

# STANDARDS OVERSIGHT COUNCIL

## Technical Standards Needs Assessment



### 2017 Summary of Results

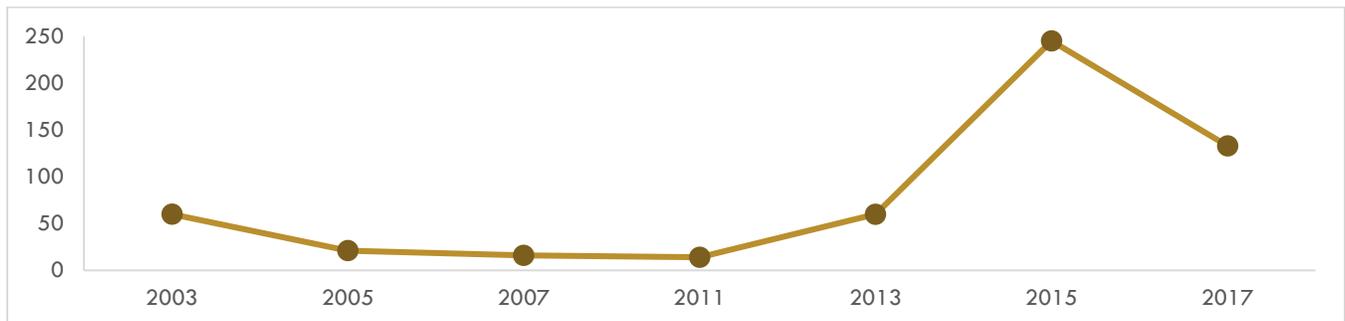
This biennial survey was completed by **133 individuals** familiar with Wisconsin's technical standards used in statewide conservation programs. The survey results are used to prioritize revisions and the development of effective technical standards that protect our state's natural resources.

# Standards Oversight Council

## 2017 SUMMARY OF RESULTS

The 2017 Standards Oversight Council (SOC) Technical Standards Needs Assessment received responses from 133 individuals. This was the second-highest participation on record, dipping from a peak of 245 in 2015. As in 2015, the survey was released via the SOC urban and agricultural listservs, Wisconsin Land+Water's land conservation department staff listserv, and on the SOC website. Announcements of the survey were made to several technical standard teams, at a summer North American Stormwater and Erosion Control Association (NASECA) field tour, a summer county conservation staff meeting, and through many individual communications. Additionally, all recipients of the survey were encouraged to share it with relevant colleagues.

County government was more strongly represented in 2017 than 2015, with over half of respondents representing this sector. Participation from the private sector dropped from 31% to 14%, likely because the survey was forwarded by a participant to a 900-member storm water-related listserv in 2015, but not in 2017. The respondents in 2017 were engaged in SOC at a higher level than 2015; nearly half had commented on draft standards or were on the listserv, and nearly a third were former SOC team participants.



**Figure 1. Number of respondents to Standards Oversight Council Technical Standards Needs Assessment surveys.**

Respondents recommended that Channel Erosion Mat (1053) and Methods to Determine Efficacy of Proprietary Filtration Devices (New) be prioritized for WDNR standard updates. Very few recommendations for NRCS standard updates were received. Those mentioned include Constructed Wetland (656), Cover Crops (340) and Waste Transfer (634).

Requests for trainings on Vegetated Swales (1005) and Nutrient Management (590) topped the list, with several NRCS standards receiving a half-dozen or more requests.

Respondents to the survey expressed a preference for receiving information on changes in standards as summary document, through webinars and regional in person sessions with field time.

Unique to 2017, this survey was designed to assess the extent to which respondents value SOC's Guiding Principles and how well they perceive SOC as achieving them. Ninety-eight percent of respondents said that

seeking input from them or their colleagues was Fairly or Very Important. This principle also ranked highest for achievement: 80% of respondents view SOC as Probably or Definitely Achieving this goal.

