

Comments on Draft Sustainable Soil and Water Quality Practices on Forest Land

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Sustainable Soil and Water Quality Practices on Forest Land

By Michigan Association of Timbermen

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General Comments:

The change from buffer zone to Riparian Management Zone is very positive. Many people view a buffer as a no cut or management area and the inclusion of management demonstrates that timber harvesting can take place in these unique areas. There were a few areas in the document where the use of the term buffer is being used and I would recommend changing it to RMZ.

The recommendation of seeking help from the DEQ on how to properly install any type of stream crossing may be misleading. A couple of issues, there is no guarantee that the DEQ official is qualified to help or that this person may not wish to help. I have been told by different DEQ officials that handle these permits that they will get involved once the permit is issued and that they are regulator not educators.

I would like to see a section detailing alternative types of either wetland crossings or temporary stream crossings. This document only talks about wooden or steel temporary bridges. A brief description of the following wetland crossing structures would be beneficial Wood Panels, Wood Pallets, Expanded Metal Grating, PVC/HDPE Pipe Mat & Plastic Road, Tire Mat Terra Mat, Corduroy, Pole Rails, and Wood Aggregate Chips. The more options provided the better.

Recommend a description of different type of Geo-Textile fabric and which is preferred, woven versus non-woven.

May want to get clarification regarding Part 91, it has been described in training sessions by DEQ that road work within the harvest unit is exempt from this permit, however, once the soil disturbance occurs outside the harvest unit then Part 91 applies.

Recommend that permits that are part of a timber harvest be put on the fast track. The delay of sending the permits to Lansing has discouraged many land managers from applying for a permit. It should not take months to get your permits. All permits should be sent to local offices rather than Lansing.

The use of the justice scale to denote legal requirements from voluntary guidelines is very helpful.

Make sure the figures and table numbers correspond with the number in the text of this manual.

Vernal ponds and seeps were not well documented in this manual. These two areas need to be addressed better and how to operate around them.

Gravel weirs and French drains should also be included in this manual. This provides two options for dealing with seeps that are located in a forest road.

Soil Erosion and Sedimentation Control Regulations

Page 7 - Recommend clarifying that earth changes within the harvest unit are exempt from a permit. A permit is needed for access roads leading to and from the harvest unit and any ancillary activities. A clarification of ancillary activities associated with logging would be recommended. The primary location for getting a SESC permit is local Zoning Administration.

Page 7 - Landings do not always require a change in earth.

Wetlands and Floodplains

Page 7 - Only the construction of a Temporary Road is exempt from a 303 permit, if BMP s are followed and properly implemented. Permanent roads are required to obtain a permit.

Other Laws Affecting Forest Management

Page 8 - Recommend the inclusion of Part 353, Sand Dunes Protection, in the body of this manual. The harvesting of timber along the Western Side of the Lower Peninsula often interacts with Part 353. All possible legal permits that might be needed for harvesting of timber should be presented in the manual, not just in the appendices.

Page 9 - There should be an easier way to quickly check to see if either an Archaeological or T&E site. The response time of 3-4 weeks seem to be extremely lengthy, especially if the site is discovered after the harvest has been started. Which leads to the next question, What is the recommendation on how to handle either an archaeological or T&E site once the harvest has started?

Fuels, Lubricants and Spills

Create a provision where the scattering of contaminated soil can be spread in the uplands, where water concerns are not present. The exposure to sun and micro-organisms will allow for the break down of these contaminants, I believe Minnesota allows for this procedure.

Page 10 - Spill kits should be on every job site, however, an adequate kit is too large and bulky to fit into the small confines of logging equipment. Kits and absorbents should be located with the service truck.

Page 10 - Recommend defining a spill, large is very vague and open to a lot if interpretation. Is a spill a confined to one area or does it include a more wide spread area? Example if a processor blows a hydraulic line fluid may be sprayed over a wide spread area and be less concentrated and difficult to clean up then a chipper or slasher leaking oil in one concentrated spot.

Timber Harvest Planning

Figure 1. Page 12 that is the difference between a filter strip/RMZ and a filter strip. The use of Riparian Management Zone is a positive change; make sure it is used consistently within the body of this document to prevent confusion. The figure identifies filter strip and filter strip/RMZ differently.

Riparian Management Zones (RMZs)

Page 14 - The minimum RMZ width of 100 feet has been a good rule of thumb, however, deviation from this minimum should be allowed as determined by the specific site. Natural Rivers vegetative strip , which are the same as RMZ, width are as small as 50 feet on private lands. On relatively flat ground where overland sheet flow of water is unlikely a 100 feet may be excessive.

Page 14 - Recommend intermittent streams have different RMZ requirement then perennial streams. Could mimic the Natural Rivers where tributaries generally have a narrower Vegetative Strip then the main stream.

Page 15 - Recommend using Basal Area as a guideline in retaining sufficient thermal cover in the RMZ s. Logging contractors are familiar with BA and this is an easy measurement to take.

Page 15 - Recommend the cable skidding of logs in the RMZ be avoided. Forwarders and grapple skidding would have less impact then cable skidding. Manual references or removing logs with cable and winch is better. We do not see this as a better way of removing logs as stated, better definition is needed for this comment. Page 15, bullet point 5.

Page 15 - Recommend the use of low ground pressure logging equipment in the RMZ s, tracked vehicles are not necessarily better then rubber tired equipment.

