



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, December 10, 2020 ▲ 9:00am – 12:30 pm ▲

Online Meeting

9:00 Welcome & Notes Approval (Kate, Team)

Goal: Welcome, attendance, meeting goals, approve 8/21/20 draft meeting notes.

Confirmation of attendance:

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

Absent: Faith, Ben

Guests: none

Meeting goal: recap where we were at before the hiatus, and start looking at details of the updated text for 580 and 582.

Reminder that this is a collaborative process and we'd like consensus for the edits. The team members should speak up when you have something to add or you feel should be adjusted—either unmute yourselves or type in the chat box.

A draft of the 8/21/20 Meeting Notes was emailed to the team for review. There is one question about the riprap slope (2:1) suggested for CPS 580; that standard is on the agenda for discussion today so that slope will be discussed more as part of CPS 580 review. There were no team edits via email or in this meeting; **Kate** will finalize and post these notes publicly on our team website within a week.

Recap (Steve)

Goal: Identify the process for edits over the past few months.

Over the past couple months, Steve took the time to review the team work on 580 and 582 first and that's what we'll focus on today.

Certain national language in the NRCS Conservation Practice Standard is locked in and cannot change. For example, States can delete Purposes, but not add.

Steve will go through the 580 and 582 standards today with the edits (strikethrough and blue text). He'll point out where key language was added, where and why he took out the suggestion of the breakout group, and then team can discuss.

Review Draft 1 of *CPS 580 Streambank and Shoreline Restoration* (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 580 standard for team review. Steve prepared this document using details by the breakout group (Mike Dreischmeier and Bob Micheel) and discussions in our team meetings.

Steve reviews the supplemental language on-screen and the team discusses. Some key points of this discussion on Condition Where Practice Applies:

- Does not apply where site drainage area is >390 square mile with the new national standard. The standard excludes Miss. River and lower reaches of the WI River (these are ACOE projects). Other larger areas include Baraboo River downstream of Reedsburg and Kickapoo River downstream of Readstown. This size drainage area may restrict projects that have been worked on in the past. A variance may be an option for the larger drainage area projects.
- There is concern about partial protection; however, there is no need to call this out since designer will look at the whole picture to a stable endpoint (whether on their property or if access needed).
- More of a Criteria, not Condition Where Applies but would get buried in Criteria section: Work near bridge or other hydraulic structure (like dam) can be problematic – include both upstream and downstream of a bridge, lower to 1/8-mile. 1:1 ratio of constriction is function used in HEC-RAS. Requirement could be to consult State Conservation Engineer--Steve wouldn't necessarily shut down a project, but he'd make sure the designer is looking at specifics to the structure, including overtopping during flood event. Steve and team should mull this over on how to word the condition of work near these structures requiring a "second opinion". This may be more appropriate for the job sheet requirements.
- Some of the discussion items from past meetings will instead be put on job sheet and/or funding requirements. NRCS is separately looking at eligibility requirements for federal cost sharing.
- DNR State General Permit limits projects to 500 linear feet in ¼ mile (and not "existing").

- Use simple wording to cross-reference the other 3 standards (Access Road was pulled up for reference). **Steve** will reevaluate this Condition Where Practice Applies and how to adjust and simplify the language here. Team can send language to him as well.

Some key points of the General Criteria discussion:

- General Criteria: Cross-reference of permits and approvals might be better put into an appendix or other spot. **Note: the list is not just permits so references in this section should be something like “permits, approvals, permissions, and/or other regulatory requirements.”**
Other standards have one very simple sentence but this team likes a little more detail. The proposed list is still general, but should also indicate this isn't comprehensive—the owner needs all applicable permits and approvals.
Add 3rd DNR bullet: “Land use agreement from Wisconsin DNR fisheries program if project is located on a Wisconsin DNR fisheries or streambank protection easement.”
FSA bullet: remove specific Form #, this applies only to program participants
- Team generally likes the idea of some kind of statement requiring dealing with point source (e.g. septic) compliance, but wording could be broadened for other regulatory issues?
- Bedding and filter language for when NOT required could use clarity and definition. **Team** should send Steve language adjustments on this bulleted list.