Results from this survey are used in the following ways to improve how standards are developed and implemented:

1. **Results are shared with DNR and NRCS to help identify the need for new or revised standards.** For example, based on this survey’s feedback, DNR technical standards Channel Erosion Mat (1053), Efficiency of Proprietary Filtration Devices (NEW), Seeding (1059), Dewatering (1061), Non-Channel Erosion Mat (1052), and Mulching (1058), as well as NRCS technical standard Waste Transfer (634), will be included in the 2018-2019 Work Plan.
2. **Participants’ specific comments regarding standards are shared with the teams convened to create or revise each standard.**
3. **Results trigger needed communications that can lead to improvements in standards.** For example, SOC will facilitate communication between NRCS and those who recommended changes to Constructed Wetland (656) to promote a shared understanding of the standard and identify any opportunities for improvement.
4. **Results lead to changes in the process used to develop standards.** As a result of reflections and recommendations in this survey, the Custodian will participate in a check-in meeting halfway through the Full Process. This is in addition to participating in the first meeting for each Full Process, which already occurs.
5. **Results identify training needs and lead to cooperation among DATCP, NRCS, and WDNR in providing additional trainings on recommended standards.** In response to survey requests, SOC will support & facilitate trainings on Waste Storage Facility (313), Vegetated Swale (1005), and others as SOC and Custodian staff time allows. SOC will also provide participants’ training recommendations to SITCOM and assist as needed in coordinating other recommended trainings.

## 2017 EXTENDED RESULTS

### 1. Which affiliation best reflects your work environment?

	2017 Response Percent	2017 Response Count	2015 Response Percent
Private Sector	14%	19	31%
Federal Government	8%	11	6%
State Government	11%	14	19%
County Government	56%	74	31%
Other Local Government	8%	11	13%
Other	3%	4	N/A

Other responses: Non-profit, Regional planning commission, Manufacturer/Supplier, NGO

2. On which type of conservation practices do you work? Check all that apply.

	2017 Response Percent	2017 Response Count	2015 Response Percent
<i>Cropland management</i>	51%	68	34%
<i>Livestock and waste management</i>	63%	84	25%
<i>Wildlife, woodland and recreational management</i>	26%	35	3%
<i>Erosion control and stormwater management</i>	78%	104	38%
<i>Other (please specify)</i>	7%	9	N/A

*Other responses:* Shoreland or streambank restoration/zoning (x4), pasture management, nutrient management, proper well decommissioning, environmental reviews and assessments, habitat reviews, wetland delineations, environmental permitting, dams and wetland infrastructure

Note that this question structure was adjusted in 2017 to allow users to select more than one option.

3. How have you previously participated in the Standards Oversight Council process for technical standard development or revision? Check all that apply.

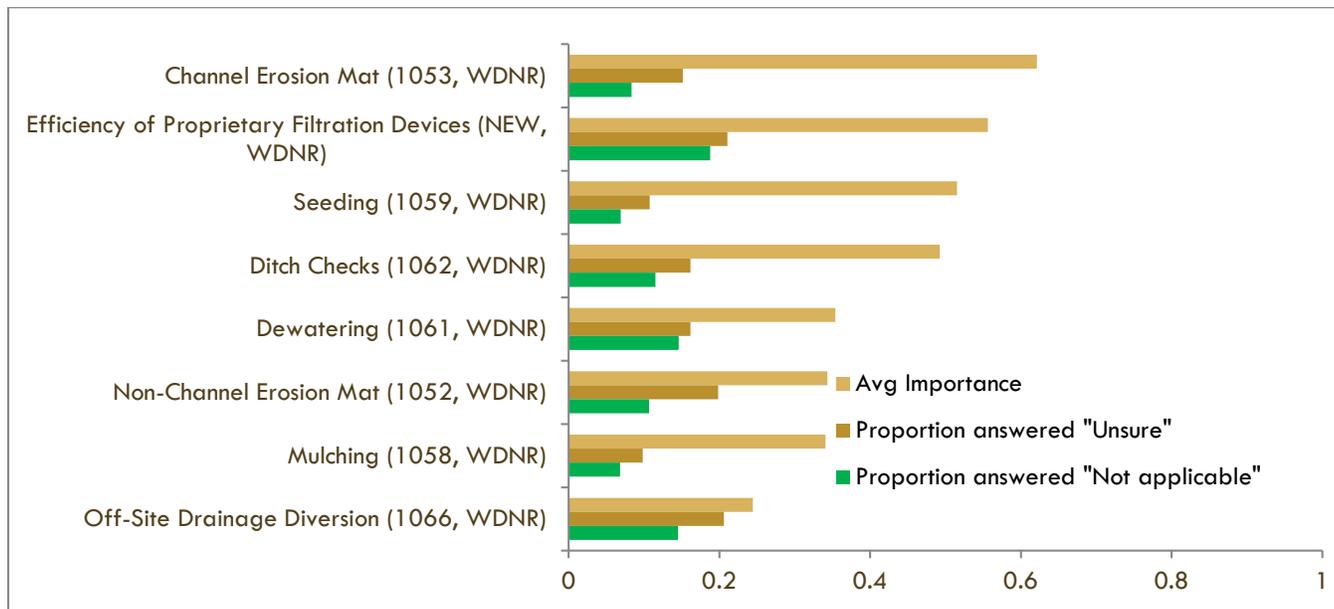
	2017 Response Percent	2017 Response Count	2015 Response Percent
<i>I have not heard of SOC prior to this survey</i>	8%	11	7%*
<i>I have heard of SOC</i>	44%	59	60%
<i>I am on the SOC listserv</i>	48%	64	31%
<i>I have commented on draft standards</i>	46%	61	33%
<i>Participated on a SOC team</i>	30%	40	16%
<i>Other (please specify)</i>	4%	5	5%*

