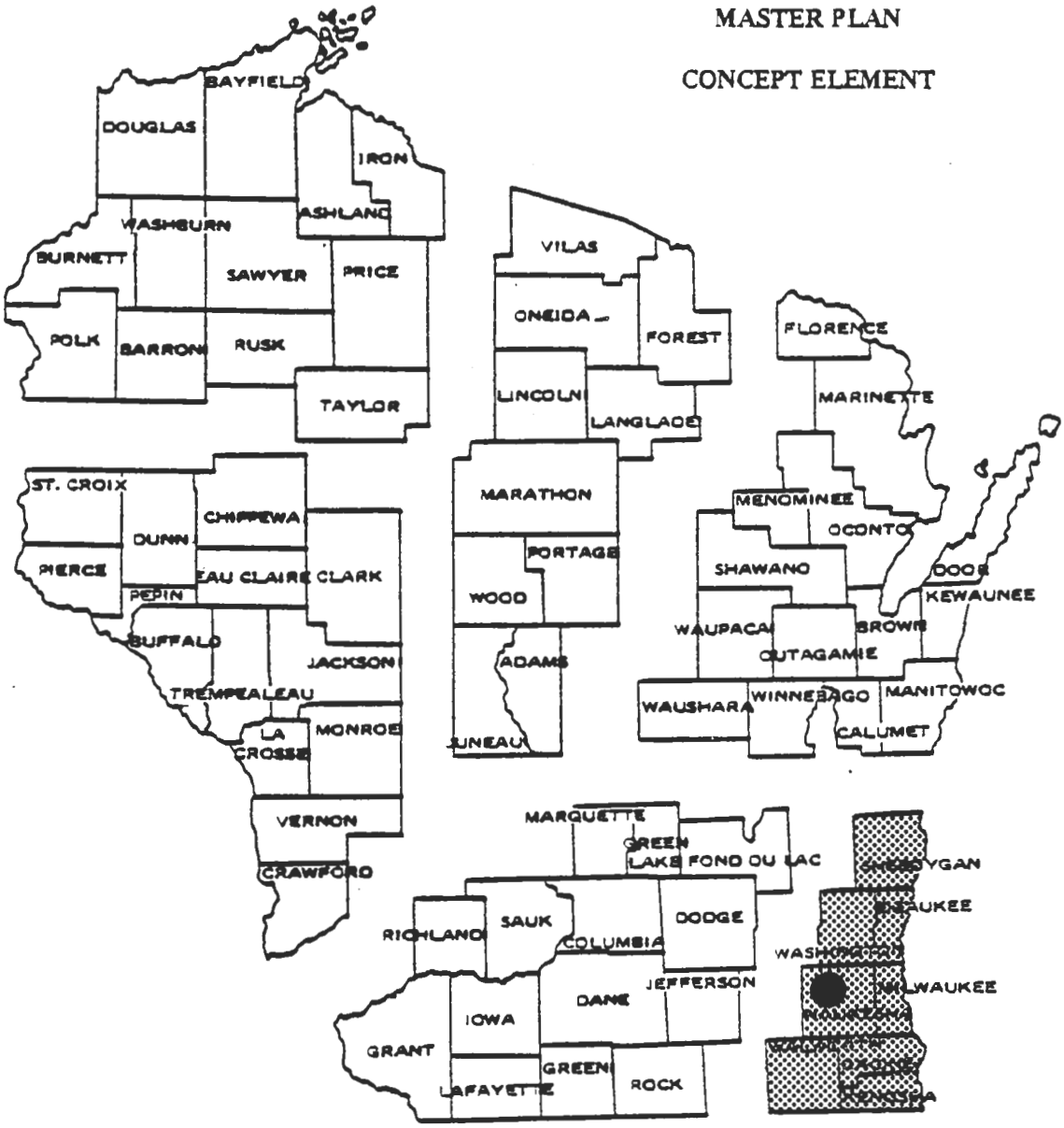
LAPHAM PEAK UNIT

KETTLE MORAINE STATE FOREST

MASTER PLAN

CONCEPT ELEMENT



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MADISON, WISCONSIN

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Master Plan Concept Element
Lapham Peak Unit
Kettle Moraine State Forest

Rounded hills, ridges, and kettles are the dominant features of this property. The view from the observation tower includes Holy Hill to the north and First Wisconsin Bank building in downtown Milwaukee to the east. Other dramatic views are found along the trail routes, from the picnic area and in various locations along the Ice Age Trail.

SECTION I - ACTIONS

A. GOAL, OBJECTIVES, AND ADDITIONAL BENEFITS

1. Goal

To manage the Lapham Peak Unit of the Kettle Moraine State Forest to provide outdoor recreational opportunities and environmental education experiences in a fashion compatible with the associated natural and geological resources.

2. Objectives

a. Establish and maintain trails to accommodate hikers, cross country skiers and horse riders*.

b. Provide a range of quality recreational experiences for overnight users by providing a traditional campground, bicycle and backpack camping facilities, and allowing for the establishment of an American Youth Hostel facility.**

c. Establish a connection for bicyclists between the Glacial Drumlin Trail and Lapham Peak.

d. Provide day use recreation areas including picnic areas and use of the existing observation tower.

e. Provide facilities which are cost effective and engineering/environmentally sound and accommodate individuals who are handicapped or otherwise disadvantaged through the proper design, construction, maintenance and operation of the property and its facilities.

f. Provide facilities and programs which emphasize the rich historical, geological, and natural features of the property and the immediate area.

g. Develop an environmental education program in association with the Havenwoods Environmental Awareness Center which supplements that unit's program.

h. Demonstrate forest and wildlife management practices which produce a diverse landscape resulting in high quality aesthetics, wildlife habitat, and woodlands.

i. Promote and demonstrate wildlife management practices which increase the diversity and abundance of native wildlife, endangered, threatened species, and regionally rare species.

j. Provide a small pond management fishery program for demonstration purposes.

* Contingent upon the implementation of a bridle fee.
** Facility to be established by American Youth Hostels, Inc.

2. Additional Benefits

a. Provide other recreational uses, including photography, bird-watching, wildlife observation, and gathering of fruits and nuts.

b. Identify points of interest and support facilities for users of the Ice Age Trail and Glacial Drumlin Trail.

c. Preserve open space in a rapidly developing residential area.

d. Produce revenue from the occasional sale of timber and other commodities.

B. RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

The recommended management and development alternative allows for substantial increase in use and development at Lapham Peak.

1. Development (Figure 3)

Development would include a 100-unit campground; a group picnic area with parking for 150 cars, the conversion of an existing stone structure to a group picnic shelter/warming shelter, and the construction of an additional group shelter; a hut for hikers on the ice-age trail; camping facilities for bicyclists; a new picnic area with an open air shelter and parking for 20 cars; conversion of the residence to a nature-meeting facility with nearby parking for 40 cars; renovation of the existing picnic area/observation tower and parking lot with a capacity of up to 40 cars; construction of a new road and a park entrance visitor station; construction of a warm water fish pond; wildlife blinds to allow visitors the opportunity to observe and photograph wildlife; shop facilities; a connection for bicyclists and hikers between Lapham Peak and the Glacial Drumlin Trail; horse trail development; a stable concession in conjunction with an American Youth Hostel facility utilizing existing buildings; turning lanes on Highway C; the abandonment of Government Hill Road as access to the

observation tower; construction of two miles of two way road to provide access to the group picnic area; observation tower, picnic areas and nature-meeting center; 3 miles of lighted cross country ski trails; and a lighted pond near the warming shelter for ice skating.

