

SECTION 18. ENVIRONMENTAL PERFORMANCE STANDARDS

SUBDIVISION 1. WETLAND CONSERVATION

A. PURPOSE

The County finds that wetlands provide a variety of benefits. Wetlands maintain water quality by filtering and absorbing polluted surface water runoff, reduce flooding and soil erosion, recharge groundwater, provide fish and wildlife habitat, provide open space, and are an integral part of the County's environment. Wetlands are important physical, educational, ecological, aesthetic, recreational, and economic assets to the County. They are critical to the County's stormwater management and other aspects of the public health, safety, and general welfare. Regulating wetlands and the land uses around them are therefore in the public interest.

B. AUTHORITY

The Wetland Conservation Act (WCA) of 1991, shall be adopted by reference, as amended from time to time. Le Sueur County designates the administrative responsibilities as the local government unit (LGU) to Le Sueur County Soil and Water Conservation Districts (SWCD) who will be responsible for the implementation of WCA in order for Le Sueur County to fulfill their responsibilities as the LGU.

C. PRESERVATION

To the extent possible, all wetlands shall be retained in their natural state. Alterations to wetlands shall require review by the Le Sueur County SWCD. The following provisions apply to wetlands in Le Sueur County.

D. WETLAND BOUNDARY OR TYPE APPLICATIONS

An applicant and/or landowner may apply for a wetland boundary or type decision from the Le Sueur County SWCD or submit a wetland boundary or type decision by a certified wetland delineator. The applicant and/or landowner is responsible for submitting proof necessary to make the decision. Applications for approval of wetland boundary or type must include information in accordance with wetland delineation report submittal guidelines provided. A wetland boundary or type application may be submitted independently or as part of a no-loss, exemption, sequencing, replacement plan, or banking application.

E. GENERAL STANDARDS

The following regulations shall apply in all Districts:

1. New Structures or additions to existing structures shall be set back seventy five (75) feet from the wetland boundary of any Type three (3) through Type eight (8).

2. No part of any sewage treatment system shall be located closer than seventy five (75) feet from the wetland boundary of any Type three (3) through Type eight (8) or ordinary high water level.
3. Organic waste which would normally be disposed of at a solid waste treatment site or which would normally be discharged into a sewage treatment system or sewer shall not be directly or indirectly discharged to a wetland.

SUBDIVISION 2. BLUFF REGULATIONS

A. GENERAL STANDARDS

1. All development shall conform to the natural limitations presented by the topography and soil as to create the best potential for preventing soil erosion.
2. No structure shall be constructed in any bluff or bluff impact zone as defined in this Ordinance. Essential Services shall be exempt from this standard.
3. Filling and cutting activity in any bluff shall be considered a conditional use. In no case shall cutting or filling be allowed for the purpose of establishing a site for the erection of a structure.
4. If the adjacent bluff is actively eroding, the Department may increase the setback requirement.
5. Development on steep slopes with a grade between eight (8) to eighteen (18) percent shall be carefully reviewed to insure adequate measures have been taken to prevent erosion, sedimentation, and structural damage.

B. BLUFF SETBACKS

1. All structures shall be set back from the top and/or toe of the bluff:
 - a. Thirty (30) feet for bluffs with slopes eighteen (18) to thirty (30) percent.
 - b. Fifty (50) feet for bluffs with slopes greater than thirty (30) percent.
 - c. **Existing Building Sites**. All structures shall be set back thirty (30) feet from the top or toe of the bluff.
2. SSTS shall be set back thirty (30) feet from the top or toe of the bluff.
 - a. For an existing dwelling, SSTS upgrade and/or replacement tank(s):
 1. Shall be exempt from bluff setback.
 2. May be located within the bluff impact zone.
 3. Shall not be located within the bluff.

3. If the adjacent bluff is actively eroding, the Department may increase the setback requirement.
4. Structures and accessory facilities, except stairways and landings, must not be placed within bluff impact zones.