*Other responses:* Representatives from the company – or the office collectively – review and comment on standards (x2), I have reviewed without comment and forwarded draft standards to colleagues, I will be participating on a SOC team, water system.

\*Note that “I have not heard of SOC prior to this survey” was retroactively extracted from the “Other” comments for 2015’s survey, and percentages adjusted. This option was new to the 2017 survey.

4. The following standards are scheduled to be created or revised in the next two years. Based on your knowledge, rank how important you think it is to create or revise each standard in this time frame. In the comments section, provide input on the potential revisions for the work teams to consider, if any. If your work does not include use of a listed standard, please check "N/A."

**130-133 of 133 respondents filled out importance ranking for each standard listed. Options included Not at all important, Not too important, Unsure, Fairly important, Very important, and Not applicable to my work.**



**Figure 2. Weighted average score for the importance of creating or revising a given standard. Weights: Not at all Important = -2, Not Too Important = -1, Unknown and Not Applicable to my Work = 0, Fairly Important = 1, Very Important = 2.**

**General comments:**

- Unless there have been documented problems in the past, don't make the standard more rigid just to be extra conservative. The standard has to be workable and flexible or real field conditions.
- Most of our work uses NRCS standards. Not real familiar with the DNR standards.
- While I fully support the concept of the periodic review and revising the standards to improve BMPs; I am fairly new to my position, and after reviewing the current standards, I do not feel I have seen them in practice enough to know what changes or updates are needed at this time.

**DNR-specific comments:**

- I suggest you get a DOT representative on the SOC and get them to use all the WNDR tech standards. They are falling behind.
- Make sure the barriers of entry for approved products is consistent between manufactures. Some standardized testing has already been done for some of these.
- 1061, Dewatering
  - I am very interested in seeing the dewatering technical standard updated. There are a few references that are dead ends in the guidance and a few things I think need more study.
- 1062, Ditch Checks

- I would like to see rock filterbag ditch check standards in 1062. I would like to see waddles removed as an option....they just don't work.
- Add details and minimum diameters for log-type sediment barrier ditch checks
- *Proprietary Filtration Devices*
  - While not currently working in stormwater and erosion control, I do have past work experience in it. It might be good to describe methodology on how to establish treatment efficiencies for proprietary filtration devices. The channel erosion mat standard is old so probably could use updating. Check with DOT methods to make consistent. The same thing for ditch checks.
  - Proprietary filtration devices can be very effective. These units are currently rarely used in WI due to lack of knowledge on their effectiveness. As land costs continue to rise, they may be a good solution in more urban areas versus natural solutions.
- *1058, Mulching & 1059, Seeding*
  - NRCS already has a mulching and seeding standard, are duplicates needed?
  - In my opinion, not much has changed in the methodologies for matting, seeding and mulching. They are important, but standards are likely adequate. I've seen a surge in folks wanting to use proprietary devices.

**NRCS-specific comments:**

- Please provide more information in the standards than what is in the NRCS standards. Keep the standards the way they were 5 to 10 years ago. The NRCS standards have changed so much it is very difficult to follow the sections and to find information. Also, there has been a removal of very important detailed information removed from all of the NRCS standards. Please do not remove important detailed information when developing the new standards as NRCS has done to their new standards.

5. Are there technical standards not on the above list that need creation or revision? If so, please write which standards or topics and a brief explanation of your recommendations.

