LITTLE GREEN LAKE WATERSHED LAND USE PLAN

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I. Introduction

Little Green Lake is an attractive 466-acre body of water located just north of the City of Markesan, Wisconsin. (See Figure 1.) Surrounded by woods, wetlands and rolling hills, the lake provides both year-round and seasonal residents with opportunities to experience leisure, recreation and natural resources.

With the prospect of sewer and eventually water service being provided to the area around the lake, identifying environmentally sensitive areas, and establishing the capacity of the land to support development, especially residential development, becomes critical. Basic elements of community quality of life, such as open space and small town atmosphere, are also essential considerations in studying this area.

Study Area: For land use recommendation purposes, this study looks at the 1,645-acre Little Green Lake Watershed. A Wastewater Facilities Plan has been developed parallel to this analysis. This area land use plan will be incorporated into the larger Town of Green Lake Comprehensive Plan.

Some Questions: *Given our market-driven society, the area around Little Green Lake will grow. The questions are: How much? What will the quality of this development be? Will growth occur in ways that maintain or improve the community's soil and water quality? Will the area around Little Green Lake become the northern end of the City of Markesan? Or will it remain part of the Town of Green Lake? Will growth occur in ways that minimize cost to the community? Will the growth that occurs tend to respect and preserve the area's unique qualities and resources? Will growth occur in ways that maintain or improve community quality of life? Will growth occur in ways that allow lake residents to pursue their three favorite activities – enjoy the view, observe wildlife, and fishing/ice fishing.*

Purpose of Planning Activities: Land use planning for the Little Green Lake Watershed is carried out with the general purpose of guiding and accomplishing coordinated, adjusted and harmonious development of the community which will, in accordance with existing and future needs, best promote public health, safety, order, convenience, prosperity and the general welfare, as well as efficiency and economy in the process of development.

Methodology: Several layers of analysis are involved in determining where and how much growth the study area can handle:

* Establish Local Goals for Land Use & Development
* Review Physical Characteristics & Natural Resources
* Identify Environmentally Sensitive Areas & Drainage Patterns
* Determine Land Use Acreages/Developable Land Area
* Project Household Population & Housing Development
* Review Regulatory Framework for Local Land Use Decisions
* Make Recommendations for Future Land Use Patterns
* Provide Implementation Strategies Supporting Recommendations

II. Goals for Land Use & Development

The following long-term goals for land use and development were established by the Town of Green Lake Planning Committee. (Because 6 of the 11 Planning Committee members live by Little Green Lake, the draft goals are used in this watershed plan.) In order to implement its vision for the future; maintain and improve the community's quality of life; promote the comfort, safety, health, prosperity, aesthetics and general welfare; provide for orderly development; and protect the town's natural resource base, the Board of the Little Green Lake Protection & Rehabilitation District and citizens living within the Little Green Lake Watershed will work to:

GOAL A. Preserve the distinctive rural character of the Watershed as embodied in open space uses, such as farmland, forests, natural resource areas, and scenic, historic and cultural resources.

GOAL B. Guide residential and other growth in the Watershed in ways that allow lake residents to pursue their three favorite activities - enjoying the view, observing wildlife, and fishing/ice fishing. (1997 Lake Resident Survey.)

GOAL C. Provide adequate water, sewer and other infrastructure to support the orderly and cost-effective development of the Watershed.

GOAL D. Protect and preserve the productive agricultural land resources of the Watershed.

GOAL E. Preserve and protect the quality of the community's lake resources and provide for adequate green space around the lakes. Work with farmers, local landowners, Green Lake County Land Conservation, and other partners to minimize run-off and erosion in the Watershed.

GOAL F. Collaborate with partners, including the Town of Green Lake and Green Lake County, to develop and adopt effective land use controls and tools to control and direct future development.

GOAL G. Work with the Town of Green Lake to establish shared interests and goals for land use, conservation and development with the City of Markesan.

