

BOARD OF WATER AND SOIL RESOURCES

Buffer Program and Soil Loss Program Comments Received April/May 2016

Administrative Procedures

- How long of a period of time will the validation be good for?

Vegetation can be very easily removed so it would seem logical that validations would be only good for one growing season. Based on the methods of providing documentation that can withstand an appeal and dependent on the number of requests. This effort will be very time consuming and expensive. How will SWCD's recover this expense? Landowner fees? Additional State funds?

Choices to make: Spend money on doing the validation in a way that can prevent most appeals or spend money through the appeals process.

If it is found that the site is non-compliant during the validation process is the SWCD required to notify the appropriate authority for enforcement actions? This would seem to be the case. Will landowners need to be provided with that information prior to making a validation request? Should there be a formal request document that the landowner signs and agrees too prior to starting the validation process?

Shoreland rules may also apply to same area, as there is certainly some overlap between the buffer law and shoreland rule. Seems counterproductive to validate something for the buffer law that may still not be compliant with the shoreland rule based on the difference between the two. Need to be clear with the landowner that this is only for the buffer law and that there may be other rules and regulations that apply. Suggest that language be used in a request for validation form that covers some of these issues. **(Grant SWCD)**

A. Validation of Compliance:

- {MN Stat. 103F.48, Sec. 5, Subd 3, (d) states... "Upon the request by a landowner or authorized agent or operator of a landowner, a technical professional employee or contractor of the soil and water conservation district or its delegate may issue a validation of compliance with the requirements of this subdivision. The soil and water conservation district validation may be appealed to the board as described in subdivision 9."

Without a formal request by a landowner there is no authorization under state law to provide for a validation of compliance. With such a request, by a landowner or authorized party on behalf of the landowner, the requirements of this subdivision limit the "validation of compliance" should be restricted to provisions of measurements of appropriate widths or documentation in regard to alternative methods.

Provisions of the changes made in state law in 2016 maintain the requirements based on the Natural Resources Conservation Service (NRCS) Technical Guide or other practices approved by the board. These newly adopted changes also include practices such as retention ponds and alternative measures that prevent overland flow to the water resource. To the extent that the

alternative practice prevents the overland flow to the water resources as a comparable level to match the determined buffer width requirement, the validation of compliance should be issued as requested. } **(Farm Bureau)**

Question 1: What documentation should be required to support or deny a validation of compliance by an SWCD?

- Photo, aerial map with gps waypoints depicting buffer in relation to waterway **(Mille Lacs SWCD)**
- Validations will need to be completed during times of the year that all of the information described below can be properly gathered and documented.

SWCD Technical staff (with the landowner or their representative present) should document “in the field” measurement of the width of the permanent vegetation from top of bank, or the normal water level to the point non-permanent vegetation occurs. This should be completed at intervals sufficient to determine compliance or non-compliance. These measurements should be completed with GPS/GIS technology so the points can be retained and easily transferred to the most recent air photo of the area in question. At each measured interval predominant plant species should be documented and recorded to document the permanent nature of the vegetation. Each measurement point should be flagged and photographed in the field. Validation forms should provide for a landowner signature where the landowner can signify agreement or disagreement with the measured points. If the landowner cannot be present at the time of measurement a follow-up in field review of the site and the flagged measurements should occur with the landowner or their representative.

Determination of where the top of bank or the normal water level is located will be critical in determining compliance. For each measured section this location should be documented based on the clear description of what constitutes the “top of bank” or “normal water level”. This may involve survey work and soils analysis. **(Grant SWCD)**

- Aerial photography investigation of parcel in question. If most up-to-date imagery is not available or inconclusive to whether or not the vegetation meets buffer initiative requirements a site visit needs to be conducted to measure & evaluate site conditions. Information should be documented on a standardize form that lists: Date of validation request, Name of Requestor/Landowner, Parcel ID, County-TWP-SEC, Type of investigation, type of waterbody, waterbody name (if applicable), buffer requirement, current buffer meets requirements, vegetation type, alternative practices present, alternative practices meet standards, actions to be in compliance, date of validation of compliance occurred, disclaimer that buffer is currently in compliance at time of validation and future alterations to buffer could affect compliance status, if validated using aerial imagery landowner will need to sign validation to certify that buffer is in perennial vegetation and still in place. **(Freeborn SWCD)**
- Any documentation that supports or denies a validation of compliance by an SWCD would only be for that current time, as buffers can be easily removed. A letter from the SWCD Board of Supervisors with maps and photos of the area at that time should be required for a validation of compliance. **(Dodge County/Dodge SWCD)**
- It should require a combination of approaches, but rely more heavily on field investigations and documentation. Photos with the appropriate 50’ average or 16.5’ line marked with flags and

photos of the riparian area showing that the perennial vegetation meets that edge or not. GPS points could readily be taken of areas that need more buffer and marked on a map. **(Cottonwood SWCD)**

- A written document (letter) that states the SWCD staff measured the buffer and that the buffer is in compliance with the law, a map should accompany the letter. A CRP contract, or other contract, can substitute an actual field measurement. **(Carver SWCD)**
- Letter and photo, sometimes a site visit may be necessary. **(Douglas SWCD)**
- Yes, in order to avoid misunderstanding and costly mistakes. **(Lower Mn WD)**
- MFU understanding is that validation of compliance is voluntary and is an option only if a landowner seeks this. The validation should be something like a letter stating landowner is in compliance with buffer law. **(Farmers Union)**
- Documentation required by LGU that have implemented buffer programs should be consulted. **(Corn Growers)**
- Map with technical measure of effectiveness (i.e. SAM) **(Lac Qui Parle SWCD)**
- {Documentation which should be required to accompany a validation of compliance, issued by an SWCD, should include a signed statement that the landowner made the request for validation of compliance. Further the requested validation for compliance report should include a field report, investigated with the landowner or designated representative of the landowner being present, the details of the measurements of widths for buffers required. The documentation package should also include the evidence from the Department of Natural Resources (DNR) Buffer Protection Map that the waterbody requires a state mandated buffer and the width requirement associated with that waterbody.

This documentation, if part of a formal request by the landowner, but determined to be lacking through the field investigation, would only be necessary to be processed in the event that the landowner wished to pursue an appeal to the board as described in subdivision 9 of 103F.48. }
(Farm Bureau)

Question 2: What information should be provided by a landowner to appeal a validation of compliance to BWSR?

- Assuming BWSR means we did not validate compliance: Photo, aerial map, measurements. **(Mille Lacs SWCD)**
- Based on the method described above it should reduce the number of appeals. However if the landowner wants to appeal they should provide documentation using GPS/GIS technology with documentation in the same fashion as the SWCD used as described above. **(Grant SWCD)**
- Name, Parcel ID, parcel location, reason for appeal of SWCD validation decision, copy of SWCD validation decision **(Freeborn SWCD)**
- As this law does not change the shore land rule, and with Dodge County not planning on changing/weakening their shore land ordinance, either a 50' buffer is present, or not. If the "top

of bank” is disputed, the DNR Area Hydrologist should be used for a verification of the OHW. **(Dodge County/Dodge SWCD)**

- It should require photo documentation over time, on the ground measurements by the landowner/agent, and a written document that would explain why they believe their buffer meets legal criteria and their method of measuring the buffer. **(Cottonwood SWCD)**
- ???A written explanation as to why they feel they are in compliance, including maps, photos, and/or engineering reports. **(Carver SWCD)**
- Written appeal and follow-up site inspection. **(Douglas SWCD)**
- Request should first be submitted to SWCD for technical review, then to BWSR. Supporting information should demonstrate equal or better protection compared to an average 50-foot buffer. Include runoff analysis based on accepted model or equation, such as RUSLE, with SWCD signoff. **(Lower Mn WD)**
- FMU would support referencing the practices listed In NRCS Field Office technical Guide, during discussions at buffer meetings and hearings these are the practices that were discussed and if landowners are properly using them they should be allowed. Picture, mapping, crop and conservation program should all be information used. **(Farmers Union)**
- The process used to appeal a validation of compliance should be clear, concise and predictable for the landowner. The information required of the landowner should be readily available to the landowner. A landowner should be entitled to a site visit by the LGU if desired to support the appeal. (Corn Growers)
- Map with technical measure of effectiveness (i.e. SAM) **(Lac Qui Parle SWCD)**
- {Information provided by a landowner to appeal a validation of compliance should include the evidence that a request for a validation of compliance was appropriately made. Further evidence could include various alternatives of photos, aerial mapping or other means of presenting the case that appropriate measurements for buffer widths have been achieved. Likewise technical evidence which demonstrates the results of alternative practices preventing overland flow to the water resource shall be included if the basis for the appeal is based on this element. **(Farm Bureau)**

Question 3: Who can appeal a validation of compliance, and can an appeal only address requirements of Minnesota Statutes 103F.48 (i.e. not local requirements)?

- Only the landowner responsible for the buffer. (no neighbor feuds). Yes. **(Mille Lacs SWCD)**
- Any landowner/person that receives a validation should be able to request an appeal. Are validations going to be public knowledge and should other citizens be able to appeal validations that are not their own? Appeals regarding other requirements not governed by BWSR or SWCD should be directed to the agency that controls those requirements. **(Freeborn SWCD)**
- The landowner would appeal the validation of compliance, as the landowner would be receiving the administrative penalty order if found out of compliance and unwilling to work to get back into compliance. **(Dodge County/Dodge SWCD)**

- Only the landowner, or an authorized agent (similar to DNR permits) should be able to appeal. A renter that does not have a long term interest in the property should not be able to appeal. **(Carver SWCD)**
- Landowner or operator and only new buffer law. **(Douglas SWCD)**
- Only structural practices should be allowed. Successful stabilization of the 50-ft. shore impact zone should not be contingent on timely implementation of management practices which may not work. For example, cover crop establishment depends on optimal soil moisture in Aug-Oct. period. Reliance on uncertain management practices also complicates verification of compliance. **(Lower Mn WD)**
- Only the landowner should be allowed to appeal. **(Farmers Union)**
- Landowners should be the only party eligible to appeal a validation of compliance. Appeals to local requirements should be left to the LGU to develop. **(Corn Growers)**
- Landowner or county or watershed district. **(Lac Qui Parle SWCD)**
- { Given the nature and context of a validation of compliance, under law (MN Stat. 103F.48) relating to a “request by a landowner or authorized agent or operator of a landowner” only a landowner should be able to appeal to the board, a rejection of a validation of compliance.

As to the question regarding whether an appeal would apply to the requirements of MN Stat. 103F.48 and not ‘local requirement,’ the law is very clear that validation of compliance only applies to “this subdivision”. Since ‘local requirement’ is not included in this subdivision it cannot be dealt with as part of an appeal to the board. The board has no jurisdiction for local requirements and the validation of compliance doesn’t apply.} **(Farm Bureau)**

B. Alternative Practices:

- The law uses the term “comparable” how will this be defined? Exactly the same, or just close enough?

Local SWCD’s should be allowed to establish local policy on what will be allowed and not allowed for alternative practices, as long as those policies are more restrictive than State policy and achieve equal or greater water quality protection.

Who insures that the alternative practice is in place and maintained? How frequently will these need to be inspected? For what period of time? **(Grant SWCD)**
- The buffer provisions in the 1989 shoreland standards were embedded in local zoning ordinances, and so were subject to normal zoning law variance procedures and requirements. DNR has guidelines that outline how variances are supposed to work under shoreland zoning. http://files.dnr.state.mn.us/waters/watmgmt_section/shoreland/dnr_variance_umbrella_document_final_042213.pdf. Variances are supposed to be rare, only available under exceptional circumstances, typically where some unique feature of the property (not created by the landowner) makes strict compliance with the applicable zoning requirement unreasonable.

The new buffer statute, Minn. Stat. § 103F.48, contains a different kind of variance provision. It expressly allows landowners to comply with the law through "alternative practices." The statute has three requirements that must be met before an "alternative practice" can qualify:

The alternative practice must be a "riparian water quality practice" or "a combination of structural vegetative, and management practices." (The 2016 amendments clarify that "retention ponds, or alternative measures that prevent overland flow to the water resource" are examples.)

The alternative practice must be "based on the Natural Resources Conservation Service Field Office Technical Guide" or on "other practices approved by the board [of water and soil resources]; and

The alternative practice "must provide water quality comparable to the buffer protection for the water body that the property abuts." *Id.*, subd. 3(b).

As with normal zoning variances "alternative practices" under the new buffer law should be the exception, not the rule. Generally the intent was to address those situations where buffers, because of the topography of the landscape, would not do much good. The intent was not to eliminate the buffer requirement so long as a landowner could claim compliance with some best management practice included in the NRCS Field Office Technical Guide or a BWSR guideline.

The difficult issue will be whether a proffered "alternative practice" will produce "comparable" water quality results. MCEA believes that, as with variance requirements, the burden of proof should be on the landowner who wants to carve out an exception to the rule.

That landowner should be obligated to show what unusual feature there is in the landscape that makes installation of a buffer undesirable and why an alternative practice would have the same or greater water quality benefits than a buffer would typically provide. 50-foot buffers would normally get 60% phosphorus removal, 20% nitrates, and 80% sediment, plus or minus 10 percent. Alternative practices should get comparable results. "Comparability" should likewise be read fairly narrowly to encompass only the specific benefits of buffers. Water quality BMPs that produce different kinds of results, e.g. a landowner reducing pesticide application rates, although admirable, should not excuse noncompliance with the buffer requirement.

Of course, any landowner who chooses not install a buffer but instead adopts some alternative practice runs the risk that the government will later determine that the alternative practice does not meet these requirements. That is why all levels of government involved in this should encourage landowners to seek "validations of compliance" from their local SWCD, or, more precisely, as the statute provides, "a technical professional employee or contractor of the soil and water resource conservation district or its delegate." That validation process is not limited to evaluating alternative practices. A landowner "or authorized agent or operator of a landowner" can seek a "validation of compliance" with the basic buffer requirement as well.

If the landowner request is for validation that his or her buffers comply with the law, it would seem that photographic evidence plus a site visit from the SWCD office should be enough: If, on the other hand, a landowner wants validation of an alternative practice, the request should include a detailed description of what water bodies are involved, what unusual landscape features make a buffer impractical or not useful, what practices have been adopted (again with photographic evidence), and where those practices tie into either the NRCS manual or a BWSR approval. Then, the applicant needs to offer evidence that the alternative practice will benefit water quality as much as an appropriate buffer would, e.g. showing that an alternative practice will cut down on sediment or phosphorus loading as much as a buffer would. The SWCD order granting such a "validation" should be based on written findings, include the supporting evidence, and give notice to the public about what decision has been made.

In any event, landowners and others with a stake in the outcome should have basic procedural due process rights on alternative practices. Obviously, for landowners who choose not to bother to get a "validation of compliance," their due process rights will come from potential enforcement proceedings. Landowners who do seek "validations of compliance" should and do have the right to appeal adverse determinations to BWSR. On the other hand, like neighboring landowners who can object to a variance request in the ordinary zoning context, citizens should get some notice when validations are issued (perhaps the BWSR website, perhaps local legal notice like variances), and the same opportunity to appeal from decisions that are contrary to their interests. **(Mn Center for Env Advocacy)**

Question 1: Should prior approval be required for a landowner to use an alternative practice?

- Yes. **(Mille Lacs SWCD)**
- BWSR should be focused here on how to coordinate planning and implementation of local government units. Guidance should make very clear the fact that only a landowner can request a validation of compliance with MS 103F.48, the buffer law, and should emphasize that landowners are under no obligation to request a validation of compliance. When such a validation is requested, the SWCD should assess the designated tract for compliance with 103F.48 per their authority. The opportunity to appeal should only be available to the landowner. And naturally, the appeal should only address 103F.48, anything more is a blatant attempt by BWSR to exert authority it does not have. **(Mn Ag Water Resources Center)**
- Yes. **(Grant SWCD)**
- Yes. Especially if the alternative practice needs to be an NRCS engineering practice or a practice approved by the board. If the practice they are installing needs to meet NRCS standards then they need to be evaluated by technical staff. Alternative practices should go through similar validation process. **(Freeborn SWCD)**
- As this law does not change the shore land rule, and Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider and Dodge County will not be approving alternative practices. **(Dodge County/Dodge SWCD)**
- Should not have to be a requirement to have prior approval, but it should be made known to the landowner that the alternative practice may or may not help them achieve not putting in a buffer. Landowners could have existing structures prior to the Buffer Law that may qualify as an alternative practice and did not receive prior approval. We should be issuing some kind of conditional compliance certificate that if these conditions are met (cover crops, no till, a waterway, etc) every year then the alternative practice meets the definition of an alternative practice, but once these practices cease to exist they must put in a buffer. **(Cottonwood SWCD)**
- Yes. **(Carver SWCD)**
- For pre-existing practices these need to be reviewed and prior approval for all new. **(Douglas SWCD)**
- No, again if a landowner wants to voluntarily get validation from the local SWCD, they can do that. Again, in hearings and meetings on buffer program. It was our organizations understanding that a landowner was not required to get validation of alternative practices if they were being properly used and from the NRCS Field Office Technical Guide. **(Farmers Union)**

- No, the law states that a landowner may request a validation of compliance but prior approval to install an alternative practice should not be required (S.F. 2503, Section 5, Subd. 3(d)). **(Corn Growers)**
- Yes, it's part of planning and assistance and to ensure feasibility and effectiveness. **(Lac Qui Parle SWCD)**
- Prior approval should be required for an alternative practice. Plans, area affected and pollution reduction numbers should be included.

Management practices are great for protecting water quality, but without a “contract” how can we be sure that these are implemented in lieu of a buffer? For this reason only physical structural alternatives should be considered. **(Wright SWCD)**

- {The 2015 Legislative record, involving the testimony of BWSR Director John Jaschke clearly establishes that no prior approval for a landowner to use an alternative practice is required. Further there is no entity, qualified under the law, to request permission from.} **(Farm Bureau)**

Question 2: How should a request to use alternative practices be submitted, including what supporting information should be provided?

