Glossary of Terms

~Data sources have been listed where appropriate; for more detailed information about the development of criteria used in the model, including data sources, navigate to the document titled "Greenprint Criteria - Methodology and Data Sources" from the Data Sources tab on the Door County Greenprint home page.~

Aerial Photo
Photos taken from a low-elevation flight. Photos provided in this model were taken in late April and early May of 2009. These photos are orthorectified, or, geometrically corrected to produce a uniform scale and reduce distortion through adjustments for topographic relief, lens distortion, and camera tilt. The resulting image is a mosaic of one-foot resolution photos of the entire county.

Aquifer
A water-bearing layer of soil, sand, gravel, or rock that will yield usable quantities of water to a well.

ATC Transmission Line
An interconnected group of lines and equipment for transporting electric energy in bulk on a high-voltage power line from a source or sources of power supply (e.g. power plant) to a point of use within a utility system or to a point of interconnection with another utility system or power grid.

Bedrock
The native *consolidated* rock underlying the Earth's surface. Above the bedrock is usually an area of broken and weathered *unconsolidated* rock in the basal subsoil. The term implies that the rock lies in beds, or strata. Under any given location on the surface of the planet, rock will be found. The term bedrock may be somewhat misleading, since in many locations, the bedrock may change over a short distance, or the technical bedrock may be a thin stratum overlying quite different rock. A geologic map of an area will usually show bands of differing rock type exposure, i.e., rock that would be exposed at the surface if all soil were removed. The different rock strata or layers that are indicated may be a result of either nonparallel (sloping) surface erosion at the edges of flat strata *or* normal surface erosion of tilted strata that has removed the upper portions of higher layers.

Closed Depression
An area of land surface which is internally drained with no surface outlet for runoff water. In order to leave the closed depression, water must enter the groundwater system or leave through evaporation.

Coastal Wetlands
Wetlands types found near the coasts of the Great Lakes include marshes, bogs, fens, sedge meadows, shrub swamps, hardwood swamps, coniferous swamps, and spring seeps within habitats that include freshwater estuaries, interdunal wetlands, ridge and swale systems, and lakeplain prairies. While there is no universally accepted definition of a coastal wetland, there are some significant characteristics distinguishing them from their inland counterparts. Coastal wetlands exist because of their historic and present-day interactions with the Great Lakes. They serve as spawning grounds for fish, stopovers or staging grounds for migratory and breeding birds, and critical habitat for many rare plants and animals.

Conservation Opportunity Areas
Locations where a significant wildlife or habitat resource occurs (or could reasonably occur with restoration), one or more organizations are willing to implement conservation actions and evaluate the results, funding is (or could be) available and a specific, plausible conservation objective can be articulated. These areas were designated by the Wisconsin Department of Natural Resources.

Contour
Lines representing elevation above sea level. Each point along the representative line is the same elevation. A contour interval is the difference in elevation between two adjacent lines. The contours represented in this model are ten-foot contours generated from 2002 LIDAR points.

County Zoning
Administered and enforced by Planning Department staff, the Door County Board of Supervisors' Resource Planning Committee, and the county board-appointed Board of Adjustment, the county zoning ordinance is in effect in all areas of the Towns of Baileys Harbor, Clay Banks, Forestville, Gibraltar, Jacksonport, Liberty Grove, Sevastopol, Sturgeon Bay, and Washington, and, per state statute, in shoreland areas of the Towns of Brussels, Egg Harbor, Gardner, Nasewaupee, and Union. The complete ordinance may be viewed at http://map.co.door.wi.us/planning.

DNR Significant Natural Areas
State Natural Areas (SNAs) protect outstanding examples of Wisconsin's native landscape of natural communities, significant geological formations, and archeological sites. Wisconsin's 607 State Natural Areas encompassing 326,000 acres are valuable for research and educational use, the preservation of genetic and biological diversity, and for providing benchmarks for determining the impact of use on managed lands. They also provide some of the last refuges for rare plants and animals. In fact, more than 90% of the plants and 75% of the animals on Wisconsin's list of endangered and threatened species are protected on SNAs.

