

APPENDIX F

Groundwater Protection Zoning Overlay Model Ordinance for Door County Towns

GROUNDWATER PROTECTION ZONING OVERLAY DISTRICT

[Note: This draft ordinance has not undergone full legal review. Counsel for the town should review the draft for consistency with state law and with county and town ordinances.]

I. PURPOSE, INTENT AND AUTHORITY

The town of _____ (“town”) adopts a groundwater protection zoning overlay district and accompanying regulations in order to protect, preserve and maintain groundwater quality and quantity in habitat areas important to the federally endangered Hine’s emerald dragonfly (*Somatochlora hineana*).

To ensure proactive and preventative protection of groundwater supplies, this ordinance establishes a zoning overlay district for the Hine’s emerald dragonfly habitat groundwater contribution area including 1000 foot buffer for the area. The purpose of the groundwater protection zoning overlay district is to protect groundwater quality and quantity by minimizing contamination potential and promoting infiltration. It is the intent to accomplish this through imposing regulations on land use.

II. DEFINITIONS

For the purposes of this ordinance, the following terms shall be defined as below:

- a. **BEST MANAGEMENT PRACTICE (BMP).** A technique or preventative measure which is equal to or of a higher standard than the common industry practice (i.e., structural or non-structural measures, practices, techniques or devices employed to avoid or minimize soil, sediment or pollutants carried in runoff to waters of the state.)
- b. **CONTAMINATION.** An impairment of water quality by chemical, biological, or other extraneous matter affecting the potential or intended beneficial use of water.
- c. **DEVELOPMENT.** Carrying out any construction, reconstruction, alteration of surface or structure, land disturbance, or change of land use or intensity of use that is subject to the regulatory authority of the town.
- d. **GROUNDWATER CONTRIBUTION AREA.** The total area in which surface water percolates into the below ground water table and yields as surface water again (i.e., wells or springs).
- e. **GROUNDWATER PROTECTION OVERLAY DISTRICT:** The zoning district defined to overlay other zoning districts in the town of _____. This district may include specifically designated recharge areas that collect precipitation or surface water and carry it to groundwater sources.

- f. IMPERVIOUS SURFACE. Surfaces which do not absorb precipitation including but not limited to buildings, structures, parking areas, driveways, roads, sidewalks, and any areas in concrete, asphalt, or packed stone.
- g. KARST FEATURE. An area or surficial geologic feature subject to bedrock dissolution so that it is likely to provide a conduit to groundwater, and may include caves, enlarged fractures, mine features, exposed bedrock surfaces, sinkholes, springs, seeps or swallets.
- h. LAND SPREADING. The disposal of manure waste in thin layers onto the land surface and/or the incorporation of such waste into the top several feet of the surface soil for agricultural and/or solid waste disposal.
- i. MANURE. Livestock excreta and other materials such as bedding, water, soil, hair, feathers, waste water, contaminated runoff and other debris normally included in manure handling operations.
- j. PRIVATE ONSITE WASTEWATER TREATMENT SYSTEM (POWTS). A sewage treatment and disposal system serving a single structure with a septic tank and soil absorption field located on the same parcel as the structure.
- k. SINKHOLE. A depression or opening on the land surface, formed by solution or the collapse of limestone or dolomite bedrock. Sinkholes may be partially or completely filled with unconsolidated material (also known as “rockhole”).
- l. STORM WATER MANAGEMENT PRACTICES. Measures, either structural or nonstructural, that are determined to be effective, practical means of preventing or reducing point source or nonpoint source pollution inputs to storm water runoff and water bodies.
- m. SURFACE WATER. Any wetland, lake, perennial, or intermittent stream or direct conveyance to such waters.

III. EXTENT AND DESIGNATION OF RECHARGE AREAS AND PROTECTION ZONES

A zoning overlay district is hereby created within the boundaries set forth on the map attached hereto as _____. These boundaries include all of the surface areas that contribute groundwater to Hine’s emerald dragonfly larval habitat plus a 1000 foot buffer.

[Note: The boundaries of the 11 groundwater contribution areas of Hine’s emerald dragonfly habitat in Door County can be viewed at (under the Conservation layer): <http://map.co.door.wi.us/map/>]

IV. USES AND RESTRICTIONS

- a. Prohibited Development –
 - i. The expansion of an existing or creation of new non-metallic mines shall be prohibited within the zoning overlay district.
 - ii. The creation of new golf courses shall be prohibited within the zoning overlay district.

- b. Manure Spreading - The following setbacks are required for all sources of manure and organic by-products spread within the zoning overlay district and within the 1000 foot buffer:
 - i. Manure and organic by-products shall not be applied on frozen or snow covered grounds.
 - ii. Manure and organic by-products shall not be applied within 75 feet of surface water.
 - iii. Manure and organic by-products shall not be applied within 75 feet of exposed bedrock.

- c. Maximum Site Impervious Surface Coverage -
 - i. Within the zoning overlay district, no more than 30% of a single lot or building site may be rendered impervious to groundwater infiltration.
 - ii. Maximum impervious site coverage may exceed 30% provided that storm water mitigation devices are installed, such as rain gardens, vegetated retention swales, or bio filters. To the extent feasible, all runoff from impervious surfaces shall be recharged to the aquifer on-site and these devices shall provide for the retention, filtration and percolation.

- d. Storm Water Runoff Plans - Any proposals for the construction of residential dwellings, commercial or industrial structures, recreational or institutional facilities, additions, or reconstructions within the groundwater protection zoning overlay district must adhere to the Door County Soil & Water Conservation Department Procedure Policy: Storm Water Runoff Control Design Criteria.
<http://map.co.door.wi.us/swcd/Storm%20Water%20Policy.pdf>

- e. Minimum Lot Size and Land Divisions – Land divisions resulting in density greater than one unit per acre, or increased intensity of current use shall not be allowed in the zoning overlay district.

V. BEST MANAGEMENT PRACTICES

Under the provisions of this section all operations potentially resulting in sources of contamination, displacement, and erosion shall incorporate and utilize best management practices (BMPs). BMPs may include, but are not limited to, structural and nonstructural systems, conservation practices, and operation and maintenance procedures.

- a. Exposed Bedrock - All development and land use activities shall be set back a minimum distance of 75 feet from any visible or detectable karst features. A buffer of native vegetation shall be installed around the entire perimeter of any exposed karst feature.

- b. Deicing Road Salt - Deicing road salt applications in zoning overlay district is prohibited, where practical. Substitute products and alternative technologies shall be evaluated.

- c. Lawn Care - Use of lawn care pesticides and synthetic fertilizers is prohibited on residential lawns, public places, and recreational fields, within the zoning overlay district. This excludes agricultural pest management and natural areas management (i.e., invasive species control, forestry project maintenance).

VI. PERFORMANCE STANDARDS

- a. Violations -

[Note: Enforcement should be consistent with enforcement of other land use regulation and zoning violations in town.]

VII. SEVERABILITY

If any section, clause, provision or portion of this ordinance shall be held to be invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect or impair any other section, clause, provision, or portion of this ordinance.

VIII. DATE OF EFFECT

This ordinance, and amendments, shall take effect upon passage.

Approved by: _____

Date: _____