- Aerial photo/drawing/map depicting. **(Mille Lacs SWCD)**
- The buffer law explicitly states that landowners may meet the buffer requirement by adopting an alternative practice or practices. Discretion in how to implement such alternative practices should reside with the landowner, who could implement the practices solely on their own or could request technical assistance from their local SWCD. Prior approval should not be required, and any effort by BWSR to shorten the list of practices available to landowners should be avoided. **(Mn Ag Water Res Center)**
- This should be an application process that the landowner has to document with supporting evidence-- that the proposed alternative practice will provide water quality protection comparable to that of a vegetated buffer. The contributing watershed needs to be considered in determining the adequacy of the alternative practice (Soil type, slope etc). Supporting evidence should include any plans, designs, construction check outs and pollution reduction estimates based on proven methods that compare the alternative practice to the vegetated buffer. **(Grant SWCD)**
- Some sort of form should be submitted to the SWCD office that lists the following: date, name, owner/operator, parcel id, parcel location, alternative practice, existing or future practice, location of practice, number of practices (if structural) or acres of practice (if non-structural), justification of how alternative practices will adequately reduce sediment delivery to water bodies, was it built with previous cost share/to NRCS standards, FO investigation if current/potential structure will adequately treat problem. **(Freeborn SWCD)**
- As this law does not change the shore land rule, and Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider and Dodge County will not be approving alternative practices. **(Dodge County/Dodge SWCD)**

- An application should be developed for the landowner to fill out and structural designs should be submitted to the SWCD, as well as any pollution reductions calculated by the engineer or staff. **(Cottonwood SWCD)**
- The landowner, or authorized agent, must submit a written request to the local SWCD to use an alternative practice and site specifically where they would like to use it, and what practice they feel would provide adequate protection for the water resource. SWCD's should not be asked to "find a way out of installing a buffer". It would be nice if BWSR had a form for use statewide for requesting an alternative practice. The form should require the specific site, the reason for an alternative practice instead of the buffer, the FOTG approved practice that will provide equal or more water quality benefit, an estimated amount of staff time to determine if the alternative practice is feasible and a compensation amount that the landowner will pay the SWCD for working on this request. The form may need to include language from the most recent legislation...Included in these practices are retention ponds and alternative measures that prevent overland flow to the water resource. **(Carver SWCD)**
- Written application to SWCD to review alternative practice. **(Douglas SWCD)**
- Again, our organization's understanding if a landowner wants validation that the alternative practices they are using they may contact the SWCD for validation, MFU would support simply contacting the SWCD by phone, email, or letter and requesting site visit, or supporting pictures and documents. **(Farmers Union)**
- See previous response. Prior approval should not be required for the installation of alternative practices. The process used to monitor and/or appeal compliance should be the same regardless if a riparian buffer or alternative management practice is used to comply with the law. **(Corn Growers)**
- Map with technical measure of effectiveness (i.e. SAM) **(Lac Qui Parle SWCD)**
- {Since there is no requirement for a 'request to use alternative practices' there is no supporting information required to seek permission to use alternative practices.} **(Farm Bureau)**

Question 3: Should alternative practices include both structural (grassed waterways, controlled outlets, etc.) and management practices (cover crops, etc.)?

- Just structural practices. Years of heavy rain may make it impossible for landowners to do management practices like plant cover crops. Those years of heavy rain would be the most important years in protecting water quality. Management practices would also be hard to enforce that a land owner is continuing to do the practice every year. **(Mille Lacs SWCD)**
- Alternative practices could include any combination of these. However management practices tend to be utilized, and in place on an annual basis. Therefore landowners that include management practices as part of, or as the only method of providing water quality protection should be required to apply for this option on an annual basis. The SWCD would need to document on an annual basis that these practices have been applied. Who pays for the SWCD's time? Should landowner fees be established in those cases where annual inspection is required? **(Grant SWCD)**
- Yes. However structural practices that only address gully stabilization (grassed waterways, water & sediment control basins) should not be an acceptable alternative practice unless used in

conjunction with other structural practices that address sheet/rill erosion (Terraces) and/or with whole field management practices (no-till, strip-till, cover crops). Management practices are going to give a better result of reducing the amount of sediment delivery to bodies of water than some structural practices are going to since they can treat a larger area verses only treating one problem area. Each county should be allowed determine what NRCS practices will be considered acceptable alternative practices and which ones to exclude. If the SWCD denies landowner's request for specific alternative practice in place of a buffer will there be an appeal process? **(Freeborn SWCD)**

- As this law does not change the shore land rule, and Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider and Dodge County will not be approving alternative practices. **(Dodge County/Dodge SWCD)**
- Yes. **(Cottonwood SWCD)**
- Yes, this will be site specific for each alternative practice. Any approved FOTG practice should be considered, but the benefits must equal or exceed the benefits of the buffer strip. **(Carver SWCD)**
- Yes, as long as they produce the same benefits or protection. **(Douglas SWCD)**
- Yes. **(Farmers Union)**
- All of the practices adopted via the USDA Natural Resources Conservation Service Field Office Technical Guide (FOTG) as outlined in the BWSR document Alternative Practice Options for Landowners, Summer 2015 should be included. This includes Vegetative Practice Standards, Structural/Engineered Practice Standards, and Management Practice Standards. Another resource is The Agricultural BMP Handbook for Minnesota, September 2012 developed by the Minnesota Department of Agriculture (MDA). **(Corn Growers)**
- Yes. **(Lac Qui Parle SWCD)**
- {As per the language of law and amendments adopted in 2016 "...an alternative riparian water quality practice, or combination of structural, vegetative, and management practices, based on the Natural Resources Conservation Service Field Office Technical Guide or other practices approved by the board, that provide water quality protection comparable to the buffer protection for the water body that the property abuts. Included in these practices are retention ponds and alternative measures that prevent overland flow to the water resource."} **(Farm Bureau)**

C. Exemptions

- This section largely warrants no response other than a reminder to BWSR to simply follow the law. The shoreland standards and NPDES permitting are outside of BWSR's authority. The water inundation cropping system exemption applies only in very specific regions of the state and should be left to local authorities. **(Mn Ag Water Res Center)**

{Subd 5 of MN Stat. 103F.48 provides the basis for exemptions from the buffer requirements that are provided for in Subd 3 of the law. BWSR should decide to follow the law and not seek to extend authority to deal with matters associated with the provided exemptions. Other agencies (federal and state) or units of government have whatever authority necessary to regulate and manage these identified situations.} **(Farm Bureau)**

Question 1: What factors or information should be considered in developing guidance to implement the exemption for compliance with shoreland management standards?

- Would they not be in compliance with buffer law if they are in compliance with shoreland? Can a local shoreland ordinance be past that supersedes state shoreland requirement of 50 feet? (**Millie Lacs SWCD**)
- The landowner could request documentation from the shoreland management authority similar to the validation process. This will be very dependent on the local Shoreland authority and what they are willing to provide. But ultimately it is the Shoreland zonings Authorities decision to make. (**Grant SWCD**)
- Factors should include meeting any of the 6 specific exemptions. (**Dodge County/Dodge SWCD**)
- Documentation on where and why a person has an exemption, particularly for future enforcement. (**Cottonwood SWCD**)
- If you are referring to exemption #2, the full text of the law includes examples. All exemptions should be viewed with some historical basis. For example, if someone installed a road or path along a water course since 2015, they should not be provided the exemption from the buffer. (**Carver SWCD**)
- Guidance should reference Minn. R. 6120.3300, Subp. 7, "Agricultural use standards for shoreland areas". Guidance should specify the need for a 50-foot standard width as an absolute for the shore impact zone, not an average. Within the Shoreland District (300 feet from high water mark of stream) steep slopes must be structurally stabilized to reasonably prevent channelized flow from reaching the shore impact zone. The reference to an approved conservation plan (Resource Management System) should be removed, as it is based on an outmoded and largely forgotten NRCS conservation planning program. (**Lower Mn WD**)
- MFU supports local implementation and handing of shore/and management standards. (**Farmers Union**)
- Exemptions for compliance need to consider any factors or information related to the purposed of Minn. Stat. 103F.48, Subd. 2 which is to (1) protect state water resources from erosion and runoff pollution; (2) stabilize soils, shores, and banks; and (3) protect or provide riparian corridors. Factors that affect the above are very complex and will be site specific depending on local topography, soils, tillage methods, nutrient management, grazing management, erosion control practices and other conservation practices currently in place. In some cases the presence of berms and spoil banks could impact the vulnerability of a waterway to runoff. These factors need to be considered and should reside with the LGU to make the determination of compliance with the law. (**Corn Growers**)

- {Subd 5 of MN Stat. 103F.48 provides the basis for exemptions from the buffer requirements that are provided for in Subd 3 of the law. BWSR should decide to follow the law and not seek to extend authority to deal with matters associated with the provided exemptions. Other agencies (federal and state) or units of government have whatever authority necessary to regulate and manage these identified situations.} **(Farm Bureau)**

Question 2: How should water resources riparian protection be addressed in developing guidance for the exemption for national pollutant discharge elimination system/state disposal system (NPDES/SDS) permits?

- Water resources riparian protection should be addressed within the MS4 permit issued for those areas under MS4 regulation. In those incorporated non-MS4 areas, water resources riparian protection regulation should fall back to the BWSR. **(Dodge County/Dodge SWCD)**
- The active permit should describe in detail the water resources riparian protection measures, and those measures should meet or exceed the protection measures of the required buffer (similar to the alternative practices language). **(Carver SWCD)**
- Permits should address buffer law, as long as same as or better than buffer requirements. **(Douglas SWCD)**
- For wastewater treatment by irrigation over a field, application rates should prevent channelized flow from reaching the shore impact zone. Pipe or ditch discharge structures should be designed to prevent exacerbation of erosion in plunge pool or from ditch banks. **(Lower Mn WD)**
- {Subd 5 of MN Stat. 103F.48 provides the basis for exemptions from the buffer requirements that are provided for in Subd 3 of the law. BWSR should decide to follow the law and not seek to extend authority to deal with matters associated with the provided exemptions. Other agencies (federal and state) or units of government have whatever authority necessary to regulate and manage these identified situations.} **(Farm Bureau)**

Question 3: What factors or information should be considered in developing guidance for the water-inundation cropping system exemption?

- Type of crop, length and time of year of water-inundation **(Freeborn SWCD)**
- There are no water-inundation cropping systems in Dodge County, we have no comment. **(Dodge County/Dodge SWCD)**
- ?? – If water drains back to the protected surface water, the water quality should meet or exceed that if a buffer was in place. **(Carver SWCD)**
- Not applicable to Douglas County. **(Douglas SWCD)**
- MFU supports having local input on this where it applies. **(Farmers Union)**

- For inundated cropping systems, factors to consider: chemicals and fertilizer inputs as well as nutrient management practices. Where is water coming from? Where is it drained to? (**Wright SWCD**)
- {Subd 5 of MN Stat. 103F.48 provides the basis for exemptions from the buffer requirements that are provided for in Subd 3 of the law. BWSR should decide to follow the law and not seek to extend authority to deal with matters associated with the provided exemptions. Other agencies (federal and state) or units of government have whatever authority necessary to regulate and manage these identified situations.} (**Farm Bureau**)

D. Initial Implementation Waiver:

- The buffer law as passed during the first special session of 2015 provided for a conditional compliance waiver in either the case of public waters or public ditches. With regard to public waters, landowners should be given one additional year, or until November 1, 2018, to implement buffers when doing so under a financial assistance program. With regard to public ditches, local drainage authorities should be allowed the flexibility to implement in timely coordination with redetermination of benefits processes. (**Mn Ag Water Resources Center**)
- The buffer law (Minn. Stat. 103F.48) provided for a conditional compliance waiver in either the case of public waters or public ditches. With regard to public waters, landowners should be given one additional year, or until November 1, 2018, to implement buffers when doing so under a financial assistance program. With regard to public ditches, local drainage authorities should be allowed the flexibility to implement in timely coordination with redetermination of benefits processes. (**Corn Growers**)

Question 1: What information should be provided by a landowner when requesting a conditional compliance waiver?

- Copy of approved contracts with supporting documentation that proves that a buffer will be installed in the future. Approved RIM application, copy of CCRP contract, EQIP contract, CSP contract, State Cost-Share contract etc. Copy of legal drainage proceedings that details the actions taking place that prevents the buffer from being installed. (**Grant SWCD**)
- Proof landowners have applied for and maintained eligibility for financial assistance and are subject to certain drainage proceedings. Parcel ID. Intent to implement by given deadline (**Freeborn SWCD**)
- Location specifics (township, range, section, watercourse name, etc), reason as to why they want/need the extension. (**Cottonwood SWCD**)
- Documented minutes from a drainage authority that the drainage proceeding is approved and will be implemented in the suggested timeframe. (**Carver SWCD**)
- Documentation from landowner that they are in the process of enrolling in conservation program or ditch system is in the process of a redetermination of benefits. (**Douglas SWCD**)
- MFU supports reasonable flexibility in working with a landowner who maybe awaiting financial assistance or entrance into a program associated with implementation. MFU believes that if the

landowner has made a good faith effort but is reasonably held up that landowner should be granted a reasonable time waiver whatever that may be. **(Farmers Union)**

- Location, Yes/no drainage proceeding , Anticipated date of resolution, Name of Cost share program applied for, Anticipated date of practice installation, Notify SWCD when project complete. **(Lac Qui Parle SWCD)**
- { We are aware of 2015 Session Law reference to the opportunities for landowners to receive a conditional compliance waiver, but do not see referenced authority which would involve BWSR to be involved on this matter. In our search of MN Stat. 103F.48 we have not been able to locate language or reference which covers any provision for “conditional compliance waiver.” Without the direction or authorization being located in this law, we are uncertain what the basis for BWSR has for action. Absent authority, BWSR should not assume or extend requirements on landowners.} **(Farm Bureau)**

Question 2: What should be included in a response from an SWCD to a conditional compliance waiver request from a landowner?

- Findings of fact document similar to WCA granting or denying request based on evidence presented by the landowner. **(Grant SWCD)**
- Whether their request has been accepted or denied, if denied: reason for denial, if accepted: length of time waiver is good for and date it expires. Parcels or specific areas covered by waiver. **(Freeborn SWCD)**
- Landowner name, address, specific site location with Township, Range, Section, watercourse name, and date of required installation (meaning if they can receive a 12 month exemption then it should say “buffer in place by October 12, 2018 (12 months from date of request)). **(Cottonwood SWCD)**
- Acknowledgement of the approved drainage proceeding, and a date by which the work must be completed. **(Carver SWCD)**
- Approval or denial and giving a deadline according to program or situation. **(Douglas SWCD)**
- Again, MFU hope the SWCD will put a good faith effort into granting the landowner a reasonable amount of time to come into compliance due to a conditional reason. MFU also supports the SWCD requesting reasonable documentation and a reasonable timeframe for the landowner to provide documentation as to the reason for compliance. **(Farmers Union)**
- Yes/no granted, waiver expiration date. **(Lac Qui Parle SWCD)**
- { We are aware of 2015 Session Law reference to the opportunities for landowners to receive a conditional compliance waiver, but do not see referenced authority which would involve BWSR to be involved on this matter. In our search of MN Stat. 103F.48 we have not been able to locate language or reference which covers any provision for “conditional compliance waiver.” Without the direction or authorization being located in this law, we are uncertain what the basis for BWSR

has for action. Absent authority, BWSR should not assume or extend requirements on landowners.} (**Farm Bureau**)

Technical Requirements

A. Required Buffer Width:

- Methods used by LGU that have implemented buffer programs should be made available as guidance without being too prescriptive. If aerial imagery or other remote sensing methods are employed to identify areas that are not in compliance, landowners should be granted the right to request an on-site confirmation of compliance. (**Corn Growers**)

Question 1: What methodologies should be considered for determining if a buffer meets the 50' average requirement?