Page 15 - Should the slash left behind from the timber harvest in the RMZ be removed from the RMZ? This is not clear. Would recommend that any slash from trees harvested from outside the RMZ and falls within the RMZ be removed. However, slash from harvested trees with in the RMZ should remain the RMZ.

Page 16 - The Vegetative buffer strip on Natural Rivers and protected tributaries are often narrower then the 100 foot minimum provided in this manual.

Page 18, paragraphs 5 and 6 use the term buffer, suggest replacing with RMZ.

Forest Roads

Page 21 - The use of 3 inches of gravel needs more clarification as to type of aggregate used. Not all gravel will hold or provide the needed traction and may contribute more to the problem in help.

Page 21 - The use of 3 inches (6 inches is optimal) needs to be used in conjunction with geo-textile fabric. Under wet conditions the gravel will be driven into the mud and will not provide any benefits, underlying with geo-textile will provide a stronger foundation for the gravel. Also aggregate needs to be small so that pieces of aggregate do not become lodged in the between the log truck tires and become a road hazard.

Page 21 - When regarding haul roads with water diversion devices installed the country curb of road material needs to be removed from start of the diversion device.

Page 23 - Recommend using a culvert or PVC bundle in when creating an ice bridge. The culvert or PVC bundle will facilitate water flow and not result in a damning affect.

Page 24 - Include a guideline that if vegetation does not come back naturally, and then seed with recommended seeding mixture.

Page 24 - Might be beneficial to have recommendations from Wildlife Division on what type of mixes would benefit game species as these roads and landings could be utilized like lineal food plots.

Water Diversion Devices

Page 25 - The first water bar should regardless of how constructed should be placed at the top of the slope then measure from that water bar to the next one.

Page 27 - The inclusion of conveyor belt water bars is great! These can be utilized by logging equipment, however, would recommend using either 2x6 or 2x8 treated lumber to sandwich the belt to aid in securing underground.

Page 27 - Open top box culverts can be effective in diverting water; however, they require more maintenance.

Page 31 - Cross drainage culverts do not always have to be placed at a downgrade angle. This is applicable in hilly topography. Cross drainage can be used for ephemerals and the culvert should be placed at a right angle to the road. Minimum culvert diameter could be 12 inches. This would depend on expected flows and slope of culvert placement. Adequate flow would minimize debris left behind.

Page 31 - Culverts ends should be place at least 2 inches below grade to ensure that either end is not perched.

Page 31 - In wet areas, geo-textile should be used to as an underlayment for the culvert to prevent the culvert from bowing up on both ends.

Page 31 - A minimum of 12 inches of fill should be placed on top of the culvert

Cross drainage culverts do not require permits.

Maintenance of all water control structure is needed in order to remain effective, both during and after the harvest is conducted.

Alternative water control structures for handling of seeps on forest roads could include French drains or rock weirs.

Stream Crossings

Fords are not granted even when used in the haul road? In certain circumstances a ford would be the most economical way to cross and easiest way to cross a shallow stream.

Don t be so restrictive to the building material for the a temporary wood bridge some additional possibilities could include Log Stringers, Solid Sawn Stringers, Stress-laminated, Glued-laminated, Dowel-laminated, Nail-laminated, Crane Mats, and Others. Included portable steel bridges.

Page 33 - Recommend anchoring all four corners to keep the structure in place and when the bridge is not in operation remove all but one anchor point. This would allow the bridge to swing out of the stream during an extreme rain event and not be washed down stream.

Page 33 - The guidelines for installing a bridge are lacking or not present. This need to be addressed.

Page 34 - If the stream crossing can not be placed at a right angle to the road then the culvert should be place at the angle of the natural flow of the stream. Would caution trying to direct flow into culvert. The stream flow should not be impeded.

Page 34 - Culvert should be placed a 1 or 2 inches below stream grade to ensure the culvert is not perched.

Page 34 - Amount of fill on top of the culvert should be a minimum of 12 inches or ½ the diameter of the culvert whichever is greater.

Page 36 - Recommend not allowing multiple culverts. It takes four culverts to equal the end area of one properly sized culvert.

Page 36 - Recommend not using the MESBOA and go back to using the Hasty Method as recommend in the previous manual. The Hasty Method seemed to be much easier to understand and implement.

Regardless of which method deviation can be requested at the local level. Permitted culvert may be grossly oversized resulting in a stream crossing that could not be built.

The stream crossing should have raised road approaches and the highest point should be at the midpoint of the crossing. This will allow water to directed back and way from the stream itself.

Rutting

Page 38 - Trails and roads should zigzag in nature allowing for water to be diverted reducing the occurrence of ruts.

Page 39 - Recommend not removing geo-textile fabric once it is covered with soil material. The vegetation that becomes established on top of the fabric would be destroyed and the erosion potential returns when disturbing the site once again.

Page 40 - Specific rutting numbers should not be included in this document as rutting is a site specific. Incorporating rutting numbers will be interpreted as a rule rather then a guideline.

Skidding

Page 42 - Don t recommend skidding along the contour of a slope as this could increase the potential of equipment roll-over.

Page 42 - Trails in steep topography should zigzag up the slope allowing for water diversion along the way and minimizing erosion.

Page 43 - Would recommend maximizing skid trail impacts on one or few skid trails rather then spreading trails across the site. Numerous skid trails would increase soil compaction and potential root damage.

Wetland BMPs and Forest Roads

Page 43 - Fill should be used from the excavated material and not taken from the uplands.

Page 45 - The figure on page 45 does not represent the text description very well, this picture looks more like a stream crossing and the depression is not discussed. A better picture should be used.