

Topic:	Natural Resource Protection & Conservation; Open Space Preservation Regulations
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State:	Iowa
Jurisdiction Type:	Municipal
Municipality:	City of Decorah
Year (adopted, written, etc.):	1993
Community Type – applicable to:	Urban; Suburban
Title:	City of Decorah Conservation & Open Space (COS) Regulations
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Abstract

This ordinance was created to protect mature and young woodlands and prevent the ecological degradation of heavily wooded areas, as well as protect drainageways, wetlands, and soil erosion and sedimentation control.

Resource

Chapter 17.124 CONSERVATION AND OPEN SPACE (COS) REGULATIONS

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17.124.010 Statement of intent.

It is the intent of this chapter to provide standards that limit development on the hillsides in order to minimize the danger to life and property which results from development undertaken without full realization of such danger, and to preserve and protect the heavily wooded areas, drainageways, and the visual and environmental qualities, and to prevent ecological degradation of such areas. (Ord. 952 (part), 1993)

17.124.020 Special requirements.

A. With the exception of agricultural uses allowed in an A-1 district, resource protection and site performance standards shall apply to all development in all districts, and are applied to each site at the time a site plan and/or subdivision plat is prepared.

B. All natural resources defined herein shall be protected by the standards of this chapter.

C. It is not intended by this chapter to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail.

D. In their interpretation and application, the provisions of this chapter shall be held to be minimum requirements and shall not be deemed a limitation of any other powers granted by state statutes. If two or more resources subject to protection are present on the same area of land, only the most restrictive provisions of this chapter shall apply. (Ord. 952 (part), 1993)

17.124.030 Site plans.

Site plans shall be required in accordance with the provisions of Chapter 17.36 for all uses except agricultural uses. (Ord. 952 (part), 1993)

17.124.040 Protection of mature woodlands and young woodlands.

A. Definitions.

1. "Canopy of trees" means the maximum perimeter of vegetation of any tree or group of trees growing together as viewed from overhead.

2. "Mature woodland" means an area of mature deciduous and/or evergreen trees covering a lot or a portion of a lot and consisting of thirty percent or more largely deciduous canopy of trees having a ten-inch or greater caliper, or any grove of deciduous trees consisting of eight or more trees having an eighteen-inch or greater caliper.

3. "Young woodland" means an area of deciduous or evergreen trees covering a lot or a portion of a lot and consisting of seventy percent or more of canopy of trees having a three-inch caliper or greater.

B. Determination of woodland and woodland boundaries shall be based on a field survey compiled by a registered surveyor, architect, engineer, landscape architect, or forester and/or from most recent Winneshiek County aerial photographs or official plat books.

C. Protection Levels. In all developments, the level of protection provided woodlands shall be in accordance with this chapter. Mature woodlands shall be provided with seventy-five percent protection and young woodlands with fifty percent protection, except as provided herein under mitigation. That is, on each development, the appropriate level of protection is to be provided by leaving the identified wooded areas undisturbed. In residential

developments, such areas must be within the designated yards. In nonresidential developments, wooded areas may be part of the required minimum open space.

D. Development area shall include the sum of all areas disturbed by construction and adjoining street right-of-way area. The development area shall not exceed the minimum resource protection levels required for a lot or a portion of a lot. (See Attachment F, at the end of this title, for development area illustration.)

1. All rights-of-way shall be included as part of the development area. Woodland areas preserved within any rights-of-way shall not be counted as part of resource protection area.

2. All streets, drives, parking areas, septic tanks, tile fields, utility lines, and buildings shall define the development area. The development area's maximum size shall be determined by the following:

a. From the building foundation. The dimensions of the development area may extend a maximum of twenty feet beyond the foundation of structures.

b. Other Boundaries. For the parking area, the septic system area, utility lines and drives, a maximum distance to the edge of the development area shall be five feet from the outermost line or edge of the septic system area, utility line trench, driveway, or parking area.

3. All grading, fill storage and ground disturbance shall be strictly confined to the development area.

4. For each lot, a development area shall be shown on the site plan and on preliminary and final subdivision plats. The size of the area shall be limited by the minimum required level of protection for the resource for the entire parcel. A deed restriction shall appear on the plat indicating that no clearing shall be permitted beyond the development area of the lot.