Some key points from the team discussion of the drafted language on Additional Criteria for Streambanks section:

- In WI, the standards have put in detailed assessment requirements. This list is synthesized from previous team work and Steve's perspective.
- Methods (like threshold values and BEPI values) should instead be in the program eligibility requirements, and identify more extensive work that carries the user into other standards. What upfront assessment work needs to be done to delineate the referral criteria for stream corridor restoration analysis?
- Team discusses that the soils investigation (logging a soil profile) is too detailed for this standard. Soil survey doesn't provide site-specific detail but soil probes aren't really necessary for this level of work. Identifying depth of sediment is important to understand what to key the revetment into. Some text adjustments made on-screen and team should send Steve language adjustments
- Slope stability models and geotech investigation are sometimes necessary. These details are not clear for non-technical audience and language may need simplification.
- 100-year design storm seems prudent rather than a smaller storm; however, a smaller storm can reach the top of bank at higher flow. **Steve** will check flows (if others on team can assist, email Steve).
- Revetment tie-in may need clarification. Could be at least 2.5 x D100. 2 x blanket thickness is currently used.

- NEH Part 654 reference is important, and we could also add minimum feet of stable substratum. Suggestion made to solidify this would be to add a tab to the spreadsheet to look at scour.
- Tractive stress analysis added, as it's industry standard. Details provided to allow vegetation protection rather than rock. Team should think about this and suggest edits—perhaps a more performance-based approach rather than prescriptive. Emphasize the need for in-stream woody debris protection or placement; remove only when causing damage.

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

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

Previous agenda topic was longer than expected, therefore, this agenda item for CPS 582 was not covered. This topic will be moved to the next team meeting.

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

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

Next meeting is January 12, 2021. Discussion related to future team meetings:

- Priority is to continue discussion on 580 before moving to another standard.
- Discuss CPS 395, 582, and 584 in detail at subsequent meetings, perhaps one meeting per standard.
- Team agrees to compress work into more meetings in next couple months to make leaps in progress before construction season starts in spring. Full day virtual meetings are not preferred by the team, but half-day meetings work out.

Action Items:

- **Kate:** schedule another meeting January 14 based on previous poll—that's 2 meetings in one week. Set up another Doodle poll too add even more meetings! **Full team** should respond.
- **Steve** will email team the version of CPS 580 from our on-screen work today, including the red highlights with areas where team should help clarify language. **Full team** on the team should submit Track Changes edits to **Steve** to address further comments BEFORE the next meeting.
- **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. These will be reviewed at later meetings.
- **Kate:** finalize 8/21 notes and post online.
- **Kate:** prepare 12/10 draft meeting notes, Steve reviews, then full Team reviews.
- **Kate and Steve:** prepare agenda for next meeting on January 12, 2021.

Parking Lot for future team discussion (carrying over from previous meetings):

1. 582
 - a. 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.
 - b. 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?
2. 584
 - a. For floodplain wide weirs, is this a problem to include in a "channel" specific standard?
 - b. Raising stage seems to cause a problem in permitting which has a requirement of not raising the 100 yr stage (might be simplifying this).
 - c. Is there precedent in other states that use Channel Bed Stabilization for natural streams? If so, we could use their language as an example.
3. Multiple stds
 - a. Definitions and applications of different factors: OHWM, bankfull discharge, effective flow, channel-forming flow (relative to 580 and 582 at min.)
 - b. as built and aged definitions,
 - c. can meander belt width be worked into the terminology for resource concern (Fluvial Erosion Hazard).
 - d. With regard to assessments: Should the standard require a Rosgen (or other) classification? Should we require a description or classification of the evolutionary stage?
 - e. There's an important place for soil borings in the restoration standard. Reasons = 1) the variable glacial deposits that we have in the state and that they 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. Some of this is in the surficial geology section at the existing conditions assessment. 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?
 - f. Hydrology analyses - look at mapping tools that help set the hydrologic setting and design flows for ungaged streams. There is a lot going on here that may help standardize the approach -- USGS Streamstats tool at <https://streamstats.usgs.gov/ss/> Does this mapping tool fit into a standard?
 - g. Should look at the "risk" and the amount of risk that would govern what detailed analysis needs to be done. We have hundreds of miles that are stable from work that has been done in the past (without all this detailed analysis), but we do have high risk areas in upper watersheds and where some of our work hasn't held up.