TOWN OF ISABELLE PIERCE COUNTY, WISCONSIN

ORDINANCE NUMBER 2025-01

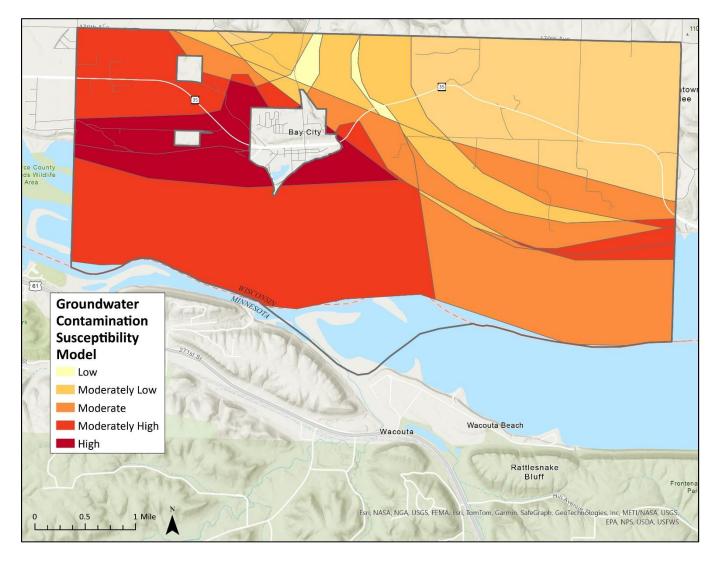
CONCENTRATED ANIMAL FEEDING OPERATIONS (CAFO) ORDINANCE

APPENDIX B.

Map 1. Groundwater Susceptibility to Contamination Model - Local Finding 9

Five factors contribute to groundwater susceptibility, including: type of soil, bedrock and materials between soil and bedrock; depth to bedrock; and depth to groundwater. Data from the Wisconsin Department of Natural Resources Groundwater Susceptibility Model was divided into five evenly spread categories ranging from high to low. Of the town's total acreage approximately 9% is ranked high susceptibility to contamination, 34% moderately high, 24% moderate, 32% moderately low, and 1% ranked low susceptibility.

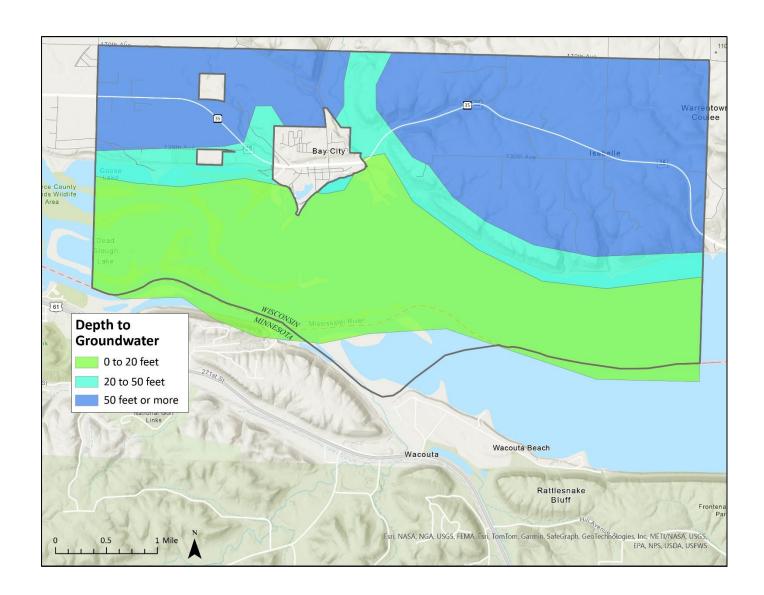
Groundwater Susceptibility to		
Contamination	Percent of Total	
High	9%	
Moderately High	34%	
Moderate	24%	
Moderately Low	32%	
Low	1%	



Map 2. Depth to Groundwater - Local Finding 10

Approximately 42% of Isabelle's total acres have groundwater within 20 feet of the land surface, 13% is 20 to 50 feet, and 45% is over 50 feet from the land surface.

