LAND USE PLAN COMPLETED FOR CHIWAUKEE PRAIRIE-CAROL BEACH AREA OF KENOSHA COUNTY

INTRODUCTION

The future of the Chiwaukee Prairie-Carol Beach area of Kenosha County has been uncertain for many years. Natural resource preservation and urban development objectives have conflicted in the area. Many public agencies and private interests are concerned about this conflict and attempt to influence land use decisions in the area. Recognizing both the importance of the natural resource values of the area and the problems of, and potential for, urban development in the area, the Town of Pleasant Prairie and Kenosha County in 1981 requested the assistance of the Regional Planning Commission in the preparation of a land use plan for the area that would reconcile the conflicting interests.

Work on the preparation of the plan was begun in 1982 by the Southeastern Wisconsin Regional Planning Commission in cooperation with the Wisconsin Department of Natural Resources (DNR), the County, and the Town. The plan preparation took place under the guidance of an Advisory Committee made up of representatives of the Town, the County, the DNR, the U. S. Army Corps of Engineers, private citizens, and major affected landowners, including the Wisconsin Electric Power Company and The Nature Conservancy. The full membership of the Committee is listed on page 3.

PURPOSE OF THE PLANNING PROGRAM

The primary purpose of the Chiwaukee Prairie-Carol Beach planning program was to develop a plan which

This entire issue of the SEWRPC Newsletter is being devoted to the recently completed land use management plan for the Chiwaukee Prairie-Carol Beach area of the Town of Pleasant Prairie, Kenosha County. While this plan is very local in terms of its geographic impact, the process that led to the plan generated widespread interest beyond the boundaries of the Region and the State. The Question Box at the end of this Newsletter defines several of the key terms used in the planning process.

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would identify those lands—both wetlands and uplands—which should be protected and preserved in the public interest for their resource values, and those lands upon which urban growth should continue to be accommodated. The planning process attempted to achieve a sound balance between the resource protection and urban development objectives for the area. Importantly, it sought a way to fairly compensate landowners—particularly owners of platted lots—whose land would have to be zoned against development to protect the natural resource base.

In essence, the plan was to accommodate urban growth within the area, while preserving its most important natural features. The continuation of past trends clearly would not allow either objective to be effectively met.

The planning program recognized that both past platting and development activities and the past acquisition of open space areas meant that various individuals and groups had significant investments in the Chiwaukee Prairie-Carol Beach area. Therefore, without a "compromise" plan each group had something to lose, while with such a plan each group had something to gain.

GENERAL LOCATION OF THE AREA

The Chiwaukee Prairie-Carol Beach area is located in the eastern portion of the Town of Pleasant Prairie, Kenosha County. It is bounded on the east by Lake Michigan; on the south by the Wisconsin-Illinois state line; on the west by STH 32 (Sheridan Road); and on the north by 80th Street—approximately the southern limits of the City of Kenosha. The study area encompasses about 1,825 acres, or about 8 percent of the total area of the Town of Pleasant Prairie.

ENVIRONMENTAL SIGNIFICANCE

The Chiwaukee Prairie-Carol Beach area contains some of the most outstanding natural resource features remaining in southeastern Wisconsin. It is an area of rare natural beauty, characterized by a series of alternating beach dune ridges and lower, wetter swales.

Associated with the ridges and swales are high-quality upland prairies and high-quality wetlands, both growing increasingly scarce within the Region. The area contains a state scientific area that is a National Natural Landmark recognized as one of the best remaining examples of lowland prairie in the upper Midwest. It also contains three additional natural areas of statewide significance and three natural areas of regional significance. Furthermore, the area supports the largest concentration of prairie white-fringed orchid in the central Midwest. This orchid and four other plants and seven animals found within the Chiwaukee Prairie-Carol Beach area are listed by the State as endangered or threatened species in Wisconsin.