The former Boehm residence west of Highway C is currently being utilized as housing for staff at Lapham Peak. It will continue to be used in this capacity.

The nature-meeting facility will include a natural history museum with displays, a small auditorium and classrooms on the upper level. The lower level will be used as a meeting room for the Department and other public organizations.

All areas of development will be examined for the presence or absence of endangered and threatened wild animals, and plants, historical or archaelogical features, and appropriate protective measures will be taken for significant sites.

Two species from the threatened species list have been located on the property. They are kittentail and downy false foxglove. These areas will be protected during the construction of facilities. Their habitats will be maintained through prescribed burns or manual cutting of undesirable vegetation. If any other flora and fauna list species are found during development, construction would be suspended until the District Endangered and Nongame Species Coordinator is consulted. The State Historical Society and the State Archaeologist will be consulted prior to any construction.

Due to the capability of existing soils, waste water will be treated by standard septic systems or large-scale absorption systems. However, depending upon environmental necessity and economic feasibility, connection to the Delafield-Hartland water treatment plant may be considered.

C. MANAGEMENT

1. Facility

Lapham Peak will continue to be operated as a separate unit of the Kettle Moraine State Forest independent of the Southern Unit's operations. The Glacial Drumlin Trail will continue to be administered as a part of the Lapham Peak work unit.

Existing staffing at the Lapham Peak work unit is listed in the existing management and development section. Additions to that will include: assistant superintendent, conversion of the seasonal ranger position to a permanent position and the hiring of an LTE interpreter and three additional LTE ranger positions. Staff increases will coincide with need and availability funding.

2. Wildlife

Lapham Peak will provide numerous opportunities for visitors to view wildlife. The diversity of habitats on the property increases the number of species present. Trails will be set up to traverse the different types of habitat to provide opportunities to view a wide variety of wildlife. A bluebird nest box trail will be established along the hedgerows, in grassy fields or in open oak areas. If boxes are placed close to the water, tree swallows may also use the boxes.

Squirrel boxes will be placed in wooded areas. Wood duck boxes will be placed near or over water. Nesting boxes for screech owls, barred owls, kestrels, bats may be used to supplement hollow nest trees. Wildlife blinds may also be constructed to allow visitors the opportunity to observe and photograph wildlife.

With residential development continuing around Lapham Peak, deer may not disperse into surrounding areas. Numbers of deer could become large enough that the herd could cause damage to the habitat. Another consideration would be the damage the deer could inflict on nearby landowner's property.

Removal of a portion of the population by the Department may be necessary to prevent habitat damage. With managed removal the population will remain healthy and will continue to be of high value to the nonconsumptive user.

Agricultural areas and pastures should be developed into dense nesting cover to benefit grassland wildlife. Prairie grasses and/or mixtures of cool season grasses and legumes provide excellent nesting cover for field nesting wildlife. Brush and small trees must be removed from areas where it is desired to establish nexting cover. Woody vegetation can be controlled through prescribed burning, herbicides, and mechanical removal. Once established, nesting cover requires periodic burning to maintain vigor and control encroachment of woody vegetation. Blocks of nesting cover should be burned on a rotational basis approximately every 5 years after initial tree and brush removal. Scattered food patches of dwarf sorghum, corn and other grains which provide wildlife with high energy foods when native seed or forage is lacking, should also be established in these areas.

Maintaining a strip of shrubs between the grassland-forest ecotone will increase vegetative diversity. Songbirds and small mammals will benefit because the resulting 3 vegetative zones in close proximity can be exploited by animal species of limited mobility. Establish a shrub zone in desired areas by planting shrubs. Maintain shrubs by mowing them every 5 years. Additional hedgerow establishment will also increase songbird, small mammal, and other wildlife habitat.

It is anticipated that wild turkeys will populate Lapham Peak and the surrounding area within a few years. Management practices to

encourage wild turkeys should emphasize the maintenance of mature, productive oak forests interspersed with small open areas. It is recognized that the turkeys are more sensitive to disturbance during their nesting season (late April-May). Any activities that may create such a disturbance will be evaluated.

A deed restriction prohibiting hunting and trapping was placed on 409 acres by the former landowner at the time of acquisition. The restriction was extended by the Department to include all lands within the project boundary.

3. Vegetative

The goal of vegetative management will be to maintain the health, vigor and diversity of the vegetation. This will be accomplished by removing single clumps or stands of trees, pruning the existing stock and planting new materials in and/or adjacent to the intensive use areas.

To increase the diversity within the blocks of conifers, thereby increasing use of the area by wildlife, the areas should be thinned out. Thinning would increase the amount of sunlight reaching the forest floor, inducing the growth of herbaceous and shrubby species. Wildlife which utilizes this habitat will likewise increase. Existing pine plantation edges should be scalloped to break up the present straight line effect.

Selective removal of vegetation may be necessary to create, maintain or enhance scenic vistas on the property.

In order to prevent disturbance of the Cooper's Hawk nesting in the plantations, thinnings will not occur during the hawk's breeding season (March 1-August 15).

Deciduous trees and shrubs such as cherry, black walnut, high bush cranberry and hazel provide food for wildlife and could be planted among the pines. This would provide food along with feeding cover for migrant and resident wildlife.

The upland fields are linked by hedgerows and conifer plantings. The hedgerows increase the diversity of the upland areas and provide protected travel lanes for resident wildlife. A variety of song birds use the upland grasslands and hedgerows for nesting during the spring and summer. The large blocks of conifers provide some species such as the mourning dove with nesting cover. They also provide winter cover for resident birds and deer.

4. Fisheries

There are several ponds located on the property. These ponds do not provide immediate fish management potential and would better serve the interests of wildlife.

There is the potential to provide a seasonal childrens fishing pond by dredging a new pond in an area of spring seeps. This option will be explored further with the area fish manager.

5. Land Acquisition (Figure 2)

This plan proposes the establishment of Lapham Peak Unit - Kettle Moraine State Forest with an acreage goal of 995 acres. State ownership is presently 671 acres. These lands were acquired for Southern Forest purposes. The 324 acres that remain to be acquired are owned by six different landowners, all of whom have expressed an interest in selling their land to the Department.

6. Operations Cost and Revenue Projections

The fiscal 1987 operations budget was $24,250. In 1987, the revenue generated at Lapham Peak was $11,000. In 1988 the revenues are anticipated to be about $18,000. The fiscal year 1988-89 operations budget is $27,886 and the 1989-91 operations budget is projected to be $40,000 each year.

As the property gains in popularity and the facilities expand, the revenue picture will improve. Lack of facilities is the limiting factor.

7. Roads, Entrances and Private Inholdings

Presently, access to the facilities (picnic area/observation tower) is Government Hill Road. There are approximately a dozen residences along the road. This plan calls for the road to be terminated and removed beyond the last residence. The road will be repaved, a turn-a-round provided and it will be turned over to the Town of Delafield. The entrance will be relocated along Highway C, where a park entrance visitor station/office will be constructed. This will provide better service to the visitor, increase revenue collection efficiency, and increase security. Turning lanes will be provided along Highway C for safety purposes.

8. An education program will be developed cooperatively with Havenwoods. The program will focus on comparisons of the urban and rural ecosystems. Various educator workshops will also be conducted by the Havenwoods staff at Lapham Peak.