E. Mitigation. A certain amount of additional disturbance to woodlands may be permitted, but only if the developer mitigates the disturbance according to the following requirements:

1. The level of protection given woodlands shall not be less than fifty-five percent for mature woodlands, or twenty-five percent for young woodlands.

2. The land on which the mitigation is to take place shall be deed restricted as permanent open space, with a protective easement running in favor of the city.

3. Mitigation shall include the planting of new trees for which mitigation is required.

4. Mitigation shall include the replacement of woodlands that have been disturbed with new woodlands, using the following number of plants per acre or in proportion to:

- a. Four canopy trees, minimum four-inch caliper for deciduous trees and twelve feet high for evergreen trees;
 - b. Eight canopy trees, minimum two-and-one-half-inch caliper for deciduous trees and six feet high for evergreen trees;
 - c. Sixty canopy trees, minimum five feet high;
 - d. Twenty understory trees, minimum five feet high;
 - e. Twenty-five shrubs, minimum eleven inches
5. The species of plants used in mitigation should be similar to those to be destroyed. (Ord. 952 (part), 1993)

17.124.050 Drainageways.

A. Definitions. "Drainageway" means water-courses which are defined either by the presence of intermittent or perennial streams or by topography which indicates a swale where surface stormwater runoffs join. The following areas are drainage-ways:

1. The land, except where areas are designated as floodplain, in the F-1 floodplain district, on either side of and within fifty feet from the edge of each embankment of any intermittent or perennial stream shown on the U.S. Geological Survey seven and one-half-minute quadrangle sheets and/or on the Winneshiek County soil survey maps provided by the Soil Conservation Service.
2. The land, except where areas are designated as floodplain, on either side of and within twenty-five feet of the centerline of any swale identified by topography having a minimum of five acres of upstream area tributary to it.

B. Determination. Drainageway areas shall be determined by reference to one or a combination of the following sources:

1. USGS topographic maps or other topographic maps;
2. Soil maps provided in the Winneshiek County soil survey;
3. Topographic field survey or aerial topographic survey.

C. Protection Level. Drainageway protection requires that seventy-five percent of the drainageway be maintained as open space. Drainageways shall be protected such that the entire length can continue to function and be used for drainage purposes. In no case shall stormwater flows be impeded.

D. Design Standards. New developments shall be designed so that there is a continuous strip of open space along the course of the drainageway. Since the purpose of this protection is to preserve the natural storm drainage system, drainage improvements and retention or detention structures shall be located in these areas. In order to permit this, the open space portions of the drainageway areas may be disturbed, but only if such construction is part of an approved stormwater system that meets the following criteria:

1. The time of concentration of stormwater flows remains unchanged or is lengthened;
2. Stormwater storage capacity is unchanged or increased;
3. Vegetation is replaced in accordance with provisions of woodland mitigation and as required by the city;
4. The resultant new drainageway has less velocity than pre-existed or reduces stream bank erosion through the provision of erosion control measures;
5. Additional water is not backed up onto adjoining properties.

E. The drainageways open space shall be deed restricted as drainageway easement, with a protective easement running in favor of the city. (Ord. 952 (part), 1993)

17.124.060 Wetlands.

A. Definitions.

"Wetland" means an area of ten thousand square feet or more where standing water is retained periodically and hydric vegetation has adapted to the area. Wetlands include all areas designated as "marsh" and/or "swamp" or "wetland" on USGS maps and all areas designated as intermittent ponds, "springs," "marsh," or "swamp," "wet spot" and "depressions" on Winneshiek County soils maps prepared by the Soil Conservation Service.

B. Determination. Wetland areas shall be determined by reference to the following sources. If the first source is considered inaccurate or inappropriate, the succeeding source may be used:

1. U.S. Geological Survey topographic maps;
2. Soil maps provided by the Winneshiek County soil survey;
3. Field survey of plant material by a botanist, landscape architect or engineer;
4. Soil borings provided by a registered soil engineer.

C. Protection Level. One hundred percent of all wetland areas shall remain undisturbed.

D. Disruption and/or Modification. All development proposals which will disrupt wetlands shall, in addition to the provisions of this title, provide proof of approval by the U.S. Corps of Engineers and the Iowa Department of Natural Resources.