III. Physical Characteristics & Natural Resources

Little Green Lake: As described in 1994 and 1997 studies, Little Green Lake is a *eutrophic* lake, or one that has an overabundance of nutrients, especially phosphorus and nitrogen. The lake has one intermittent outlet and two intermittent inlets. The Board of the Little Green Lake Protection and Rehabilitation District has funded and received grants for a number of studies to address lake-related problems. In summary:

* The 1994 Lake Management Planning Grant Project conducted by Northern Environmental found that Little Green Lake had moderate species diversity and a high amount of biomass." Control stregies for macrophytes include a range of options for habitat manipulation; biological controls; and physical, biological and mechanical harvesting.

* Ramaker's Little Green Lake Management Plan, completed in 1996, noted that high phosphorus levels in Little Green Lake were contributing to "nuisance algae blooms and the generally poor water quality conditions." Generally, recommended strategies for dealing with the phosphorus problem involve control of 1) external nutrients, 2) internal nutrient loading or 3) the biological consequences of nutrient loading.

Environmentally Sensitive Areas: The designation and protection of environmentally sensitive areas is important for soil and water quality within the study area, as well as for community quality of life.

Areas identified as environmental corridors in Wisconsin are described as natural features and sensitive environmental areas that must be excluded from sewer services areas. {WI Admin. Code NR 121.05(1)(g)2c} Under formal Sewer Service Area Plans, environmental corridors are designated in order to:

1. Protect general public health, safety and welfare;
2. Protect surface and groundwater quality;
3. Reduce damage from flooding and stormwater runoff;
4. Maintain important wildlife habitats & outdoor recreation areas (with the support of local government units); and
5. Reduce public utilities costs and environmental damages.

For the purposes of this study, environmentally sensitive areas include identified wetlands, shoreland areas and 75 foot buffers, areas of steep slope greater than 12 percent, and publicly-owned natural and scientific areas. (See Figure 3.)

Although environmentally sensitive areas surround Little Green Lake, these resource areas are concentrated in the lowlands east of Highway 44 by the lake's outlet, and in the area west of the lake. These areas should be protected from development and should not be sewered. Creative approaches to permitting development in ways that do not impact environmentally sensitive areas should be explored. (See VIII. Land Use &

Water Quality Recommendations) Environmentally sensitive areas account for 936 acres, or 57 percent of the Little Green Lake Watershed.

Soils: Like the Town of Green Lake, the area surrounding Little Green Lake consists mostly of Plano-Mendota-St. Charles soil mix. If not too steeply graded, this soil association supports most agricultural activities and standard types of development without significant limitations. Other soil associations within the watershed include Boyer-Oshtemo-Gotham, Adrian-Houghton, Kidder-Rotomer-Grellton, and Lapeer-Mecan-Okee. All except the Adrian-Houghton association are assumed to sustain typical types of development and activity without severe limitations. Soils are analyzed for this plan in terms of their suitability for basement and septic system placement, and other development.

Topography & Drainage Areas: The topography of the land surrounding Little Green Lake determines the movement and drainage of water towards the surface of the lake. "Watershed topography is gently rolling with the most dramatic elevation changes, 110-foot drop in one quarter mile distance, located just north of Little Green Lake." (1997 Ramaker Study). A drainage area is a basin that contributes run-off to a stream, river or lake. The amount and quality of these contributions is directly related to the health of the lake, and the quality of life that local citizens enjoy.

An analysis of the U.S. Geological Survey map for the watershed shows 12 such basins in the Little Green Lake Watershed. (See Figure 4.) Within each drainage area, a drainage corridor is identified. Basin drainage corridors are low channels that function to convey surface waters from the basin to the lake as perpetual streams or as intermittent conveyors responding to precipitation. Drainage corridors should be protected from development.

