

NRCS Stream Restoration Standards Team

MEETING NOTES

Tuesday, February 2, 2021 ▲ 9:00am – 12:30 pm ▲

Online meeting

9:00 Welcome (Kate, Team)

Goal: Welcome, attendance, meeting goal, approve 1/12/21 and 1/14/21 draft meeting notes.

Confirmation of attendance:

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

Absent: Ken, Marty, Bart

Guests: None

Meeting goal: Review, discuss and edit the draft text for Conservation Practice Standard (CPS) 584 Channel Bed Stabilization.

We acknowledge that there are still questions on CPS 580 Streambank and Shoreline Protection. Steve sent the updated file a few days ago for your review and we will return to this discussion again to address the team's questions and to gain consensus. Steve mentions a few points on CPS 580:

- After the last meeting, NRCS WI decided to remove the maximum size of 390 square mile drainage area, which had been problematic for the team. This will be in their engineering manual (as NRCS policy) but not the standard. This way, State cost share or other programs wouldn't be impeded by this drainage area restriction.
- Draft 3 of CPS 580 now has updated language based on our January meeting discussions. In particular there is new language to identify high risk sites (e.g. steep slopes, super critical flow) and what extra fortification is appropriate.
- Steve notes the drawing will be kept out—if you feel strongly that something from the previous 580 should be carried over, be sure to let Steve know.

Consider this review and comment as part of your “vote” on issues that need work.

- The **Team** should review and redline text for Draft 3 of CPS 580 and Draft 2 of CPS 582—both of these were emailed by Kate on 1/31. Send redlined comments and suggested edits to **Steve** by Feb. 12 so he can review before our 2/16 meeting.

Drafts of both the January 12 and January 14, 2021 Meeting Notes were emailed to the team for review. No questions or edits were raised on either of these meeting notes. Poll of the team indicates approval of both 1/12 and 1/14 meeting notes. **Kate** will finalize both sets of meeting notes and post online.

As with our last meeting, please remember that this is a collaborative process and we need consensus for the edits. You are each encouraged to participate, listen to other points of view, and let’s try to end today with less open issues.

Before we start, we view the Parking Lot items specific to CPS 584 to refresh our memories:

- 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 (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.

Review of Draft 1 of CPS 584 Channel Bed Stabilization (Steve, Team)

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

Prior to this meeting, Kate emailed the team a “Draft 1” of the CPS 584 standard for team review. Steve prepared this document from discussions at our previous team meetings.

Steve reminds group before we get started that the black text is federal language that went through Federal Register process and can’t be changed, though sometimes we can make additions. The Purpose section is linked to the NRCS programmatic requirements so can’t be altered. Blue and red text are additions. Bracketed text is commentary from Steve to provided context and that will be deleted.

Steve reviews the standard with supplemental language on-screen and the team discusses. Some wordsmithing is done on-screen together. Some key points of the team discussion on Condition Where Practice Applies:

- This standard may also be used in drainage ditches, and in that case this standard could be used as a stand-alone practice.
- Clarification added to better define the standard is for a natural stream in a channel bed—related to stability rather than for habitat. This standard is specific to grade adjustment. Some of the conditions maybe be better to clarify later in criteria, like details on the weir, riffle, etc., and NEH referral for sizing. We will return to this in discussion on Criteria.
- If you are using log weirs, cross veins, or artificial riffles for habitat, you'd start in 395. When it comes to design for stability, it refers the user to 584. 395 is ecological and 584 is engineering so the WHO can do the work (engineering vs ecological job approval) is set up in the purpose of the work. The team agrees that referral to 395 and 578 be removed here as they are circular/redundant.
- Open Channel referral – a little circular but could be left in. There is greater value to this statement.