TECHNICAL AND CITIZEN ADVISORY COMMITTEE FOR THE CHIWAUKEE PRAIRIE-CAROL BEACH LAND USE MANAGEMENT PLANNING PROGRAM

| Roger E. Prange, | Clerk, Town of Pleasant Prairie |
|-----------------------|---|
| George E. Melcher, | Director, Kenosha County Office |
| Vice Chairman | of Planning and Zoning Administration |
| Philip C. Evenson | Assistant Director, Southeastern |
| Secretary | Wisconsin Regional Planning Commission |
| Elvin L. Crispell | Town Engineer, Town of |
| | Pleasant Prairie |
| Lewis R. Dixon | Senior Land Use Planner, |
| | Wisconsin Electric Power Company |
| Steve D. Eggers | |
| | U. S. Army Corps of Engineers |
| James L. Fonk | Supervisor, Kenosha County Board |
| Charles F. Graf | Resident, Carol Beach Estates |
| Florence M. Jensen | President, Carol Beach Estates- |
| | Unit W Property Owners Association |
| Russell Knetzger | |
| | Pleasant Prairie |
| | League of Women Voters of Kenosha |
| O. Fred Nelson | General Manager, Kenosha |
| | Water Utility |
| John F. Papan | Chairman, Town of Pleasant |
| | Prairie Plan Commission |
| | Resident, Chiwaukee Subdivision |
| Phil Sander | Member, Technical and Citizens Advisory |
| | Committee on Coastal Management |
| | in Southeastern Wisconsin |
| Allen K. Shea | Planning Analyst, Bureau of Water |
| | Resources Management, Wisconsin |
| | Department of Natural Resources |
| Dr. Forest W. Stearns | Professor, Department of Botany, |
| | University of Wisconsin-Milwaukee |
| Russell Van Herik | Director, Wisconsin Chapter, |
| | The Nature Conservancy |
| | |

In addition, the area supports 13 plants and 20 animals whose populations are unstable. These have been identified by the State as watch list species, and therefore are candidates for designation as endangered or threatened species in Wisconsin.

Because of these factors, there have been ongoing efforts by both public agencies and private groups to preserve and protect the important natural features of the Chiwaukee Prairie-Carol Beach area. However, the preservation and protection efforts are complicated by the fact that much of the area has been platted and partially developed for residential uses. The wetlands and uplands in the study area warranting consideration for preservation are shown on Map 1.

HISTORICAL PERSPECTIVE

Plans to develop certain portions of the Chiwaukee Prairie-Carol Beach area for residential use date back to the 1920's, with the most intensive land subdivision activity occurring between 1947 and 1956. By 1983, 2,746 lots had been created in the area through platting activity. However, after all of these years, only 643 lots, or 23 percent of those platted, were actually built upon, and then in a scattered fashion.

Nevertheless, high-quality upland prairies and wetlands, with attendant valuable wildlife habitat, have persisted in many locations, and the natural resource values of much of the study area remain essentially intact. This is partly due to the high water tables and wet soils which have restricted urban development. Certain streets proposed in the original subdivision plats have not been constructed. Others have not been used and have fallen into disrepair. There is no public sanitary sewer and only limited public water supply service in the area.

Today, housing units are found in scattered locations throughout much of the area. Some concentrations of housing do exist and have the potential to provide enclaves of highly attractive and desirable residential areas if provided with public sewer and water service. Other portions of the area are not suitable for urban development even with centralized sanitary sewer service. Complicating the situation is the severe shoreline erosion problem along the Lake Michigan shoreline, with average annual recession rates approaching 10 feet along certain shoreline reaches.

FEDERAL AND STATE REGULATIONS AFFECTING DEVELOPMENT

Federal Level

Section 404 of the federal Clean Water Act requires the U. S. Army Corps of Engineers to regulate the placement of dredged and fill materials not only into the waters of the United States, including rivers and lakes, but into adjacent wetlands. The Corps of Engineers has determined that most of the wetlands located east of the Chicago & North Western Railway right-of-way in the Chiwaukee Prairie-Carol Beach area are subject to regulation through individual Section 404 permits and

that these wetlands are generally unsuitable for the placement of dredged or fill material. While this does not rule out the granting of Section 404 permits, it does provide a preliminary indication that the granting of such permits would be unlikely—particularly in the absence of a sound land use plan for the area.

State Level

Chapter 59 of the Wisconsin Statutes directs the Wisconsin Department of Natural Resources to administer a shoreland regulatory program. Under the program, counties are required to regulate shorelands within unincorporated areas. Included are lands lying within 1,000 feet of a lake, pond, or flowage; within 300 feet of a river or stream; or within a floodplain. The county shoreland regulations must include restrictions on lot sizes, building setbacks, and filling and grading according to Chapter NR 115 of the Wisconsin Administrative Code. Wetlands five acres or larger located within the shoreland area must be placed within a conservancy zoning district that would prohibit filling and development.

It was recognized that, given the number of already platted residential lots in the wetland areas, the financial impacts of these regulations on the landowners would be severe. Yet, because the federal and state regulations focus primarily on wetlands, the important upland resources in the area could be lost through continued scattered urban development.

THE PRELIMINARY RECOMMENDED PLAN

Three alternative land use management plans were developed for the Chiwaukee Prairie-Carol Beach area, each proposing a different combination of development-preservation patterns. The three plans were: 1) a maximum development plan; 2) a maximum preservation plan; and 3) a combination development-preservation plan. After carefully considering the alternative plans, the Advisory Committee selected the development-preservation alternative as the basis for refinement into a preliminary recommended plan.