**15 of 133 respondents provided comments.**

<i>Requests for updates to NRCS (top, orange background) &amp; WNDR standards or guidance</i>	<b>Count of Requests</b>
<i>656, Constructed Wetland</i>	2
<i>WCS 009, Rock Rip-Rap (align with DOT spec)</i>	1
<i>340, Cover Crop</i>	1
<i>634, Waste Transfer</i>	1
<i>NEW, Constructed Wetlands for Stormwater Management</i>	1
<i>NEW, Infiltration Testing for Ditch Lines</i>	1
<i>Modeling: Particle size distribution with post-construction standards</i>	1
<i>Modeling: Dry detention ponds</i>	1
<i>Modeling: Amount of P removal with filtration devices in native soil</i>	1

**General comments:**

- Not that I'm aware of.
- No
- N/A

**DNR-specific comments:**

- Shoreland Habitat Standard work together with the Wisconsin Biology Technical Note 1

- Recommendations for new standards:
  - Wisconsin should have a technical standard constructed wetlands for stormwater management, similar to the Minnesota Stormwater Manual; [https://stormwater.pca.state.mn.us/index.php?title=Stormwater\\_wetlands](https://stormwater.pca.state.mn.us/index.php?title=Stormwater_wetlands). We really need it because this is what most of our stormwater basins turn into over time, so why not just plan ahead?
  - Infiltration testing for existing ditch lines
- Modeling:
  - Particle size distribution used with post-construction standards and SLAMM
  - Modeling dry detention ponds
  - I would like to see updates on the amount of phosphorous removal can be obtained with filtration devices based on the native soil.

**NRCS-specific comments:**

- Publish excel sheets with revisions immediately. Don't update standards unless excel sheets/standard drawings are rolled out in the same time.
- I would like to see the NRCS Riprap Specification brought together with the Wisconsin DOT Riprap Specification. Quarries make riprap for DOT and not for NRCS. It is very difficult to get riprap to meet the NRCS spec. without literally mixing rock on site.
- Cover crop standard
- In regards to the Conservation Practice Standard for Constructed Wetlands, Code 656, The Nature Conservancy would like to submit several recommendations for consideration. These recommendations were developed in consultation with Nonpoint Source and Wetland staff at the Wisconsin Department of Natural Resources.
  - We recommend the practice be called “Constructed Treatment Wetland”, rather than “Constructed Wetland”, since the purpose of the practice is to treat water and improve its quality. This would help distinguish it from projects intended to create or re-establish wetland plant communities for habitat or other goals distinct from water treatment. The renaming would also help to distinguish constructed treatment wetlands as being separate from wetlands that are eligible for wetland mitigation programs, since those are subject to separate criteria.
  - The section entitled “Additional Criteria Applicable to Constructed Wetlands for Wastewater Treatment” contains important provisions including: (a) pretreatment of water flowing into the wetland to reduce solids, organics and nutrients to levels the wetland system will tolerate; and (b) provision of sufficient storage upstream of the wetland to contain the wastewater to be treated. In addition to these criteria, we also recommend that criteria be included for the use of soil conservation practices within the upstream agricultural area draining to the constructed treatment wetland. Practices might include reduced or no-till tillage, increased residue, cover crops, perennial crops, double cropping, or other methods to reduce sediment and nutrient loading to the wetland. Such reductions would help improve treatment capacity.
  - Monitoring is of critical importance in constructed treatment wetlands and we encourage the use of monitoring whenever possible. In such cases, we recommend a consistent monitoring methodology be used. This is because wetland performance varies considerably in response to many factors, and monitoring data are often reported in various ways, including nutrient concentrations, loads, and reduction efficiencies (Lubner Zeigler 2016). To facilitate better comparison across sites, and to strengthen monitoring procedures in general, we recommend that monitoring activities:
    - Include measurements at both inflows and outflows to the wetland;
    - Include mass load units for target nutrients (mass/time) as well as hydraulic load (volume/time). With both mass loads and hydraulic loads, concentration as well as reduction efficiency can easily be obtained, if desired. And, since hydraulic load is a strong driver in reduction efficiency, reporting hydraulic load will provide important context for those interpreting monitoring results.