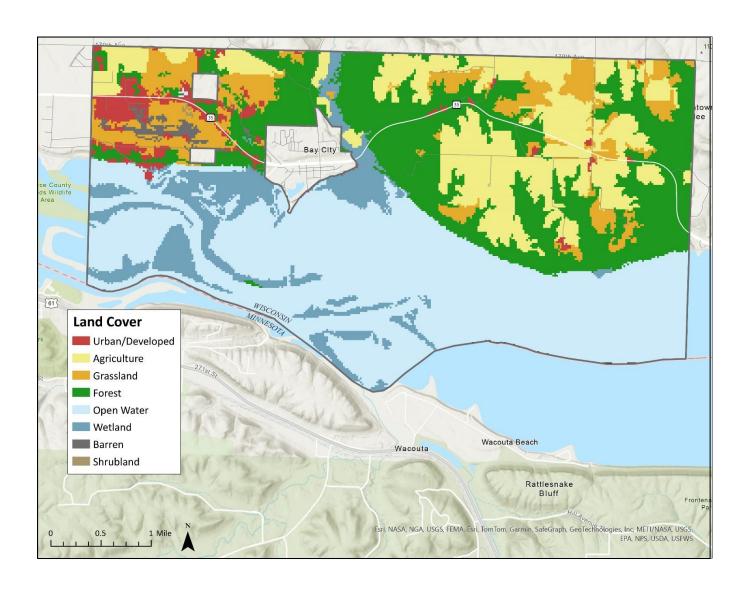
Depth to Groundwater		
0-20ft	42%	
20ft - 50ft	13%	
Over 50ft	45%	



Source: Wisconsin DNR Groundwater Susceptibility Model, Depth to Groundwater https://data-wi-dnr.opendata.arcgis.com/datasets/wi-dnr::gcsm-water-table-depth/about

Map 3. Land Cover - Local Finding 11

Land Cover - WiscLand (Not land use)	Percent
Agriculture	17%
Barren	1%
Forest	24%
Grassland	9%
Open Water	38%
Shrubland	<1%
Urban/Developed	3%
Wetland	9%



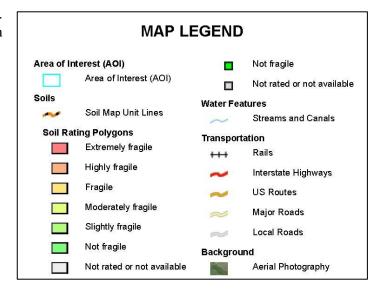
Source: Wisconsin Land Cover Data (WISCLAND 2.0) https://dnr.wisconsin.gov/maps/WISCLAND

Map 4. Fragile Soil Index - Local Finding 12

Fragile soils are those that are most vulnerable to degradation. They are easily degraded and are highly susceptible to erosion with low resilience. They are characterized as having low organic matter contents, low water-stable aggregates and low soil structure. Fragile soils are generally located on sloping ground, have sparse plant cover and tend to be in arid and semiarid regions. A fragile soil index interpretation was developed to rate soils based on their fragility. The index can be used in conservation and watershed planning to assist in identifying soils and areas with greater vulnerability to

degradation.

Fragile Soils	
Fragile	7%
Moderately Fragile	44%
Slightly Fragile	9%
Null or Not Rated	40%