SUBDIVISION 3. GRADING, EXCAVATING, OR FILLING STANDARDS

A. APPLICABILITY

1. Grading, excavating or filling activities that involve topographic alterations in all districts shall conform to the following standards of this Section, with the following exceptions.
 - a. Grading, excavating, or filling activities necessary for the construction of structures, sewage treatment systems, and driveways under validly issued zoning permits shall be exempt from this standard.
 - b. Public roads and land alterations for agricultural purposes shall be exempt from this standard.
2. Grading, excavating or filling activities within the bluff shall be a conditional use.

B. STANDARDS

1. There shall be no substantial environmental impact or that such impact shall be alleviated through the County's Erosion Control Standards and other conditions of the permit.
2. There shall be no substantial adverse impact on surrounding properties.
3. Grading, excavating or filling activities within a shoreland district shall conform to the regulations of this Ordinance.
4. Grading, excavating or filling activities in any type of wetland shall be evaluated in accordance with the WCA regulations, as administered by the Le Sueur County SWCD.

C. PERMIT REQUIREMENTS

1. Plans shall be submitted by the applicant and/or landowner as indicated in the following table for review by the Department. The Department may request review by the SWCD.
2. Erosion control measures shall be required. Erosion and siltation of the surrounding area shall be prohibited.
3. The proposed grading, excavating or filling activities shall occur within one (1) year of permit issuance.

4. The permit shall specify what operations are to occur in the permitted area and what general types of equipment may be used in the operation.
5. A National Pollution Discharge Elimination System (NPDES) permit shall be obtained if the land disturbance is greater than one (1) acre.
6. Refer to the following table for permitting requirements for grading, excavating or filling activities in each zoning district.

(TABLE ON NEXT PAGE)

ZONE		Permitted Use (No requirements)	Permitted Use w/LAP	Land Alteration Permit (LAP) Requirements	Conditional Use	Conditional Use Requirements
Shore Impact Zone Bluff Impact Zone	SIZ BIZ	<5 cu yds	5-10 cu yds	Scaled Site plan w/ 2-foot contours depicting existing and proposed topography. As-Built upon completion.	>10 cu yds	Scaled Site plan w/ 2-foot contours depicting existing and proposed topography. As-Built upon completion.
Bluff		Prohibited	Prohibited	Prohibited	>0 cu yds	Site plan & As-Built completed by a surveyor or engineer.
Special Protection	SP	<25 cu yds	25-50 cu yds	<u>Parcels < 5 ac:</u> Scaled Site plan w/ 2-foot contours depicting existing and proposed topography. As-Built upon completion. <u>Parcels 5-20 ac:</u> Scaled Site plan w/ 5-foot contours depicting existing and proposed topography. As-Built upon completion. <u>Parcels > 20 ac:</u> Scaled Site plan w/ 10-foot contours depicting existing and proposed topography. As-Built upon completion.	>50 cu yds	<u>Parcels < 5 ac:</u> Scaled Site plan w/ 2-foot contours depicting existing and proposed topography. As-Built upon completion. <u>Parcels 5-20 ac:</u> Scaled Site plan w/ 5-foot contours depicting existing and proposed topography. As-Built upon completion. <u>Parcels > 20 ac:</u> Scaled Site plan w/ 10-foot contours depicting existing and proposed topography. As-Built upon completion. Site plan & As-Built completed by a surveyor or engineer.
Recreational Commercial	RC	<25 cu yds	25-50 cu yds		>50 cu yds	
Recreational Residential	RR	<25 cu yds	25-50 cu yds		>50 cu yds	
Urban/Rural Residential	R1	<25 cu yds	25-50 cu yds		>50 cu yds	
Conservancy	C	<25 cu yds	25-50 cu yds		>50 cu yds	
Business	B	<25 cu yds	25-50 cu yds		>50 cu yds	
Industrial	I	<250 cu yds	250-500 cu yds		>500 cu yds	
Agricultural Parcels less than 20 acres	A	<250 cu yds	250-500 cu yds		>500 cu yds	
Agricultural Parcels more than 20 acres	A	>500 cu yds	500-1000 cu yds		>1000 cu yds	
** Road projects and farming practices are exempt from Grading, Excavating, and Filling requirements .						