- Cover as long and continuous a time span as possible to capture seasonal patterns in wetland performance as well as responses to extreme weather events. Status of vegetation establishment and growth should also be recorded throughout.
  - Include ongoing documentation of the upstream land area that drains into the wetland, specifically the crop rotations, tillage practices, and nutrient applications that are used.
  - Include estimation of sediment and nutrient loading from upstream agricultural lands using SnapPlus or similar software – <https://snapplus.wisc.edu/>.
  - Measure the performance of upland pretreatment features (#2b above), including sediment and nutrient reductions, changes in vegetation, and changes in other biological characteristics, as appropriate.
- Our final recommendation concerns the risk for increased flooding in the future, as predicted by local and regional climate forecasts (WICCI 2011, Janssen et al. 2014). Failure to build constructed wetlands with adequate protection from extreme runoff events may jeopardize the functionality of the wetland as well as endanger surrounding ecosystems to contamination. Code 656 contains several provisions addressing the risk of flood events, however we ask the committee to consider either strengthening such provisions to better address this risk, or to provide information about increased flood risk to wetland designers. Strengthening the standard might include, for example, adjusting the 25-year frequency, 24-hour design flood event, since such events are projected to occur more frequently in Wisconsin (Schuster et al. 2012). In communicating increased flood risk to designers, we strongly support the inclusion of optional practices that help mitigate overflow risk. Some are already included in the standard, such as the suggestion to treat only the first-flush of a large event and bypass the remaining runoff to the wetland during large storm events, and another to provide seasonal storage of wastewater during times that are excessively wet. We recommend further options be added to the standard, as appropriate, to provide even more options to designers.
- References: Janssen E, Wuebbles DJ, Kunkel KE, Olsen SC, Goodman A. 2014. Observational-and model-based trends and projections of extreme precipitation over the contiguous United States. *Earth's Future* 2:99–113. <> Lubner Ziegler V. 2016. Exploration of the Use of Treatment Wetlands as a Nutrient Management Strategy in Wisconsin. Madison, WI: The Nature Conservancy. <> Schuster ZT, Potter KW, Liebl DS. 2012. Assessing the Effects of Climate Change on Precipitation and Flood Damage in Wisconsin. *J Hydrol Eng* 17:888–94. <> WICCI. 2011. Wisconsin's Changing Climate: Impacts and Adaptation. Wisconsin Initiative on Climate Change Impacts. Nelson Institute for Environmental Studies, University of Wisconsin-Madison and the Wisconsin Department of Natural Resources, Madison, Wisconsin
- NRCS 634. Update that HDPE pipe should be in the limited scour for sand bedding section. Revisit when air/pressure relief valves should be used. Discuss more methods to determine pressure pipe calculations methods. Criteria to differentiate reception tanks from "waste storages". Revisit differentiation between scrape alleys and channels?
- Consider changes to wetland construction standard

6. How do you prefer to obtain training on new or updated criteria for technical standards? Rank at least your top 3 in order of preference (1-3), with 1 being your preferred method.

129 of 133 respondents contributed to the results in Figure 3.

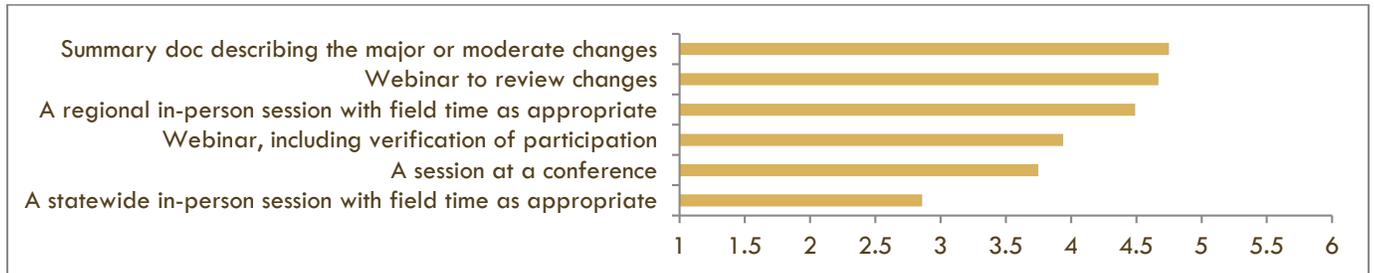


Figure 3. Weighted average score (1-6) for training preferences expressed by respondents.

7. If you would like to see trainings on a particular standard, list the standard in the box below. If possible, include recommendations for training content and setting.

46 of 133 respondents provided the information below.

Requests for training on NRCS (top, orange background) & WNDR standards or guidance	Count of Requests	Notes
590, Nutrient Management	11	Training for gov't staff and private sector as well (1)
635, Vegetated Treatment Area	10	
410, Grade Stabilization	10	Good to review on a semi-regular basis (1)
657, Wetland Restoration	8	Webinar (1)
393, Filter Strip	8	
638, Water Sediment Control Basin	7	Good to review on a semi-regular basis (1)
378, Pond	5	Good to review on a semi-regular basis (1)
313, Waste Storage Facility	5	
629, Waste Treatment	1	
Clean Water Diversions	1	
1005, Vegetated Swale	12	
1050, Land Application of Additives for Erosion Control	7	
1051, Water Application of Additives for Sediment Control	4	
WDNR Construction Site Soil Loss and Sediment Discharge Calculation Guidance	1	
WDNR Stormwater Infiltration Guidance	1	
Streambank Restoration	1	
NR 151	1	Once it is rewritten (1)
NR 243	1	Once it is rewritten (1)