9. Providing for use by mobility disabled and other handicapped persons.

The parks program will initiate an information/education program to inform the public of accessible facilities. The program will also work with and accelerate communications with advocacy groups to determine needs for other and less traditional recreation activities.

Since this is a new property, most of these facilities and all of the new buildings will be accessible. The existing picnic area near the tower will be modified to be accessible. The existing shelter and the residence conversion to a nature center-meeting facility will be made accessible.

A fishing pond facility will have an accessible fishing dock.

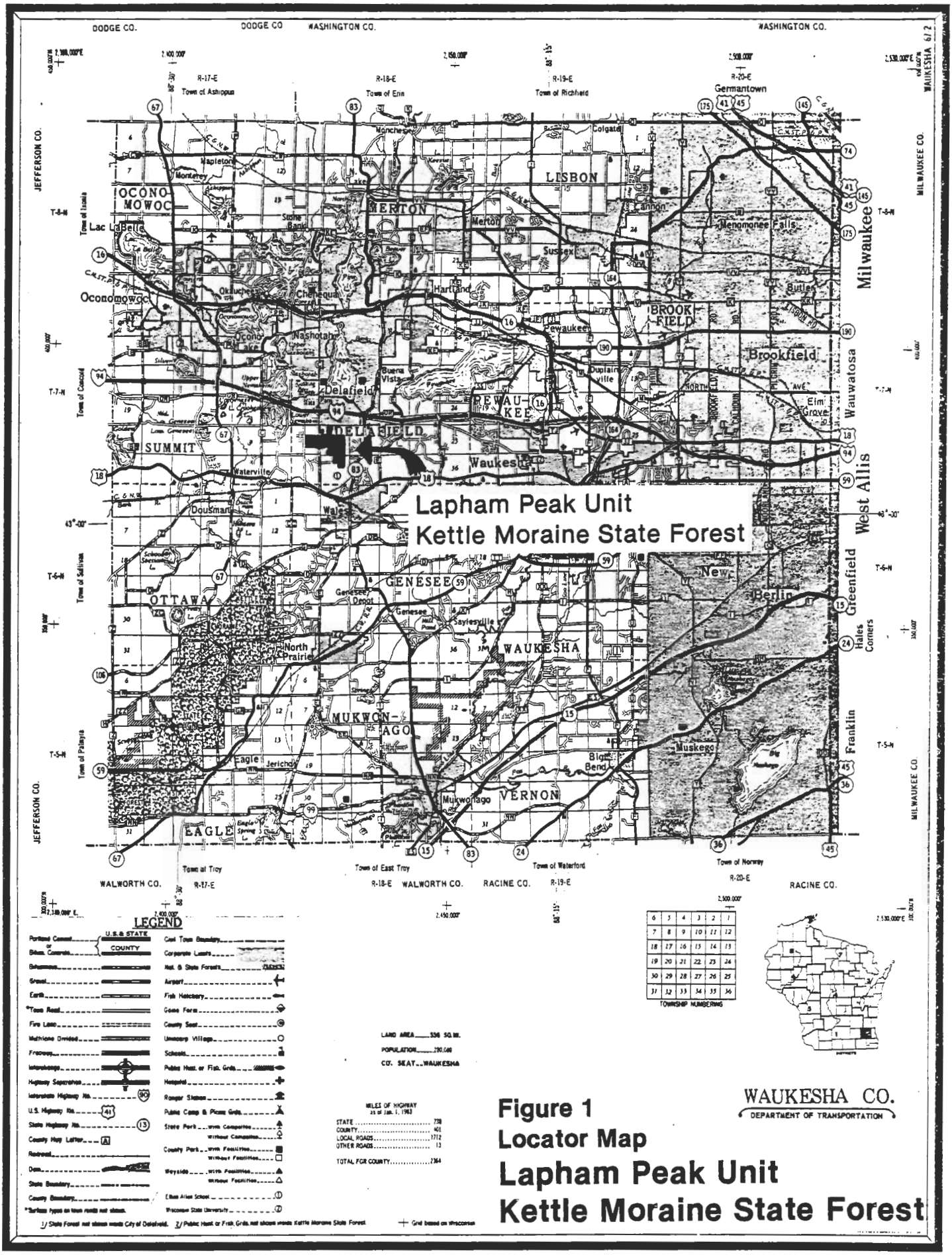


Figure 1
Locator Map
Lapham Peak Unit
Kettle Moraine State Forest

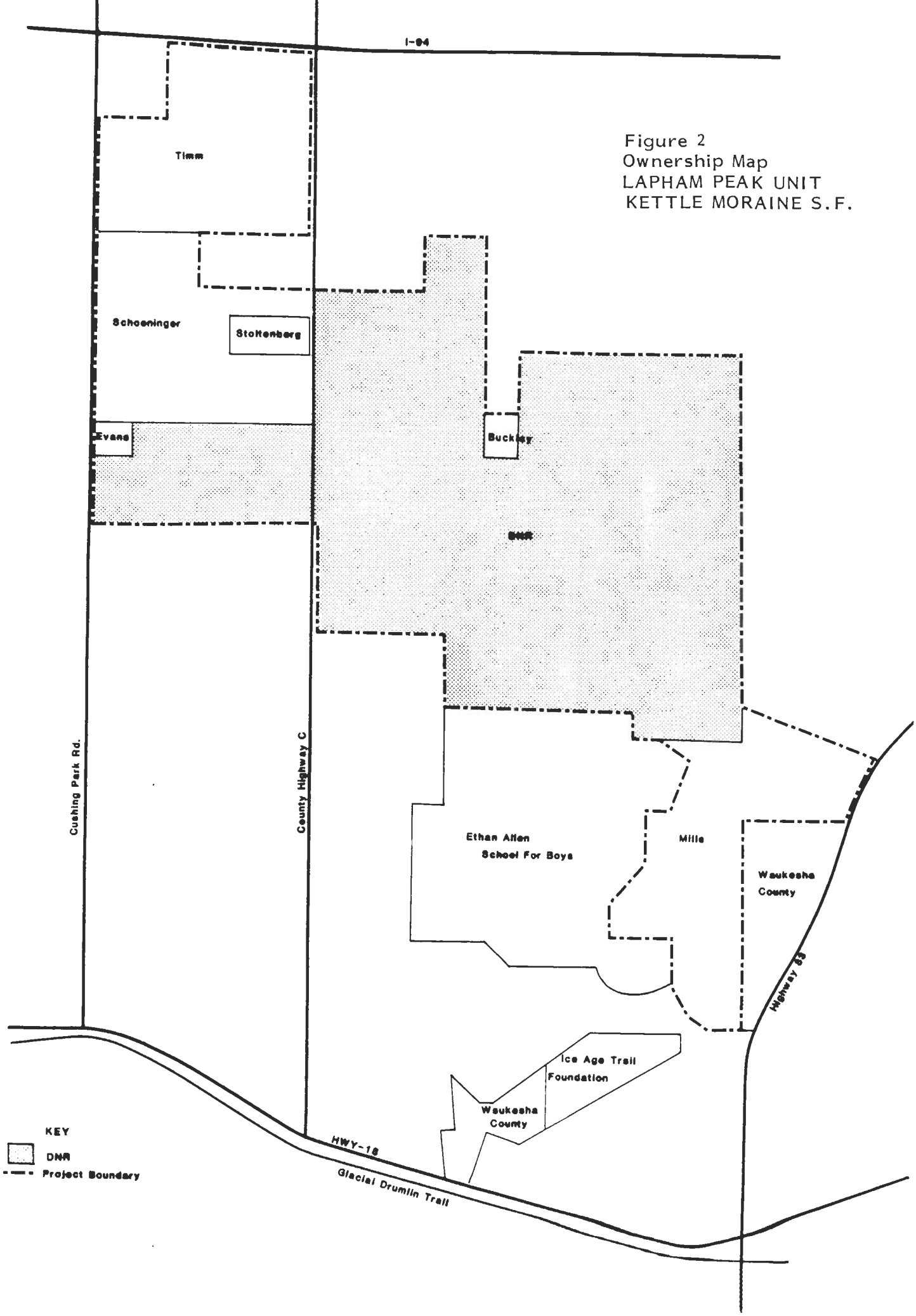
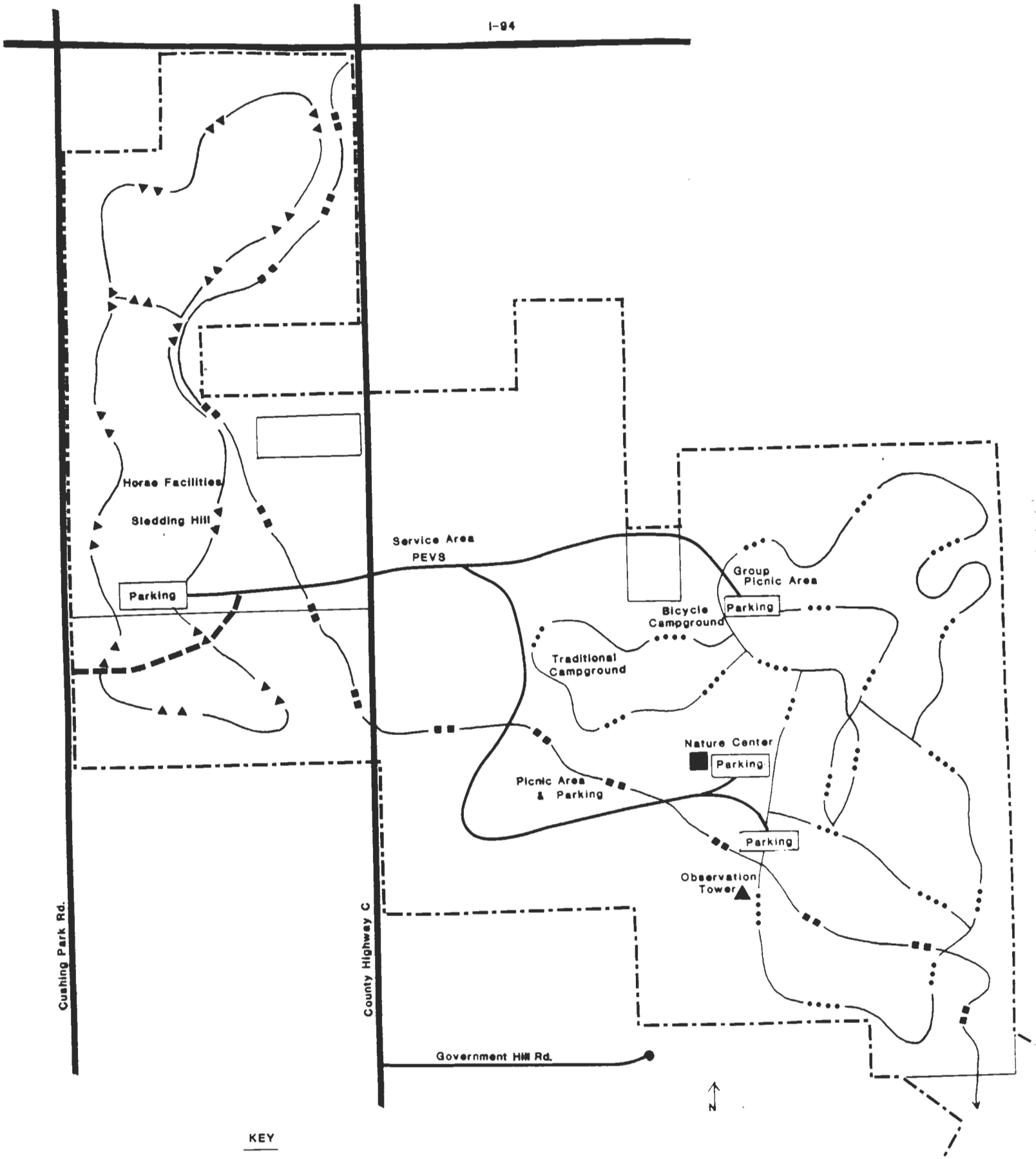


Figure 2
Ownership Map
LAPHAM PEAK UNIT
KETTLE MORAINE S.F.



KEY

- Horse Trails
- Hiking/Skiing Trails
- Bicycle Trails
- Ice Age Trail

Figure 3
Development Map
LAPHAM PEAK UNIT
KETTLE MORAINE S.F.