E. The wetlands open space shall be deed restricted as wetlands easement, with a protective easement running in favor of the city. (Ord. 952 (part), 1993)

17.124.070 Soil erosion and sedimentation control.

In order to prevent both soil erosion and sedimentation, a soil erosion and sedimentation control plan shall be required as a part of a site plan and/or subdivision plat whenever a development involves any of the conditions or activities as specified in Sections 17.124.040, 17.124.050 and 17.124.060, and for all other uses whenever a site plan is required in accordance with Section 17.36.020 except single-family and two-family dwellings.

A. Definitions for the purposes of this section:

1. "Soil erosion" means any removal and/or loss of soil by the action of water, ice, gravity or wind. Erosion includes both the detachment and transport of soil particles.

2. "Sedimentation" means the settling out of the soil particles which are transported by water or wind. Sedimentation occurs when the velocity of water or wind in which soil particles are suspended is slowed to a sufficient degree and for a sufficient period of time to allow the particles to settle out of suspension or when the degree of slope is lessened to achieve the same result.

3. "Erodible slope" means all slopes with inclines in excess of four percent.

4. "Large exposed area" means an area which consists of more than five thousand square feet of exposed soil.

B. Movement of Land--Plan Required. A soil erosion and sedimentation control plan is required whenever a development involves disturbing land by the movement of earth, including the mining of minerals, sand and gravel (to the extent that such mining is subject to regulation by the city). Any one of the following descriptions shall be considered movement of land:

1. Excavation, fill or any combination thereof exceeding five hundred cubic yards;

2. Filling activities exceeding three feet in vertical depth at the deepest point, as measured from the natural ground surface;

3. Excavating exceeding four feet in vertical depth at the deepest point, as measured from the natural ground surface;

4. Excavation, fill or any combination thereof exceeding an area of five thousand square feet;

5. Any large exposed area of more than five thousand square feet of exposed soil created by land clearing activities.

C. Streams and Water Bodies--Plan Required. Whenever any land located in a drainageway, stream, stream channel, stream bank, lake shoreline or body of water is disturbed, a soil erosion and sedimentation control plan and permits by the Department of Natural Resources and U.S. Corps of Engineers shall be required.

D. The land included within Steep Rock Land (Sr) and Steep Sandy Land (SsF) as mapped on the Winneshiek County soil survey maps of the Soil Conservation Service with slopes greater than thirty percent shall remain undisturbed.

E. The Steep Rock Land (Sr) and/or Steep Sandy Land (SsF) with slopes greater than thirty percent shall be deed restricted as slope protection easement, with a protective easement running in favor of the city.

F. Exemptions. Specifically exempted from the requirement for a soil erosion and sedimentation control plan are farming or other agricultural uses.

G. Objectives of Soil Erosion and Sedimentation Control Plan. A soil erosion and sedimentation control plan shall contain specific control measures for each condition or activity described in subsections B and C of this section. Control measures shall be provided for all areas disturbed by stormwater runoff, and shall retain sedimentation within the development site as early as possible following disturbances. A soil erosion and sedimentation control plan should include the following control measures:

1. Movement of land: control measures for excavation, fill, borrow and stockpile areas or combinations thereof; divert water runoff from erodible slopes which are exposed in the excavation, stockpiling or filling process; provide stable channels to convey runoff water to a stable outlet; excavation, fill, borrow areas and stockpiles shall be left in a stable condition to prevent detachment and transportation of soil particles;

2. Streams, streambeds, stream banks, bodies of water, and lake shorelines: prevent detachment and transportation of soil particles, and siltation or pollution of water;

3. Drainageways and land adjacent to streams, wetlands, and bodies of water: prevent detachment and transportation of soil particles and provide for deposition or sedimentation control to prevent sedimentation in these areas, or pollution of adjacent or receiving waters;

4. Enclosed drainage structure: prevent sedimentation in structure, erosion at outfall of system, and deposit of sediment loads within a system or beyond it;

5. Impervious surfaces: prevent the detachment and transportation of soil (in response to an increase in the rate and/or volume of runoff at the site or its concentration caused by impervious surfaces)

6. Adjacent properties: prevent erosion and/or sedimentation on adjacent properties;

7. Meet requirements of the Department of Natural Resources. (Ord. 952 (part), 1993)