Dune
Dunes form where constructive waves encourage the accumulation of sand, and where prevailing onshore winds blow this sand inland. There need to be obstacles e.g. vegetation, pebbles, landforms, etc. to trap the moving sand grains. As the sand grains get trapped they start to accumulate, starting dune formation. The wind then starts to affect the mound of sand by eroding sand particles from the windward side and depositing them on the leeward side. Gradually this action causes the dune to "migrate" inland, as it does so it accumulates more and more sand.

Ecological Landscape
Ecological Landscapes are areas of Wisconsin that differ from each other in ecological attributes and management opportunities. They have unique combinations of physical and biological characteristics that make up the ecosystem, such as climate, geology, soils, water, or vegetation. They differ in levels of biological productivity, habitat suitability for wildlife, presence of rare species and natural communities, and in many other ways that affect land use and management. These areas were named and designated by the Wisconsin Department of Natural Resources.

Egg Harbor Zoning
Village of Egg Harbor elected and appointed officials and employees administer the Village of Egg Harbor Zoning Ordinance. The complete ordinance may be viewed at http://villageofeggharbor.org/.

Embayment
An indentation of a shoreline larger than a cove but smaller than a gulf; a body of water partially enclosed by land but having a wide outlet to a larger water body.

Environmental Corridors
Natural and restored native ecosystems and landscape features, including wetlands, floodplains, waterways, woodlands, wildlife habitats, public lands (such as parks and natural areas), and other open spaces (such as viewsheds and greenways). This data was provided by the Bay-Lake Regional Planning Commission.

EPA 303(d) Waters
Under Section 303(d) of the federal Clean Water Act, states, territories, and authorized tribes are required to develop lists of impaired waters every two years (i.e., a Section 303(d) list). The states identify all waters where required pollution controls are not sufficient to attain or maintain applicable water quality standards.

Escarpment
In geomorphology, an escarpment is a transition zone between different physiogeographic provinces that involves an elevation differential, often involving high cliffs. Most commonly, an escarpment, also called a scarp, is a transition from one series of sedimentary rocks to another series of a different age and composition. In such cases, the escarpment usually represents the line of erosional loss of the newer rock over the older. The Niagara Escarpment is a long escarpment, or cuesta, in the United States and Canada that runs westward from New York State, through Ontario, Michigan, Wisconsin, and Illinois. It is composed of the Lockport geological formation of Silurian age and is most famous as the cliff over which the Niagara River plunges to form Niagara Falls, for which it is named. The Door Peninsula is situated on Silurian age dolostone comprising a portion of the Niagara Escarpment.

Floodplain
Level land area subject to periodic flooding from a contiguous body of water. Floodplains are delineated by the expected frequency of flooding. For example, an annual floodplain is expected to flood once each year.

Fractured Bedrock
Bedrock common in karst areas where solution activity has enlarged vertical joints and horizontal bedding plans in the rock units to create secondary porosity conducive to rapid movement of groundwater within the bedrock.

Fragmentation
The disruption of extensive habitats into isolated and small patches. Fragmentation has two primary negative components for living things: loss of total habitat area, and smaller, more isolated remaining habitat patches.

Groundwater
Water that occupies the pore spaces, the layers between boundaries of sedimentary rock strata (bedding planes), and joints of rocks, and originates from two main sources: as hot mineral water rising from deep within the earth, or as water resulting from percolation of precipitation and meltwater from the surface. Groundwater may return to the surface by seepage or through springs, or may be artificially withdrawn through the use of wells.

Habitat
The place where an organism lives and its surrounding environment, including its biotic (living) and abiotic (nonliving) components. Habitat includes everything that an organism needs to survive.

Hydrology
The science of that part of the hydrologic cycle between rain and return to the sea; the study of water on and within the land. The study of the occurrence, distribution, movement, and chemistry of waters of the earth.

Impervious Surface
An impervious surface is one through which water cannot drain (e.g. pavement, asphalt, roofing material). The existence of impervious surfaces is linked to increased rates and speed of runoff from an area, in that they prevent water from draining into the soil.