When development, such as roads and houses, occurs in the watershed, impervious (built-upon) surfaces are increased and there is less infiltration of rainwater into the ground. This results in a larger volume of runoff, moving at a faster velocity, and carrying more pollutants and sediment, than would normally be the case without the development. Rain falling in the area that does not infiltrate into the soil, or return to the atmosphere by evapotranspiration, flows as runoff into the surface water. As development continues to occur and more land is built upon, the quantity, rate, and contamination of runoff going into a water body increases. Eventually, a point can be reached where a water supply source is degraded, recreational and scenic features are impaired, and costly treatment is needed to provide clean drinking water. In the case of Little Green Lake, where management for water quality is already an issue, development activities will require close attention.

Another potential development impact within the watershed is the loss of plants and of root structure permitting greater incidence of erosion.

Watershed studies have documented a number of impacts related to human activities within drainage basins:

1. **Agricultural Run-off**, livestock use, and forestry harvest practices resulting in increased water sediment, nutrients and temperature. *In the Little Green Lake Watershed, several farmers are working with the Green County Land Conservation Department to address run-off through Best Management Practices or BMPs.*

2. **Channelization** resulting in decreased stream length, sever loss of habitat, and associated riparian vegetation.

3. **Diversion and Groundwater Extraction** including wells irrigation and domestic use, diversion ditches, direct pumping from a stream, or other water uses. This activity can reduce groundwater flow, decrease base flow, reduce habitat availability, and decrease water quality.

4. **Transportation and Utility Corridors** including use of riparian corridors for roads and utilities. These activities can increase sediment, nutrient, and contaminant inputs, and reduce habitat quality.

5. **Recreational & Public Use Activities** resulting in trampling, soil compaction, soil erosion, and other disturbances leading to increased sedimentation and nutrient inputs. Such activities are often linked with increased hardened surface areas, with roads and parking lots.

6. **Urbanization** results in hardening of surfaces, increased stormwater inputs, point source and non-point source pollution, sedimentation, surface water drainage, nutrient inputs, and loss of water loving/dependent vegetation.

Therefore, land use and development planning and implementation need to minimize such development activities, or minimize their impacts, within drainage basins in order to enhance water quality protection.

IV. Trends in Population & Land Use

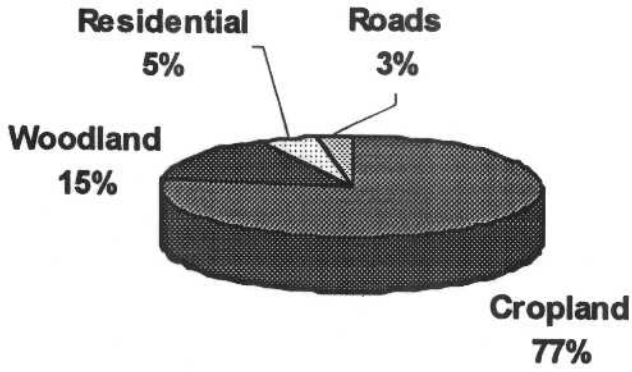
Population

Like the Town of Green Lake, the Little Green Lake Watershed has experienced population growth and development in the 1980's and the 1990's. Since 1985, the number of year-round households has increased almost 20 percent, rising from 73 households in that year to 91 households in 1997. The proportion of lake-area households with year-round residents has increased during the same period from 36 percent to 38 percent. The number of seasonal households rose from 130 to 147, an increase of 10 percent. In a 1997 survey, seasonal residents estimated that they spent an average of 9 days per month at the lake.

Land Use

Change in the watershed has been relatively slow over the years, although this is likely to change as sewer and eventually water service is provided. Agricultural activities continue to be the dominant land use in the study area. In its 1994 Little Green Lake Watershed Inventory, the Land Conservation Department found that 77 percent of the 1,645 acres of the watershed was cropland, 15 percent was woodland, 5 percent was residential, and 3 percent was roads. In 1985, woodlands were estimated at 20 percent of total land use, so some loss of woods may have occurred during this period.