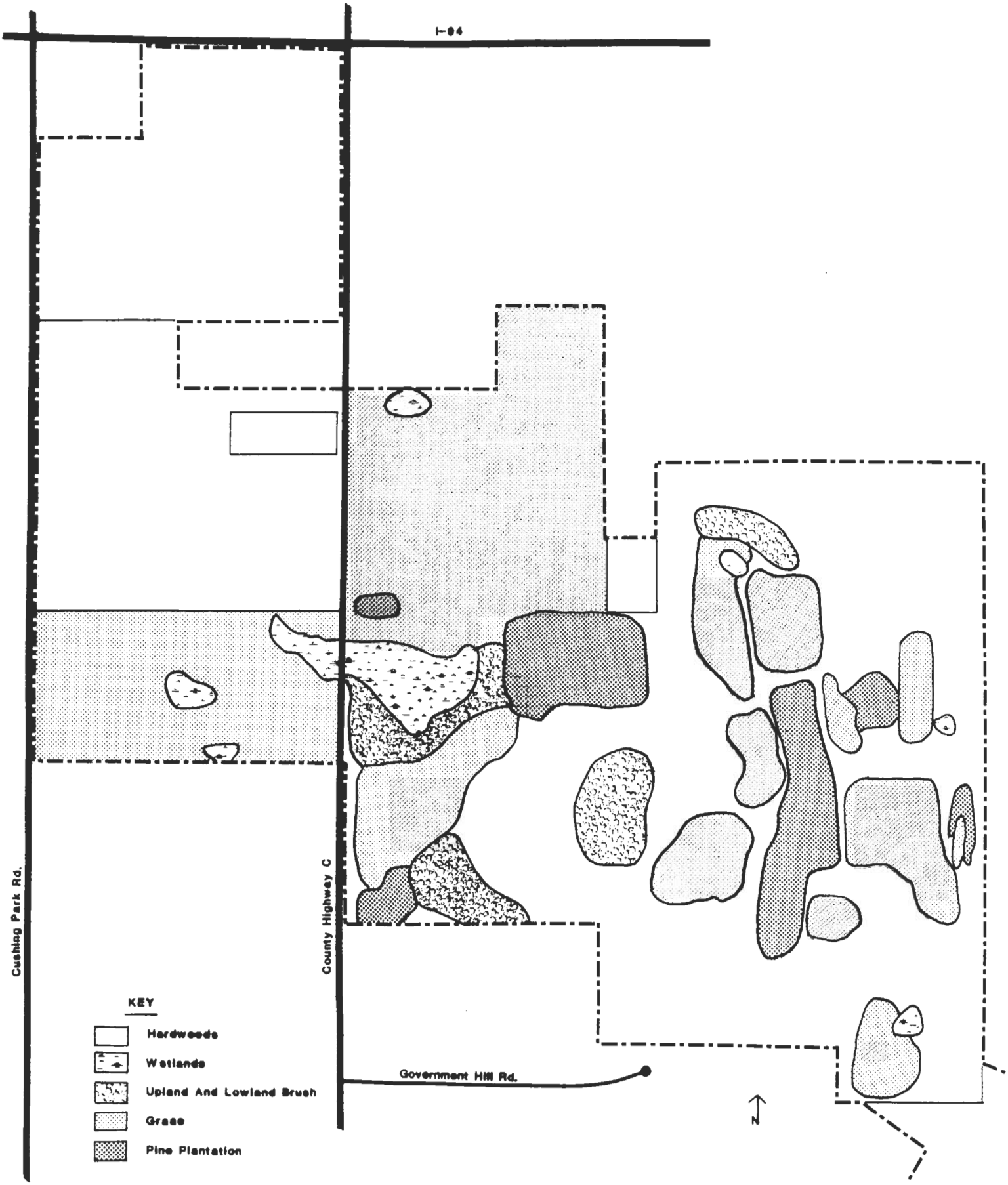


Figure 4
Vegetative Cover Map
LAPHAM PEAK UNIT
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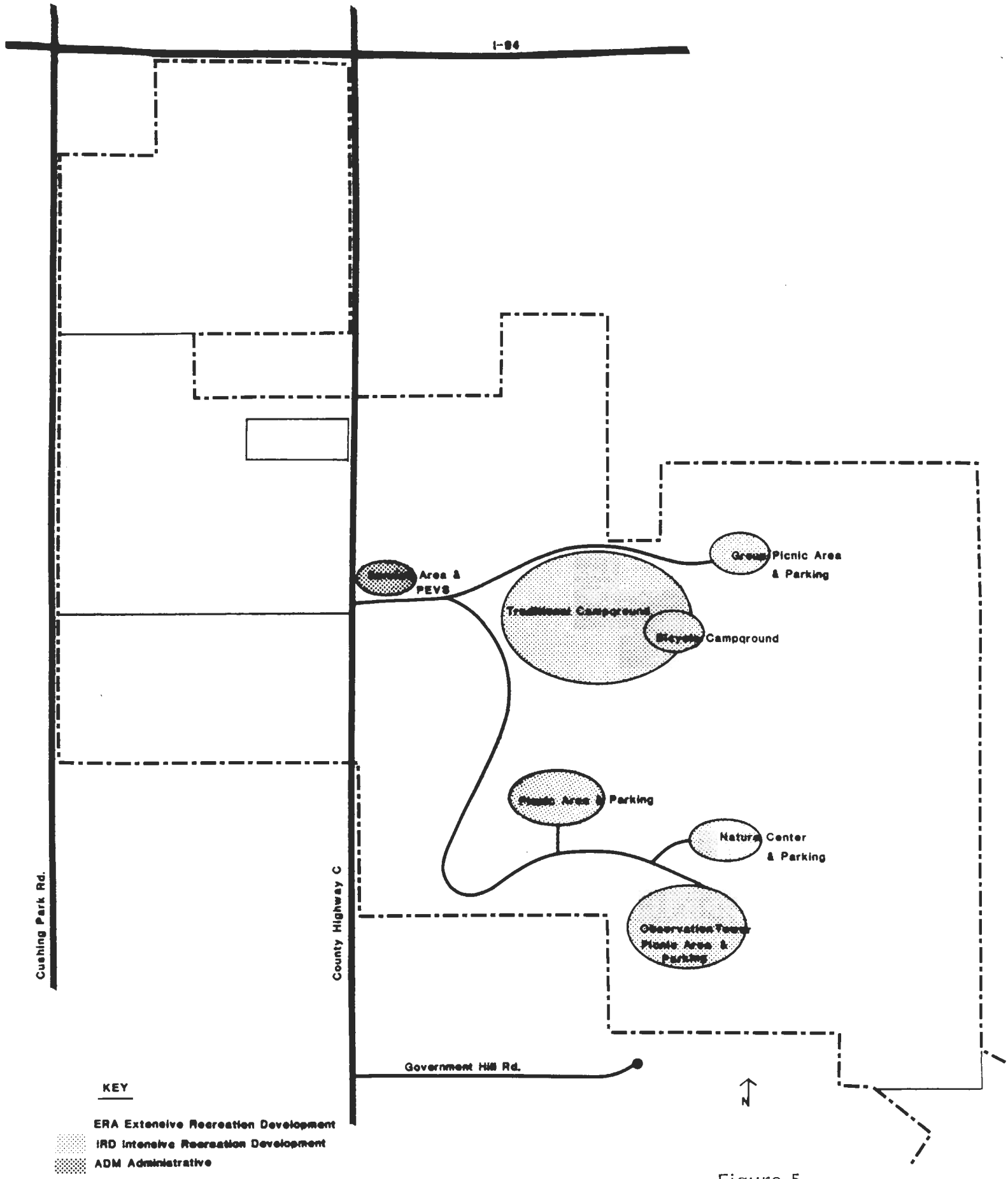

Figure 5
Land Use Classification Map
LAPHAM PEAK UNIT
KETTLE MORAINE S.F.

SECTION II
SUPPORT DATA

A. BACKGROUND INFORMATION

1. Location (Figure 1)

Lapham Peak is located in southeastern Wisconsin in Waukesha County. It is situated 25 miles west of Milwaukee, between the Villages of Wales and Delafield.

Good access to the property is provided by Interstate 94, one mile to the north and U. S. Highway 18, one mile to the south. Access off these two major roads is via County Highway C which bisects the property.

2. Regional Context

Lapham Peak is located 30 minutes from downtown Milwaukee and one hour from Madison. More than 1.5 million people live within a one hour drive (including the communities of Whitewater, Janesville, Waukesha, West Bend, Beaver Dam, and Watertown).

The Glacial Drumlin State Trail is less than 1½ miles south of the property, roughly paralleling U. S. Highway 18. The Ice Age Trail is a 1,000 mile-hiking trail that traverses the state from Potawatomi State Park in Door County to Interstate State Park at St. Croix Falls. The trail follows the terminal moraine left by the glacier and passes through Lapham Peak, providing a pedestrian connection to the Glacial Drumlin Trail.

The Loew's Lake Unit is located 20 miles north of Lapham Peak; Pike Lake State Park is 25 miles north of Lapham Peak. The headquarters of the Southern Unit of the Kettle Moraine State Forest is located 20 miles to the south.

The Havenwoods Environmental Center is located 25 miles east of Lapham Peak, in the City of Milwaukee.

3. History of the Area

Lapham Peak is thought to have been an important place to the Indians of the area. Though little is known of their activity, several trees which are thought to be Indian trail trees (directional markers used along Indian trails) have been located on the property indicating their presence.

