners are amenable, especially if they are losing cropland. Permitting would also need to be on-board with straight-to-meandering type of channel adjustment.
- What happened to the national reference to the 1 square mile drainage area in the Wisconsin standard? Can we change this from National to Wisconsin standard?
- Soil borings: 1) the variable glacial deposits we have in the state really define the alluvial channels, 2) potential bed material load contributions that affect the channel geometry, 3) gw/sw interactions in the springfed channels, importance of baseflow/water table that comes from the soil boring data. Think beyond

bank stability but vertical/bed contributions and larger setting. Need a bit more of a geological influence -- not just engineering perspective. The standards would ensure some minimum requirement and the professional engineer stamping the design would make professional judgement. Standard could establish when needed/appropriate, where to bore? and how deep?

Next Meeting Topics and Plan of Action (Kate, Steve)

Goal: Identify goals for next meeting. Review Action Items.

Next meeting is in about 2 weeks, on February 2, 2021, with another on Feb. 4. The focus of these will likely be rehashing the 2 standards 580 and 582, before moving on to Channel Bed Stabilization or Stream Habitat Improvement. The focus of the 2/2 and 2/4 meetings will depend on the degree of track changes comments Steve receives on Draft 3 for 580 and Draft 2 for 582 (see Action Items below). The lingering issues and team comments will inform future meeting agenda.

Action Items:

- **Steve** will send Draft 3 for 580 and Draft 2 for 582 to the team early next week based on discussions this week.
- **Team** should review and comment in writing with tracked changes back to Steve in advance (due date will likely be around 1/28). Team should particularly focus on criteria from 582 with an eye toward what constitutes a good restoration. **Kate** will track responses and pursue participation to try and hear directly from everyone.
- **Steve** will continue work on getting Draft 1 versions of CPS 395 and 584 consistent with NRCS programs and standard requirements, and incorporating previous team input.
- **Kate:** prepare 1/14/21 draft meeting notes, Steve reviews, then full Team reviews.
- **Kate and Steve:** prepare and post agendas for next team meetings on February 2, 4, 16 and 25, 2021.

12:30 End