Key points of the team discussion on Criteria:

- Site Assessment is used to connect reasoning of design to the background. It may be redundant to NRCS staff but this standard is likely to be used by partnership and private sector.
 - Stream classification and waterway designation wouldn't necessarily apply here as a standalone practice (but would in a larger restoration type of project, so some items on this list aren't for Channel Bed Stabilization practice alone).
 - This Site Assessment list is generally a good detail, but rather than include something like this in multiple standards (580, 582, 584...) team proposes that it could be a separate external list that all refer to. Some already exist in Chapter 16. Companion documents are sometimes ignored, but this standard and program procedures could require this external companion document.
 - Current WI Standard has a "Management Assessment" to evaluate what the project is and then the criteria then would define what to do. Team may look back to existing WI Standard. The site assessment helps guide to a decision about specific criteria that apply.
 - Team had differing opinions on whether to keep the site assessment within the standard or now. If kept in, we should revisit the list again and make sure it's specific to just CPS 584 (right now it's more extensive than that). We'd want to step up the level of assessment from 580 to 582, for example. **Steve** will develop some options for the Site Assessment text (e.g. in the standard(s), or a companion document but require it in the standard, or put basically in the standard and the detail elsewhere, or is it

already adequately addressed in CPS 580) and present them to the team for review and comment.

- Setting the maximum overfall height of 3 feet above channel bed – this is already a lot, and designer could still go to NRCS for variance. Team agrees to remove this language. The job approval system is already keeping tabs on who is allowed to work on types of projects so detailed sideboards aren't necessary here.
- Supplemental language includes focus on bankfull discharge and base flood elevation, and modeling to evaluate putting tailwater on pipe outlets (natural or man-made).
- Language added to evaluate lateral channel movement in design.
- NEH 654 references – **Steve** will confirm text matches the language for NEH and associated drawings (like keyway distance).
- Habitat Structures language is refined.
 - This level of detail would be more appropriate to move to 395, not kept here. If the structure is for sediment transport, that would trigger this CPS 584 standard. **Steve** will adjust the language for the Team to look at with 395 on Thursday.
 - Some solutions are specific to the stream and species needs (e.g., brook vs brown trout). Some allowable increase in bed elevation may be acceptable or backwater effect may be desirable, but gradient can damage habitat upstream.
 - Low-gradient, overwidened reaches can also be narrowed (using Open Channel) and/or induce lateral acceleration around log structures.
 - It's more important to focus on the effect of the structure rather than specify a size or max height.
 - Stability language will reference NEH.
 - Selection of habitat structures – there is an existing 580 companion document to select habitat structure based on Rosgen.
- DNR permitting and navigability issues complicate habitat structure options. Structures shouldn't impede navigation, or other access must be available (outside the stream).

What's left for CPS 584? Discuss Plan of Action (Kate, Steve)

Goal: Identify any substantial remaining areas of disagreement and discussion for next meeting related to CPS 584. Review Action Items.

What are next steps for this team related to CPS 584?

- Steve is editing some language based on our discussions today. He has a specific action item to prepare new text options for the Site Assessment.

- Continue review where we left off--Start at Plans and Specs (which Steve will also update). Steve will work on Draft 2 of CPS 584 and we'll resume the review at a later meeting.
- Other state standards could be used for reference/preferences (for all 4 standards this team is updating). However, more and more states (like those adjacent to WI) are accepting the federal standards with no additional detail. Montana has some state-specific adjustments, but different geography.

Next team meeting is this Thursday, February 4, at which we'll start review of CPS 395, as planned.

Action Items:

1. **Kate:** finalize 1/12/21 and 1/14/21 meeting notes and post online.
2. **Kate:** prepare 2/2/21 draft meeting notes, **Steve** reviews, then full **Team** reviews.
3. **Team** should review and redline text for Draft 3 of CPS 580 and Draft 2 of CPS 582—these were emailed by Kate on 1/31. Send redlined comments and suggested edits **to Steve by Feb. 12**. Consider this review as part of your “vote” on issues that need work.
4. **Kate** and **Steve:** prepare and post agendas for next team meetings on February 16 and 25, 2021. February 16 we will resume focus on CPS 580.
5. We will likely need more meetings. **Kate** will work with **Steve** to narrow down options and prepare Doodle poll for additional meeting dates.
6. **Steve** has some editing to clear up language, along with some specific follow-up for CPS 584:
 - **Steve** will look into options for the Site Assessment text in all 4 of the standards and present options to the Team.
 - **Steve** will refine Plans and Specs section.
 - **Steve** will then email Draft 2 of CPS 584 to the Team for further review and comment.

12:30 End