The State Historical Society has not identified any archeological or historical sites on the property but will be contacted to provide a survey prior to any development. Welsh settlers are said to have settled in the area because Lapham Peak reminded them of Mount Snowdon in their homeland of Wales.

Government surveyors are believed to have used the summit as a signal station to make topographic maps of the region.

A 100-foot high tower was built by the government in the fall of 1871 for a lake survey. In April of the following year, the tower was destroyed during a storm.

The use of Lapham Peak as a recreational area began in the mid-1800's when Charles Hansen constructed an observation tower and charged admission for visitors to picnic and climb the tower. Later, the summit was part of a tract purchased for the construction of a state tuberculosis sanitarium (now the Ethan Allen School for Boys). The state legislature transferred it to the Wisconsin Conservation Department in 1939. The present observation tower was built in 1940 through a WPA grant of $9,000.

Early settlers referred to Lapham Peak as "Big Hill". Later it was called "Stoney Hill", "Prospect Hill", "Government Hill" and finally Lapham Peak in 1916. It is named in honor of Increase A. Lapham, a prominent conservationist and scientist of the 1800's. He recorded and studied weather data from the peak and eventually formulated the bill to establish the first weather bureau. A plaque honoring Lapham was erected near the peak in 1916 by the Waukesha County Historical Society.

In 1870, the Signal Service Division of Telegrams and Reports, allowed Lapham to set-up signal stations between Pikes Peak, Colorado and Lapham Peak. Blue Mound State Park west of Madison was the site of another such signal station. The stations were used to transmit data via telegraph on the formation of weather patterns from west to east. These meteorological observations were transmitted to Lapham at his Chicago office. His analysis of this data was telegraphed to Great Lakes ports to give advance warning to ships of approaching storms.

The Kettle Moraine State Forest was established in 1936. Initially it was envisioned to begin in Sheboygan County and to extend 85 miles to Walworth County. In the 1950's the plan was scaled back somewhat and the Southern Unit was to begin near Whitewater and extend north to Naga-Waukee County Park following the terminal moraine and including Lapham Peak.

4. Chronology of Property's Establishment and Development

State ownership of land at Lapham Peak began with a legislative transfer of 50 acres between state agencies in 1939. In 1953 the state received a gift of 40 acres from Alice Prime and purchased an additional 40 acres in 1950. In 1984 the Department acquired 409 acres from Dr. Paul and Bernice Hausmann. In addition, 40 acres from the Ellis Mills estate was acquired in 1985, 41 acres in 1987 from Louise Boehm, and in 1988, 51 acres from Hanna Schmidt which brings the current total acreage figure at Lapham Peak to 671 acres.

In 1945, the Wisconsin State Legislature took action to build a State FM Radio Network by creating the State Radio Council. The purpose of this body was to plant "plan, construct, and develop a

state radio system of radio broadcasting for the presentation of educational, informational, and public service programs". A tower was constructed at Lapham Peak and WHAD began broadcasting in 1948. It was the second such station to begin broadcasting statewide.

An observation tower, restrooms, and parking were constructed at the peak in 1940. It remained open to the public until 1981, when budgetary cutbacks forced it's closing. Lapham Peak had been managed by the Southern Unit of the Kettle Moraine State Forest until 1986.

The Hausmann's began assembling their 400+ acre tract of land in 1956 through the purchase of several former farms. Over the next 30 years, it was managed for timber growth and wildlife habitat with numerous stands of various species of trees having been planted.

In 1981, the Hausmann's signed a 15-year contract on 36 acres under the Woodland State Tax Law and placed 100.16 acres under the Waterbank Program of the United States Department of Agriculture, Agricultural Stabilization and Conservation Service (ASCS).

Their residence, an 8,700 square foot home of a contemporary design was completed in 1965.

5. Existing Management and Development

In 1985, a superintendent for the Glacial Drumlin State Trail and Lapham Peak was hired. The headquarters for these two work units has been established in a set of farm buildings on the property located along Highway C. Current staffing levels include the superintendent, a seasonal park ranger, and four limited term employees for both Lapham Peak and the Glacial Drumlin Trail.

The observation tower and restroom facilities located at the peak were renovated and reopened to the public in 1986. Approximately seven miles of trail were first opened for cross-country skiing for the 1986 season. Adequate snowfalls have produced a good turnout of skiers during the first two seasons of operation.

A deed restriction placed on the 409 acre parcel at the time of acquisition prohibits hunting and trapping on that property. The restriction has been extended by the Department to include all lands within the project boundary. Lapham Peak presently provides multi-season day use for hiking, picnicking, and cross-country skiing.

Attendance figures for 1986 (July-December) was 40,462 visitors. For 1987, that figure was 57,967 visitors. This figure is expected to increase over the next several years as Lapham Peak adds facilities and gains in popularity.

B. DESCRIPTION OF THE ENVIRONMENT (RESOURCE CAPABILITIES)

1. Resource Capabilities and Inventory

a. Geology

Lapham Peak is part of the Kettle Moraine. It formed by the glacier some 10,000 years ago where two lobes of the Wisconsin glacier came together. As the massive ice lobes "collided", pressure, friction and buckling resulted. This caused the ice to melt. Tremendous loads of rocks, gravel, and sand were deposited, forming the interlobate moraine. Lapham Peak is the highest point in Waukesha County with an elevation of 1,233 feet above sea level.

b. Soils

The soils east of Highway C are predominantly rodman-casco association. This association is medium textured soil over gravel and sand. It is typically made up of kames, eskers, kettle holes, and pot holes. Slopes range from 2% to 30%. Erosion control practices are needed if these soils are used intensively.

The fox-casco association is predominant west of Highway C. These are loamy soils over stratified sand and gravel. This association is mainly on sandy and gravely outwash plains. These soils are less prone to erosion than the rodman-casco association.

c. Vegetative Cover (Figure 4)

Land use and forest cover at Lapham Peak is representative of the Kettle Moraine area throughout Waukesha County. The forest cover type is predominantly mature oak over brush and/or scattered, low-quality central hardwoods such as hickory and elm (235.2 acres).

Abandoned farm fields are being invaded by central hardwoods. Recently abandoned fields support grass or agricultural crops of hay and alfalfa (112 acres), several coniferous plantations are found on the property (44 acres) as well as some unusual vegetation due to the efforts of the previous landowners.

d. Water Resources

There are few significant water features, due to the sloping, upland nature of the property. Some wetlands within the property boundary. The proposed addition of lands to the southeast will take in parts of Scuppernong Creek.

Some of the wetlands have been dredged by the former owner to provide waterfowl habitat. Information on wells located at

Lapham Peak indicate they are drilled to depths of 150-300 feet.

e. Wildlife

The Lapham Peak property provides a relatively large acreage of wildlife habitat in a developing residential area. There are five major habitat types within the property boundaries. These include wetland areas (34 acres), fallow (5 acres), agricultural areas and pastures (158 acres), two large blocks of conifers (44 acres), and hardwood forests (235 acres).

Wildlife species associated with these types of habitat are the same as those found throughout southeastern Wisconsin with the addition of some threatened and other rare species not commonly found in the region. Species utilizing the wetland areas include Canada geese, muskrats, mink, great blue herons, red-winged blackbirds, mallards, blue-winged teal, and wood ducks. Reptiles and amphibians common to southeastern Wisconsin frequent the wetlands on the property.