Open Space Preservation Area

The preliminary recommended plan proposed an open space preservation area consisting of a continuous environmental corridor connecting the Kenosha Sand Dunes on the north end of the study area with the Chiwaukee Prairie on the south end. The open space preservation area encompassed a total area of 803 acres, or 44 percent of the study area. It encompassed 604 acres of wetlands, or 81 percent of all wetlands in the area, including 565 acres of special value wetlands, or 86 percent of such wetlands. The preliminary plan proposed that a total of 641 undeveloped platted lots within the open space preservation area be acquired at fair market value by the Department of Natural Resources or private resource protection organizations such as The Nature Conservancy. An additional 20 lots would be acquired by the Town of Pleasant Prairie to preserve open drainageways.

THE EFFECTS OF NOT ADOPTING AND IMPLEMENTING A PLAN: HOW THE REGULATORY PROCESS WOULD PREVAIL

Without a sound land use plan for the Chiwaukee Prairie-Carol Beach area of Kenosha County that can serve as the basis for federal, state, and local actions, the existing regulatory process would prevail. This generally means that:

- Landowners with wetland lots regulated by the federal government would not be able to fill
 and develop their lots. This would affect about 840 lots, rendering such lots valueless for any
 urban use;
- Landowners with wetland lots in state-defined shoreland areas would have their lands zoned for conservancy and would be unable to fill and develop their lots. This would affect about 750 lots, rendering such lots valueless for any urban use;
- The DNR would probably not approve the extension of sanitary sewers into that part of the study area lying east of the Chicago & North Western railroad tracks, leaving onsite sewage disposal problems created by existing development to be solved by the use of holding tanks;
- The general unsuitability of the soils for installation and use of septic tank systems would effectively prevent development on many lots which are not subject to federal or state regulation except with holding tanks; and
- Except where the University of Wisconsin, The Nature Conservancy, or other groups chose
 to spend the limited funds available to purchase land, residents owning the adversely affected
 lots would not be compensated for their losses.

The lack of a plan would also mean that:

- Roads presently constructed through sensitive natural areas but not required to serve existing
 development would remain in place, thus continuing to fragment the natural areas and entailing
 continuing maintenance costs;
- Even if protected from physical alteration, the biological integrity of many areas containing high-quality wetlands, prairie, and wildlife habitat may be threatened because ownership by many private parties will not allow important parts of the study area to be managed as an integrated resource unit;
- Health-related problems and concerns will probably increase as more failing septic systems are discovered over time in the study area because of the general unsuitability of the soils to treat the septic effluent generated by existing residences; and
- Scattered, unplanned development will likely continue at a slow pace in portions of the study area, further complicating future efforts to both preserve and manage key upland as well as wetland resource features and provide needed urban services to concentrations of development.

CHIWAUKEE PRAIRIE-CAROL BEACH—continued

Under the preliminary plan, the lands within the open space preservation area would be placed in a conservancy zoning district to ensure their preservation until purchased. The plan envisioned that the open space preservation area would be managed as a natural area-wildlife area, with emphasis on maintaining existing plant and animal communities, and on restoring disturbed areas to a natural condition. The plan recommended that Kenosha County amend the county zoning ordinance to establish a new C-3 Natural and Scientific Area Resource Conservancy District and, in conjunction with the Town of Pleasant Prairie, amend the zoning district map for the Chiwaukee Prairie-Carol Beach area to apply the proposed new conservancy district, together with other zoning districts, in accordance with the open space preservation and urban development recommendations of the land use management plan. Thirty existing homes within the open space preservation area would be left in private ownership, to be maintained indefinitely, and be rendered "conforming use" under the proposed zoning. However, the plan would not have ruled out acquiring these homes if this were agreeable to both the seller and the purchasing agency.

Urban Development Area

The preliminary recommended plan proposed an urban area of 860 acres in extent, or 47 percent of the study area. Most of the urban area would be devoted to single-family residential use, and to limited commercial and institutional use. In addition, the proposed urban area included lands specifically set aside for the possible expansion of the Kenosha sewage treatment plant and the Trident Marina. All platted lands within the urban area would be zoned for development under the plan and be placed in a residential, commercial, institutional, or recreational district, as appropriate. The plan envisioned that the Town and the County would apply to the U. S. Army Corps of Engineers for a collective permit to fill and develop those wetlands lying within the urban development area, thus relieving individual landowners of that burden and attendant uncertainty.