**Other comments:**

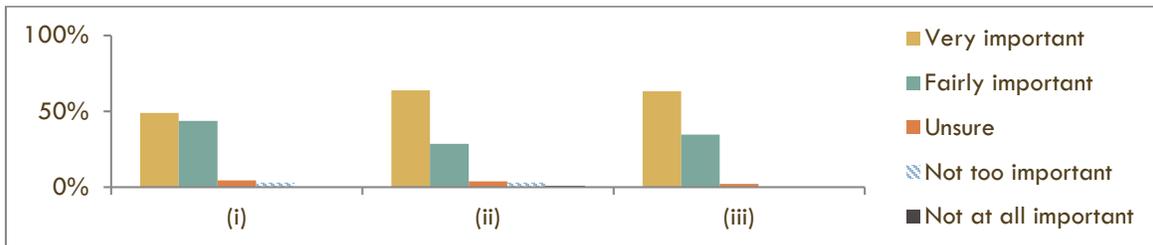
- A field day assessing milkhouse waste. The trainings that were held in spring did not address milkhouse waste that is NOT routed into manure storage.
- All of them - but if the trainings are webinars, the presenters should not read the standard to the audience.

- Pond standard looks really different and was challenging to compare to the old standard
- I am relatively new, so training on most things is beneficial
- Any barnyard practices
- All would be ok, useful

8. This two-part question aimed to understand how well SOC's Guiding Principles align with the priorities and preferences of respondents.

(A) How important is the following to your work?

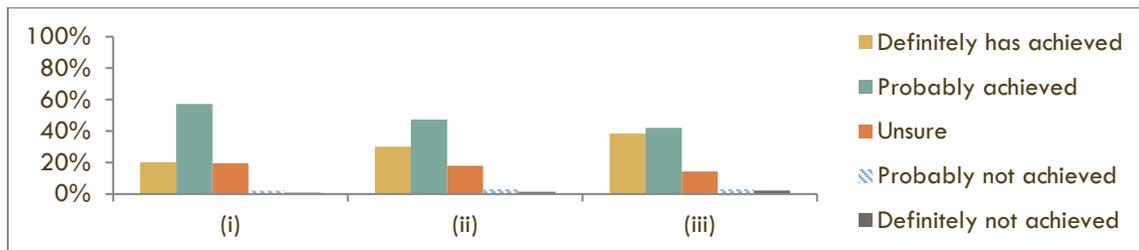
- SOC ensures quality standards by revising them approximately every 5 years to reflect the latest field experience, research, and technology.
- SOC develops statewide technical standards to be applied uniformly across Wisconsin.
- SOC seeks input from you and your colleagues to participate in this process to maintain fairness and accountability.



**Figure 4. Proportion of respondents ranking the importance of each SOC guiding principle. Guiding Principles are embodied in the statements listed in 8.A.i-iii above.**

(B) Has SOC successfully achieved each of the following goals?

- SOC ensures quality standards by revising them approximately every 5 years to reflect the latest field experience, research, and technology.
- SOC develops statewide technical standards to be applied uniformly across Wisconsin.
- SOC seeks input from you and your colleagues to participate in this process to maintain fairness and accountability.



**Figure 5. Proportion of respondents ranking the extent to which each SOC guiding principles has been achieved. Guiding principles are embodied in the statements listed in 8.B.i-iii above.**

9. What is the greatest benefit provided to you by the Standards Oversight Council?

65 of 133 respondents commented on this question.

The greatest benefit is consistent statewide standards. Respondents appreciate consistent standards because it promotes uniformity across government agencies, and between government agencies and private contractors. Additionally, respondents can work more easily with their clientele when standards are clear and consistent.

Respondents also greatly benefit by standards that stay updated with current technology. Incorporating the best technology and field practices promotes buy-in, encourages data-sharing, and better protects Wisconsin’s natural resources, all of which ranked among the many benefits of SOC as well.

Major themes are summarized in the table below. All comments are listed below the table.