- 30ft Min, 50 ft Average, what defines a 50ft Average? (**Stearns SWCD**)
- Should the maximum buffer width distance be equal to or less than the minimum buffer width (30') distance in order to take into consideration the 50' average buffer? For example: a landowner may have 1 mile of streambank with 5000' of 30' buffer and 280' of 5,000' wide buffer. $5000' \times 30' = 150,000$ sq. ft. and $5,000' \times 280' = 1,400,000$ sq. ft. Is this the intent of the buffer law? (**Root River SWCD**)
- GPS each buffer as a polygon. Measure (in FT) the length of the buffer. The length $\times 50 = B$, if the area of the polygon (buffer) is larger than B then the buffer has met the 50 foot average and buffer requirements as long as the minimum width along the buffer is larger than 30 FT minimum. This method may not work on winding rivers/streams where a 50 foot buffer would overlap with itself. (**Mille Lacs SWCD**)
- Buffers should be measured in feet, as required under the buffer law. Buffer measurements should not be done off-site using aerial or satellite imagery. (**Mn Ag Water Res Center**)
- If a buffer measures at 70' for a 100' stretch your buffer could be 30' for a 100' stretch somewhere else. Measure linear feet of stream or lake shore that the landowner owns and multiply by 50'. This will be the minimum square feet of buffer to have. Should be considered on a field/tract/parcel scale. May need to give consideration each side of the ditch or stream is considered separately or not. Offsite review is OK if it is clear, onsite investigation may be needed in cases where it is not clear. (**Freeborn SWCD**)
- Dodge County/SWCD plans to stay with the 50' requirement, as that is in the shore land rule and a county ordinance, and this law doesn't change that rule and Dodge County does not plan on changing/weakening their shore land ordinance. (**Dodge County/Dodge SWCD**)
- Use ArcMap to create a 50' buffer polygon around the watercourse using the Buffer tool, calculate that acres if they had 50' all the way. Then use their existing buffer or proposed buffer and determine the acres with that. They should be similar if they have 30' for 100 ft of the watercourse and then 70' for 100 ft of the watercourse. (**Cottonwood SWCD**)
- GIS maps if up-to-date aerial photography is available. FSA measurements for land enrolled in CRP, or CLU boundary changes showing acreage of farmland reduced after the buffer is installed. Width and length measurements in the field. (**Carver SWCD**)

- Latest year of aerial photo available and or site visits. **(Douglas SWCD)**
- Each continuous buffer should be required to meet the 50-foot average. Owners/operators of large acreages should not be able to offset a 30- foot buffer along one stream by increasing buffer width along another stream. This balances the need for flexibility against the benefits of the minimum 50-foot width buffer for water quality and ease-of- enforcement. The width off each discrete buffer could be measured at regular intervals to estimate an arithmetic mean. **(Lower Mn WD)**
- MFU believes this is already specified in law. **(Farmers Union)**
- GIS map measurement. **(Lac Qui Parle SWCD)**
- {With the burden falling on the landowner for the 50 ft. average buffer for public waters, identified on the public waters inventory, the consideration should be based on that individual's tract of land, requiring a perennial buffer. Measuring from the top of the bank or the edge of the normal water level, the outward buffer width for the landowner's tract of land adjacent to the water shall average 50 ft. with a minimum width. As long as the landowner complies with the 50 ft. average width and 30 ft. minimum, where wider widths are provided to result in the 50 ft. average is up to the landowner.} **(Farm Bureau)**

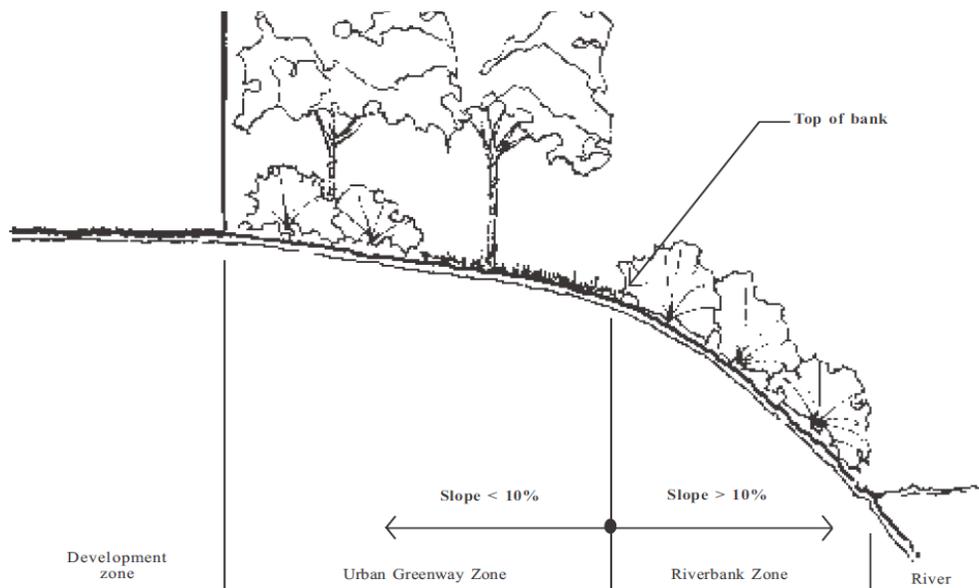
B. Top of Bank/Normal Water Level:

- Both Top of Bank and Normal Water Level should be determined based on what is stated in S.F. 2503, Subd. 3 (c). **(Corn Growers)**

Question 1: How should the top of bank be delineated/determined?

- Take into account changes in vegetation, soils, washed rock, sedimentation, etc. **(Root River SWCD)**
- Where the slope of the bank becomes or nears 0. The bank on a two stage ditch begins at the outer edge of the bench of the ditch **(Mille Lacs SWCD)**
- For natural watercourses, we support measuring from the edge of the normal water level. For constructed ditches, we support measuring from the edge of the constructed channel. For altered watercourses, we support measuring from the edge of the normal water level. The normal water level should be defined as the edge of the water under normal summer conditions, specifically exclusive of flood periods. **(Mn Ag Water Res Center)**
- If you start at the water level in the ditch and walk up the ditch bank start your buffer strip where it begins to level out on top of the ditch bank. If there is no ditch bank and the area along the stream is relatively flat begin the buffer strip from where the normal water level is at. Unstable areas should not be included in the buffer width measurements. (if the stream has a bank but the first 50 feet on the upland side are eroding or slumping into the stream there should be another 50' of buffer since the first 50 feet are not able to provide adequate buffering). **(Freeborn SWCD)**

- The top of bank will be obvious in most cases, but in cases that it is not, the LGU should utilize the Ordinary High Water (OHW) as determined by the DNR Area Hydrologist. **(Dodge County/Dodge SWCD)**
- An open ditch should be the top of the spoil bank as outlined in the guidance already in existence. **(Cottonwood SWCD)**
- In the same manner as required by 103E. **(Carver SWCD)**
- For ditches where you can safely drive a vehicle. For streams, normal high flow not flood plain.
- Wetlands, normal water level. **(Douglas SWCD)**
- Should follow the language in Sf2503. **(Farmers Union)**
- I think it is important to have a clear definition for this so that it is consistently being interpreted from county to county. I have done some research on this and the definition of what the top of a bank is can change from source to source. I have listed a definition that the city of Chicago uses. I think this definition would be easy to use and could be applied to any type of stream/river that we find in Minnesota.
- **2.5 DEFINITION, TOP OF BANK (SLOPED BANK)**
Where the bank is sloped, the “top of bank” is defined as the point at the top of the slope where the slope becomes less than 10 percent (see Fig. 2.1). Where there is a terrace or “bench” in the slope, the top of bank is the point furthest from the water’s edge where the slope becomes less than 10 percent.



If there is not a sloped bank, or if the slope is less than 10%, then I propose we use the ordinary high water level (OHWL). The DNR defines the OHWL of a public water basin as the elevation delineating the highest water level that has been maintained long enough to leave evidence upon the landscape where the natural vegetation changes from aquatic to terrestrial. For a watercourse the DNR defines the OHWL as the top of the bank, so if the land next to a watercourse has a slope of less than 10%, I think it would be justified to say the bank is not defined and use the definition of where the vegetation changes from aquatic to terrestrial. **(Lac qui Parle SWCD)**

- An elevation or a point on the landscape where overland water no longer drains toward the water resource. This area may include the waterway's floodplain. **(Wilkin County)**
- Elevation. **(Lac Qui Parle SWCD)**
- {If there is a defined bank, the measurement should begin at top point of the bank for the waterbody.} **(Farm Bureau)**

Question 2: How should “normal water level” be delineated/determined?

- Should a rain event of a certain duration be used to define “normal”? **(Root River SWCD)**
- If there is no defined bank it cannot be a ditch, river, or stream in MN. This must be referring to wetlands? **(Mille Lacs SWCD)**
- OHW should be used for lakes with listed or official OHW. For those without an OHW with a vegetated shoreline it should be the upland edge of a type III (Wetlands of US – Circular 39). **(Freeborn SWCD)**
- It should be the DNR designated Ordinary High Water Level. **(Cottonwood SWCD)**
- Bank full height or by vegetation changes. This will be more difficult in the public water wetland areas and on some of the shallow lake zones. **(Carver SWCD)**
- DNR must have a definition of normal water level. **(Douglas SWCD)**
- Normal water should be defined by historical records excluding flooding. **(Farmers Union)**
- The level that surface water is present for extended periods especially early in the growing season, but is absent by the end of the season in most years. **(Wilkin County)**
- Wetland delineation criteria? **(Lac Qui Parle SWCD)**
- {As provided in the law, where there is no defined bank, measurement starts outward from the edge of normal water level. The “normal water level” should be established on the basis of non-flooding conditions.} **(Farm Bureau)**

C. Alternative Practices:

- We wanted to comment on the buffer law alternative practices that should be allowed are grassed terraces above the waterway that have been in place for years or build a terrace. Sediment and water control basins should be allowed as that they slow down the water and hold back erosion. No-till along these areas should be allowed along these areas. Patter tiled fields should be allowed as there is very little water runoff on the fields.

CRP is not the answer on these areas because the volunteer trees start growing and take over and it turns into a big mess. The trees grow where the water runs and blocks the stream and soon the water is running outside the stream banks and out in the field creating a worse problem.

Terraces, basins, no-till and pattern tile on fields should be allowed as alternative practices. **(Tom Boulton, Farmer-owner)**

- Attached is a DRAFT Framework for considering alternative practices to buffers. I'm submitting this for your comment and consideration as you work through developing guidance under the "current" buffer legislation. I emphasize "current" to acknowledge that changes to the legislation during this session could certainly impact the work we've done to date. Specifically, this project is submitted to provide input as you consider "2) Technical Aspects of the Buffer Program; Alternative Practices".

This was a project initiated by the MN Soybean Growers with a goal of developing an alternative practice framework that could be used by farmers, SWCDs, and landowners statewide. The hope is that this framework will provide a path to developing information for landowners so that they understand their conservation practice options for complying with the current buffer legislation.

Please feel free to contact me with any questions or comments.

BACKGROUND AND PURPOSE (Excerpt - See complete document for additional information)

During the 2015 legislative session, the State of Minnesota passed the Buffer and Soil Loss Legislation (Minnesota Statue 2014, section 103B.101), commonly referred to as the Governor's Buffer Initiative. The legislation added 103F.48 Riparian Protection and Water Quality Practices, which requires a 50-foot average continuous buffer of perennial vegetation with a 30-foot minimum width around all public waters and a 16.5-foot minimum width continuous buffer of perennial vegetation along all public drainage systems. The Minnesota Department of Natural Resources (MNDNR) has been tasked with defining the locations of waters that fall into these two categories. The law includes a provision under MS 103F.48 subd. 3 (2)(b) that allows landowners to adopt "...an alternative riparian water quality practice, or combination of structural, vegetative, and management practices, based on the Natural Resources Conservation Service Field Office Technical Guide or other practices approved by the board, that provide water quality protection comparable to the buffer protection for the waterbody that the property abuts." Here, the "board" means the Minnesota Board of Water and Soil Resources (BWSR).

The legislation leaves open four key policy considerations related to the evaluation of alternative practices to vegetative buffers:

The definition of "water quality" and specifically the metrics which will be used to evaluate the comparability of a practice or practices to a vegetative buffer?

What types of practices are eligible as an alternative to vegetative buffers?

What methods can be used to evaluate the water quality protection of a practice or practices, as compared to a vegetative buffer?

What information demonstrates that one or more practices provides “comparable” water quality protection to a vegetative buffer for an abutting water body?

The purpose of this memorandum is to develop a framework (hereafter referred to as the alternatives framework) which addresses these policy questions and provides the Minnesota Soybean Research & Promotion Council, agricultural producers, landowners and Soil and Water Conservation Districts (SWCD) a standardized and consistent approach for evaluating the use of alternative practices to buffers under the Governor’s Buffer Initiative. This alternatives framework was developed through a private, non-profit, and public collaborative. This memorandum is intended to provide technical information associated with the Governor’s Buffer Initiative to constructively guide policy discussion around the implementation of the legislation. This memorandum provides a summary of the findings. A detailed descriptions of the methods used in the alternatives framework is provided in **Appendix A**. The desired goal is to have this alternatives framework adopted by BWSR as a suitable method for performing alternative practice assessments under the Governor’s Buffer Initiative. (**Houston Engineering**)

▪ **Proposal:**

Agren proposes that agencies in the State of Minnesota consider Agren’s field-scale, conservation planning software to determine alternative practices for Minnesota’s 2015 Buffer Initiative.

Introduction:

Agren, a central-Iowa based small-business, proposes to use best-in-class erosion and sediment delivery models applied in a GIS-framework to help Minnesota determine alternative practices for the 2015 Buffer Initiative. Agren’s solution pairs Agren’s SoilCalculator™ tool with Agren’s EphemeralGullyErosionCalculator. Together, these two tools can model soil erosion, sediment transport, and sediment delivery to a water body. Both of these models are well-researched and scientifically documented.

Agren has collaborated with the USDA-ARS Sedimentation Laboratory and the University of Tennessee since 2007 to develop these tools. Each tool combines remotely-sensed, high resolution digital elevation models and newly developed hydrologic algorithms with the well-researched and validated Revised Universal Soil Loss Equation 2 (RUSLE2). The results of this combination are two dimensional, distributed soil loss predictions for sheet, rill, and ephemeral gully erosion.

Rationale:

The Minnesota 2015 Buffer Initiative designated an estimated 110,000 acres of land for water quality buffer strips. The law establishes new perennial vegetation buffers of up 16.5 feet or 50 feet along rivers, streams, and ditches that will help filter out phosphorus and sediment. The initiative allows for a combination of the practices that may be used to sufficiently meet water quality goals equal to that of the required buffer.

Agren’s software can help landowners validate the efficacy of three distinct alternative practices to replace mandated buffer widths.

Variable width filter strips: This method sizes filter strip segments along any water body, in relation to the size of each segment’s’ drainage area and the amount of sediment delivered by the

drainage. Variable width filters are designed to be wider in areas where water and sediment are running into the stream in a concentrated flow or channel. The filter width is increased in the areas of concentrated flow and simultaneously reduced in areas of non-concentrated flow. This reallocation of grass results in less total acres of filter strips required.

Impoundment structures: This method uses small upstream impoundment structures to capture runoff and sediment before it reaches the stream. Impoundment structures include water and sediment control basins and terraces. These practices trap sediment running off cropland and reduce ephemeral gully erosion downslope by controlling flow within the drainage area. Water is released slowly, usually through a pipe inlet and/or tile line.

Soil conservation practice: Soil conserving practices like no-till, contouring, terraces, and grassed waterways reduce sediment delivery to water body. With soil conservation practices, farmers could achieve the same water quality benefits with a narrower filter strip or could possibly eliminate a filter strip altogether. At the same time, this system would do more to reduce sediment erosion and improve soil health. **(AGREN)**

Question 1: At what scales (field, parcel, catchment, etc.) would it be appropriate for alternative practices to be considered and/or evaluated?

- Local authorities should be given discretion determine appropriate scale to evaluate alternative practices. Some practices may be designed for very small areas, others for very large areas. Local authorities should also be given the flexibility to consider the extent of berms and spoil banks and their effect on water flow in evaluating alternative practices, in fact, berms and spoil banks can be effective alternative practices. **(Mn Ag Water Res Center)**
- Ask yourself will the alternative practice serve the same purpose as a buffer strip? Minimum average width? If yes then the practice would be an alternative option. No larger than field or parcel. Recommend practices within same field scale watershed as the filter strip would have been. **(Freeborn SWCD)**
- As this law does not change the shore land rule, and with Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider alternative practices. **(Dodge County/Dodge SWCD)**
- Alternative practices should be considered or evaluate at the catchment scale at least. Water does not follow political or ownership boundaries, it will cross fields in its flow paths. Therefore a catchment scale of that watershed should be used for the flow path to actually determine the benefit of the alternative practice. NRCS builds their structural practices based on the catchment going to that structure, so it should be evaluated the same way. **(Cottonwood SWCD)**
- Alternative practices should only be applied to areas where buffer strips do not make any sense. Given buffer strips provide wildlife habitat, and protection from both wind and water erosion, it is difficult to imagine that alternative practices will be more beneficial than buffer strips. There should really only be a few, if any, alternative practices approved in each county. **(Carver SWCD)**
- Field **(Douglas SWCD)**

- Field scale. Buffers can be evaluated most readily with regard to reduction in surface runoff from field to stream. An alternative set of structural practices could be evaluated using RUSLE for comparison with a baseline runoff reduction estimate for a 50-foot buffer. **(Lower Mn WD)**
- MFU does not feel this was specified and would support the landowner making this decision. **(Farmers Union)**
- The scale should be consistent with the practice. Some practices may encompass large areas whereas others will be designed for specific places within a field. **(Corn Growers)**
- {While evaluating “scale” of land area it is important to note that this consideration for appropriate alternative practices does not diminish the ability for a landowner to make decisions for implementing alternative practices without prior approval by any government entity or a necessity for permission. Under the law, landowners are not required to obtain permission or have evaluation for implementation of alternative practices which “provide water quality protection comparable to the buffer protection for the water body that the property abuts.”

Based on the provisions of this law, a landowner may avoid the requirement of a buffer through implementing alternative riparian water quality practices, or a combination of structural, vegetative, and management practices, based on the Natural Resources Conservation Service Field Office Technical Guide or other practices approved by the board. Included in these practices are retention ponds and alternative measures that prevent overland flow to the water resource.

The ability to use an alternative practice to replace mandated buffers requires the alternative practices used “provide water quality protection comparable to the buffer protection for the water body that the property abuts.” The standard to meet by an alternative practice is the water quality protection that the required specific buffer width would provide for that water body next to that property. Along with the alternative practices being selected from the Natural Resources Conservation Service Field Office Technical Guide or other practices approved by the board, practices can also include retention ponds or alternative measures that prevent the overland flow to the water resource.} **(Farm Bureau)**

Question 2: What evaluation tools exist that should be considered as a means of evaluating the water quality, bank stability and riparian corridor benefits of an alternative practice?

- Tools for water quality standards: Information from Subsurface Sewage Treatment Standards (SSTS). Would this information be useful? Tools for evaluating bank stability: BEHI or Bank Erosion Hazard Index which takes into account such things as bank angle in degrees, depth of root mass of perennial vegetation, ration of bank height to bank full height, ration of root depth to bank height, and surface protection, in percent. Riparian Corridor benefits: improve habitat for wildlife (food and cover), filter pollutants. **(Root River SWCD)**
- Is there erosion on the ditch banks? What type of vegetation is on the ditch banks? (Trees, grasses, nothing?) What does the water look like? (Dirty, clear, algae?) Is the drainage ditch filled with sediment creating unstable conditions that could affect what is downstream at some point? **(Freeborn SWCD)**
- As this law does not change the shore land rule, and with Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider alternative practices. **(Dodge County/Dodge SWCD)**

- I am not aware of any evaluation tool that would identify the replacement value that a buffer strip provides. **(Carver SWCD)**
- BWSR tool in elink. **(Douglas SWCD)**
- Rosgen or equivalent methods can be used to measure bank stability; the MPCA uses an index of biotic integrity to measure biological attributes; DNR should be consulted for methods of estimating the benefits of riparian corridor attributes such as connectivity and width. Measurement of ecological services, if feasible, also might be used. **(Lower Mn WD)**
- MFU would support again referring to NRCS Field Guide. Also consider using data from Discovery Farms. **(Farmers Union)**
- Any tools employed to evaluate benefits of alternative practices should be user friendly for the LGU while yielding scientifically accurate and consistent results. The tools should not be an impediment to the potential use of alternative practices to comply with the law. **(Corn Growers)**
- {While the definition for “buffers” identifies functions that “protect water resources of the state from runoff pollution, stabilizes soils, shores and banks and protects or provides for riparian corridors, this question attempts to expand beyond the language of the law for alternative practices. It is inappropriate. In the context of alternative practices, the law clearly states that the standard to be achieved is the water quality protection that the required specific buffer width would provide for that water body next to that property. Speculation over what tools might evaluate bank stability and riparian corridor benefits are irrelevant to the context of the law.} **(Farm Bureau)**

Question 3: What other options, considerations and proposals should be evaluated in developing an effective means to determine if a proposed alternative practice would be permissible for meeting the buffer requirement of Minn. Stat. 103F.48?