Under the preliminary recommended plan, housing units in the study area could have increased over time from just over 500 to nearly 1,500, while the population could have increased from about 1,400 to about 4,300 upon full development. Furthermore, the preliminary recommended plan envisioned that public sanitary sewer and water supply service would eventually be provided to all areas proposed for urban use. The plan further envisioned that the area would be served by all-weather streets with rural cross-sections; that is, with road ditches, culverts, and skeletal storm sewer systems and without curbs and gutters and full storm sewer systems. The plan envisioned a 20.3-linear-mile local roadway system, including 20.0 linear miles over existing street rights-of-way and slightly more than 0.3 linear mile over proposed new rights-of-way. Conversely, street rights-of-way totaling 7.5 linear miles would be vacated under the plan.

PUBLIC REACTION TO THE PRELIMINARY RECOMMENDED PLAN AND SUBSEQUENT ACTION OF THE TECHNICAL ADVISORY COMMITTEE

The preliminary recommended land use management plan for the Chiwaukee Prairie-Carol Beach area was the subject of a formal public hearing conducted by the Regional Planning Commission on October 23, 1984, in the City of Kenosha. About 200 individuals attended the hearing.

The positions of the individuals and organizations making statements or submitting comments generally can be grouped into three categories. In the first category are those who generally supported the plan as presented at the hearing, while perhaps suggesting refinement in some of its details. Those in this category did express concern that the property owners whose lands are zoned conservancy be fairly compensated in future state or private acquisition of the lands. This position was taken by two town officials, two residents of the area, and a representative of the Trident Marina.

In the second category are those individuals and organizations whose comments indicated that, while they recognized the existence in the study area of certain natural resources worthy of protection and preservation, they were opposed to any large-scale preservation effort that would include the zoning and acquisition of upland resources, as well as wetland resources; those who questioned the accuracy of the wetland resource data developed under the planning effort; and those who were opposed to any rezoning efforts that would tend to diminish the market value of private property. Taking these positions were the Chiwaukee-Carol Beach Citizens Organization, Inc.; relatively large landowners in the study area, including the Kenosha Towne Club, Inc., and the Wisconsin Electric Power Company; and individual property owners, some of whom are also members of the above-noted citizen organization. In general, these individuals and organizations maintained that there is no federal or state mandate for placing upland resources in a conservancy zone, and argued that much of the proposed preservation area is buildable with onsite sewage disposal systems or holding tanks.

In the third category are those individuals and organizations whose comments indicated that they believed the plan fell short of adequately protecting the natural environment in the study area, and who generally favored greater efforts to preserve the resource base while fairly compensating the private property owners who might be adversely affected. This position was taken by conservation and environmental interest groups; the Wisconsin Public Intervenor and academicians testifying on behalf of that office; the Wisconsin Department of Natural Resources; and many individual citizens.

The Chiwaukee Prairie Rescue Coalition, on behalf of various environmental organizations and concerned individuals, objected to the preliminary plan on the basis that: 1) the plan would accommodate substantial amounts of urban development in an environmentally sensitive area and failed to give due weight to the larger public interest in preserving and protecting the entire area; and 2) no new development should be accommodated in the study area if it could have any adverse impacts on the wetland/upland complex found in the area. Among other suggestions, the Coalition recommended that the 18-acre land reservation for the potential expansion of the Kenosha sewage treatment plant be eliminated from the plan; that the expansion proposal for the Trident Marina be eliminated from the plan; that any sanitary sewer service east of the Chicago & North Western Transportation Company railway right-of-way be eliminated from the plan; and that a preservation area greater than that included in the preliminary plan be identified, and that all open space lands be purchased at fair market value.

The Wisconsin Department of Natural Resources indicated that the Department would not be able to approve the preliminary recommended land use management plan unless the plan were amended to preserve all wetlands within the statutorily defined shoreland area that had been identified in the planning effort as special value wetlands according to Chapter NR 115 of the Wisconsin Administrative Code. Also, the Department indicated that there was no need for a north-south utility corridor identified on Wisconsin Electric Power Company lands in the preliminary plan. Finally, the Department indicated that sanitary sewer service should not be proposed to be extended into the open space preservation area. The Department concurred with the Chiwaukee Prairie Rescue Coalition that provision for the potential expansion of the Kenosha sewage treatment plant should be eliminated from the plan. Furthermore, the Department suggested that the proposed expansion of the Trident Marina be relocated to avoid the use of special value wetlands or plant habitat areas that contain endangered or threatened species.