Figure 6: Land Use Percentages Within Watershed, 1994



Based on windshield surveys, and discussions with local and county officials, some areas within the Little Green Lake are identified as likely to be in transition in terms of land use. Such properties consist of those:

1. Platted for development, but as yet undeveloped;
2. Agriculture lands close to existing roads;
3. Agricultural lands close to areas planned for sewer service;
4. Trailer parks which may, with sewer service, become single family housing;
5. Close to Markesan industrial development area.

Agricultural use, once a steady form of open space preservation - once seen as a lifetime commitment by many families - is changing. Older farmers are looking to move into retirement; many understandably see opportunities for residential and industrial development in the land they own. Even some younger farmers, concerned about the volatility in milk markets, the long hours and, depending on their location, the rising cost of operations and taxes, are selling their cows and renting their land. (Current land use patterns in the watershed are shown in Figure 7.) The effectiveness of State-funded farmland preservation programs is limited by the proximity of development.

V. Population & Development Projections

During the next two decades, three factors, among many, will significantly affect population and development trends in the Little Green Lake Watershed. (The analysis here focuses on residential development because it is likely to be the dominant development type in and around the lake. Local households will continue to serve recreational and bedroom community-type functions.) The first factor is infill within areas zoned, and in some cases platted, for single family housing, but not yet developed. Additional residential growth occurring in areas now zoned for agriculture are the second factor. Finally, the impact of sewer service extension from Markesan, should it take place, will also have on watershed growth patterns. All three factors are impacted, in turn, by broader economic growth cycles; the availability, administration and enforcement of local and county land use regulations; perceptions of lake water quality; and so on.

Increases in numbers of year-round and seasonal residents are based on trends seen in the Little Green Lake Protection and Rehabilitation District over the last 32 years. It is assumed that seasonal residents, while growing more slowly than the year-round resident category, will continue to be the preferred mode of housing through 2020.

Figure 8. Household Projections Table

	LITTLE GREEN LAKE WATERSHED NUMBER OF HOUSEHOLDS					
YEAR	Yr-Round Resident #	Seasonal Resident #	Total HH Zoned Areas	Addit. HH Low-Density	Addit. HH W/ Sewer	Grand Total HH
1985	73	130	203			
1995	85	140	225			
1997	87	143	230			
2000	91	147	238	5		243
2005	96	155	251	10	21	282
2010	101	163	264	15	42	321
2015	106	171	277	20	84	381
2020	111	180	291	25	126	442

VI. Current Regulations

Land use decisions in the Watershed reflect its location within the Town of Green Lake and Green Lake County. Like many towns in Green Lake County, the town has adopted county zoning and subdivision regulations. The Green Lake County Zoning Ordinance, along with the Shoreland Zoning Ordinance administered and enforced by the county regulates the structures, lands and waters of the watershed. By regulating such factors as lot coverage, population density, and the location and size of structures, the county is able, to some extent, to control development. Zoning districts have been established by the county for agricultural, resource conservation, commercial, industrial and other uses. Establishing districts separates and preserves different uses. Depending on the zoning district established for a given area, development projects are subject to restrictions on permitted and conditional uses, and standards for building size, setbacks, minimum lot size, yard size and placement, parking, etc. Under the provisions of the county Zoning Ordinance, the Town of Green Lake is able to approve, approve with conditions, or reject a proposed conditional use or zoning amendment requested of the county zoning function.

The county's Shoreland Zoning Ordinance represents local commitment to administer the State mandate to minimize water pollution; protect fish and aquatic life; control building sites, structures and land uses; and preserve shore cover and natural beauty. Using a variety of regulations and restrictions, the county minimizes the impact of human activities on shoreland areas. Towns are required by law to comply with the ordinance. Local projects are affected.

County Land Division and Subdivision Regulations determines mapping, dedications and improvements, and land suitability requirements related to the dividing of land for development. Towns may have more restrictive land division and subdivision ordinances; to date, the Town of Green Lake has chosen not to adopt, administer and enforce such an ordinance.

