

Table 1. Setbacks

| Application Location | DATCP/DNR Setback (ft) | Sylvester Township Setback (ft) |
|---|------------------------|---------------------------------|
| Private drinking water well | 100 | 1000 |
| Direct conduit to groundwater – NR 243.14(2)(b)8 | 100 | 1000 |
| Swallet, and perennial and intermittent drainageways | 100 | 200 |
| Non-metallic mine | 100 | 1000 |
| Depressional groundwater recharge area over shallow fractured bedrock | 100 | 1000 |
| Sinkholes | 100 | 1000 |
| Fractured bedrock at the surface (<i>and fracturing within 20 feet of the surface</i>) | 100 | 1000 |
| Tile inlets discharging to groundwater | 100 | 1000 |
| Upslope of direct conduit to groundwater – NRCS technical standard 590 | 200 | 1000 |
| Surface Water Quality Management Area (SWQMA) NR 243.03(66)(d) * | 300-1000 | 1000 |
| Municipal, Village Potable Water Well Protection Starting at Extra-territorial Limit | 1000 | 5000 |
| Fields located near State Natural Areas and dedicated State Scientific Areas | NA | 1000 |
| Field bordering organic food production lands, including farms, orchards, and nurseries without written permission of the landowner. | NA | 100 |
| Specialized genetic plant and animal culture; and diversified agricultural operations without written permission of the landowner. | NA | 100 |
| Fields with less than an average of 3%, or 100 tons/acre of soil organic carbon and bulk density of less than 1.1 g/cc (dry weight) | NA | No Spread (NS) |
| Fields with soil permeabilities under low, moderate and high antecedent rooting zone soil moisture levels of greater than 10 to the minus 5, centimeters per second. | NA | No Spread (NS) |
| Fields with seasonal shallow groundwater table for ≥ 14 days and with saturation within 24 inches of surface of ground on a minimum of 25% of the field gross acreage. | NA | No Spread (NS) |
| Fields supporting uncontrolled overland runoff at anytime during the dormant or growing season in any location on the landscape. | NA | No Spread (NS) |

Table 2. Prohibited Areas

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| Non-farmed wetland, sinkhole, non-metallic mine or well |
| Surface water, established concentrated flow channels or non-harvested permanent vegetative buffers |
| Land where vegetation is not removed mechanically or by grazing, except to provide nutrients for establishment and maintenance |
| Fields exceeding tolerable soil loss (T)** |
| Slopes greater than 9% |
| No application on soils with a depth to groundwater or bedrock if less than 24 inches – NR 243.14(2)(b)7. |
| Within 100 feet of any property line without written permission from landowner. |

Table 3. Conservation Options

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| Fields only where manure is fully dewatered and fully composted and no additional crop fertilizers are added to the field to grow crops during the year of spreading or the following crop production year. |
| Fields with deep clay loam soils where 2, 10, 25, and 50-year precipitation events (Type II, 24-hour storm events) can be retained in the field, in the soil matrix, or depressional areas, and released at a rate that would not exceed a 2-year storm event release rate. |
| Fields where 10 year precipitation events (Type II, 24-hour storm event with high antecedent soil moisture conditions) are fully contained in the fields and final polished before released water would enter an intermittent and perennial drainageway. |
| Fields where it can be demonstrated that 10-year precipitation events (Type II, 24-hour storm event with high antecedent soil moisture conditions) and all nitrogen, phosphorus, suspended solids, and dissolved organic carbon and particulate carbon can be removed from surface water runoff to 95% removal efficiencies (as modeled using USGS, HSPF, SLAM, or other acceptable empirical models) and be fully contained in the fields and final polished before released water would enter an intermittent and perennial drainageway. Techniques used to accomplish this improvement can include at least three techniques in each field that follow NRCS BMP requirements, such as residue management, cover cropping, STRIPs, wetland and upland prairie biofilters and buffering of intermittent and perennial drainageways, and subgrade denitrification wetlands. |
| Fields with dormant season cover crops and growing season intercropping to produce 90% vegetation cover year-round on fields and where manure is spread directly over the established cover crop planting so that manure and runoff are controlled by the cover crop. |
| Fields where 50 foot width STRIPs of native prairie vegetation plants have been successfully installed at distances of 1 STRIP every 400 feet that are laid out like terraces, perpendicular to the drainage routes and overland flow routes to intercept surface runoff across farm fields. |
| Fields where a minimum of 50% of annual manure load and 100% of crop fertilizer applications are changed to the use of approved slow release osmocote or biotic fertilizers (see PerfectBlend as example of acceptable product), and that meet all other setback requirements. |
| NOTES: |
| *SWQMA-For the purposes of nutrient management planning, Surface Water Quality Areas are defined as follows: 1. within 1,000 feet from the ordinary high-water mark of navigable waters that consist of a lake, pond or flowage, except that, for a navigable water that is a glacial pothole lake, "surface water quality management area" means the area within 1,000 feet from the high-water mark of the lake. 2. The area within 300 feet from the ordinary high-water mark of navigable waters that consist of a river or stream or other non-lake navigable water. |
| **Tolerable Soil Loss (T)- For sheet and rill erosion T-value means the maximum rate of soil erosion established for each soil type that will permit crop productivity to be sustained economically and indefinitely. Erosion calculations shall be based on current approved erosion predication technology found in NRCS FOTG Section I or the soil loss assessment calculated using the Phosphorous Index Model. Tolerable soil erosion rates shall be determined using the RUSLE2 Related Attributes Report located in Section 2, e-FOTG, Soil Report. |