POST-PUBLIC HEARING RECOMMENDED LAND USE MANAGEMENT PLAN

Based upon careful consideration of the citizen and public agency reaction to the preliminary land use plan, a post-public hearing recommended land use plan was prepared and submitted to the Advisory Committee for consideration. This plan is shown in summary form on Map 2. This plan represents a refinement of the preliminary plan, changing that plan to reduce the amount of urban development proposed in the area, in particular, sewered urban development, and to increase the amount of area to be allocated to natural resource base preservation and protection. This plan was designed to fully meet the requirements of the Wisconsin Department of Natural Resources as set forth in Chapters NR 115 (shoreland-wetland zoning) and NR 121 (sanitary sewer service areas) of the Wisconsin Administrative Code. The key recom-





mendations of the post-public hearing recommended land use management plan for the Chiwaukee Prairie-Carol Beach area may be summarized as follows.

1. Extent of Open Space Preservation Area

The recommended area allocated to natural resource base preservation and protection would encompass a total of 950 acres—an increase of 147 acres, or 18 percent, over the 803 acres proposed for preservation and protection in the preliminary recommended plan. This increase is the result of the elimination of the urban land reservations for the Kenosha sewage treatment plant and the Trident Marina expansion projects, the addition of open lands to ensure that all special value wetlands within the state-defined shoreland area are included in the natural resource base preservation and protection area, the addition to the open space areas of all lands encompassed within the natural floodplains of the study area; and the inclusion in the open space area of additional Lake Michigan shoreline where existing lots have eroded to the point where, as a practical matter, they cannot be used for building development.

2. Acquisition of Open Space Preservation Area

Of the 950 acres that constitute the proposed natural resource base preservation and protection area, 217 were already held in public or quasi-public ownership by the Town of Pleasant Prairie, Kenosha County, the University of Wisconsin, or The Nature Conservancy in 1984, and are proposed to be retained in such ownership. An additional 481 acres were privately held in 1984, but are proposed to be acquired in the public interest by the Wisconsin Department of Natural Resources and The Nature Conservancy.

Of the remaining 252 acres recommended to be kept in open space, 47 acres consist of existing street rights-of-way to be vacated, with the lands returned to natural open uses; 50 acres represent existing street rights-of-way proposed to be maintained for access to existing homes in the open space preservation area, one acre represents lands proposed to be used for minor street rights-of-way; and the remaining 154 acres, or about 16 percent of the total natural resource base preservation and protection area, constitute privately held lands proposed to be kept in private ownership, but to be zoned conservancy.

3. Homes Within Open Space Preservation Area

The plan recommends that the 72 homes within the proposed preservation area (not including a caretaker's home owned by The Nature Conservancy), together with the attendant homesites, be permitted to be maintained indefinitely and not rendered nonconforming uses under the Kenosha County zoning ordinance. As such, they could be bought and sold on the private land market, be expanded, and be rebuilt if necessary. The plan

would not, however, preclude the acquisition of these homes by the Wisconsin Department of Natural Resources or by The Nature Conservancy should the homeowners wish to sell their homes to either the Department or the Conservancy, and should there be sufficient funds available to the Department or the Conservancy for such acquisition.

4. Cost of Acquiring Land in the Open Space Preservation Area

The plan recommends the acquisition of 989 platted lots totaling 310 acres within the proposed natural resource base preservation and protection area. These platted lots are not presently used as homesites. The cost of acquiring these lots would approximate \$1.98 million. In addition, the plan recommends that about 171 acres of unplatted lands be acquired at a cost of about \$402,000. In total, then, it would cost about \$2.38 million to acquire 481 acres of land to protect and preserve the resources in the study area. If all of the owners of the 72 existing homes in the open space preservation area would decide to sell their homes to the Wisconsin Department of Natural Resources or The Nature Conservancy, the additional estimated cost would be \$3.30 million.

5. Preservation of Resources Within the Study Area

Under the final plan, about 640 acres of special value wetlands would be preserved, representing 98 percent of such wetlands in the area. If all wetlands are taken into account, the plan would preserve 684 of the 747 wetland acres, or about 92 percent. In addition, the plan would preserve 134, or about 84 percent, of the 159 acres of significant uplands identified in the study area. Of the 828 acres of prairie in the study area, which include both uplands and wetlands, the plan would preserve about 95 percent of the high-quality prairies and about 81 percent of all prairies.

6. Sewered Urban Area

The post-public hearing recommended plan proposes that sanitary sewer service be provided to all existing and proposed urban development in that portion of the study area lying west of the railway tracks, and to existing and proposed urban development in that portion of the study area lying east of the railway tracks and north of Barnes Creek. In addition, these areas would ultimately receive public water supply service. In connection with these utility installation projects, the plan envisions that the Town will undertake local street and stormwater drainage improvements.