In a rural community like the Town of Green Lake, Green Lake County's Farmland Preservation Plan is an important part of the land development equation. All of the farmland in the Watershed is zoned for Ag-2 Farmland Preservation. The primary purpose of this district is to maintain, preserve and enhance agricultural lands historically utilized for crop production. The Ag-2FP district meets all requirements of the State of Wisconsin Farmland Preservation Act.

VII. Future Land Use

With shoreline property now fully utilized, additional growth will likely occur in the "second tier" or emerge out from the Markesan area. Although the area zoned for residential development around the lake could accommodate the additional 291 residential households projected in Figure 8 through the year 2020, it is assumed that land transitioning out of agriculture, and, potentially, sewer service from Markesan will generate residential development beyond the base number of 291 households.

The Little Green Lake Protection and Rehabilitation District has an opportunity to work with the Town of Green Lake, Green Lake County, the City of Markesan and other partners to protect conservation corridors – environmentally sensitive areas combined with drainage corridors shown on Figure 9 – while permitting growth, especially residential growth to proceed in some areas. The issue, once again, is not whether growth will occur, but the quality and extent of the development allowed.

Low-density residential development over the next twenty years in the watershed should be limited to a "second tier" area. (See Future Land Use Map.) Portions of the forested area north of the lake and the low drainage should be protected and preserved in their current state.

VIII. Land Use & Water Quality Recommendations

In order to accomplish its goals the following strategies are recommended:

Strategies for Achieving GOAL A. Preserve the distinctive rural character of the Watershed as embodied in open space uses, such as farmland, forests, natural resource areas, and scenic, historic and cultural resources.

Strategy 1: Work with the Town of Green Lake, the County Planning Department, and the County Land Use Planning & Zoning Committee to develop and adopt an overlay zoning option in the County Zoning Ordinance for Planned Development. The ordinance would "facilitate a more flexible mixture, pattern and density of development, and the grouping of open spaces" for higher community quality of life and the protection of valued resources. (See Appendix A.)

Strategy 2: Identify, prioritize and preserve "open space" values by completing a Secondary Conservation Analysis and Implementation Plan. Utilize WI/DNR Lake Protection Grant support to develop and implement a Secondary Conservation Analysis and Implementation Plan.

Open space, which includes environmentally sensitive areas, is defined as any parcel or area of land:

1. Devoted to the preservation of natural resources, such as, critical plant and animal habitats; recharge areas for groundwater basins; waters important to commercial fisheries management; and lake shores, river banks, etc.
2. devoted to the managed production of resources, such as, such as forest and agricultural lands;
3. designated for recreational, scenic, historic and cultural use or value; or
4. preserved for public health and safety.

Open space areas are sometimes referred to as *secondary conservation areas* which include mature woodlands, wildlife habitats and travel corridors, prime farmland, groundwater recharge areas, historic buildings, and scenic views.

Identifying open space areas allows watershed residents and property owners to:

1. Create awareness of those aspects of the landscape that give each community its own unique character and, as such, contribute to the Little Green Lake community's quality of life; and

2. Create a template for residential and commercial development that allows development to occur, but through zoning, and design criteria and standards, creates opportunities to preserve designated open space areas.

Public input and suggestions from local officials are needed to identify and prioritize open space in the Little Green Lake Watershed.

Strategies for Achieving GOAL B. Guide residential and other growth in the Watershed in ways that allow lake residents to pursue their three favorite activities - enjoying the view, observing wildlife, and fishing/ice fishing.

Strategy 1: Identify and preserve scenic vistas by completing a Secondary Conservation Analysis and Implementation Strategy.

Strategy 2: Minimize habitat loss through public education and awareness, and use of conservation design standards for residential and commercial development, and for public access facilities.

Strategy 3: Maintain healthy fish populations. Utilize a WI/DNR Lake Planning Grant for fisheries management. A review of previous work indicates that the most significant fisheries problem for the lake appears to be stunted panfish. Fish have density-dependent growth that allows them to deal with overabundance and habitat limitations by reducing maximum size. Dealing with stunted panfish is probably synonymous with vegetation management and control; reducing aquatic vegetation biomass is and allowing predator fish access to the panfish population will make the panfish less abundant so that they can increase in size.