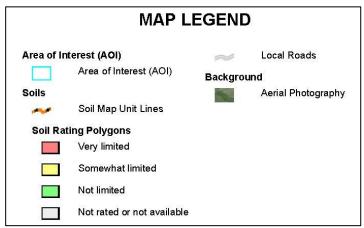


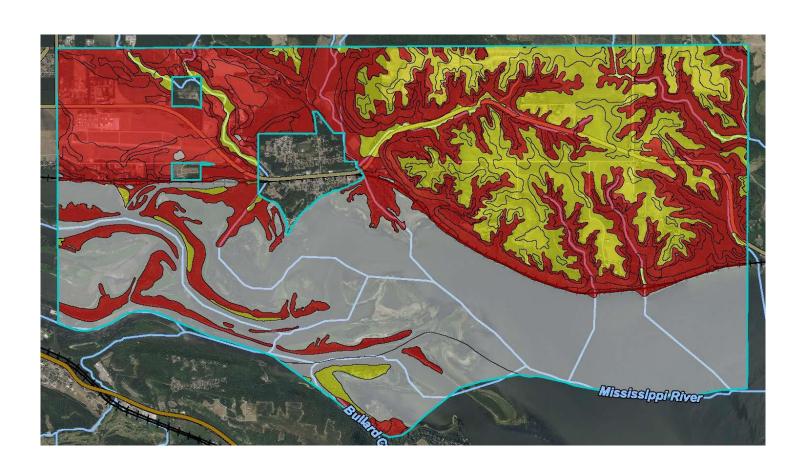
Source: National Cooperative Soil Survey, USDA – NRCS https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Map 5. Manure and Food-Processing Waste - Local Finding 13

These ratings are based on the soil properties that affect absorption, plant growth, microbial activity, erodibility, the rate at which the waste is applied, and the method by which the waste is applied. The properties that affect absorption include saturated hydraulic conductivity (Ksat), depth to a water table, ponding, the sodium adsorption ratio, depth to bedrock or a cemented pan, and available water capacity. The properties that affect plant growth and microbial activity include reaction, the sodium adsorption ratio, salinity, and bulk density. The wind erodibility group, soil erosion factor K, and slope are considered in estimating the likelihood that wind erosion or water erosion will transport the waste material from the application site. Stones, cobbles, a water table, ponding, and flooding can hinder the application of waste. Permanently frozen soils are unsuitable for waste treatment.

- 41% Very Limited indicates that soil has one or more features that are unfavorable for the specific use. Limitations generally cannot be overcome without major soil reclamation, special design, or expensive installation procedures. Poor performance and high maintenance can be expected.
- 20% Somewhat Limited indicates that the soil has features that are moderately favorable for specified use. Limitations can be overcome or minimized by special planning, design, or installation.
- 39% Not Limited or Not Rated



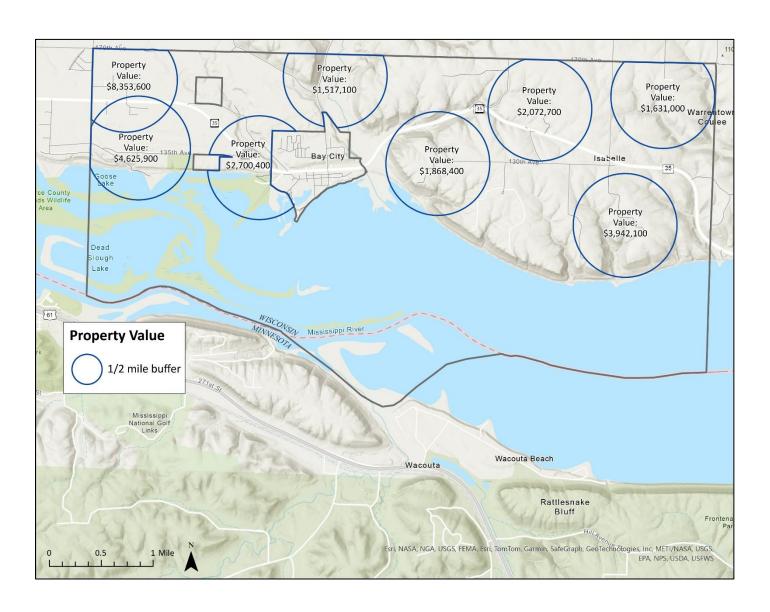


Source: National Cooperative Soil Survey, USDA_https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Map 6. Property Tax Values Within 0.5 mile radius of 8 Randomly Selected Potential CAFO Sites

Local Finding 19

Property values within 1/2 mile of 8 randomly selected sites range in value from \$1.5 million to \$8.3 million.



Source: 2023 Wisconsin County Parcel Data Pierce County, WI

https://www.sco.wisc.edu/parcels/data-county/