D. ASSURANCE REQUIREMENTS

1. A performance bond, letter of credit, or other improvement security satisfactory to the County shall be required to be filed with the Department for grading, excavating or filling activities involving the movement of more than fifteen hundred (1500) cubic yards of material.
 - a. The County shall specify the amount and type of assurance required.
 - b. The assurance shall be used to reimburse the County for any monies, labor, or materials expended to bring the operation into compliance with the conditions of the permit. This includes, but is not limited to cover all costs of improvements, landscaping, maintenance of improvements, engineering, inspection and professional fee and consultant costs.
 - c. The assurance may be used in the event of failure to execute any phase of the restoration plan specifically scheduled as required in the permit.
 - d. This option may be executed one hundred and eighty (180) days after written notice of non-compliance to the applicant and/or landowner.
2. The applicant and/or landowner shall acquire and keep in force for the duration of the permit, liability insurance specifically covering the project.
3. The applicant and/or landowner shall provide certification of insurance.

SUBDIVISION 4. ABATEMENT OF ENVIRONMENTAL HAZARDS.

- A. Final plats shall not be approved until all known environmental hazards situated on the subject property have been abated in a manner prescribed by law. Environmental hazards include, but not limited to the following:
 1. Unused or improperly sealed wells, cisterns, pits, tanks, and similar hazards.
 2. Unapproved sites where man made articles are stored, abandoned or discarded.
 3. Discarded appliances.
 4. Inoperative, or unlicensed motor vehicles, combustion engines and parts.
 5. Any hazardous waste materials.
 6. Abandoned, dilapidated, or burned out structures.
 7. Other uses similar to those listed above.

SUBDIVISION 5. FOREST MANAGEMENT AND NATURAL VEGETATION PRESERVATION

A. FOREST MANAGEMENT STANDARDS

1. The harvesting of timber and associated reforestation or conversion of forested use to a nonforested use must be conducted consistent with the following standards:
 - a. Timber harvesting and associated reforestation shall be conducted consistent with the provisions of the Minnesota Nonpoint Source Pollution Assessment-Forestry and the provisions of Water Quality in Forest Management "Best Management Practices in Minnesota."

B. NATURAL VEGETATION STANDARDS

1. Natural vegetation, including ground cover and trees, shall be preserved and maintained to the greatest extent possible in order to control erosion and runoff, preserve habitat, and maintain a buffer between land uses.
2. Structures shall be located in such a manner that the maximum number of trees shall be preserved.
3. Prior to the granting of a zoning permit, it shall be the responsibility of the applicant and/or landowner to demonstrate that there are no feasible or prudent alternatives to the cutting of trees on the site.
4. A Tree Inventory and Replacement Plan shall be required if the applicant and/or landowner will be cutting or removing trees on site. A tree inventory shall be submitted by the property owner and identify all trees with a caliper of six (6) inches or greater (measured at four and one-half (4.5) feet above ground level).
 - a. No trees shall be cleared or in any way removed from the site unless replaced with one (1) trees for every tree that is removed and a variety of trees shall be used.
 - b. Replacement trees shall have a minimum caliper of two (2) inches measured at four and one-half (4.5) feet above ground level.
5. Residential development shall not disturb or remove more than one-half (1/2) acre of healthy tree cover for the building pad, accessory structure, driveway, septic system, firebreak, well or for any other purpose without first providing a tree replanting plan for the site.
6. Commercial or industrial development shall not disturb more than one (1) acre of healthy tree cover for the building pad, accessory structure, driveway, septic system, firebreak, well or for any other purpose without first providing a tree replanting plan for the site.
7. Timing of tree removal shall be as such to minimize tree loss.

C. GENERAL STANDARDS

1. Shore and bluff impact zones shall not be intensively cleared of vegetation.
2. An erosion and sediment control plan shall be developed and approved by the Le Sueur County SWCD before issuance of a conditional use permit for the conversion.
3. Forestation, reforestation or landscaping shall utilize a variety of tree species and shall not utilize any species presently under disease epidemic. Native species are recommended, however species planted shall be hardy under local conditions and compatible with the local landscape.
4. The root zone of existing trees shall be preserved and protected during development including grading and contouring, so that the trees will not be adversely affected by the work.
5. The removal of trees seriously damaged by storms or other natural causes, or diseased trees shall be allowed.
6. As a mitigating measure, where trees are to be removed, the applicant and/or landowner shall prepare a tree planting plan to be approved by the Department.