- Given that “Cover Crops (340)” are an accepted Alternative Practice Option for Landowners”, would the combination of row crops and cover crops give the same protection as established perennial vegetation? **(Root River SWCD)**
- Maintenance requirements on proposed alternatives practices should be considered. **(Mille Lacs SWCD)**
- Would the alternative practice be serving the same purpose as if a buffer were present? Would it be enhancing the same water quality effects or better than the buffer would be? If yes the alternative practice would be permissible. Gully control should not be an alternative practice. Fields without gullies should be the baseline to start from. Need to determine if existing practices can count towards alternative practices or if they need to be new practices. Is the practice easily verified by SWCD staff? Should existing practices county or not? May need to recommend or require a minimum buffer in some cases. For example a 20’ buffer together with certain alternative practices to meet the requirement. **(Freeborn SWCD)**

- As this law does not change the shore land rule, and with Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider alternative practices. **(Dodge County/Dodge SWCD)**
- The only possible scenario would involve a piece of land where no water leaves the site, no wind erosion is possible, and the land use provides for equal or greater wildlife benefit...such a piece of land is likely not going to be in an area that needs a buffer strip in the first place. **(Carver SWCD)**
- If erosion rate is same or less as a buffer and as long as bank stability is addressed. Consideration also given to buffers as habitat corridors. **(Douglas SWCD)**
- The District is somewhat skeptical that effective alternatives to permanent vegetated buffers will be readily found. A grassed buffer is relatively permanent and easily identified for compliance purposes. An alternative should not only be technically equivalent to a grassed buffer, or better. It should also be judged according to ease of compliance evaluation and likely longevity. **(Lower Mn WD)**
- MFU's understanding was that if they are listed in the NRCS Field Guide they are eligible as long as they are following guidelines from that guide. **(Farmers Union)**
- As with evaluating exemptions for compliance considerations for alternative practices need to consider the purpose of Minn. Stat. 103F.48, Subd. 2 which is to (1) protect state water resources from erosion and runoff pollution; (2) stabilize soils, shores, and banks; and (3) protect or provide riparian corridors. Factors that affect the above are very complex and will be site specific depending on local topography, soils, tillage methods, nutrient management, grazing management, erosion control practices and other conservation practices currently in place. In some cases the presence of berms and spoil banks could impact the vulnerability of a waterway to runoff. These factors need to be considered and should reside with the LGU to make the determination whether the alternative practice complies with the law. Processes for considering alternative practices should be practical, predictable, and use readily available information. Alternative practices should not be the exception to the law as there are many alternative practices that may meet or exceed the water quality benefits of riparian buffers depending on the site conditions. **(Corn Growers)**
- If a berm exists, or ditch bank slopes up, it is likely a buffer will have little function as a filter (i.e. buffer intakes or side inlets along with upland treatment). **(Lac Qui Parle SWCD)**
- {The law, Minn. Stat. 103F.48 provides the answer to the question of what "proposed alternative practice would be permissible for meeting the buffer requirement."}

Based on the provisions of this law, a landowner may avoid the requirement of a buffer through implementing alternative riparian water quality practices, or a combination of structural, vegetative, and management practices, based on the Natural Resources Conservation Service Field Office Technical Guide or other practices approved by the board. Included in these practices are retention ponds and alternative measures that prevent overland flow to the water resource.

The standard to meet by an alternative practice is the water quality protection that the required specific buffer width would provide for that water body next to that property. Along with the alternative practices being selected from the Natural Resources Conservation Service Field Office Technical Guide or other practices approved by the board, practices can also include retention ponds or alternative measures that prevent the overland flow to the water resource.

The law does not authorize any entity to evaluate or develop any effective means for determination if a proposed alternative practice would be permissible. BWSR should not assume for itself this ability to designate themselves such authority. } **(Farm Bureau)**

D. Comparable Water Quality Benefit:

- The definition should be consistent with how the water quality benefit of riparian buffers are defined. Resources such as the FOTG and The Agricultural BMP Handbook for Minnesota, September 2012 can be used as a guide to determine water quality benefits of alternative practices compared to the riparian buffers recognizing that the magnitude of benefits for any practice (including riparian buffers) depends on site-specific conditions related to soil type, topography, tillage management, etc. In some cases the alternative practice may be more effective than the riparian buffer defined by law. **(Corn Growers)**

Question 1: How should “comparable water quality benefit” be defined?

- Benefits received that are equal or greater than those received from the required buffer width. **(Mille Lacs SWCD)**
- Local authorities should use scientifically defensible, practical methods to evaluate buffers and alternative practices. BWSR should provide expertise, per their powers and duties. **(Mn Ag Water Res Center)**
- It is defined as the level of water quality in which the practice that is established is producing water quality and how does that water quality relate to as if there was a buffer strip in place. Is it enhancing the water quality more or less? Use BWSR filter strip pollution reduction estimator or approved equivalent to determine pollution reduction. Alt practice(s) need to meet or exceed those amounts. Amounts of P, N, and sediment with consideration to other pollutants such as bacteria and contributing factors such as quantity and time of water runoff. **(Freeborn SWCD)**
- As this law does not change the shore land rule, and with Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider alternative practices. **(Dodge County/Dodge SWCD)**
- The purpose of a buffer is to slow down water enough to allow sediment particles to drop out of suspension before reaching a watercourse. The comparable water quality benefit of an alternative practice should be equal or greater than the sediment and phosphorus benefit created by a buffer. **(Cottonwood SWCD)**
- This is another difficult question. The newest legislation includes - Included in these practices are retention ponds and alternative measures that prevent overland flow to the water resource. A key word here is “prevent”, in most cases with heavy soils it will be infeasible to prevent overland flow to the water resource for a large storm event. Most water rule requirements include showing no negative impact for the 100 year storm event. **(Carver SWCD)**

- Running erosion rate equivalents or looking at source of water quality concern. Site specific features. **(Douglas SWCD)**
- Water quality is defined with -reference to chemical, biological and physical attributes. A 50-foot buffer provides runoff filtering and uptake (chemical); shading of water and soil and bank stability (physical); and habitat for aquatic insects. Comparable water quality benefit should be evaluated for all three dimensions. **(Lower Mn WD)**
- MFU supports local authorities determining that through using accepted scientific measures. **(Farmers Union)**
- {Minn. Stat. 103F.48, does not offer a definition for “comparable water quality benefit,” except to say that an alternative practice would need to “provide water quality protection comparable to the buffer protection for the water body that property abuts.” Whatever “water quality benefit” a specific width of buffer for that specific property would provide is the definition for comparable. The definition is determined on a site-specific basis and is linked to the outcome for water quality that a buffer of appropriate width for that property will provide.} **(Farm Bureau)**

Question 2: How should a proposed alternative practice be evaluated to determine if it meets the “comparable water quality” definition?

- It should be evaluated and determined if it is serving the same purpose or is enhancing the purpose of a buffer. If it is serving as the same purpose or if it is enhancing the buffer then it would meet the comparable water quality. Use BWSR pollution reduction estimators or equivalent approved estimators to determine pollution reduction of Alt practices. **(Freeborn SWCD)**
- As this law does not change the shore land rule, and with Dodge County not planning on changing/weakening their shore land ordinance, there is no need to consider alternative practices. **(Dodge County/Dodge SWCD)**
- The new PTMapp sounds promising on helping to assess a project’s impact on sediment, nitrogen, and phosphorus reduction. If that can be estimated on an alternative practice and an appropriate buffer can be calculated for the same field, then you can possibly compare the two. **(Cottonwood SWCD)**
- SWCD staff should evaluate the proposed alternative practice BEFORE it is approved as an alternate to a buffer. If the SWCD does not have the technical capacity to review and approve the proposed alternative practice, BWSR should provide input to the SWCD Board for approval or denial. **(Carver SWCD)**
- Look at both water quality and habitat **(Douglas SWCD)**
- A USDA or SWCD conservation technician would need to conduct a site visit. Evaluation should be based on the field office technical guide and other objective methods of comparing chemical, physical and biological attributes of water quality. **(Lower Mn WD)**
- MFU supports the use of alternative practices being used properly that are listed in the NRCS Field Guide. MFU supports local decision making in determining if that is occurring and

working with the landowner in a reasonable timeframe if they deem the practice is not to correct the situation. **(Farmers Union)**

- Use of evaluation tool such as SAM. **(Lac Qui Parle SWCD)**
- {It should be clearly understood that the board is only able to “evaluate” those proposed alternatives which are within the scope of authority of the board for determination of “other practices.” Those alternative practices that are based on the Natural Resources Conservation Service Field Office Technical Guide, retention ponds and alternative measures that prevent overland flow to the water resources are not subject to evaluation nor are there provisions which grant authority to anyone for determinations of “comparable water quality.” **(Farm Bureau)**

E. Temporary non-vegetated due to perennial crop rotation

- The use of perennial crops is an important management option provided under the buffer law. Perennial crops, whether grown for livestock feed, biomass energy or other uses, may require periodic rotation. Research into new perennial crops and the associated management practices is ongoing. At a minimum, we understand this exemption to allow for appropriate termination method associated with a perennial crop, allowing for farming practices as needed to subsequently re-establish needed buffers. This may include the establishment of another perennial crop if desired by the landowner. Landowners should work with local authorities to determine appropriate practices during the transition period, possibly the seeding of a closely-seeded crop during the fallow period. **(Corn Growers)**

Question 1: What are acceptable practices for perennial crop rotations (i.e. sod, alfalfa etc.)?

- Seeding with no-till drill. If tillage is required, done before June 1st and seeded within two weeks after. Mowing. **(Mille Lacs SWCD)**
- The use of perennial crops is an important management option provided under the buffer law. Perennial crops, whether grown for livestock feed, biomass energy or other uses, may require periodic rotation. Given that much research is underway to explore new perennial crops, acceptable practices relating to various perennial crops are largely unknown. At a minimum, we understand this exemption to allow for termination of a perennial crop as appropriate for that crop, allowing for farming practices as needed to subsequently re-establish needed buffers, including, if desired by the landowner, another perennial crop. Landowners should work with local authorities to determine appropriate practices during the transition period, possibly the seeding of a closely-seeded crop during the fallow period. **(Mn Ag Water Resources Center)**
- The buffer can temporarily not be vegetated if in a perennial crop rotation such as alfalfa, perennial crop, or plant seeding. It should not go long periods of time without being vegetated. Mowing and haying should be permitted. If reseeding is needed and tillage is needed to accomplish that it shall be seeded at the next seeding window as per BWSR seeding dates. Recommend limiting tillage. Do we want to allow livestock grazing? May need to stipulate how often it can be tilled and reseeded (ex. Only once out of 4 years). Coordinate tillage and seeding so that it can be seeded and revegetated within one month. **(Freeborn SWCD)**
- Acceptable cover would include perennial plants/cover including hay, alfalfa, and sod. **(Dodge County/Dodge SWCD)**

- Allow alfalfa on the first seeding and when it goes to grass or is no longer a viable alfalfa crop then it must stay grass, no re-planting. **(Cottonwood SWCD)**
- Sod should not be considered a perennial crop because it is going to be removed – leaving the soil bare and exposed. Alfalfa could be acceptable if it is part of a mix of perennial grasses. Reseeding alfalfa into an old alfalfa stand usually results in poor results because of autotoxicity of disease and pests from the old stand. Additional research and guidance on the use of cover crops as a perennial cover should be provided by BWSR. **(Carver SWCD)**
- Cover crop if corn or beans in rotation, landowner will need conservation plan to follow up on compliance. **(Douglas SWCD)**
- Soil disturbance and destruction of ground cover should be minimized. Fall application of glyphosate followed by no-till spring seeding is ideal for re-establishing alfalfa and other deep-rooted perennial grasses and legumes. Inter-seeding into an existing stand is another option. **(Lower Mn WD)**
- MFU membership is clear that an annual forage that they are able to use for a productive hay or bio energy crop is a viable option that may include alfalfa and other grass mixes suitable for hay production. **(Farmers Union)**
- {The law does not contemplate what may or may not be “acceptable practices for crop rotations.” It is also inappropriate to offer a perception that someone or entity has the authority to make determinations of being “acceptable.”

Unless the buffer areas are enrolled in a federal or state conservation program, with the stipulations required for those programs, or the right of way isn't acquired through the redetermination of benefits by a drainage authority, landowners are providing their private property for the buffer.

There are also expending their funds for perennial seed as well as paying the costs for management requirements of weed control and should be able to make necessary decisions for rotations.} **(Farm Bureau)**

Buffer Enforcement and Compliance

- {The board has limited scope and legislated authority for penalty enforcement as it relates to buffers. We challenge BWSR to reflect this scope and limitations as opposed to attempting to exceed authority and feign powers not provided through law.} **(Farm Bureau)**
- All parties have expressed their confidence that landowners will comply with the buffer requirement voluntarily, especially if federal or state money is available to subsidize the cost. That does not mean that an effective enforcement system does not have to be created. At least part of the motivation for the new law was the sense that existing enforcement mechanisms, e.g. county attorney lawsuits or criminal charges, were not working and were not consistent. Hence, the decision was to develop a plan for administrative penalty orders (APOs).

The buffer statute, Minn. Stat. § I03F.48, is an attempt to encourage local enforcement but still provide for the possibility of state enforcement when necessary. Local

governments who wish to take on that responsibility need to develop their own APO plan and adopt it by ordinance or rule. The 2015 statute did not contain clear statutory language for any such plan, but the 2016 direction to BWSR to create its own plan, 2016. Minn. Laws ch. 85, strongly suggests that local plans should be at least as effective as the BWSR plan that gets developed.

The administrative penalty order plan developed by the DNR for water appropriation cases in 2015 is an appropriate place to start, and can help with at least identifying the important topics.

http://files.dnr.state.mn.us/input/mgmtplans/water_appropriations/final_apo_plans.pdf

Elements should include:

A statement about why compliance is important, why riparian buffers are valuable. The MPCA's fact sheet on buffers <https://www.pca.state.mn.us/water/buffers-improve-water-quality>, could be helpful.

- A description of outreach and education efforts, and available financial incentives,
- Amount of penalty, including exaggerating and mitigating factors.
- Content of order.
- Statute of limitations.
- Notice of violations and opportunity to take corrective action.
- APO and corrective action orders.
- Compliance verification.
- Right to appeal.
- Penalties due, interest assessed.
- Collection of penalties.
- Repeat violations or failure to comply with corrective actions.
- Reporting, monitoring and documentation.

Philosophically, any APO plan should try to achieve three principal goals:

1. Deterrence. Violators must *not* be able to retain an overall advantage from noncompliance. Those who comply cannot be placed at a competitive disadvantage. Ultimately, both potential violators and the general public need to believe that penalties will place a violator in a worse position than those who comply in a timely fashion.

2. Fair and equitable treatment of regulated community. A good plan will have the right combination of consistency and flexibility. The goal should be to set penalties at appropriate deterrent levels, and then have a set of exaggerating and mitigating factors in place to make adjustments, e.g. degree of willfulness, history of violations, degree of cooperation, ability to pay, other unique factors.

3. Swift resolution of disputes. The plan should include incentives to settle and institute prompt remedial action, and disincentives to delay compliance.

The corrective action provisions in the statute, where landowners who get into compliance can have any penalty risk removed, should provide the incentive necessary to get prompt compliance.

The \$500 limit and the 11 month grace period in Minn. Stat. § 103B.101, subd. 12a may make it difficult to get penalties high enough to have a deterrent effect. There may be no realistic option other than to simply assess repeated \$500 penalties against noncompliant landowners once the grace period expires, since the option of developing a range of penalties that better reflects the economic benefit of noncompliance or the cost of the harm may not be available. If the penalties are too low to be a deterrent, then, ironically, the likelihood that local governments and BWSR will end up tangled in undesired enforcement proceedings will just go up.

The other issue to address is reporting on violations. SWCD's are mandatory reporters under the statute, but all other government agents who observe violations should be directed or incentivized to report as well. Reports should be shared with the relevant local enforcement authorities and with BWSR. Citizens who are aware of violations should also be encouraged to report just as they would any other violations of the law. **(MN Center for Environmental Advocacy)**

- \$500 penalty for noncompliance, is that 1 time, yearly, daily? Per landowner, per field, per farm? **(Stearns SWCD)**
- Approaches that LGU have used to implement existing buffer programs should be provided as guidance as they have demonstrated a high degree of compliance. Buffer enforcement and compliance should reside solely with the LGU. The role of BWSR should be limited to facilitating local efforts. **(Corn Growers)**
- What happens if landowner has compliance letter and neighbor appeals that the buffer doesn't meet buffer law? If county does APO, does appeal of APO go to BWSR or County Board of Adjustment first and then possibly to BWSR. **(Douglas SWCD)**
- We are concerned that the counties have now been given an option to opt out of enforcement with the burden then falling to BWSR. Is BWSR prepared if many counties take that option? Will BWSR be adding staff so to avoid a back log of potential violations? **(Wright SWCD)**

Question 1: What models or enforcement structures should be evaluated and considered for the Buffer Law?