<i>Benefit from SOC</i>	<b>Count</b>
<i>Consistent statewide standards</i>	19
<i>(Consistent statewide standards subset → Uniformity across government agencies)</i>	(8)
<i>(Consistent statewide standards subset → Uniformity across government and private contractors)</i>	(1)
<i>Standards stay updated with current technology</i>	14
<i>SOC process includes broad stakeholder input</i>	12
<i>(SOC process includes broad stakeholder input subset → allows <u>my</u> input)</i>	(4)
<i>(SOC process includes broad stakeholder input subset → includes input from experts in the <u>field</u>)</i>	(3)
<i>Information-sharing: SOC provides updates on new &amp; forthcoming revisions</i>	6
<i>Standards protect Wisconsin’s resources</i>	4
<i>Criteria is scientifically based</i>	3
<i>Trainings/training materials</i>	3
<i>Sharing of data/research</i>	2
<i>Enables learning a new perspective on certain topics</i>	2
<i>Allows direct communication with SOC team/experts</i>	2
<i>Ensures expert buy-in</i>	2
<i>Standards stay updated with current rules</i>	1
<i>Diversity of standards is offered</i>	1
<i>Promotes regulatory agency buy-in</i>	1
<i>Attempt to create user-friendly standards</i>	1
<i>Considers Wisconsin-specific climate and topography</i>	1

**Comments:**

- Constant updating of standards that allow us to stay current with rules and technologies and still protect the resources of Wisconsin.
- Having a wide variety of standards available for the many different conservation practices needed. Input by a diverse set of users into the development of standards. Consistent, scientifically based, standards. Standards to follow in the field
- The comprehensive standard development process ensures that when a standard is complete, it has been accepted by experts in the standard's subject.
- That technical standards do match up for similar things between government agencies with similar goals.

- It brought NRCS, County staff and DNR to the table together to create some uniformity between the agencies.
- Training and standards
- Allowing each county the opportunity to review the draft standards and have a say in them.
- Most of the unforeseen problems have been addressed prior to a standard being debuted. No process is perfect, but at least individuals who have firsthand knowledge in the field are taking part in the process.
- Providing updated standards
- Provide the latest information on practices
- Up to date standards
- Standards used and applied across public agencies and private contractors.
- One set of rules/ books for all agencies
- Revising standards keep us up to date and helps to protect the environment in this day and age.
- Uniformity
- Heads up knowledge of what is going on
- Keep standards up to date
- Standards that regulatory agencies accept.
- Data availability
- Unified use of dewatering mechanism = less releases
- Relevant technical comments for R&D
- The standards themselves
- The ability to update standards in a semi timely fashion and keep us informed of revisions and updates.
- Gaining a variety of perspectives on a topic, and developing a better appreciation for the standards development process.
- Having sound and defensible design standards that get revised as necessary when new information is come upon.
- The ability to have input and/or be involved into the process of technical standards development. And trained on updates and revisions.
- I use the standards as guides to proper installation
- Emerging and new science is integrated into standards.
- Providing a single authoritative source for guidance to professionals working to comply with state and county erosion control and stormwater management regulations
- Not sure, new to this.
- Assuring that standards are updated and current. And education to users
- The production of standards that are (mostly) up-to-date with the latest technologies and techniques which can be referenced to aid in gaining understanding and correct design and implementation as to protect our waters!  
Thank you!
- Knowing the standards reflect the latest research, technology and field experience.
- Advancing technical ideas and standards to protect the environment!
- Consistency statewide
- The networking to assemble current and reasonable standards.
- Attempts to provide uniformity
- The creation of user friendly Technical Standards that are easy to interpret and apply for use by designers.
- There isn't much, due to the fact that the rules that are modified aren't first vetted by true field personnel. The rules are not designed to be implemented on linear road projects. Also common sense from a true field inspector is never applied.

- Unified standards across all agencies. Applicable to current engineering practices. Applicable to Wisconsin climate and topography, developed by employees implementing the actual practice.
- Coordination between agencies, the ability to put together a team that includes a variety of persons who use the standards, including both other agencies and industry experts
- Comments back from team is helpful. Except when they don't give a good reason for their stance.
- Able to see what topics are currently being discussed and what will be discussed in the future.
- The uniformity across the state. We at the County level frequently hear "County XXX doesn't make us do that" and we know that isn't true, because we have one set of Standards.
- Uniform state wide standards
- Uniform standards across the state, and between agencies
- Ongoing reviews from users and related experts
- Keeps us all up to date on what is currently going on with all standards. If we choose. Great learning opportunity to seek advice from experts
- Making sure that standards are current utilizing the latest science and technology.
- Input from a variety of parties makes it work for more people
- Participation by a wide variety of individuals ensures a quality standard.
- The SOC provides uniform standards that are scientifically accurate.
- Communication about changes and new standards.
- Opportunity to review and provide input on the standards revisions prior to them being released.
- Updates on standards
- Guidance on new WDNR releases
- Diverse group of individuals that work to improve standards
- Maintains communications across all the agencies to develop as much uniformity as possible. Uniformity and consistency are the most important things we can provide to our clients so they know how to prepare and plan for their future projects.
- A forum for field staff to comment on standard revisions
- Keeping Standards up to date with changing times.
- Provides reference documents
- Consistency in state code when implementing a practice that provides thoughtful guidance
- Allows technical data with interagency value to be shared among water resource stakeholders

10. What other comments for SOC or the Custodian agencies (NRCS, WDNR) regarding SOC's process for technical standard revisions and development can you offer?