The preliminary plan proposed the extension of sanitary sewer service to all existing or proposed urban areas within the study area. Unlike the preliminary plan, the post-public hearing recommended plan proposes no sanitary sewer service to existing or porposed urban development in the area east of the railway tracks, south of Barnes Creek.

7. Unsewered Urban Area

In that portion of the study area lying east of the railway tracks and south of Barnes Creek, there are a number of enclaves of developed and related vacant platted lots that are proposed for urban development without public utility services. These enclaves encompass about 155 acres, and are proposed to be retained in private ownership and to be developed for residential uses with onsite sewage disposal by septic tank or holding tank systems.

The Trident Marina site lies within the southernmost of these urban clusters of land. The final plan makes no specific recommendation for the Trident Marina site. If, however, the owners of the Trident Marina desire to expand the marina, that expansion would have to occur on lands to the north and east of the present basin area, and any sewage disposal needs for the development would have to be accommodated through onsite sewage disposal or holding tank systems, or a pumping station and force main connection to the nearest available gravity flow sewer.

8. Population and Housing

Under the post-public hearing recommended plan, the housing stock in the Chiwaukee Prairie-Carol Beach area could increase over time from 512 housing units in 1980 to about 1,269 units upon full development. The population in the study area would increase from about 1,400 in 1980 to about 3,700 upon full development.

9. Plan Implementation Period

It will be a number of years before all of the land within the open space preservation area proposed to be acquired can, in fact, be acquired by the Wisconsin Department of Natural Resources and/or The Nature Conservancy. While there may be many landowners willing to sell in the near future, other landowners may prefer to keep their lands in private ownership. The Department of Natural Resources has estimated that an acquisition program of this type may take about two decades to complete.

It is recommended in this respect, however, that the Department of Natural Resources and The Nature Conservancy work with the State Legislature and the Governor to establish a Chiwaukee Prairie-Carol Beach open space land acquisition program, with that program scheduled to begin on July 1, 1985. Initially, it is recommended that that program contain sufficient funds in the two-year 1985-1987 biennium so that the Department will be able to acquire all of the vacant lands within the proposed open space preservation area. This would ensure that all landowners within that area who wish to sell within the next two years could do so. Based upon the reaction of homeowners and landowners during the next two years, the Department and The Nature Conservancy could request additional funds from the State Legisla-

ture and the Governor in the 1987-1989 biennium to expand and continue the project.

10. Zoning Map and Procedures

The proposed revised zoning would seek to place land uses within the entire study area into appropriate zoning districts. Importantly, all of the designated natural resource base preservation and protection area is proposed to be placed in the recommended new C-3 Natural and Scientific Area Resource Conservancy District. To prevent the application of the C-3 District from having a chilling effect on the appraisal process that will be required to establish market land values prior to acquisition, it is recommended that Kenosha County and the Town of Pleasant Prairie proceed on an incremental basis to apply the C-3 Zoning District to the open space preservation area.

Initially, it is recommended that Kenosha County proceed with the legally mandated rezoning of wetlands within the shoreland area. It is recommended that the remaining lands within the proposed open space preservation area, which consist either of wetlands beyond the shoreland zone or of significant uplands, remain in their current zoning category until acquisition takes place, and that Kenosha County and the Town of Pleasant Prairie annually review the status of land acquisition in the area and rezone all lands that have been acquired in the public interest into the C-3 District. It is further recommended that once 50 percent of the land within the natural resource base preservation and protection area has been acquired in the public interest, all remaining lands in that area be rezoned into the C-3 District.

Advisory Committee Action

After carefully reviewing the revised plan in light of the public hearing testimony, the Advisory Committee approved the plan as presented above with three modifications.

- 1. The Committee determined that the plan should explicitly recommend that the state land acquisition program begin as soon as possible in 1985, following provision of necessary state funding. The Committee further determined that the plan should explicitly recommend that the acquisition program contain sufficient funds in the two-year 1985-1987 biennium to enable the Department to make substantial progress toward acquisition of all of the vacant lands within the proposed open space preservation area. The Committee also recommended that the Department adopt the revised plan as a master plan for state acquisition, thereby rendering unnecessary a time-consuming effort by the Department itself to prepare such a master plan.
- 2. The Advisory Committee determined that the recommendation should be deleted from the plan that all lands within the open space preservation area

be placed in the recommended new C-3 Conservancy Zoning District when it had been determined that 50 percent of the land within the open space preservation area had been acquired in the public interest. Thus, under the final plan, upland and wetland conservancy areas located beyond the state-defined shoreland areas which are recommended for public acquisition would remain in the current zoning category until public interest acquisition takes place.