- If county is enforcing – develop policies and include in the county ordinances. If by a watershed, in their rules and guidelines. **(Yellow Medicine SWCD)**
- Option 1 or 2A are the two best enforcement structures. **(Mille Lacs SWCD)**
- The local enforcement option is the only viable option. BWSR should discontinue the effort to expand its authority and instead focus on facilitating local efforts. **(Mn Ag Water Res Center)**

- Models or enforcement structures to consider would be the WCA model of enforcement with a local TEP. **(Dodge County/Dodge SWCD)**
- Having worked with the RIM compliance structure, this seems to be a way to include landowner input in the compliance process as well. There is a transmittal form and a formal action plan with it for the landowner to follow. Under the septic rules/ordinance, we have a Notice of Violation that we send out that states the situation, findings of fact, the violation in question, and then the timeframe to follow and if not followed it will lead to civil action by the county attorney. The septic enforcement structure leaves it mainly up to the LGU with no homeowner/landowner input. It seems that something similar to the RIM enforcement structure might be better since a landowner may want to try and implement an alternative practice that may be better for the environment and his farming practice too. **(Cottonwood SWCD)**
- The WCA model seems to work for most situations, however the appeals process can sometimes be too lengthy. This new buffer law should be an opportunity to develop a new structure that utilizes the authority granted through the APO process. **(Carver SWCD)**
- Simpler the better. **(Douglas SWCD)**
- A systematic approach that covers an entire county is needed. Using Dodge County as an example of successful implementation of its shoreland ordinance, the process proceeds as follows: 1) Use aerial imagery to identify fields where buffers appear to be needed, but are lacking or inadequate. 2) Follow-up with a site visit to determine whether the initial assessment was accurate. 3) If so, delineate with flags the 50-foot area requiring a buffer. Inform the land owner of buffer requirements, timelines for compliance, and sources of technical assistance. 4) Follow up as needed with county/SWCD staff until compliance is achieved. Compliance in Dodge County is about 96%. N cases have gone to court in Dodge County following this procedure, to my knowledge. After a few initial years, the county conducts areal assessments and follow-up inspections on half its townships every year. **(Lower Mn WD)**
- FMU believes this is clearly stated in SF 2503 and supports that process being followed. **(Farmers Union)**
- Funding to Counties. Concern regarding staff time. **(Isanti County)**
- {The most expansive details related to “enforcement” for the ‘Buffer Law’ is found in 103F.48 subdivision 7 and is entitled “Corrective actions.” The ‘model or enforcement structure’ outlined by this section of state law directs that SWCDs determine whether a landowner is out of compliance.

As a result of the 2016 changes to 103B.101, subdivision 12a, BWSR is required to adopt a plan which contains the procedures for the issuance of administrative penalty orders, whether the board will use this authority or if local government (counties or watershed districts) qualify to use the authority.

Through the definition section of 103F.48, subdivision 1, empowerment of counties or watersheds “with jurisdiction” is based on determination of the board that the local units of government have adopted rules, ordinances or official controls.

When SWCDs make a determination of a landowner not being in compliance they are required to notify the county or watershed district with jurisdiction. Changes to the law made in 2016 also require that the SWCD include the board with the notification for noncompliance.

The county or watershed district with jurisdiction or the board must provide the landowner with a list of corrective actions needed to come into compliance along with a practical timeline to meet the requirements of the law. When counties or watershed districts with jurisdiction assert their authority, they are required to copy the board of the corrective action given to the landowner.

Counties or watershed districts exercising jurisdiction under this subdivision are required to notify the board of their decision to assume jurisdiction as well as the provisions they will use. The options available to counties or watershed districts for exercising their authority include the administrative penalty authority of 103B.101, subdivision 12, local ordinance rule or other official control mechanism.

In the event that the local authorities plan to use 103B.101, subdivision 12 the county or watershed district must adopt a plan for the administrative penalty that is consistent with the plan that the board prepares to direct requirements on the local authority.

Minnesota Farm Bureau supports local county governments enforcing the state buffer requirements and believe that local ordinances and requirements which achieve the state-mandated buffer specifications. Given the reporting process which involves the board there will be opportunity to monitor whether more stringent enforcement mechanisms are required. There should be a demonstrated need to have state authority over this section of law prior to adoption of a state entity assuming a greater role in the enforcement structure. } **(Farm Bureau)**

Question 2: Will the options presented below effectively address any circumstances of noncompliance?

- We are not sure how to answer this question. **(Yellow Medicine SWCD)**
- Yes, as far as I can tell it will address any potential noncompliance issues. **(Mille Lacs SWCD)**
- Should be in violation before the first day of 11th month. Too long to wait and complaints can be forgotten and complainants can get frustrated. Need to have some way of communicating what areas are doing alternatives. Otherwise the public sees a non-buffered ditch and thinks the landowner is not in compliance and the law is not enforced. It needs to be clearer if the county or watershed district has dibs on enforcing. **(Freeborn SWCD)**
- Yes, SWCD's are effective at working with landowners to install conservation practices in order to stay in or get into compliance with laws. **(Dodge County/Dodge SWCD)**
- ??There will likely be cases across the state that don't fit perfectly with any of these scenarios. BWSR should evaluate the workload that may be placed on the agency if many LGU's defer enforcement back to the state. **(Carver SWCD)**
- Yes with county giving APO. **(Douglas SWCD)**
- Maintaining a 50-foot buffer along a rapidly eroding stream bank can be challenging. Usually these areas are isolated at certain bends in the river. Multiple site visits by county and SWCD staff, and ongoing communication with land owners, may be needed. **(Lower**

Mn WD)

- MFU believes that enforcement laid out in SF2503 will bring the majority of landowners into compliance. **(Farmers Union)**
- The timeline for compliance might be difficult for landowners and/or Counties. **(Isanti County)**
- {Minnesota Farm Bureau supports local county governments enforcing the state buffer requirements and believe that local ordinances and requirements which achieve the state-mandated buffer specifications. Given the reporting process which involves the board there will be opportunity to monitor whether more stringent enforcement mechanisms are required. There should be a demonstrated need to have state authority over this section of law prior to adoption of a state entity assuming a greater role in the enforcement structure.} **(Farm Bureau)**

Question 3: What potential problems might the options discussed here present to BWSR, local governments and landowners, and what actions should be considered to address these problems?

- If BWSR handles, they would potential need to hire additional staff do to the increased workload and in order to complete in a timely matter. If the county and/or watershed handle it they also would have added workload and could potential need to hire additional staff if landowners do not participate. Landowner: potential financial burden on buffer requirement with no CRP or CREP financial assistance due to acre limit. Therefore, in all instances there may need to be additional funding to help the authority to enforce law and landowner should be compensated. **(Yellow Medicine SWCD)**
- Option 2B may result in an overload of BWSR responsibility that makes it hard to perform the job effectively. Option 2A may result in miscommunication from having 3 agencies involved in the same process. **(Mille Lacs SWCD)**
- If the county has not enforced the shore land ordinance in the past without repercussions, they may view this law the same way. Does BWSR plan to hire an enforcement specialist or the like? Many counties may see delegation to BWSR as the easy thing to do. FSA and NRCS need to be involved so that they do not tell landowners of expiring CRP contracts on public waters that they can take it out of CRP and farm it. Communication is needed at state and county level. **(Freeborn SWCD)**
- Potential problems include the timeframe of the A.P.O. and how often it will be assessed. **(Dodge County/Dodge SWCD)**
- Some concern is the responsibility of the SWCDs and other LGUs to track progress towards compliance and enforce future compliance issues without accurate and timely aerial photos. There is a lot of ground to cover and a lot of buffers aren't readily accessible from a road, having aerial imagery (updated) would be helpful in enforcement. This also means that offices will likely need to invest in the software like ArcMap to run scenarios and track progress effectively. **(Cottonwood SWCD)**

- Sometimes it is better to keep the local enforcement away from local politics. However, the workload placed on BWSR could be huge if LGU's defer enforcement back to the state. The APO option could be an acceptable solution, but details will need to be ironed out long in advance of the actual enforcement. **(Carver SWCD)**
- Will BWSR step over county and go right to landowner, like MPCA does with feedlot issues. **(Douglas SWCD)**
- Cases of technical quandaries or uncooperative land owners are certain to result in delay of buffer implementation. They will consume time of local and state staff and potentially cause publicity which might negatively impact public acceptance of the buffer program. Counties which have been enforcing their shoreland ordinances, such as Dodge, Olmsted, Goodhue, Winona, Mower and perhaps others, should be asked to help identify problems likely to occur, and how they might be prevented or readily resolved. **(Lower Mn WD)**
- MFU believes that guidance should focus on education and implementation of enforcement language in SF 2503 and that there will be few problems for enforcement and compliance. **(Farmers Union)**
- The financial burden on the landowners. **(Isanti County)**
- {The greatest risk of potential problems is the inappropriate over- reach of BWSR exceeding the authority of state law and alienating landowners from cooperative actions to implement the requirements of the state- mandated buffer law. Minnesota Farm Bureau supports local county governments enforcing the state buffer requirements and believe that local ordinances and requirements which achieve the state-mandated buffer specifications. Given the reporting process which involves the board there will be opportunity to monitor whether more stringent enforcement mechanisms are required. There should be a demonstrated need to have state authority over this section of law prior to adoption of a state entity assuming a greater role in the enforcement structure.} **(Farm Bureau)**

Question 4: What other options, considerations and proposals should be evaluated in developing an effective means to ensure compliance and enforcement of the buffer requirement of Minn. Stat. 103F.48?

- Permanent funding to SWCD's for conducting site inspections will be needed to make sure that all landowners are in compliance, similar to Easement Delivery Grant based on miles of public waters, public ditches, etc. **(Yellow Medicine SWCD)**
- The SWCD will be the ones meeting with the landowner so the landowners will likely come to the SWCD with questions when they receive a corrective action notice. It would be beneficial to all parties if there was an effective communication process between the SWCD, County and BWSR would be helpful. Under option 2A landowners shouldn't have to contact 3 agencies trying to get answers. **(Mille Lacs SWCD)**
- Will a landowner be expected to destroy standing crops if they are found to be out of compliance? **(Freeborn SWCD)**

- It will likely become landowner complaint based when they see a neighbor not following the rules. It may also be a job for township officials as well. **(Cottonwood SWCD)**
- ?? I am not familiar with the intricacies of the APO system...hopefully it is a simple process. Otherwise the process could drag out and become an unmanageable workload. Efforts should be made by state agencies to have farm organizations support and offer encouragement to their members to act swiftly to come into compliance with the new law. A statewide effort to have compliance with the buffer law with few enforcement cases would put a positive viewpoint on the farming community. (Carver SWCD)
- Would appeal be through local Board of Adjustment first and if further appeal to BWSR. **(Douglas SWCD)**
- Public information campaigns at the state and local levels can help to adjust expectations to the new buffer requirements. This should be supplemented with direct communication with land owners (mail, public meetings, visits) so that they understand the rationale for the buffer program, and see that they are not being singled out but are being treated the same as other landowners. **(Lower Mn WD)**
- Follow language in SF2503. **(Farmers Union)**
- Provide funding to Counties to ensure they have proper staffing for the compliance of these laws. **(Isanti County)**
- { While we support the provisions of state law in regard to compliance and enforcement we also wish to repeat our contention that the authority and responsibility for oversight be maintained at the local level.

County government or watershed districts should follow local ordinances or requirements to meet the provisions of the state buffer law mandate. } **(Farm Bureau)**

Local Resource Riparian Protection

- The identification of local resource protections relating to other waters is solely a local function. At most, BWSR should simply provide its expertise in support of local water planning. State agencies should play no role in the process of identifying “other waters” or in determining appropriate protection. BWSR has no authority to seek justification from local authorities. Local authorities should be allowed to incorporate this new requirement into their local water management plan over a period of time long enough to facilitate timely update of plans. **(Mn Ag Water Resources Center)**
- General comments and questions: One concern I have is the consistency of how this completed across SWCD boundaries. All SWCD’s should be working from the same criteria. How will this work as we move to one watershed one plan? I would think these maps would need to be in those plans. However if the maps are produced in an inconsistent manner across the watershed it will not be a very useful part of those plans. **(Grant SWCD)**

- The identification of watercourses to be included in the local water management authority's plan is solely a local function. A potential role for BWSR is to provide expertise in support of local water planning. State agencies do not have the authority to have an active role in the process of identifying, reviewing, or approving "other waters" identified by local authorities including the absence of any such waters. **(Corn Growers)**
- The 35-year-old public waters inventory or protected waters inventory maps do not catch all waters that meet the statutory definition of "public waters." Minn. Stat. § 103G.005, subd. 5. And the DNR has so far taken the position that their new buffer maps will not include all the waters that are on the PWI maps, but only a subset with non-default shoreland designations.

That means the SWCD process of identifying additional waters to be incorporated in local water plans (ideally one watershed/one plan plans) takes on additional significance. MCEA's view is that the focus of the SWCD effort should be on identifying waters that meet the statutory definition of "public waters" but which are not included in the DNR maps defining where 50-foot average buffers will be required. Ultimately, that information should be gathered by DNR and used to update or connect the public waters inventory itself.

To the extent the SWCDs can identify, for example, private ditches that are exempt from the mapping process or other watercourses that are not "public waters" but are part of public drainage systems benefited areas, that can help to get those ultimately covered by at least a one-rod buffer requirement. Nevertheless, MCEA recommends concentration on getting water bodies, watercourses, and public water wetlands that meet the "public waters" definition into the 50-foot buffer requirement, and ultimately into the PWI. **(Mn Center for Env Advocacy)**

Question 1: What criteria should an SWCD consider when developing a summary of "other waters"?

- Criteria could include the length of protected streambank and size of drainage area (especially those larger in relation to streams protected in the law already). It is our understanding that every other water body that is not a public water or public ditch should be identified as "other waters" however this does not mean that a buffer is needed per the law. **(Yellow Medicine SWCD)**
- Whether or not there is base flow of tributary water. **(Root River SWCD)**
- The potential "other waters" should be waters that are being harmed. They should be waters where buffers will help protect our water quality. Waters specifically vulnerable to land use changes (not protected by old laws/rules...shoreland, WCA, floodplain etc.) These could be areas that currently have a buffer but could be torn up and converted into farmland, housing, etc. **(Mille Lacs SWCD)**
- Areas currently mapped as Intermittent streams by USGS or county soil survey. Stream or natural drainages that are tributary to a public water and have 200 acres, or more of contributing watershed. Wetlands over 10 acres. **(Grant SWCD)**
- Local impairments and resource concerns. Local priorities. Watersheds that have proportionately high contributions of pollutants. Local support and current levels of BMP adoption. Conservation programs available **(Freeborn SWCD)**

- The SWCD's should consider the upper portions of the watershed where there is perennial flow, especially near springs. **(Dodge County/Dodge SWCD)**
- A bed and a bank will require a buffer, similar to the wording in the original buffer law proposal by the governor. **(Cottonwood SWCD)**
- This is a difficult question, there has been little information provided on the legislative intent of "other waters". Any surface water connected to a public water or public ditch would benefit from additional protection measures (this would likely be everything except intermittent flow systems or stagnant water such as ponds). Was it the legislative intent that "other waters" should be identified as a local input process for identifying additional buffer areas? Was "other waters" meant to identify Prioritized Targeted Measurable areas for other BMP's? Was "other waters" meant to be tied to TMDL studies or 1W1P studies? If no additional legislative input is available, BWSR should try to standardize a process for SWCD's to identify other waters in a consistent manner across the state. However, this may not be worth a large effort if follow up to "other waters" is left to local control and local politics. **(Carver SWCD)**
- By a local technical committee and local landowners or if identified as a source of pollution that buffering will fix. **(Douglas SWCD)**
- We understand that "other waters" are in addition to those identified by the DNR as requiring a permanent buffer. Criteria should be based on recurring water quality impacts that could be reduced in severity with a riparian buffer. For example, the list of protected waters currently excludes the uppermost reaches of a stream – those with a contributing catchment area of less than two square miles. Where such reaches are generating significant sediment and nutrients, or where a valued downstream water resource is threatened or impaired, local authorities could add such waters to the list of those requiring a buffer. Privately owned drainage ditches within the benefited area of a public system form another category that can be reviewed for water quality impacts. For example, if downstream public ditches are being destabilized by higher flows since the addition of private ditches, certain of those private ditches could be identified as requiring a buffer to partially reduce surface runoff. Biological, chemical and structural aspects of water quality should be considered as candidates for inclusion on a local list are examined. **(Lower Mn WD)**
- MFU believe that this is a local decision and should be implemented as just that. MFU encourages SWCD's when visiting landowners about compliance with new buffer law that this is a good time for them to discuss other waters with a landowner and what their program options for working with those waters on their property. **(Farmers Union)**
- Priorities identified in existing water plans, TMDLs, etc. **(Lac Qui Parle SWCD)**
- "Other waters" should be those that are sensitive to surrounding land use and are not included in the DNR public waters. Could private ditches that feed to a public ditch be considered for "other waters"? This is obviously going to be a large contribution of the pollutants into a public ditch system. **(Wright SWCD)**
- {The law requires that the determination of local water resource protection be carried out in consultation with local water management authorities. Given this emphasis on local in the law and the nature of the line of questioning presented here, there is an intention to

expand beyond law in creating a state dictate of which “other waters” local entities shall incorporate into their water plans. The exhibited top-down philosophy is a serious concern and evidence of an unwillingness of BWSR to comply with the limitations of state law. The criteria that an SWCD should consider, should be established “in consultation with local water management authorities.” We would encourage that this be established through a public process, allowing local citizens the opportunity to be part of the process.} **(Farm Bureau)**

Question 2: What if any public review process by state agencies should be a part of the development of the summary of watercourses?