SUBDIVISION 6. SPREADING OF CONTAMINATED SOIL

- A. Soil that has been determined by the Agency to be contaminated with petroleum, or soil that has been determined by the Minnesota Department of Agriculture (MDA) to be contaminated with agricultural pesticides, may be land spread if the following have been met.
 1. The Agency or MDA has granted approval for the land spreading of contaminated soil on the proposed site.
 2. The Applicant and/or Landowner shall provide documentation that the Township Board has received notification.
 3. The Department has reviewed and approved the proposal. The County may impose conditions to assure compliance with this Ordinance.
 4. Shall abide by all grading and filling standards as set forth in this Ordinance.

SUBDIVISION 7. EROSION CONTROL

A. Le Sueur County hereby adopts by reference Minnesota Statute Chapters 103B, 105, 462, and 497, Minnesota Rules, Parts 6120.2500-6120.3900, and Minnesota Rules Chapters 8410 and 8420, as amended from time to time, for the purpose of setting forth the minimum requirements to control or eliminate storm water pollution along with soil erosion and sedimentation within the County. It establishes standards and specifications for conservation practices and planning activities designed to minimize nonpoint source pollution, soil erosion and sedimentation.

B. GENERAL CRITERIA FOR STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

Any construction activity disturbing surface vegetation of one (1) acre or more shall not take place without the implementation of an approved SWPPP meeting the requirements of the Agency's National Pollutant Discharge Elimination System Stormwater Program (NPDES), unless by Agency exception.

C. EROSION AND SEDIMENT CONTROL

1. Erosion and siltation control measures shall be coordinated with the different stages of development.
2. Appropriate control measures shall be installed prior to development, when necessary to control erosion.
3. The County may require a storm water drainage and erosion control plan prepared by a licensed professional engineer on all development that has less than one (1) acre of disturbed area.
4. For all areas that have one (1) acre or more of disturbed area, SWPPP and NPDES permits are required. The SWPPP shall be prepared by a licensed professional engineer.
5. The following restrictions shall apply:
 - a. Land shall be developed in increments of workable size such that adequate erosion and siltation controls can be provided as construction progresses.
 - b. The smallest practical area of land shall be exposed at any one period of time.
 - c. The drainage system shall be constructed and operational as quickly as possible during construction.
 - d. Natural vegetation shall be retained and protected when feasible, and the amount of exposed soil shall be minimized.

- e. Where the topsoil is removed, sufficient desirable soil shall be set aside for respreading over the developed area. The soil shall be restored to a depth of four (4) inches and shall be of a quality at least equal to the soil quality prior to development.
- f. Perimeter sediment control measures shall be properly installed before construction activity begins. Such structures may be adjusted during dry weather to accommodate short term activities, such as those that require very large vehicles. As soon as this activity is finished or before rainfall, the erosion and sediment control structures must be returned to the configuration specified by the Agency.
- g. The natural drainage shall be used when feasible for storage and flow of runoff.
- h. Temporary storage areas or retention basins scattered throughout developed areas shall be encouraged to reduce peak flow, erosion damage, and construction costs.
- i. Inlet protection shall be placed on culverts, tile inlets and storm sewer inlets.
- j. Pipe outlets shall have energy dissipation installed to a surface water for outlet protection within twenty four (24) hours of connection.

D. EXPOSED SLOPES

1. All exposed soil areas with a continuous positive slope that are within two hundred (200) lineal feet of any surface water, or any conveyance (stormwater inlet, drainage ditch, etc.) to a surface water, must have temporary or permanent cover year round. The area shall be stabilized if it has not been worked within the following:
 - a. Seven (7) days on slopes greater than three feet horizontal to one foot vertical (3:1).
 - b. Fourteen (14) days on slopes ranging from 3:1 to 10:1.
 - c. Twenty one (21) days for flatter slopes.
 - d. On sensitive sites or sites with special waters, as defined by the Agency, exposed soil areas with a greater than 3:1 slope.
2. At the foot of each exposed slope, a channel and berm shall be constructed to control runoff. The channelized water shall be diverted to a sedimentation basin (debris basin, silt basin, or silt trap), before being allowed to enter the natural drainage system.
3. For exposed slopes on stockpiles greater than ten (10) cubic yards the toe must be more than twenty five (25) feet from a road, drainage channel or stormwater inlet.
 - a. If left exposed for more than seven (7) days, it must be stabilized with mulch, vegetation, tarps or other means.