Wildlife common to upland areas include white-tailed deer, red and gray fox, cottontail rabbits and ring-necked pheasants. There have been some sightings of coyote on the property as well. A variety of song birds use the upland grasses and hedgerows for nesting during spring and summer. The large blocks of conifers provides some species such as mourning dove with nesting cover. They also provide winter cover for resident birds and deer.

Woodpeckers, thrushes, vireos, warblers, gray and fox squirrels, raccoons and chipmunks utilize the wooded areas. Raptors found in the area include great-horned owls, red-tailed hawks, kestrels, and red-shouldered hawks (threatened). Cooper's Hawks (threatened) were documented in 1987-8 as nesting in pine plantations on the property. Hooded warblers have been noted at Lapham Peak. This species is presently on the special concern list is proposed to be added to the threatened list.

Other rare birds of forest habitats found at Lapham Peak are Cerulean warbler, Kentucky warbler, worm eating warbler and Acadian flycatcher.

f. Land-Use Potential (Figure 5)

In accordance with the Department's Land Use Classification Systems, lands at Lapham Peak are classified as:

1. Intensive recreation development (60 acres) which will include parking lots, campground and picnic areas, group picnic area, 2 miles of roadway and a visitor center.

2. Extensive recreation area (606 acres) which will remain undeveloped, with the exception of trail use.
3. Administrative area (5 acres) which includes the park entrance visitor station/office and the shop facilities.

g. Historical and Archaeological Features

The State Historical Society has been contacted and they have no historical or archaeological sites documented on lands currently in state ownership at Lapham Peak.
An archaeological survey will be conducted prior to construction of any new facilities.

There is evidence that Indians inhabited the area at one time. Several trees thought to be Indian trees designate routes used by the Indians and numerous arrowheads have been found.

2. MANAGEMENT PROBLEMS:

a. Public Roads

The property is bisected by County Highway C, a two lane road with no shoulders. This road receives a substantial amount of heavy trucking as well as a lot of vehicular traffic. The posted speed limit on the road is 45 mph.

Specific uses are segregated, so the number of users crossing Highway C will not be substantial. However, there will be some park users crossing Highway C, causing some safety concerns.

b. Wildlife

A significant deer population now exists at Lapham Peak. This may create problems for the Department and adjacent landowners such as overbrowsing and the spread of Lyme disease.

c. Residential Development

The property adjoining the east side of Lapham Peak is all subdivisions. As residential development continues, the property could become surrounded by homes. This could put a strain on the resources and facilities to meet all the needs of those wishing to recreate here. Some neighbors have complained about the potential use of the roads past their homes by visitors wishing to access the property.

Volunteer trails from the nearby subdivisions may provide unauthorized uses such as dirt bikes and horses access to the trails on the property. However, some neighbors are working with the Department to develop designated connector trails from their subdivisions to the trail system on the property.

d. Land Acquisition

All landowners within the proposed project boundary have expressed an interest in selling their land to the Department. Limited monies for acquisition may mean the Department will not be in the position to buy these lands when the seller wishes to dispose of them. These lands could then be developed for residential or some other use and their potential park use could be lost forever.

e. Soils

The soils may create minor problems in the siting of septic systems and roadways. Location of these facilities may be influenced greatly by these factors.

f. Public Radio Tower

Current location of the WHAD radio tower inhibits the scenic view from the top of observation tower. It is the desire of the Department that at the time the present tower is replaced, it will be relocated away from the observation tower and public use area.

g. Mountain Bikes

Mountain bikes have become a management problem on other state properties as their use increases. This problem may eventually spread to Lapham Peak as they gain in popularity. If user conflicts and/or erosion problems arise, restricting their use may be necessary.

3. RECREATIONAL NEEDS AND JUSTIFICATIONS

The 1986 State Comprehensive Outdoor Recreation Plan (SCORP) for Region 10 - Southeast Wisconsin, the Southeastern Wisconsin Regional Planning Commission (SEWRPC) Regional Park and Open Space Plan for Southeastern Wisconsin - 2000, and an extensive citizen participation effort were used to determine the needs and justifications for recreational activities at Lapham Peak.

SCORP has the following activities/facilities planned for Lapham Peak listed as high priority for southeastern Wisconsin: bicycling, camping, cross country skiing, hiking/backpacking, and picnicking.

Horseback-riding, was given a low priority in the SCORP plan. It is being included in this plan to meet a local demand as indicated through the citizen participation process.

The Southeastern Wisconsin Regional Planning Commission has identified Lapham Peak as being within a primary environmental corridor. Under their regional park and open space plan, they recommend that lands within this corridor at Lapham Peak be protected and preserved through acquisition by the Department of Natural Resources.

4. ANALYSIS OF ALTERNATIVES

a. No Future Development - Status Quo

This alternative, which is not recommended, would mean no expansion of the recreation facilities would take place. This would not allow for dispersal of the users over more of the property, causing over-use of existing facilities. As the surrounding area continues to urbanize, the demands placed on the property to provide recreational opportunities will increase.
The lack of future expansion will also limit the ability of the property to generate revenue beyond a point. This tends to have a stagnating effect on things: no future development with no promise of a return on the investment.

b. Expanded Development

This alternative allows for substantial increase in use and development at Lapham Peak. Development would include a 100-unit campground area with the conversion of an existing stone structure to a group picnic shelter/warming hut, a hut for hikers on the ice age trail, camping facilities for bicyclists, a new picnic area with a parking lot, a group picnic shelter/warming hut, conversion of the residence to a nature-conference center, expanded trail development (including lighted cross-country ski trails and Ice Age Trail connection), renovation of the existing picnic area/observation tower, construction of a new road and a park entrance visitor station/office, shop facilities, a connection for bicyclists between Lapham Peak and the Glacial Drumlin Trail, overnight parking facilities for users of Ice Age or Glacial Drumlin Trail, horse trail development and a stable concession, an American Youth Hostel facility, turning lanes on Highway C, and the abandonment of Government Hill Road as access to the observation tower.

This alternative strikes a balance between preservation and recreation. Ease of accessibility, close proximity to a major metropolitan area and the use patterns developing indicate Lapham Peak will be a well utilized property.

c. Large-Scale Development

This alternative would suggest very intensive recreational development, such uses be included as a swimming pool, an indoor group camp, etc. with fewer natural areas for trails,

nature study, wildlife observation, etc. This alternative is not recommended.

d. Public Hunting

A growing deer herd and wild turkey population offers limited hunting opportunities. However, the close proximity to rural homes coupled with use levels in fall preclude this alternative from being used. Additionally, a deed restriction which specifically prohibits hunting and trapping has been placed on 409 acres of the projects property.

Public Involvement in the Master Planning Process

Public involvement has played a major role in the formulation of this plan. In 1985, an open forum was held at the Delafield Town Hall to solicit ideas on how Lapham Peak should be developed. The uses incorporated into this plan and the expansion of the project boundary to its present size were all products of citizen input. The Department held another forum in early 1986 to receive comments on the goal statement and objectives developed. The Department has maintained a dialog with the public through the use of a newsletter, which has a circulation of over 500 households.

The Department has also been in contact with state legislators, county and local government officials throughout the process. There has been broad base support for Lapham Peak and the master plan throughout the planning process.