3. The Advisory Committee determined that the plan should recommend priorities for the use of state funds made available for land acquisition within the area. The Committee determined that the plan should recommend that state funds be used first to ensure that owners of wetlands which are regulated at the town, county, state, or federal levels are given an opportunity to sell their lands to the State. Thus, the purchase of unregulated lands within the open space preservation area would be assigned a lower priority under the state acquisition program.

PLAN ADOPTION

After carefully reviewing the plan, the Regional Planning Commission adopted the plan on March 11, 1985, as an amendment to the regional land use and water quality management plans. The Commission subsequently certified the plan to the Town of Pleasant Prairie and Kenosha County and to the concerned state and federal agencies, with the recommendation that these units and agencies adopt the plan and proceed with its implementation. The plan is documented in SEWRPC Community Assistance Planning Report No. 88, A Land Use Management Plan for the Chiwaukee Prairie-Carol Beach Area of the Town of Pleasant Prairie, Kenosha County, Wisconsin. Copies of the report may be obtained from the Commission offices for \$5 inside the Region and \$10 outside the Region.

CONCLUDING REMARKS

The primary purpose of the Chiwaukee Prairie-Carol Beach planning program was the development of a plan that would identify those open space lands which should be protected and preserved in the public interest and those areas within which urban growth should be accommodated. The planning process attempted to achieve a sound balance between open space preservation objectives and urban development objectives attendant to the area. The resulting plan attempts to accommodate the existing and some new urban development within the area, while preserving its most important natural features. The plan is intended to guide local, state, and federal agencies and units of government in the exercise of their respective land use regulatory responsibilities; to guide the concerned local units of government in the provision of basic urban services; to guide public agencies and private interests in the acquisition of environmentally significant open space land; and to provide a

framework within which private interests can formulate plans for additional development within the area.

Adoption and implementation of the plan would ensure the protection and preservation of existing plant and animal communities, as well as the unique heritage of the Chiwaukee Prairie-Carol Beach area. At the same time, implementation of the plan would enhance the potential for urban development in the area and foster the establishment of residential neighborhoods which offer a unique opportunity for living in proximity to a natural prairie environment and the Lake Michigan shoreline. Adoption and implementation of the plan will serve to protect, in a sound and equitable manner, both the environmental interests concerned and the interests of the private property owners in the area.

QUESTION BOX

WHAT IS MEANT BY THE TERMS "WETLANDS,"
"SPECIAL VALUE WETLANDS," "PRAIRIES," "NATURAL
AND SCIENTIFIC AREAS," "NATIONAL NATURAL LANDMARKS,"
AND "CRITICAL PLANT HABITAT AREAS"?

Some of the terms used to describe various features of the natural resource base in the Chiwaukee Prairie-Carol Beach area are not fully understood by those outside the scientific community. Knowledge of certain of these terms is important to understanding and appreciating existing natural resource values in the Chiwaukee Prairie-Carol Beach area. Accordingly, some key terms are defined below.

Wetlands

Wetlands are defined as areas where water is at, near, or above the land surface long enough each year to be capable of supporting aquatic or hydrophytic vegetation—such as cattails, bulrushes, sedges, and willows—and which are covered by soils indicative of wet conditions.

Much of the Chiwaukee Prairie-Carol Beach area consists of wetlands occurring in the swales of the beach dune ridge and swale complex which characterizes much of the area. The swales, or low areas, between the ridges are wetlands and are covered by cattails, bulrushes, sedges, grasses, and other wetland vegetation; the ridges themselves are dry. The alternating ridges and swales in the study area together comprise a natural unit and this unit has been identified as wetland under the Wisconsin Wetland Inventory owing to the predominance of wetland vegetation. The identified wetland areas—including ridges within the ridge-swale complex—encompass 747 acres, or 41 percent of the study area.

"Special Value" Wetlands

For purposes of the Chiwaukee Prairie-Carol Beach planning program, "special value" wetlands were defined as wetlands which have an important bearing on the natural features and functions set forth in Section NR 115.05(2)(e)4 of the Wisconsin Administrative Code. These features and functions include: 1) stormand floodwater storage capacity; 2) maintenance of dry season streamflow, or the discharge of groundwater to a wetland, the recharge of groundwater from a wetland to another area, or the flow of groundwater through a wetland; 3) filtering or storage of sediments, nutrients, heavy metals, or organic compounds that would otherwise drain into navigable waters; 4) shoreline protection against soil erosion; 5) fish spawning, breeding, nursery, or feeding grounds; 6) wildlife habitat; and 7) areas of special recreational, scenic, or scientific interest, including scarce wetland types. For purposes of the study, wetland areas determined to have an important bearing on one or more of the above natural features and functions were identified as special value wetlands. Such wetlands encompass 654 acres, or 36 percent of the total study area.