Strategies for Achieving GOAL C. Provide adequate water, sewer and other infrastructure to support the orderly and cost-effective development of the Watershed.

Strategy 1: Complete Facilities Plan. (Already underway.)

Strategy 2: Explore subdivision infrastructure and design standards that minimize cost and maximize open space and environmental protection.

Strategies for Achieving GOAL D. Protect and preserve the productive agricultural land resources of the Town of Green Lake.

Strategy 1: Work with the Green Lake County Land Conservation Department, North East Wisconsin Land Trust and other partners to provide education and implementation of purchase of development rights programs, conservation easements, and other options supporting private land owners in the preservation of farm land. WI/DNR Lake Protection Grant support may be available to for acquisition of important lands.

Strategy 2: Support a more comprehensive and effective taxation of farmland based on the land's use, not it's development value.

Strategies for Achieving GOAL E. Preserve and protect the quality of the community's lake resources and provide for adequate green space around the lakes. Work with farmers, local landowners, Green Lake County Land Conservation, and other partners to minimize run-off and erosion in the Watershed.

Strategy 1: Restrict sewer service to areas that are not environmentally sensitive.

Strategy 2: Work with local and county partners to establish a county Conservation Corridor Protection Program. Options for corridor preservation should include 1) outright purchase of property or purchase of conservation easements on portions of properties within identified corridors, and/or 2) adoption by the county of a conservation corridor zoning ordinance requiring an assessment of alternatives and an environmental analysis prior to permitting development to proceed. (NOTE: The county's Land Division & Subdivision Regulations include a drainageway easement.)

Strategy 3: Support the county's consideration and adoption of DRAFT Storm Water Management & Erosion Control Ordinance which sets forth storm water requirements and criteria to prevent and control water pollution and diminish threats to public health and safety from development.

Strategy 4: Establish watershed and drainage way buffers. Watershed and drainage way buffer requirements maintain strips of natural vegetation that serve to remove pollutants from storm water runoff before they reach a water supply source, watercourse or other drainage way that drains to the water supply source. They do so by allowing infiltration of runoff and filtration of pollutants through the ground and soil, slowing down the runoff flow to allow settling and deposition of pollutants, and providing vegetation that absorbs pollutants through the roots. The provision of vegetated, undisturbed buffers within water supply watersheds, therefore, serves as an important and effective method of maintaining the quality of public water supply sources and protecting those sources from the potential polluting activities associated with development within the watershed. WI/DNR Lake Planning Grant support could be used to identify areas needing buffers or to examine the extent of buffer needed; then, WI/DNR Lake Protection Grant support could be used to implement buffer requirements.

Strategies for Achieving GOAL F. Collaborate with partners, including the Town of Green Lake and Green Lake County, to develop and adopt effective land use controls and tools to control and direct future development.

Strategy 1: Same as Strategy 1 for Goal A.

Strategies for GOAL G. Work with the Town of Green Lake to establish shared interests and goals for land use and development with the City of Markesan.

Strategy 1: Within 5 working days of the adoption of this plan, set up quarterly meetings with the city and the town to discuss 1) short-term and long-term plans for land use, conservation and development.

IX. Plan Implementation

Action planning session upon adoption of this plan.

Appendix A: Proposed Planned Development Overlay
NOTE: The draft proposal below is an initiative of the Green Lake County Planning & Zoning Department and was written by Bruce Roskom, Planning & Zoning Director. This option is not presently available under County Zoning.

PLANNED DEVELOPMENT

Definitions
Planned Development: An area of minimum contiguous size, as specified by ordinance, to be planned, developed operated, and maintained according to plan as a single entity and containing one or more structures with appurtenant (accessory) common areas.