Karst
A landscape shaped by the dissolution of a layer or layers of soluble bedrock, usually carbonate rock such as limestone or dolostone. Due to subterranean drainage, there may be very limited surface water, even to the absence of all rivers and lakes. Many areas display distinctive surface features, with sinkholes and enlarged crevices being the most common. However, distinctive karst surface features may be completely absent where the soluble rock is mantled, such as by glacial debris, or confined by a superimposed non-soluble rock strata.

Land Legacy Areas
Areas identified by the Department of Natural Resources (DNR) as places critical to meet Wisconsin's conservation and outdoor recreation needs over the next 50 years. Over a three-year period, from 1999 to 2002, the DNR hosted numerous public and staff meetings to gather information, local knowledge, and opinions about Wisconsin's land and water. This data was provided by the Bay-Lake Regional Planning Commission.

Landscape Connectivity
The degree to which the landscape facilitates or impedes movement among resource patches. Connectivity is measured by two components: 1) structural connectivity, the spatial structure of a landscape and can be described from map elements, and 2) biological component, the response of individuals to landscape features.

Mine
Operations or activities at a nonmetallic mining site for the extraction from the earth of mineral aggregates or nonmetallic minerals for sale or use by the operator. Nonmetallic mining includes use of mining equipment or techniques to remove materials from the in-place nonmetallic mineral deposit, including drilling and blasting, as well as associated activities such as excavation, grading and dredging. Nonmetallic mining does not include removal from the earth of products or commodities that contain only minor or incidental amounts of nonmetallic minerals, such as commercial sod, agricultural crops, ornamental or garden plants, forest products, Christmas trees, or plant nursery stock.

Municipal Dumps
Historic or active facilities or land used by municipalities for solid waste treatment, solid waste storage, or solid waste disposal that includes sanitary landfills, dumps, incinerators, land disposal sites, transfer stations, storage facilities, collection and transportation services and processing, treatment, and recovery facilities. Solid waste facility does not include a salvage yard. This information was derived from historical documents held by the Door County Soil and Water Conservation Department.

Natural Area
A site largely unaltered by modern human activity, where native vegetation is distributed in naturally occurring patterns.

Natural Community
A community is an assemblage of different plant and animal species, living together in a particular area, at a particular time, in a specific habitat. Communities may be named for their dominant plant species (for example, pine barrens, sedge meadows, and oak savannas), a prominent environmental feature (Great Lakes Dune, Dry Cliff), or some combination of these factors. Communities range in size from less than an acre to thousands of acres. Communities are dynamic and always changing. Some change may be rapid while other change is too slow for many humans to notice during their brief lifetimes.

Nonmetallic Mineral
A product, commodity or material consisting principally of naturally occurring, organic or inorganic, nonmetallic, nonrenewable material. Nonmetallic minerals include, but are not limited to, stone, sand, gravel, asbestos, beryl, diamond, clay, coal, feldspar, peat, talc, and topsoil.

Orchard
Since the late 1800s, Door County orchards have been major producers of apples and cherries. During peak production in the 1940s and 1950s, the area consisted of approximately 10,000 acres of cherry orchards and 2,000 acres of apple orchards. In the last several decades, orchard acreage, and likewise processing operations, has substantially decreased. In the early 1900s until the 1940s, lead arsenate was the primary insecticide used. Starting in the 1940s lead arsenate use was alternated with the use of DDT. The widespread use of lead arsenate ended by 1960; but, it was still sporadically applied until the early 1970s. During its period of use, lead arsenate was brought to mixing stations in powder form and mixed with water to produce a lead arsenate solution for spray application on the fruit trees in the orchard. Concerns now exist regarding elevated levels of lead and arsenic in soils at abandoned mixing sites, orchards, and fruit processing plant wastewater discharge points. This information was derived from historical documents held by the Door County Soil and Water Conservation Department.

Rare
Used to refer to native species and natural communities known or suspected to be rare and/or declining in the state. Included are species legally designated as “Endangered” or “Threatened” by either the State of Wisconsin or the federal government, as well as species in the Department’s advisory “Special Concern” category and on the U.S. Fish & Wildlife Service’s “Candidate” and “Species of Concern” lists.