- The public and or state agencies should have the opportunity to review any “other waters” addressed in the water plan through the regular public comment process. **(Yellow Medicine SWCD)**
- Landowners affected by waters identified as “other waters” should be notified so they can provide comments to be taken into consideration before officially adding it into the water plan. Comments need to be considered by those downstream of the potential “other waters” because they are also affected. The agency in charge of enforcing waters identified as “other waters” should also be able to review and provide input before it is officially added into the water plan. Comments need to be considered by those downstream of the potential “other waters” because they are also affected. **(Mille Lacs SWCD)**
- State agencies could review as part of the water plan amendment process or one watershed one plan process. **(Grant SWCD)**
- Provide constructive criticism and review for clarity. Should not have to be approved by any state agency. **(Freeborn SWCD)**
- The state should allow for public hearings in each county, preferably before the SWCD board meeting. **(Dodge County/Dodge SWCD)**
- This is county jurisdiction and the state agencies should not be allowed a public review **(Cottonwood SWCD)**
- Since the follow up to this is left for local decision, I do not see a need for state agencies to be involved in a public review process. **(Carver SWCD)**
- Agencies will be included in the local technical committee. **(Douglas SWCD)**
- Since the inclusion of these waters is based on local considerations, state agencies need not review the lists unless challenged by local landowners or other stakeholders. **(Lower Mn WD)**
- Is there time for this? **(Lac Qui Parle SWCD)**
- {Given the absence of direction or authorization in the law to provide “state agencies” to be involved as part of the development of the summary of watercourses, we assert that legislators believed that local water resources should be the purview of local water management authorities. There should be nothing required by state agencies beyond receipt of their copy of the local water plan’s amendment. Violation of this local prerogative by an intrusive state entity, especially

BWSR, should be met with the strongest response and rebuke. There is no justification for BWSR to be in anyway involved with even asking the question here.} **(Farm Bureau)**

Question 3: In what format should the “other waters” map(s) and/or summary of “other waters” be provided to the water planning authority?

- The additional streams should be mapped in high detail and be referenced with a statewide recognized identification. Could the DNR add the other waters to their map, so map can be all inclusive? **(Yellow Medicine SWCD)**
- An official paper map along with an amendment to the DNR buffer map. **(Root River SWCD)**
- They should be mapped on ArcMap or a similar app. **(Mille Lacs SWCD)**
- In digital format **(Grant SWCD)**
- The “other waters” map should be provided to the water planning authority in either a PDF to be included into the county comprehensive water plan, and/or a GIS shapefile. **(Dodge County/Dodge SWCD)**
- Digitize the layer on ArcMap with attributes on the buffer width requirements and why/how the determination was made. **(Cottonwood SWCD)**
- It would make sense for a map and short description of why the area is being recommended be part of the submittal to the water planning authority. **(Carver SWCD)**
- Digital shape file, map, list, or clear definition of other waters. **(Freeborn SWCD)**
- Digital map. **(Douglas SWCD)**
- Sufficient locational data to allow identification. Maps with GIS coordinates, and added reaches highlighted, seems like a sufficient amount of information. **(Lower Mn WD)**
- MFU believes that this is a local water decision. MFU also believes that landowners should be given a reasonable time to make changes to practices dealing with "other waters" if locals decide changes are required. **(Farmers Union)**
- Statement of fact – maybe all identified are included on the map. **(Lac Qui Parle SWCD)**
- {The format by a local SWCD for reporting of the summary of “other waters” should be as determined appropriate through the consultation with local water management authorities. There is no justification for BWSR to be in anyway involved with even asking the question here.} **(Farm Bureau)**

Question 4: If no additional “other waters” are identified what justification should be required?

- All need to be added, no justification needed because we do not have to put a buffer on the “other waters”, just need to identify them. If there is no other waters identified, then a statement should be included in the water plan. **(Yellow Medicine SWCD)**
- None, SWCD’s should not be expected to add in “other waters” simply because we can. “Other waters” should be a special circumstance type use. If additional other waters are found and it is

believed they should be added in, there should be a public comment period and documentation kept of the input received. **(Mille Lacs SWCD)**

- If no other waters were mapped, the SWCD Board of Supervisors should be required to attend a BWSR Board meeting and explain as part of the public record why they didn't believe any other waters in their SWCD would benefit from having a buffer. **(Grant SWCD)**
- None – local choice. Potentially they are in high compliance already or area has little cultivated land. The list of other waters must be incorporated into the local water plan. When the current water plan expires, can the list be removed? Can it be updated? **(Freeborn SWCD)**
- There should be no justification required if no additional “other waters” are identified. **(Dodge County/Dodge SWCD)**
- There shouldn't be a justification, it is a recommendation at this point from the SWCDs and if the counties choose not to have any other waters in their water plan then that's the way it is. **(Cottonwood SWCD)**
- An explanation from the SWCD why they feel that no additional “other waters” are needed, approved by the SWCD Board. **(Carver SWCD)**
- None needed and or lack of time to put together. **(Douglas SWCD)**
- That the official DNR map identifies all stream reaches and public drainage ditches where buffers are required, and that no additional sites have been found to justify inclusion based on water quality criteria. **(Lower Mn WD)**
- MFU does not believe that other than what locals decide there should be any. **(Farmers Union)**
- {As troublesome as BWSR seems to find the lack of authority provided by state law to dictate its desired results, there is no required justification necessary. Whatever local watercourses that are identified by the local SWCD through the consultation with local water authorities should be submitted and included in the local water management authority's plan. Copies of the plan amendment should be supplied to all agencies as required by the law.

The state's buffer law also provides BWSR with the ability to withhold SWCD funding if they don't carry out their assigned responsibilities to implement the buffer law, including submitting local water courses for inclusion in the local water management plan. If local authorities follow the required process for consideration and as a result determine to not identify other waters, it should be clear that BWSR will not have the authority to withhold funding. There should not even be a hint of an action taken by BWSR to over-reach statutory authority in suggesting a requirement for justification of what is or isn't identified.} **(Farm Bureau)**

Excessive Soil Loss Program

- With regards to the draft guidance on Soil Loss Program Implementation, we suggest that local authorities be provided with adequate flexibility to address the wide range of conditions found across the state.

Whatever model or enforcement structure is used, consideration should be given to conditions contributing to soil loss. Specifically, soil loss resulting from rainfall events exceeding expected 25-year, 24-hour rainfall volumes should be exempted from enforcement. SWCDs should instead use complaints received under these conditions solely as an opportunity to work with landowners and farmland operators to implement voluntary conservation practices.

We believe the guidance provided will not effectively assist local authorities in addressing excessive soil loss and advise BWSR to work with local authorities, empowering them to make related decisions without undue influence and pressure from state agencies.

BWSR faces a very significant problem as the agency continues to evolve into an all-out regulatory agency. The "SCWD/BWSR Path" should be eliminated and BWSR should focus solely on assisting counties with implementation. SWCDs also face the risk of becoming increasingly associated with regulation, further eroding their ability to deliver conservation assistance through traditional means. SWCDs can minimize this risk by very clearly delineating their role in the process as providing technical expertise and guidance in choosing appropriate conservation methods. SWCDs should investigate complaints fairly and work closely with landowners to identify suitable solutions. Referral to the county for enforcement should be a last resort.

We recommend revision of the current BWSR model ordinance for soil loss to incorporate changes that may be necessary due to new legislation, keeping in mind the BWSR role as helper, not regulator. **(Mn Ag Water Res Center)**

- The document "Minnesota Statutes Chapter 103F Soil Erosion Law: History, Perspectives and Recommendations (the "background paper") published by BWSR in 2014, provided helpful information for framing our comments. Particularly helpful were comments from county and SWCD officials in five southeast Minnesota counties on their experience with soil loss ordinances. We begin with some general observations before addressing the four procedural questions posed in the document "Minnesota Excessive Soil Loss Program Implementation."

By comparison with regulations affecting wetlands, feedlots and shoreland, the soil loss limits program developed in the mid-1980s has been rather lenient. Only five of 81 Minnesota counties adopted a soil loss ordinance, a prerequisite for implementing the program. Within these counties, the soil loss program played a limited role in addressing excessive erosion. Thus, the District welcomes the shift from an ordinance-based approach to a complaint-driven program which uses administrative penalty orders (APOs) for violations. The APO option should strengthen the Excessive Soil Loss Program if used judiciously along with technical assistance and cost-sharing of conservation practices through SWCDs.

Soil Loss Limits

The current soil loss rule (Minn. Rule 8400.4000-.4065) sets the erosion control threshold for participating counties at "soil loss tolerance" (T), defined as the maximum soil loss consistent with maintenance of soil productivity. This value varies from 1-5 tons/acre, according to soil type. The BWSR background paper suggests this approach might be discontinued or adjusted for three reasons. First, the

Department of Agriculture sets soil loss limits for highly erodible land at 2T for

conservation compliance. SWCDs and counties have commented that farmers with conservation plans based on this federal benchmark may be confused if the state rule follows another, stricter, threshold. Second, the equation used to estimate soil erosion has been modified. Erosion estimates using the revised equation tend to be lower than previous estimates. Third, since the mid-1980s public concern has focused more on water quality problems caused by soil erosion than on soil productivity. A level of T soil loss has little bearing on water quality.

These are all valid concerns. However, the District recommends retaining T as the maximum allowable soil loss in the state's revised rules. Federal levels for highly erodible acres were originally based on T, but increased to 2T based on political pressure. Since the mid-1980s soil conservation technology has improved, and the equation used to estimate soil loss gives more credit for practices such as conservation tillage. Farming profitably at T is likely more feasible today than 30 years ago.

It is very true, however, that the T level of soil loss has little to do with water quality. Often, a conservation plan based on T would permit higher levels of erosion than called for in river and lake restoration plans. This holds true in the Minnesota River basin, particularly in the Blue Earth and LeSueur River watersheds, which often account for half of the sediment in the main stem. The District supports the use of water quality-based erosion thresholds where called for by state-approved scientific studies, such as Watershed Restoration and Protection Strategy (WRAPS) reports.

"Point Source" Erosion

Knowledge gained from sediment studies in the Minnesota River basin suggests that field-average erosion thresholds may not address all excessive soil erosion. An example is erosion caused by the discharge of water through drainage tile or surface ditches into a plunge pool or ravine at the field's edge. This type of erosion accounts for a high percentage of sediment produced by smaller "direct tributaries" to the Minnesota River where fields abut wooded hills sloping into the Minnesota River valley. Thresholds for site-specific, "point source" or "catastrophic" erosion in Minnesota's Excessive Soil Loss Program are needed to ensure that these types of excessive erosion are not ignored. This might be accomplished through establishment of sedimentation limits and sediment control plans, as called for in the current rule.

The District supports comment #2 in the background document, where local governmental units call for "systematic assessments" of soil erosion. Reliance on randomly reported complaints alone is unlikely to make a big difference in area-wide erosion. Systematic assessment across the county might be accomplished by combining soil erosion assessment with regularly scheduled conservation tillage transects, with commitment of state funds to help cover the cost. **(Lower Mn WD)**

- MCGA suggests that local authorities be provided with adequate flexibility to address the wide range of conditions found across the state when implementing a soil loss program. Whatever model or enforcement structure is used, consideration should be given to addressing chronic excessive soil loss rather than acute, extreme event driven soil loss. Specifically, soil loss resulting from rainfall events exceeding expected 25-year, 24-hour rainfall volumes should be exempted from enforcement. SWCDs should instead use complaints received under these

conditions solely as an opportunity to work with landowners and farmland operators to implement voluntary conservation practices. (**Corn Growers**)

- From the directions proposed in the Draft Interim Guidance documents it would appear that BWSR's intentions are moving sharply to a punitive/regulatory model versus an educational, technical assistance approach and working cooperatively with landowners to address specific resource concerns. This tactical change is unfortunate and disconcerting.

There are also questions and uncertainty with regard to the implied authority that BWSR identifies for itself in the Overview of the Minnesota Excessive Soil Loss Program Implementation document.

Who Has Authority For Soil Loss Control?

A fundamental contention, that we believe should be recognized in ongoing considerations of systems and processes for oversight/control, is related to local authority over soil loss.

Minnesota Law 103F.405 provides for the authority of local government to adopt and administer Soil Loss Ordinances.

“103F.405 SOIL LOSS ORDINANCES.

Subdivision 1. Authority. Each statutory or home rule charter city, town, or county that has planning and zoning authority under sections 366.10 to 366.181, 394.21 to 394.37, or 462.351 to 462.365 is encouraged to adopt a soil loss ordinance. The soil loss ordinance must use the soil loss tolerance for each soil series described in the United States Natural Resources Conservation Service Field Office Technical Guide, or another method approved by the Board of Water and Soil Resources, to determine the soil loss limits, but the soil loss limits must be attainable by the best practicable soil conservation practice. Ordinances adopted by local governments must be consistent with a comprehensive plan, local water management plan, or watershed management plan developed or amended, adopted, and approved according to chapter 103B, 103C, or 103D.

Subd. 2. Agents of local governments. A local government that adopts a soil loss ordinance may enter an agreement with its agent allowing the agent to administer the functions and perform the duties of the local government as provided by sections 103F.401 to 103F.455.”

We also contend that by the language of Minnesota Law, dealing with enforcement (103F.421) makes local government – not BWSR – as being responsible. (**Farm Bureau**)

- Having reviewed the BWSR request for comments on various elements relating to implementation of Buffer and Excessive Soil Loss programs, I do not believe that BWSR has sufficient statutory authority to control the programs to the level which is proposed. Minnesota Statute §103F.401 grants authority to local units of government whether or not to adopt a soil loss ordinance. Once that decision is made, the local unit of government has the authority to decide how the program is run and enforced. BWSR's proposed implementation exceeds the statutory authority granted to it under Minnesota Statute §103F.415. BWSR should not be providing or advocating a single approach given the local controlling unit of government's authority. The authority granted to BWSR is to serve as a guide on how to run a program, not to dictate how a local governmental unit must run their program. The local unit of government should be given a list of things to consider when setting up a program, not a list of demands. Additionally, BWSR should not have a place in the enforcement of an ordinance passed by a local governmental unit. Each local governmental unit should be free to set up or to not set up a soil loss ordinance as provided under Minnesota Statute. BWSR should not be creating any rule which would

circumvent Minnesota Statute. BWSR's proposed implementation exceeds any authority granted to it in statute. **(Soybean Growers)**

- I know I am late to the party, but with my transition to BWSR I did not have time to look at the Draft Soil Loss Implementation guidance. I have a comment on the County Path and SWCD/BWSR Path. One thing that needs to be considered is often times these erosion issues are complex and involve many different practices with multiple landowners. I'm not sure how the 90 day requirement fits into this? Usually a plan is developed before State Cost Share Assistance is applied for. It would be abnormal in my experience to have a plan completed that quick? Maybe within 90 days the landowner could sign up for conservation planning assistance?

The other thing that should be considered is in many cases the landowners in the watershed may not have erosion on their properties, but are contributing to the issue with modified drainage. They need to be part of the solution.

Also, is the \$500 penalty one time or daily?

While I was in Stearns, the staff developed a list of these issues and need a process to assist in getting landowners with erosion problems or causing erosion problems motivated to do something. **(Greg Berg, Board of Water and Soil Resources)**

- What is "Excessive Soil Loss?"

The statement is made that Minnesota's soil erosion law, enacted in 1984, states that a person may not cause excessive soil loss. 103F.415 states that this is the case, but also provides in Subd 2. "Agricultural land. A land occupier of agricultural land is not violating subdivision 1 if the occupier is farming by methods that implement the best practicable conservation practices."

Please provide, as part of the public and formal rulemaking process the citation, criteria, definition and authority granted BWSR to determine whether "best practicable conservation practices" have or have not been followed.

The Role Of SWCDs:

We also believe that it is ill-advised to continue to convert the role of Soil and Water Conservation Districts (SWCDs) into agents of BWSR and components of regulatory, top-down, command and control method of enforced conservation practices. The strength of SWCDs has been the trust and confidence of landowners willing to work cooperatively with these technical experts.

Now SWCD personnel are assigned responsibilities to be informants on landowners who have not met the state mandated buffer requirements and through the soil loss proposal carry out field investigations and document evidence of what might be erosion and/or sedimentation under a BWSR operated Excessive Soil Loss Program.

Assuming this new and expanded regulatory role will not serve the best interests of landowner/SWCD relationships nor will it build on the progress made in fostering voluntary, cooperative conservation actions taken by conscientious landowners willing to make private resource investments. **(Farm Bureau)**

Question 1: what models or enforcement structures that should be evaluated and considered for the Excessive Soil Loss Law?

- Maybe the county could use the interim guidance section of this document to develop their soil loss rules and guidelines for complaints. **(Yellow Medicine SWCD)**
- Complainants should have the option to be completely anonymous (no one knows who turned the landowner in so no one can leak the info). Defined process with clear roles such as RIM violation process. **(Freeborn SWCD)**
- One model to consider is the WCA model, with a TEP to address any enforcement issues of the Excessive Soil Loss Law. One questions to consider would be if this involve a ticket from the Conservation Officer if not in compliance? **(Dodge County/Dodge SWCD)**
- Perhaps the WCA law enforcement procedures could be a backbone for this law? Some counties may also have zoning and county ordinance procedures that work well for them. Again, having consistency across the state will help make this process much more successful. **(Carver SWCD)**
- If systematic assessment is built into the program, counties with experience conducting systematic assessments for other environmental programs, such as shoreland buffers or on-site septic systems, are likely to have suggestions. Developing a methodical township by township approach, scheduling implementation consistent with local government staffing and other resources, and widely publicizing the schedule and approach is an enforcement structure that certain counties have used regarding on-site septic systems, for example. **(Lower Mn WD)**
- MFU supports working with local governments to determine this. **(Farmers Union)**
- We believe that voluntary conservation practices are the most effective ways to address soil loss and other resource concerns. We also believe that the state law empowering local government to operate soil loss ordinances should be followed.

If BWSR is to advance a model of enforcement with punitive measures, a baseline of data should be incorporated into the public record to indicate the factual evidence that documents the present degree of “Excessive Soil Loss” occurring throughout the state with site specific instances.

Without documented evidence on the need to move from the current system to the proposed enforcement model there is no basis to evaluate whether progress has been made.

This factual information should be included in the administrative record used by BWSR to adopt the regulatory oversight constructed to enforce the Excessive Soil Loss Program.