Prairies

Prairies are open, generally treeless, areas in the landscape which are dominated by native grasses. Such areas have important ecological and scientific values. Once a dominant feature of the landscape of southeastern Wisconsin, prairies have become extremely scarce.

Prairies are of four basic types: low or wet prairie, mesic or moderately moist prairie, dry prairie, and oak openings. Wet prairies in the study area tend to occur in the swales and are dominated by cord, bluejoint, big bluestem, and muhly grasses. In addition, they contain such forbs, or broad-leaved nonwoody species, as New England aster, gayfeather, prairie dock, Culver's root, and golden alexander. Mesic prairies tend to occur on the dune slopes. These prairies are dominated by Indian grass, switch grass, and big bluestem grass. Typical mesic prairie forbs include smooth blue aster, wild indigo, rattlesnake master, New Jersey tea, and compass plant. Dry prairies occur on the well-drained dune ridges. The dominant grasses include prairie dropseed, little bluestem, panic grass, and needle grass. Forbs characteristic of dry prairies in the study area include bergamot, bush clover, orange paccoon, stiff goldenrod, and purple prairie clover. Oak openings are savannas typically dominated by the dry prairie grasses with up to 17 oak trees per acre, and having less than a 50 percent canopy cover. The characteristic forbs in the oak openings are also the dry prairie species. In all, prairie lands encompass 828 acres, or 45 percent of the total study area.

Natural and Scientific Areas

Natural areas, as defined by the Wisconsin Scientific Areas Preservation Council, are tracts of land or water so little modified by man's activity, or which have suffi-

ciently recovered from the effects of such activity, that they contain intact native plant and animal communities believed to be representative of the pre-European settlement landscape. Natural area sites are ranked into one of the following three categories: natural area of statewide or greater significance, natural area of countywide or regional significance, and natural area of local significance. The ranking of a natural area into one of these three categories is based upon consideration of the diversity of plant and animal species and community types present, the structure and integrity of the native plant or animal community, the extent of disturbance from man's activity; the commonness of the plant and animal communities present; any unique natural features within the area; the size of the area; and the educational value. Four natural areas of statewide or greater significance—in combination encompassing 404 acres—and three natural areas of countywide or regional significance—in combination encompassing 87 acres—have been identified in the study area.

Those natural areas which represent the best remaining examples of plant and animal communities, geological sites, or archaeological sites may be designated as state scientific areas. These areas have been determined to be of at least statewide significance and have been so designated by the Scientific Areas Preservation Council. One state scientific area—the Chiwaukee Prairie State Scientific Area, encompassing 82 acres east of the Chicago & North Western Railway right-of-way, south of 116th street—has been identified in the study area.

National Natural Landmark

A National Natural Landmark is an area identified by the Secretary of the U. S. Department of the Interior as possessing such distinctive ecological or geological features as to be of national significance. Sites so identified have been found to contain excellent examples of the ecological or geological features representative of a particular natural region. In identifying such sites, a number of factors—including the site conditions, viability, importance to education and scientific research, and abundance of different features characteristic of the region—are considered. Because of its botanical significance and nationally recognized scientific value, the Chiwaukee Prairie State Scientific Area has been designated as a National Natural Landmark.

"Critical Plant Habitat Areas"

A total of 18 Wisconsin rare, threatened, or endangered plant species are known to occur in the Chiwaukee Prairie-Carol Beach area. For purposes of the Chiwaukee Prairie-Carol Beach study, "critical plant habitat areas" were defined as areas in which one or more of these rare, threatened, or endangered plant species have been identified and which are generally suitable for the long-term maintenance of these species. Critical plant habitat areas encompassing 595 acres have been identified in the Chiwaukee Prairie-Carol Beach area.

Quotable Quote ...

"A critical planning task is recognizing and addressing uncertainty. Actual problems vary in uncertainty over means and ends. If people agree on what they want how to achieve it, then certainty prevails and planning is rational application of knowledge. they agree on what they want but do not know how to achieve it. then planning becomes a learning process; if they do not agree on what they want but do know how to achieve alternatives, then planning becomes a bargaining process; if they agree on neither means nor ends, then planning becomes of the search for order in chaos. Each prototype situation suggests a particular range of planning stules. Planners should tailor their styles to problem conditions. By acting contingently they can use reason to cope with uncertainty.

> Karen S. Christensen "Coping with Uncertainty in Planning" Winter 1985

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CORRECTION

ADDRESS

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