- b. If left exposed for less than seven (7) days, erosion must be controlled with perimeter control devices such as a silt fence.
 - c. If for any reason an exposed slope or stockpile is located closer than twenty five (25) feet from a road, drainage channel or stormwater inlet, it must be controlled with perimeter control devices immediately.
4. Exposed slopes shall be protected by whatever means which will effectively prevent erosion considering the degree of slope, soil material, and expected length of exposure. Slope protection shall consist of but not limited to, mulch, sheets of plastic, burlap or jute netting, sod blanket, erosion mat, fast growing grasses or temporary seedlings of annual grasses.
- a. Mulch consists of hay, straw, wood chips, corn stalks, bark or other protective material.
 - b. Mulch shall be anchored to slopes with liquid asphalt, stakes and netting or worked into the soil to provide additional slope stability.
5. Control measures, other than those specifically stated in this Subdivision, may be used in place of the above measures if it can be demonstrated that they will as effectively protect exposed slopes.

E. PRESERVATION OF NATURAL DRAINAGE WAYS

1. **Waterways**

- a. The natural drainage system shall be used, when feasible, for storage and flow of runoff water.
- b. Untreated stormwater drainage may be discharged to retention basins or other treatment facilities.
- c. Only treated stormwater may be discharged to wetlands, marshlands or swamps.
- d. Diversion of treated stormwater to wetlands, marshlands or swamps shall be considered for existing or planned surface drainage.
- e. Marshlands and swamps used for treated stormwater shall provide for natural or artificial water level control.
- f. Temporary storage areas or retention basins scattered throughout developed areas shall be encouraged in order to reduce peak flow, erosion damage and construction cost.

- g. The widths of a constructed waterway shall be sufficiently large enough to adequately channel runoff from a ten (10) year storm event as determined by the Agency. Adequacy shall be determined by the expected runoff when full development of the drainage area is reached.
- h. A report prepared by a licensed professional engineer may be required in order to prove waterway adequacy on sites that disturb less than one (1) acre.
- i. An NPDES permit and report prepared by a licensed professional engineer shall be required in order to prove waterway adequacy on all sites that disturb more than one (1) acre.
- j. No fences or structures that will reduce or restrict the flow of water shall be constructed across the waterway.
- k. The banks of the waterway shall be protected with permanent vegetation.
- l. The banks of the waterway shall not exceed 3:1 in gradient.
- m. The gradient of the waterway bed shall not exceed a grade that will result in a velocity that will cause erosion to the banks of the waterway.
- n. When possible, existing natural watercourses and vegetated soil surfaces shall be used to convey, store, filter and retain runoff before discharge into public waters or a stormwater conveyance system.
- o. If the waterway must be constructed, the bed of the waterway should be protected with natural vegetation, sod, or designed in accordance with the DNR's Best Practices for Meeting DNR General Public Waters Work Permit GP2004-001 Manual.
 - 1. If sod will not function properly, rip rap may be used.
 - 2. Rip rap shall consist of only natural rock excluding limestone and other similar erosive materials.
 - 3. The rip rap shall be no smaller than two (2) inches square or no larger than two (2) feet square, except along a public waterway in which shoreland rules apply.
 - 4. Any other forms of rip rap shall require a conditional use permit.
- p. If the flow velocity in the waterway is such that erosion of the vegetated sidewall will occur and said velocity cannot be decreased via velocity control structures, then other materials may be placed on the side walls.
- q. Either gravel or rip rap, excluding limestone and other similar erosive materials shall be allowed to prevent erosion at these points.