Overlay Zone: A set of zoning requirements that is described in the ordinance text, is mapped, and is imposed in addition to those of the underlying district; sometimes called a "floating zone." Developments within an overlay zone must conform to the requirements of both zones or the more restrictive of the two.

Cluster Development: A development design technique that concentrates buildings in specific areas on the site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive features.

Intent/Purpose - To provide a method which will facilitate a more flexible mixture and pattern of development, the grouping of open spaces, and arrangement of living patterns in accordance with good planning principals and practices, while providing adequate safeguards to protect the community.

This can be accomplished by utilizing development techniques that concentrate buildings in specific areas on a site to allow the remaining lands to be used for recreational, common open space, and preservation and protection of environmentally sensitive features. Environmentally sensitive features include, but may not be limited to, flood plains, wetlands, steeply sloping areas and drainage corridors.

Benefits
* Protects and preserves environmentally sensitive areas such as steep hillsides, wetlands and existing drainage corridors, while allowing reasonable development to occur. Also preserves open space and farmland.

* Allows property owners and developers greater creativity when developing lands.

* To allow for savings on development and maintenance of infrastructure as both the developer and the community build fewer streets and shorter utility lines to service the site.

* Allows the Planning Committee, through the review process, to insure that a development will have a minimal negative impact on adjacent lands and the general community.

Creation of a Planned Development District as an Overlay
To create a Planned Development Overlay District requires an amendment to the Zoning Ordinance. An Overlay District is a mapped zoning district that can be placed over an individual parcel, if all required size- standards- of the district are satisfied, through a rezoning process.

The Overlay District would create additional standards which are Imposed over the underlying zoning district. Developments within the Overlay District must conform to the requirements of both zoning districts with the most restrictive standards applying.

Review Process
To place a Planned Development Overlay on a parcel of land the Planning Committee will be asked to approve a rezoning.

For example, a developer owns a parcel that is currently zoned R-1 Single Family Residence. He/she wishes to utilize an unusual and creative development approach, but would be unable to do so under the current development standards of the R-1 Zoning District. The developer would request a rezoning to apply the Planned Development Overlay to the land. If the rezone is approved, the developer is then obligated to comply with the underlying standards of the R-1 zoning district as well as all applicable standards identified under Planned Development Overlay standards.

The development plan review process, which must be identified In the Planned Development Overlay District standards, would most likely include a review process similar to a Conditional Use review process. The developer will be required to submit a development plan for Planning Committee review. The decision options are the same for review of a development plan as they are for a Conditional Use. Those decision options are to approve, approve with conditions, or deny the development plan.

Examples of Review Standards
* Density: The allowance of a specific number of units per land area.

* Setbacks: Similar to existing development of the area, the minimum required by the underlying zoning district or greater setbacks being required.

* Open Space: Require that a specific percentage of a development site be set aside for the preservation of open space utilized for the purpose of recreation, or protection of wetlands, flood plains. etc. This standard may vary based on the availability of public sewer as opposed to on-site sewage treatment. For example, it would seem inappropriate to allow a virtually unusable area, such as that utilized for a septic system drain field, to apply toward compliance with an open space standard.

* Timing: That all proposed on-site development occur within a specific time frame.

* Protection of Environmental Corridors: That all existing environmentally sensitive areas such as wetlands and drainage corridors be protected and preserved.

* Development Quality: That a proposed development be similar to existing development of the area.

* Landscaping/Buffering: That the existing unusual or special physical landscaping be maintained or natural buffers such as existing berms or mounds be created maintained to act as a separation between developments.

* Site Access/Traffic Generation: That vehicular access onto a public street and pedestrian access and travel was through out the proposed development be identified and/or created so as not to result in a vehicular or pedestrian conflict area.

Appendix B: SOURCES

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13. Shoreland Protection Ordinance, Green Lake County, Green Lake County Zoning Committee, 1980.

14. Land Division & Subdivision Regulations, Green Lake County, Green Lake County Zoning Committee, Last Amended 1994.