28 of 133 respondents commented on this question.

Comments ranged widely, including suggestions for better selecting new criteria, improving buy-in through broader participation, and improving NRCS processes specifically. Suggestions within these major themes are summarized in the table below, and a full list of comments follows the table.

Suggestion	Count
Improve buy-in	
Get continued input from LCDs	1
Get buy-in from DOT	1
Create more geographically diverse teams	1
Get construction/developers on WDNR teams	1
Improve criteria selection	
Ensure criteria is actually practical in the field	2
Don't select criteria so restrictive it prevents people from undertaking standards	1
Better evaluate if installation or operation & management are the problem, not criteria	1
Better consider implications of changes to municipalities, private entities, etc.	1
Only update criteria if <u>research</u> supports the change	1
NRCS	
Clearly state at outset what is "predetermined"	1
Review the less-used standards; may need updates	1
Ensure "Minor" changes are actually minor	1
Other	
Keep up the good work	9
Align terminology better with industry lingo	1
Offer more training	1

- I understand every review is a time consuming process and I just would like to see it continue.
- Keep getting input and participation from LCD staff.
- I would like to see the standards that we need to follow converted/mesh with the industry lingo. For example - rock gradation - our 6in rock is done by weight, contactors 6in rock is a 6in diameter rock. It creates more work for us to go out to a pit, measure rock to create a pile of what our D50 6in rock is.
- Participating on a SOC team was a great experience.
- Great job trying to find the happy medium for all counties/entities.
- As standards get increasingly more restrictive they get harder to offer landowners something useful to them especially in difficult locations. This sometimes can be so restrictive it prevents them from doing anything. Maybe something is better than nothing?
- Keep doing it. It's valuable.
- Keep up the good work
- Some of the recent NRCS processes seem to be a bit predetermined and overly guided by NRCS staff.
- Standard changes seem to be a knee jerk reaction to something that has happened not necessarily based on new science. The 313 is a good example. You're trying to hold every drop of manure until it is sucked out of a pit & spread all over the land according to a standard that is profit, not environmentally driven. Point being is that many of the standards will protect the environment just fine if they are actually followed.

If there are failures, analyze what went wrong & in most cases you will likely find that something wasn't installed according to the specifications.

- DOT buy-in needed!
- Just keep us updated and don't forget about looking at some of the older less used standards that may need some tweaking.
- To me it seems like the standards on being updated almost too often. I would also like to see more training opportunities as these revisions are rolled out.
- Must consider implications of changes which should impact how the changes are rolled out to the public/municipalities/private entities, etc.
- Thanks to Jennifer Thieme for her focus, coordination, and planning to continue to update and create technical standards!
- It is imperative that the SOC actively seek input on proposed changes to Technical Standards for practicality of use and/or meeting the requirements in the field. One challenge I have is to find time to provide input on the updates. The easier the information on changes can be provided to users, the easier it will be to provide input. I would recommend that prior to a change being made to a technical standard, a key group of users be specifically sought to provide input.
- They need to talk to field people who actually see their rules being used and how ineffective they are and how it could be made better with simple techniques versus the much more complicated rules they have come up with.
- Keep up the good work
- Question 6 was left blank because the first choice said a "brief" summary of changes. They often were misleading to true changes. As far as webinars and in person sessions, it depends on the standard and its changes. Both can be helpful, but not always necessary.
- Pertaining to quality, I have noticed that when there is not science to base changes on, there is problems. i.e. the recent 313 stating that the current liquid tight concrete on sand is not sufficient, a change like this should show the science, rather it appears to be the opinion of the few team members. And the team was not very diverse in area of state they work. So the majority from one area of state would discount the minority from other areas of state.
- I don't know that technical standards are being uniformly applied across the state.
- My biggest complaint is that sometimes NRCS standards are substantially updated without using the SOC process.
- One of the best tools we have.
- Appreciate the connections that Jennifer makes, she really tries hard to reach out to us for input
- Keep up the good work!
- I don't believe the WDNR standards committees represent the construction/developer industry point of view.
- SOC provides a statewide benefit to the environment to keep our state waters healthy.