- r. A buffer strip of a minimum of sixteen and one-half (16 ½) feet shall be maintained in permanent native vegetation on each side of the waterway.

2. **Waterway Velocity**

- a. The flow of runoff in waterways shall be controlled to a velocity that will not cause erosion of the waterway.
- b. Flow velocity shall be controlled through the installation of diversions, berm, slope drains, and other similarly effective velocity control structures.

3. **Sediment Control**

- a. To prevent sedimentation from entering waterways, pervious and impervious sediment traps and other sediment control structures shall be incorporated throughout the contributing watershed.
- b. Temporary pervious sediment traps shall consist of a construction of bales of hay with a low spillway embankment section of sand and gravel or specifically designed fabric fences or other means approved by the Department that will allow a slow movement of water while filtering sediment. Such structures may serve as temporary sediment control feature during the construction state of development.
- c. Permanent impervious sediment control structures consist of sediment basins (debris basins, settling basins, or silt traps), and shall be utilized to remove sediment from runoff prior to its disposal in any permanent body of water.

F. MAINTENANCE OF EROSION CONTROL SYSTEMS

- 1. The erosion and velocity control structures shall be maintained in a condition that will insure continuous functioning according to the provisions of this Section.
- 2. A minimum eight (8) foot wide access shall be provided to erosion and velocity control structures, along with a maintenance plan identifying who will be responsible for future maintenance of the system.
- 3. Sediment basins shall be maintained as the need occurs to insure continuous desilting action. All sediment basins shall have a minimum of three (3) feet of depth below the outlet.
- 4. The areas utilized for runoff waterways and sediment basins shall not be allowed to exist in an unsightly condition. The banks of the sediment basins and waterways shall be landscaped.
- 5. Prior to the approval of any plat for development, the developer shall make provisions for continued maintenance on the erosion and sediment control system until project completion.

SUBDIVISION 8. DRAINAGE

- A. Drainage requirements within the County shall meet the standards of Minnesota Statute 103E, as amended from time to time, when applicable, along with the following standards.
- B. The use of public road right-of-ways for the purpose of subsoil drainage outlet for artificial drainage tile drains shall be prohibited without approval by the Road Authority. Approval must be granted prior to any installation of artificial drainage tile.
- C. A drainage plan shall be submitted and approved for all new commercial developments, industrial developments, and platted subdivisions.
- D. Any proposed development of land shall not increase the runoff rate of stormwater so as to cause an adverse effect upon adjacent lands.
- E. Erosion control measures shall make maximum use of natural in-place vegetation rather than the placing of new vegetation on-site as erosion control measures. When possible, existing natural drainage ways, natural or created wetlands, and vegetated soil surfaces shall be used to convey, store, filter, and retain storm water runoff.
- F. Development shall be planned in a manner that will minimize the extent of disturbed areas, runoff velocities and erosion potential. Disturbed areas shall be stabilized and protected in conformance with all applicable County, State and Federal regulations.
- G. When development density, topographic features and/or soil and vegetation conditions are not sufficient to adequately handle stormwater runoff using natural features, various types of constructed facilities such as, but not limited to, diversions, settling basins, skimming devices, dikes, waterways, and ponds shall be required.
- H. Preference shall be given to designs using surface drainage, vegetation, and infiltration rather than buried pipes and manmade materials and facilities.
- I. Settling basins to intercept urban runoff shall be sized to a minimum of a 100-year storm event.
- J. When constructed facilities are used for stormwater management, documentation shall be provided from a licensed professional engineer such that facilities are designed and installed consistent with all applicable State standards.
- K. New constructed stormwater outfalls to public waters must provide for filtering or settling of suspended solids and skimming of surface debris before discharge.
- L. A management and maintenance plan shall be submitted and approved for all new commercial developments, industrial developments, and platted subdivisions.

- M. The management and maintenance plan shall include plans for ownership, management and maintenance of drainage and storm water control features.
- N. Any public tile that is affected by development activity shall be replaced in accordance with Minnesota Statute 103, as amended from time to time when applicable.
- O. Any private tile line that is impacted by development activity shall be repaired and rerouted with the same or larger pipe size and pipe grade as the existing tile.