Even as BWSR seeks to proceed with an enforcement and punitive model for excessive soil loss, we would encourage a strong outreach and education program, empowering and encouraging SWCDs to be proactive in working with local landowners and land occupiers. This effort should include the background and details needed to have a complete understanding of the methods to be used in classifying what is “excessive soil loss” and under what circumstances complaints will be justified for consideration. This information as well as clarification on who will be targeted for “Excessive Soil Loss Program” (landowner or land occupier) should be included in the administrative record used by BWSR to adopt the regulatory oversight constructed to enforce the Excessive Soil Loss Program.

As we have indicated earlier, we also believe it necessary for landowners/land occupiers to be told who has accused them of excessive soil loss and that this complaint be based on the evidence of sedimentation on adjoining land or in a body of water.

Lastly, we also believe that it be required to follow all of the state's soil loss law, including 103F.415 Subd 2. "Agricultural land. A land occupier of agricultural land is not violating subdivision 1 if the occupier is farming by methods that implement the best practicable conservation practices." (**Farm Bureau**)

Question 2: Will the guidance presented below effectively address any circumstances of excessive soil loss?

- Minnesota's soil erosion law, enacted in 1984, states that a person may not cause excessive soil loss". Guidance doesn't provide information on how to determine who caused the erosion. Examples of where this may be a factor --streambank and shoreland erosion caused by high water levels, new landowners that acquired the erosion problem when they bought the land, drainage activities from a neighboring landowner etc. (**Grant SWCD**)
- Recommend defining excessive soil loss better. Too much room for interpretation currently. The threshold for adverse impacts should be low since it could be hard to document and show things like sedimentation to a lake. Does the law provide the right for SWCD staff to enter property if the landowner declines access? We might not be able to properly access sites to make a determination. (**Freeborn SWCD**)
- No, the guidance presented is too cumbersome of a procedure and there are too many outs for the landowner. (**Dodge County/Dodge SWCD**)
- The guidance and process seems to make sense, but I can envision circumstances in which the process will drag out over many months (winter months could stall out the technical assistance/field work). Will more funding through the cost-share program be available (one project could easily use an entire FY allocation of funding)? (**Carver SWCD**)
- As noted earlier, it does not cover discrete sources of erosion such as edge-of field plume pools and surface tile intakes. Also, hydrologic impacts of agricultural runoff and consequent channel scour erosion is not covered. Thirdly, current guidance does not cover instances of low-rate (less than T) erosion of fine silt and clay soils which lead to large cumulative impacts on Minnesota River sediment loads and turbidity. Establishment of water quality based soil loss thresholds combined with sedimentation limits, as discussed earlier, could address such problems. (**Lower Mn WD**)
- MFU supports local implementation and further education on soil loss with landowners. MFU further supports the consideration of extreme climate impacts on soil loss (heavy rains, excessive flooding) as soil loss programs are implemented. MFU believes that BWSR is to provide technical assistance on soil loss program implantation to local units and that emphasis by BWSR should focus on education and outreach to farmers. (**Farmers Union**)
- With the layout of the document it is assumed that by "guidance presented below" you are actually meaning the "guidance" outlined above the "Specific Questions" being asked?

As we have indicated in several general comments, the proposal lacks various elements of what we would consider to achieve effective outcomes. There are substantial gaps in identifying

authorized jurisdiction for those expected to perform functions portrayed as givens. Pursuing a punitive/regulatory/enforcement approach will have various consequences subject to responses not encountered in traditional cooperative systems for voluntary conservation based on technical assistance.

If effectiveness is in fact a desired objective, we recommend rethinking the apparent belief that enforcement will accomplish those results.

We further wish to receive clarification as to the authority for “guidance for the excessive soil loss program.” This information for clarification should include the citation from state law that provides BWSR with the authority to enforce punitive actions for excessive soil loss. Likewise, the administrative record used by BWSR to adopt the regulatory oversight constructed to enforce the Excessive Soil Loss Program should define where “guidance” fits within the hierarchy of punitive actions:

Who is required to adhere to “guidance” adopted by the Board? On whom is the “guidance” imposed and what state law grants BWSR the authority? What specifics of the administrative process are required by BWSR to meet the obligation of state law in developing guidance? What recourse is available for the regulated community to respond to “guidance” which they disagree? What options are available to challenge or not follow “guidance” adopted by BWSR? (**Farm Bureau**)

Question 3: What potential problems might the proposal discussed here present to BWSR, local governments and landowners, and what actions should be considered to address these problems?

- BWSR – The Board Conservationist could be spread pretty thin if each county has a number of complaints– may need to hire additional staff to get done in a timely matter. Local governments: County and SWCD added workload and could potential need to hire additional staff if high number of complaints. Landowner: it would take time to education the landowners so they understand the law. Not enough State Cost Share funds to assists landowner in solving the problem. There is not enough financial assistance to implement this program. Additional funds will be needed to investigate and provide cost share when needed. (**Yellow Medicine SWCD**)
- A \$500 fine versus a much more expensive fix even with cost-share, may not be much of an incentive for some landowners. SWCD’s may not have enough State Cost-Share funds to ever adequately fund some of the large problems. (**Grant SWCD**)
- Issues of rented land with long term agreements where the implementation of a BMP or tillage decisions could be considered a change of contract. The county attorney may not consider this a priority. Putting SWCD in administration role puts landowner at odds with SWCD when it comes to voluntary conservation programs. Counties may be eager to designate SWCDs since there is no funding directly tied to this. If the landowner chooses not to apply is the fine a onetime thing? If they pay the fine do they need to implement the BMP? If County attorney dismisses the complaint do they still need to do the BMP? (**Freeborn SWCD**)
- Potential problems include the timeframe for the A.P.O. (is it up to \$500 per day/week/month/year?). What is considered excessive erosion and what models will be used to determine how much erosion is excessive and what is acceptable? What if it is not clear where erosion is coming from? Does every field have to have a T value or is determined only if there is a complaint? (**Dodge County/Dodge SWCD**)

- This could be a very large workload in the ag dominated counties. Demand for additional cost-share funds should be expected. Training to SWCD and county staff should be provided to foster an environment of consistency throughout the state. There could be a large disconnect from the landowner and the renter that farms the land – how will the renter be held accountable and not leave a mess for the landowner to clean up? 8400.4040 Subp. 1 states “adversely affected land occupiers” may submit a written complaint...this may need to be defined better – could someone living miles downstream from an eroding farm field be adversely affected by the erosion? **(Carver SWCD)**
- First, it appears that county attorneys play a central role. Their dismissal of complaints or petitions for a district court hearing could weaken the law in certain counties. Second, the need for increased local staffing should be anticipated, especially in the first year of the program. Existing and new staff will require training. Third, BWSR may be overwhelmed with administrative burden if many counties choose not to adopt an APO plan. Incentives for counties to adopt an APO plan may be needed. The right of the county to retain a portion of penalty money for program administration might be considered. **(Lower Mn WD)**
- BWSR is developing a reputation as an entity prone to over-reaching authority and intending to seek ways of enforcing requirements on landowners by way of threat or proposed fines. This mindset of determining mandated outcomes and requiring compliance bring responses in return which aren't as favorable as those associated with voluntary conservation and partnerships built on cooperation and assistance.

As we have earlier indicated, pulling SWCDs into this toxic regulatory framework also places in jeopardy the goodwill that has been established with landowners and their local Board of Supervisors and SWCD employees.

Adopting a punitive, enforcement approach to conservation practices, at the core of this attempt to force an administrative penalty structure on local levels of government also fails to recognize the lack of authority BWSR has for this heavy-handed regulatory control.

If BWSR believes there is justification, spelled out in state law to establish and enforce a punitive “Excessive Soil Loss Program,” this should be clearly documented with citations of the state law and be included in the administrative record used by BWSR to adopt the regulatory oversight constructed to enforce the Excessive Soil Loss Program.

Minnesota Farm Bureau urges adoption of a change to the proposed outline. This should address concerns over soil loss through cooperative, working relationships with landowners and land occupiers. Through education, incentives and technical assistance based on recognition of principles for voluntary conservation, identified on the ground problems, can be addressed with meaningful solutions of implemented practices. **(Farm Bureau)**

Question 4: What other options, considerations and proposals should be evaluated in developing an effective means to implement the changes to the Excessive Soil Loss Statute?

- I believe that strong local control of excessive soil loss ordinances and local control of buffer implementation is key to creating programs that will be successful for farmers and for cleaner water. Local officials are better situated to determine how the programs should run in their own jurisdictions given the knowledge that they possess on local farming, economics, and the local environment. **(Soybean Growers)**
- Is there a way to dismiss results of unusual weather events such as 25 year rainfall events? Is there a process or expectation that the original complainant is notified of the outcomes? **(Freeborn SWCD)**
- Considerations that should be evaluated would be the purpose of the statute. Is the Excessive Soil Loss Statute supposed to maintain the current conditions of the soil, or to improve soil health, or to improve surface water quality? Another consideration to consider would be if the Excessive Soil Loss Statute includes excessive streambank erosion on a landowner's property, and how to address the situation. **(Dodge County/Dodge SWCD)**
- Additional consideration should be given to the workload this may have on SWCD's and LGU's. Adaptive management may need to be implemented to adjust the program, funding, and enforcement procedures if this becomes a large workload. Without taxing authority and a source of stable funding, SWCD's may have a difficult time responding to and following up on complaints if workloads become high. **(Carver SWCD)**
- Public communication at the state and local level will be crucial to a successful launch. Landowners need to be informed about reasons for strengthening Minnesota's soil loss program and how it could affect them. If landowners believe they are being treated fairly, they are much more likely to cooperate. **(Lower Mn WD)**
- The implementation of effective solutions for soil loss needs to come through a proactive and positive effort to build working relationships with landowners and land occupiers. We believe it would be a better option to work at regenerating this sense of teamwork for conservation with SWCDs. We believe the role of SWCDs would be improved in serving as technical and helpful resource partners instead of tattle-tails involved in reporting to a state bureaucracy motivated to inflict punishment for non-compliance of their dictates.

It would also be a positive advancement to actually document real Excessive Soil Loss, based on the parameters of the provisions of the law and based on the evidence of sedimentation on adjoining land or in a body of water. When these instances actually occur in demonstrated examples there are opportunities for teachable moments, offering financial and technical assistance.

We also repeat our contention that appropriate understanding and recognition be given to the complete context of state soil loss law, including 103F.415 Subd 2. "Agricultural land. A land occupier of agricultural land is not violating subdivision 1 if the occupier is farming by methods that implement the best practicable conservation practices."

If the best practicable conservation practices are being carried out and soil loss reaches the level of sedimentation on adjoining land or in a body of water – there is no violation of state soil loss law. **(Farm Bureau)**

General Comments.

- Similarly, BWSR has no authority under Minnesota Statute §103F.48 to set the type of guidance on the buffer law that they are seeking comment on. Technical requirements of the buffer law should be left to local units of government. Under the law is clear under Minnesota Statute §103F.48 subd. 3 (b) that a landowner “may meet the requirements under paragraph (a) by adopting an alternative riparian water quality practice, or combination of structural, vegetative, and management practices, based on the Natural Resources Conservation Service Field Technical Guide...” No authority is given to BWSR to decide if these practices have to be pre-approved or for the landowner to have to request permission. No authority is granted to develop rules on technical aspects of the alternatives. Development of guidance for counties on this subject is not provided for under the law. Additionally, no authority is given to BWSR in §103F.48 subd. 5 to give guidance on how the exemptions work for any of the exemptions listed in the statute. Nowhere in the Minnesota Statute §103F.48 is BWSR given authority to guide through rules a local governmental unit on how it will implement the buffer law. **(Soybean Growers)**

The undersigned agricultural organizations write to express our grave concerns with the direction BWSR appears to be taking with implementation of the buffer and soil loss programs. As Governor Dayton recently wrote: What we need most in Minnesota are not more laws and regulations that try to require or reward clean water practices, they're last resorts. What we really need is to establish an ethic of clean water practices.”

Unfortunately, the policies and guidance emanating from BWSR regarding the buffer and soil loss programs move away from the traditional role of USDA’s NRCS, SWCD and BWSR programs in providing technical expertise and cost share assistance to landowners. We call on BWSR to begin again in crafting guidance for local government implementation of these important programs without the heavy-handed regulatory bent apparent throughout the draft guidance.

We remind you of the powers and duties granted to BWSR in MS 103B, specifically to coordinate the water and soil resources planning and implementation activities of local government units, and to facilitate communication among state agencies in order to make the expertise and resources of state agencies available of local units of government.

The effectiveness of conservation delivery entities, already strained by an increasing emphasis by state and federal agencies on increase regulation, stands to lose even more ground under the guidance outlined by BWSR. This problem is compounded by the threat of withholding funding from local authorities if they fail to implement the buffer law to BWSR’s satisfaction. BWSR has thus positioned themselves as the ultimate dictator and persecutor of local authorities and landowners. **(Mn Ag Water Resources Center)**

- In summary, we strongly encourage BWSR to rework these draft documents with an emphasis on working with local government, with state agencies providing support as needed rather than mandates and dictates sugarcoated with funding, circuitously driving toward state agency goals while minimizing local efforts. Landowners, elected county officials and watershed districts would be better able to appropriately address local resource concerns if given more support and flexibility. We look forward to the opportunity to comment on the next iteration. **(MN Ag Water Res Center)**

- There are a number of studies and initiatives related to buffers that BWSR can use to develop guidance, procedures, and resources for local government units (LGU) charged with implementing the buffer program. Most notable are the select number of counties that have successfully implemented buffer programs with a high degree of compliance. It seems reasonable that there are lessons to be drawn from these early implementers of buffer programs.

It is important that the local government unit with the authority to implement the buffer program is granted the latitude to utilize their expertise and knowledge of local conditions. BWSR needs to recognize that differences exist across the states relative to such factors as staff resources and capabilities; varying water resources; land use; and local support for Soil and Water Conservation Districts. The guidance BWSR develops should ensure consistency in program implementation across the state without being too prescriptive.

It's also important to note that the bill (S.F. 2503) recently passed by the legislature and signed by the Governor clarifying the 2015 buffer law addresses some of the aspects of program implementation raised by BWSR's call for comments. **(Corn Growers)**

- Thank you for the information provided on the website for SWCDs to get up to speed on expectations of the new buffer law. The one area where I feel is still extremely vague is the "alternative practices". As yet, you've not offered us some examples. I hope that is forthcoming soon. **(Morrison SWCD)**
- I am a former county commissioner and a candidate for state senate in District 18 and have heard from a number of farmers regarding the new buffer guidelines, particularly as it pertains to drainage ditches.

Primary concern is that farmers are potentially losing productive land without any compensation. Could compensation for crop losses be part of the deal--perhaps something similar to CRP payments that would cover the loss and the seeding to grass?

Also, would it be possible for county assessors to reclassify the land being turned into buffers as non-productive land?

Another consideration would be granting exemptions to 50-foot buffers in areas where the ditch has berm sides and drop inlet access into the ditch itself, thus slowing the flow of water. Under such circumstances, perhaps the old five-rod buffer would be sufficient if the proper drop inlets are in place.

Just a few thoughts from someone who has been involved in drainage ditch policy for a while. I care deeply about controlling erosion, but one size does not fit all when it comes to terrain. **(Amy Wilde, Dassel, MN)**

- Received your email for comments at 10:00A.M with a response required by 4:30 today. Not a good plan. I object. However:

Two Sherburne County waterways that you neglected to include:

River unnamed that exits Elk River and drains to the lagoon at the southwest shore of Briggs Lake during high water events. It also provides a steady stream of blue green algae along the west shore line all summer long. The DNR mentions this problem in every report ever published on the Briggs Lake or the Briggs Lake Chain or the Elk River watershed.

A pond @ wetland that on the west side of 100th Street and east of soy bean or corn crops on the other side. This is a rather large body of water hidden by trees and behind the power lines. It does not appear on your map although I suspect it is on some kind of conservation program through the Department of Agriculture. There are birds, ducks and blue birds nesting there. **(Rosalie N. Musachio)**

- The buffer legislation is one of the most important directions we can go.

Thoughts:

-50 foot buffer strips should be required on public and private lands. Any water drainage eventually goes to the water table somewhere so we should do our best to protect it.

- the requirement timeframe should be ASAP, so probably spring 2017, so farmers can plan accordingly
- enforcement will be challenging but is very important. An inventive monitoring and penalty system may be needed. Positive reinforcement may be more effective than negative.

This is good work and moving in the right direction. **(Sue Ramthun, Rochester Mn)**

- I have wide buffer strips enrolled in CRP on the majority of my farmland. My comment is why are you gathering comments due May 4 when the rules are not understood yet. There seems to be more questions than good answers at this time. **(Marc Stevens)**
- This note is my response to a solicitation for comments regarding the **Alternative Practices** component in implementation of the Buffer, Soil Loss Program:

The law states:

"A landowner owning property adjacent to a water body identified in a buffer protection map and whose property is used for cultivation farming may meet the requirements under paragraph(a) by adopting an alternative riparian water quality practice, or combination of structural, vegetative, and management practices, based on the Natural Resources Conservation Service Field Office Technical Guide or other practices approved by the board, *that provide water quality protection comparable to the buffer protection* for the water body that the property abuts."

Perennial vegetation in a buffer provides:

- Removal of sediment and phosphorus from surface flow by reduction of velocity and infiltration.
- Protection of soil from water erosion in the buffer area.

- Prevention of ditch or stream bank slumping, via dewatering and mechanical retention by roots.
- Removal of nitrate from shallow groundwater moving through the riparian zone.
- Trapping of wind-borne soil particles prior to deposition in the channel.

Key to determining comparable protection may be what is assumed regarding the baseline condition. I believe the baseline assumption should be the presence of a common management practice and not the most erosive. In Minnesota, mulch tillage would be an appropriate choice for baseline condition, with a minimum of 30% residue cover, and erosion less than T for all situations since that is required on HEL anyway. The alternative practice combination would need to provide protection comparable to what the buffer strip provides in the presence of the baseline condition or better.

Since the buffer protects water in the period from spring thaw to winter freeze-up, the combination of alternative practices should have an equivalent time span. Therefore a fall, or fall and spring cover crop alone would not be sufficient since it does not provide stream protection when the row-crop is present.