Riparian Habitat
A riparian zone or riparian area is the interface between land and a stream. Plant communities along the river margins are called riparian vegetation, characterized by hydrophilic plants. Riparian zones are significant in ecology, environmental management, and civil engineering because of their role in soil conservation, their biodiversity, and the influence they have on aquatic ecosystems. Riparian zones occur in many forms including grassland, woodland, wetland or even non-vegetative. In some regions the terms riparian woodland, riparian forest, riparian buffer zone, or riparian strip are used to characterize a riparian zone. The word "riparian" is derived from Latin *ripa*, meaning river bank.

Ridge-Swale
In Door County, the ridge-swale habitat is generally associated with wetland complexes on the Lake Michigan side of the peninsula. The habitat is composed of a parallel series of higher sandy ridges interspersed with lower swales with variable levels of water present. Ridge-swale habitats developed as a result of alongshore transport of sand and subsequent wind action. They now parallel the shoreline of Lake Michigan, having become exposed as a result of changing water levels in the Holocene. The hydrology of a ridge-swale habitat is often complex, creating a diversity of micro-habitats which result in a high level of plant and animal diversity. Some species present are characteristic of wetland and bog communities, as in swales with standing water, while ridges often have sufficient drainage to support mixed deciduous forests. Perhaps the most well known example of ridge-swale habitat in Door County is protected within The Ridges Sanctuary.

Significant Wildlife Habitat Areas
Areas designated in a collective effort by individuals with the goal of preserving Door County’s communities of plants and animals and their habitats. Refer to the document A Guide to Significant Wildlife Habitat and Natural Areas or Door County, Wisconsin for more detailed information.

Sister Bay Zoning
Village of Sister Bay elected and appointed officials and employees administer the Village of Sister Bay Zoning Ordinance. The complete ordinance may be viewed at http://www.sisterbaywi.gov/.

Soil Infiltration
The process by which water on the ground surface enters the soil. Infiltration rate in soil science is a measure of the rate at which soil is able to absorb rainfall or irrigation. It is measured in inches per hour or millimeters per hour. The rate decreases as the soil becomes saturated. If the precipitation rate exceeds the infiltration rate, runoff will usually occur unless there is some physical barrier. It is related to the saturated hydraulic conductivity of the near-surface soil.

State Natural Area
Sites formally designated by the WDNR that contain outstanding examples of native biotic communities and are often the last refuges in the state for rare and endangered species of plants and animals. Areas are devoted to scientific research, the teaching of conservation biology, and especially to the preservation of their natural values and genetic diversity for future generations.

Sturgeon Bay Zoning
City of Sturgeon Bay elected and appointed officials and employees administer the City of Sturgeon Bay Zoning Ordinance. The complete ordinance may be viewed at http://sturgeonbaywi.org/.

Wellhead Protection Area
A wellhead protection area can be all or part of what is referred to as the recharge area for a given well. The recharge area for a well is identified as the entire area of land that allows water and other fluids to flow into the subsurface and move toward the well.

Water Table
Surface of a body of underground water below which the soil or rocks are permanently saturated with water. The water table separates the groundwater zone (zone of saturation) that lies below it from the zone of aeration that lies above it. The water table fluctuates both with the seasons and from year to year because it is affected by climatic variations and by the amount of precipitation used by vegetation. It also is affected by withdrawing excessive amounts of water from wells or by recharging them artificially.

Watershed
An area of land, which may or may not be under forest cover, draining water, organic matter, dissolved nutrients, and sediments into a lake or stream.

Wetland
An area inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a variety of vegetative or aquatic life. Wetland vegetation requires saturated or seasonally saturated soil conditions for growth and reproduction. Broad wetland categories include: marshes, northern sedge swamps, shrub swamps, conifer and hardwood swamps, peatlands, and muskeg.

Wildlife Corridor
An area of continuous native vegetation designed to promote connectivity and movement of wildlife between isolated natural areas, or a series of patches of natural vegetation that may serve as "stepping stones" that promote connectivity and movement of wildlife between natural areas. The natural, sequential change of species composition of a community in a given area.

Zone of Contribution (ZOC)
A delineated area on the surface of the land from which water recharges from precipitation will contribute to groundwater that will flow to a corresponding well. Soil type and depth, aquifer type and properties, groundwater gradient, well depth and pumping rates, and many other factors determine a zone of contribution for a well.