Similarly, a buffer strip provides water filtering, soil dewatering, and soil protection along the entire streambank or ditch bank, so a grassed waterway alone at a point of concentrated flow would only be part of an alternative practice system. Waterway grasses typically lay down under concentrated flow, protecting the soil but not filtering and slowing the water as the upright stiff-stemmed grasses of a filter strip do.

Finally, determination of equivalency for alternative practice systems is essentially an engineering activity, and should rely on a combination of appropriate data from the literature and models. This should not be "professional judgement" without metrics. **(Les Everett, University of Minnesota Water Resources Center)**

- First of all I don't like the fact the state is going to take land out of my production base. If I am so lucky to have a ditch through my land I Get it removed from my income base, and also get to pay tax on that land, and I get to pay to have the buffer strip put in. Do you see why I and others don't feel this is fair or even needed? I feel the rural area is being punished for not supporting Governor Dayton in the election. **(Dean Albrecht)**
- There needs to be some compensation to the land owner for creating and maintaining buffets. The farmer is being asked to donate his land, seed it, maintain it and pay tax on that land. What happened to the tax money that was to be used for clean water? The farmer is being targeted. Farm land is not the only land that comes to the water's edge. 50 ft. buffets are in excess. 16 ft. is more reasonable. **(dlkarg@hutchtel.net)**
- I have lived at Pokegama Lake, Pine County for the past 20 years. We have a very active township, lake association, soil and water conservation district, plus a host of kindred organizations and local governments that work together in an effort to promote water quality.

The 50-foot buffer concept is a nice idea but will be extremely difficult, if not impossible, to enforce – nor should it be. There are many lakeshore property owners that only have 50 feet of water frontage, so the proposed buffer zone is not practical for them.

The buffer zone you propose would have much better success if you enforced it along farmland and undeveloped river and lakeshore frontage.

Requiring residential lakeshore property owners to abide by the 50-foot frontage buffer criteria is a bad idea. **(Henry Fischer, Pine City, MN)**

- First.....what are we supposed to say? We farmers care about our water and shouldn't need a babysitter. If the government wants to take our land from us, they should be paying for it. Either by purchase, or by a yearly CRP type of rent. Is the state gonna maintain the land they take from us. Like obnoxious weeds, volunteer tree growth, tile line repair?

Plus, there should be a map out for us to actually comment on. This is the biggest problem. You're searching for comments on something we have no maps for? Plus, your timing couldn't be worse. Farmers are working 16+ hour days now until the middle of May. Our families know everything gets put on the back burner during planting, spraying, and harvest seasons. The government should realize this as well.

My 2 cents. ([iamrmackey@yahoo.com](mailto:iammackey@yahoo.com))

- This effort to significantly reduce the sediment in our streams, rivers and lakes will never provide what is the goal unless it also targets the stream bank erosion between the buffers. USDA's ARS research clearly shows that 70 –90% of sediment is coming from stream bank failure. As for Conservation buffers they are far from the best way to keep the soil out of waters and in the fields. That is Regenerative Management which restores Nature's Carbon in the soil creating almost unlimited infiltration of rain preventing erosion at the source. If you need more clarification on how this works for us you can e-mail us back. We have been presenting on both a local and National scale for years. **(Rod & Rick Sommerfield)**
- I sent the following e-mail to Gov. Dayton and other elected officials concerning the new buffer Bill and I have not yet received one response back yet.

My main question and concern is why does a buffer strip have to be install next to a county dredge ditch when the farm field doesn't even slope towards the ditch?

When this ditch was made in the 1960's, the dirt removed from the ditch was placed along side of the ditch, making it impossible for the water surface runoff from the field to flow directly into the ditch.

So with that in mind, I would like someone explain to me; if the water surface run-off doesn't flow directly into the ditch, what is the sense in putting a buffer strip in if the water will never flow through that either?

How is that going to improve water quality? **(Lee Stern, Springfield, MN)**

- Does this program impact companies, such as utility, that are constructing (e.g. burying) utility lines? Any information would be appreciated. **(Heide Anderson, Leidos Environmental Restoration Division)**
- I am frustrated that this program is so focused on external nutrients when the greater problem is the internal nutrients already in the bottom sediments. Buffers do not work when the ground is frozen which is when most of the nutrient enters our waters. They don't work in floods and they don't work in droughts. In fact many papers suggest they don't work so well even under ideal conditions.

My opinion is this program should at least include acknowledging the value of Surface water sourced irrigation systems that remove the internal nutrients. Surface water irrigation can be optimized to increase nutrient removal if bottom augmentation is also incorporated at the time the irrigation system is functioning. **(Cob Burandt)**

- Seriously, what's there to discuss? Farmers are compensated...so where's the argument? Do some farmers really believe they could continue bad conservation practices forever?
- Why is it that some farmers that rent thousands of acres of land only plow closer to the ditch? Maybe they think conservation practices don't apply to rented land.

Most small farmer's as I recall always appreciated a reasonable mix of agriculture with nature. Recently I overheard four farmers having breakfast in a cafe make the comment, "The only good deer is a dead deer"...then they all laughed...that was really upsetting!

As a nation we are changing. We had better get back to those values that give life meaning...that allow us to go to bed at night and get up in the morning with a sense of pride...a job well done!

I realize \$3 corn doesn't make one cash rich, but it has to be factored into those years of bumper crops and accelerated depreciation and of course, the accumulation of paid for assets. Surely no one thought \$8 corn could go on forever?

As world population grows, farmers will still sit in the driver's seat. That's a lot more comfortable than many who are attempting to live on a low wage with 1970's buying power and little to no assets.

As with so many things in conservation, buffer strips are a dollar short and a day late.

No, I'm not a "tree hugger" and I do wish all farmers a fair shot at prosperity, but we must recognize the world is rapidly changing and we're not in this alone. The demands made on tillable acreage will only grow and we must give the earth every possible opportunity to heal and remain viable. **(Eric C. Enberg Sr.)**

- I farm land in Langora Township, a creek runs through my farm named Lulgar Creek. I propose that you measure the buffer strips from the center of water at level of heights most of the year which would be very low and use existing banks as buffer strip frontage and go from there on, not top of bank because my creek has a 20' buffer in bank already. **(Allan Wollak)**
- A 10 foot strip wood do anything it needs to do let the farmer decide what to plant and maintain from original height. Why don't we put money towards closing ditches and install tile that would cure the problem. Then everybody would be happy. **(Barb Melberg)**
- I applaud this program even after it was watered down by our legislators. I only wish that we would include agriculture in the Federal Clean Water Act and make those who are the major polluters of our surface water responsible for the costs associated with the cleanup. Once again, we have caved to the special interests and money of the Corn Growers Association of Minnesota. So sad....**(Bob Paetzel)**
- We own 3 80's in Renville Co. putting a buffer in would take about 3 and a half acres of our land away. Is the state going to pay for that land? Who takes care of weeds, thistle and the like? I am against this, you have problems that are not even thought about yet. **(Arden A Reek)**
- I am voicing my concerns for the buffer legislation. Most of our farms have been owned by our family for 3 and 4 generations. We hope to continue for more. Thus we are good stewards of the soil. This land was and continues to be paid for from our business of farming, not fishing or hunting. The ditches on this land was dug for the purpose of draining excess water in times of storms. They were generally dug in low ground thus creating their own banks for water to drain away from the banks, not over them. I would like to know who will be buying this land from me and don't tell me government programs because that is my tax dollars. I thought private ownership was just that, PRIVATE ownership. These so called buffer strips will just allow other people to come onto my land thinking they can hunt, litter or anything else they please. Who will be covering the liability for that? Who will be maintaining the weeds that will continue to blow onto my land? This legislation to me is just another way that small interest groups are trying to bully their way into getting their interests through at the expense of others. They can go and buy their own land and do what they want with it Mr. Dayton. Leave us alone to feed the nation as we have done for years. There are places that are better suited for wildlife than here. Rivers and creeks were created centuries ago from water meandering and cutting banks. This is all Mother Nature. Don't mess with Mother

Nature. I think Mr. Dayton should rescind his proposal. Just go out on whatever merits he had. **(Dave Kubesh)**

- I have property along High Island Creek East of Bakers Lake Penn Township, McLeod County. This portion of High Island Creek is a private ditch.

According to the maps I have seen we are required to have a 15 foot buffer strip and the County & Public Drainage Systems above or west of Bakers Lake require a 16 ½ foot buffer. Property owners that were able to tile and ditch into Bakers Lake can farm their land with no requirement to leave land lay to provide Buffer Strips.

I think this is unfair. Those of us who are required to leave a 15 foot buffer should be paid for it. The buffer strips through my property amount to 9 acres of formable land or 9 acres @ \$6000 per acre - \$54,000, which I lose by the government is taking from me through limited use. I don't need a ditch to get rid of the water on my land. The need for a ditch is really caused by other ditching and tiling into Bakers Lake. **(Lyle L Winterfeldt, Glencoe, MN)**

- Did you know as of today we have septic discharge going into bodies of water in Brown County?

Did you know as of today we have livestock wadding in open bodies of water in Brown County?

Did you know as of today we have open pastures that flood and that water runs into the rivers in Brown County?

A Buffer on a well-designed drainage system will do nothing to help water quality. Perhaps we should target the real problems instead of the land grab by the government. **(Farmer of Brown County)**

- I was just wondering since most of the ditches I know of are taller than the existing farmland how will you get the water to run uphill over the buffer and into the ditch? In nearly every case rainwater runs away from the ditches back into the farmland where it soaks into the ground. **(Furniture Gallery)**
- I have sent e-mails to Governor Dayton, a number of elected officials and to the BWSR regarding the buffer bill and as of today, I still have not received any response back. I think the buffer bill should not be approved because there is a lot of farmland next to a river or county dredge ditch where the water surface runoff doesn't even flow directly into the river or ditch. In these cases mandating a buffer strip to be installed would be totally worthless because when the ground slopes away from the river or the ditch, it sure isn't going to magically flow through a buffer strip just because you put one in. Mandating the buffer bill is a total waste of tax dollars and farmland.

I am enclosing the following e-mail I sent to Governor Dayton regarding his water quality questionnaire.

27 April 2016-----sent to Governor Dayton's questionnaire

My main question and concern is why does a buffer strip have to be installed next to a county dredge ditch when the farm field doesn't even slope towards the ditch?

When this ditch was made in the 1960's, the dirt removed from the ditch was placed along side of the ditch, making it impossible for the water surface runoff from the field to flow directly into the ditch. So with that in mind, I would like someone explain to me; if the water surface run-off doesn't flow directly into the ditch, what is the sense in putting a buffer strip in if the water will never flow through that either?

How is that going to improve water quality?

I think there is more water pollution coming from all the road salt used in your larger cities and interstates than anyone wants to admit to.

I think the main purpose of mandating buffer strips were they are not needed is to increase the pheasant population? Did anyone think of the predators, like the fox and coyote population that will increase more because they will be eating the pheasants!

Since Governor Dayton wants to mandate buffer strips even were they are not needed, then I think the state should not only be paying the farmer for the loss of income for that property, but also pay the landowner for the loss of value on the land, because 1 acre of farmland is worth more than 1 acre of grassland (buffer strip).

In closing, I hope someone uses some common sense in not approving the buffer bill in the way it is written.

If the Buffer Bill gets approved, I would like to see this part included, where someone from DNR, Soil and Water and or the BWSR has to prove to each land owner that their situation is causing pollution and if it is not, then no buffer strip would have to be installed. **(Lee Stern, Springfield, MN)**

- Water doesn't run up. I think you should look at the ditches and then decide if a buffer strip is needed stop the one size fits all government. Dayton doesn't need another place to hunt pheasant. Come and visit and I will show you. **(Tim Harmening)**
- Somewhat concerned what this will do for relationships between producers and the SWCDs, and then additional conservation efforts we try to implement with land owners.

To that end might consider the possibility of locals enacting an ordinance/policy giving folks as grace period to come in voluntarily to correct things and if they do there is some protection for the producer.

Somewhat concerned of some groups trying to turn this into a strong regulatory approach totally replacing the existing “voluntary” system. In fact I’ve seen comments to this affect, by trying to set the definition of excessive soil loss quit low so that it would apply to most lands, and requiring systematic assessment of areas, rather than leaving it to complaints. My understanding from talking with Rep Paul Torkelson was that the legislative intent was to have the ability to address “bad actors’ with this, not regulate everything.

Wondering where the funding will come from for County and SWCD staff time, and for attorney’s office time.

Could really hit us hard in the urban fringe where residential is close or mixed with agriculture.

If we get consumed with responding to complaints it will pull ability away from being able to prioritize, target and measure

How does this apply to stream bank, bluff or ravine erosion? There is a fairness issue here in that causes may be upstream from the property owner who is experiencing erosion; and with bluffs for ravines the fixes could cost in the millions. Even with cost share folk don’t have this kind of money. So need to be clear where it applies.

Deciding what is excessive? Geographic setting strongly influences sediment loads. It’s well known that the Lower Mn River Basin and the bluff areas naturally have high sediment loads. Maybe some flexibility could be provided for local setting or for if local studies have been completed documenting accepted sediment loads; and if the property met that. **(Paul Nelson, Scott County)**

Requests.

- Therefore, I request specific documentation of the statutory authorization for the de-facto regulations being sought here by BWSR through the development of policy and guidance. I object to the use of this process to circumvent the administrative processes required for state agencies to undergo rule-making. It is unclear where the legislature has granted similar authority to BWSR with regard to this draft guidance and policy outside of the authority cited above.

Please provide all relevant documentation, including the context of the Administrative Procedures law related to BWSR’s process for preparing guidance documents, at your earliest convenience. I also request information outlining exactly who would be subject to and required to follow this BWSR guidance and what penalties they would face and what authority has been granted to levy such penalties. **(Soybean Growers)**

- We are concerned over the apparent assumption of authority that the Board of Water and Soil Resources is planning, beyond the specifics authorized by the law itself. Through leading questions and announced plans for development of “orders, guidance and procedures” we believe that efforts are underway to take charge in ways not

provided for by the legislation passed and signed into law by Governor Dayton. Legislative intent clearly provides that local governments are empowered to implement Minnesota Statutes 103F.48 and attempts to use the process you are taking to usurp the authority of local water management authorities is inappropriate.

Please provide all relative substantiation which identifies the authority the Board of Water and Soil Resources has, as spelled out in Minnesota's Administrative Procedures law that covers the scope of the board to develop orders, guidance and procedures.

Please provide a clear substantiation for that authority of the Board of Water and Soil Resources in developing orders, guidance and procedures, indicating who these documents are directed to as well as the responsibility, if any that the board's directives are required to be followed.

Please provide, with legal substantiation as to the requirements of the Minnesota Administrative Procedures law for the Board of Water and Soil Resources to conduct the development of orders, guidance and procedures. This detail should also provide for the required public record which is required for public input and recourse for appeal available through the state's law relating to proper conduct by the board in developing orders, guidance and procedures.

We look forward to receiving the complete response to our request as well as having our input considered by the board. **(Farm Bureau)**

- Please include in the administrative record used by BWSR to adopt the regulatory oversight proposed in the Excessive Soil Loss Program, the specific citations of state law granting the Board the authority to replace local government in the capacity to develop and implement soil loss limits.

The record should also identify whether local governments have established BWSR as their "agents" empowered to carry out the functions sought by BWSR through the processes covered in the Overview of the Minnesota Excessive Soil Loss Program Implementation document.

If BWSR does not have specific authority to construct regulatory control or enforce the actions called for through the Excessive Soil Loss Program, please provide as part of the written record the legal basis for the actions contemplated by the Excessive Soil Loss Program. **(Farm Bureau)**

- Procedural Steps For Complaints:
With regard to specifics of the Procedural Steps For Complaints Associated with Agricultural Activities, we wish to question and obtain more of the details related to various elements.

The proposal states that "Complaints are confidential data and are not public information."

First, we would like a more defined understanding of the term "confidential." Will the landowner/land occupier be made aware of who filed the complaint against them for alleged

excessive soil loss? We would assert that those accused should be provided with the identity of those making the accusations.

Secondly, we would like a clear understanding of what is assumed to be “excessive soil loss.”

8400.4002 (subp 10) states: “‘Excessive soil loss’ means soil loss that is greater than the soil loss limit or which causes sedimentation on adjoining land or in a body of water, watercourse, or wetland.”

Minnesota state law, 103F.401 also encompasses excessive soil loss as what “may be evidenced by sedimentation on adjoining land or in a body of water.”

Will a complaint require demonstrated soil loss in the form of sedimentation on adjoining land or in body of water? If erosion takes the form on soil movement from one location of a person’s land to another location of the same person’s land – will that be considered as “excessive soil loss?”

Thirdly, the outlined procedure for Step 1 asserts that “The law allows a county to designate the SWCD as its agent for carrying out administrative and mediation duties.” We disagree with this determination and believe that it is an over-expansive reach of designated authority and an attempt to misapply authority for one purpose to another.

M.S. section 103C.331, subd 19, referenced in the Overview of the Minnesota Excessive Soil Loss Program Implementation document, it is noted that “A district may accept delegation from the state, a county, or a city of authority to administer soil and water conservation-related official controls, as defined in section 103B.305, subdivision 7, of the county or city.” 103B.305 deals with water management planning – not soil loss.

Do SWCDs have an option in whether to be involved in the Excessive Soil Loss Program? If a SWCD makes a determination to not accept delegation, what will happen?

Answers to these questions should be included in the administrative record used by BWSR to adopt the regulatory oversight constructed to enforce the Excessive Soil Loss Program.

State Cost-Share:

The proposed Excessive Soil Loss Program speaks to corrective actions and enforcement with both the “County Path” and the “SWCD/BWSR Path” start with State Cost-Share being offered for financial assistance.

If there is insufficient State Cost Share financial assistance provided or if no additional funding is provided through the state, federal or local programs noted, beyond an extension, what happens? What State Cost-Share financial assistance is available for landowners? What are the criteria and detail requirements for participation in these programs? Is the cost-share from the state offered to landowners or to land occupiers?

- Answers to these questions should be included in the administrative record used by BWSR to adopt the regulatory oversight constructed to enforce the Excessive Soil Loss Program. **(Farm Bureau)**