SO:sbr

Dec88/0256/4

ENVIRONMENTAL ASSESSMENT

Lapham Peak Master Plan

October 31, 1988

ENVIRONMENTAL CONSEQUENCES (Probable adverse and beneficial impacts including primary indirect and secondary impacts)

15. Physical (include visual if applicable)

New development and conversion of existing facilities for recreation purposes will have some impact on the property. Use is expected to increase dramatically as facilities are expanded. However, this increase should not overtax the resources significantly. Use will be dispersed over a large area. Intensive recreational development will be limited to areas capable of handling the use. Some of these areas now experience intensive use without degradation.

Major Development (i.e., roads, contact stations trails, campground and support facilities) will cause some minor disruption to the soil, mainly through exposure and compaction during the various phases of construction. In other areas soils will be affected by such things as compaction caused by maintenance equipment and foot traffic. Maintenance practices will be utilized to guard against destruction of ground cover which may result in erosion.

Development plans will include additional planting of trees and shrubs for shade, screening and space definition in the areas such as the campground, day use areas and around administrative facilities.

Major transportation routes through the area (I-94 and U.S. Highway 18) will easily accommodate the expected increase in traffic volume. County Highway C will eventually be necessary (at the Department's expense) to provide safety and ease of entry to the property.

16. Biological (include impacts to threatened/endangered species)

The number and type of plant species at Lapham Peak will change somewhat due to natural plant succession, interruption of succession, cutting, burning, and planting of various plant stock. Some vegetative removal will occur to create vistas from use areas, along trails and overlook sites. This would entail some tree removal, limb cutting and occasional mowing.

Protection will be provided for endangered and threatened species that may be found to inhabit or migrate through the property. Guidelines and MC 2328.1 will be followed. Increased presence of humans on the property may mean some interference with wildlife habitat and plant damage.

17. Cultural

a. Land Use (include indirect and secondary impacts)

Hiking trails, nature trails, and cross-country ski trails located throughout the property will increase

the disturbance of some species such as fox, that are timid and do not adapt well to humans. However, most species present in the park already adapt to human disturbance and should not be noticeably affected. Some species such as deer will use the trails as travel lanes, and if seeded to grass and legumes, as feeding areas.

b. Social/Economic

Expansion and improvement of park facilities will result in better service to the public. Providing expanded day use facilities and adding campground will serve to meet some of the needs as identified in local, regional, and state outdoor recreational plans. The camping facilities will also increase property utilization and length of stay; therefore, will increase revenue. This should also mean more dollars for the local economy based on information presented within the 1980 Wisconsin Camper Survey. Providing a nature - meeting facility, and additional nature and hiking trails will promote the educational mission of the property. The user will be provided with more information about their natural environment and Department programs being undertaken to safeguard those and other resources.

Enlarging, remodeling, and, in some instances, replacing obsolete facilities should increase user satisfaction and lead to increased use and duration of stay. This, in turn, will provide economic benefits through increased admission sticker sales and campsite rental fees. It is expected that the property will continue to generate local commercial sales for such things as gasoline, picnic and camping supplies, and related items.

Proposed land acquisition will cause a shift from private ownership to public ownership which will result in more land being available for public recreation and enjoyment. Tax loss will be negligible as the state makes payments in lieu of property taxes on land that it owns.

There are five parcels of land remaining to be purchased within the project boundary. It is the state's policy to acquire any land within the boundary from willing sellers. If the landowner desires to sell his/her residence, relocation assistance is available.

Development of the property is not expected to significantly affect Wisconsin's air quality. Some

local noise and air pollution, however, might be expected during construction due to the use of heavy equipment and disruption of surface conditions.

Increased use could possibly lead to the need for public services such as police and fire protection, as well as medical attention. Gasoline and other fuels will be consumed by people coming to the property and by maintenance vehicles used on the property.

All burns for prairie maintenance will be conducted within prescribed conditions of burning permits to maximize safety and minimize air quality impacts.

Buffer strips, irregular cut boundary lines and other techniques will be utilized to reduce the visual impact of cutting pine plantations and dead and diseased trees. Trail alignment and resulting clearing and grubbing will be closely evaluated to reduce any detrimental impact such development may have on overall park aesthetics, especially as viewed from the observation tower.

c. Archaeological/Historical

There are no known archaeological or historical sites within the property. However, any development will be closely evaluated to see if it will have an impact on such resources. The State Historical Society will be contacted to inspect the property if any evidence of sites are uncovered or suspected. If needed to avoid impact on such a site, development plans and construction will be modified.

EVALUATION OF PROJECT SIGNIFICANCE (Complete each item)

22. Significance of Cumulative Effects.

Discuss the significance of reasonably anticipated cumulative effects on the environment. Consider cumulative effects from repeated projects of the same type. What is the likelihood that similar projects would be repeated? Would the cumulative effects be more severe or substantially change the quality of the environment? Include other activities planned or proposed in the area that would compound effects on the environment.

The possibility of a large tract of land in Waukesha County being acquired and developed for state park purposes is highly unlikely due to the scarcity of resources. Therefore, additional actions

of this type would be limited to upgrading existing facilities as needed. There would be little significant impact on the natural environment.

23. Significance of Risk

a. Explain the significance of any unknowns which create substantial uncertainty in predicting effects on the quality of the environment. What additional studies or analyses would eliminate or reduce these unknowns? Explain why these studies were not done.

The presence of archaeological and historical resources on the property is unknown. The state archaeologist will be consulted prior to construction to do a survey to determine the presence of sites in the areas of proposed construction. The costs of doing a survey covering the entire property would be prohibitive and is not warranted

b. Explain the environmental significance of reasonably anticipated operating problems such as malfunctions, spills, fires or other hazards (particularly those relating to health or safety). Consider reasonable detection and emergency response, and discuss the potential for these hazards.

Because of the increased visitation, there is a greater probability of wild fire. The Lapham Peak Unit maintains a full complement of appropriate fire fighting equipment and has a trained staff. In addition, the Department has an agreement with the Town of Delafield Fire Department to provide supplementary suppression if necessary.

24. Significance of Precedent

a. Would a decision on this proposal influence future decisions or foreclose options that may additionally affect the quality of the environment? Explain the significance.

The development and maintenance of the property is not precedent setting, as similar management practices and programs discussed in the master plan are being carried out or a statewide basis.

b. Describe any conflicts the proposal has with plans or policy of local, state or federal agencies that provide for the protection of the environment. Explain the significance.

This plan contains no known conflicts with other agencies that provide protection of the environment.

25. Discuss the effects of the quality of the environment, including socio-economic effects, that are (or are likely to be) highly controversial, and summarize the controversy.

An extensive citizen participation process was implemented throughout the planning process. No controversial issues have arisen through that effort, nor are any anticipated.

26. Explain other factors that should be considered in determining the significance of the proposal.

None known

SUMMARY OF ISSUE IDENTIFICATION ACTIVITIES

27. Summarize citizen and agency involvement activities (completed and proposed).

February, 1985 - Open forum held to gather public input prior to the master planning process.

August, 1985 - Open forum held to gather public input on the goals and objectives.

February, 1986 - Presented Conceptual Plan to the Delafield Town Board.

March, 1986 - Open forum held to gather public comments on the Conceptual Plan.

August, 1986 - Held open house and provided tours of the property to the public.

Five (5) newsletters with a circulation of over 500 have been sent out throughout the process to keep the public informed.

28. List agencies, groups and individuals contacted regarding the project (include DNR personnel and title).

DATE	CONTACT	COMMENT SUMMARY
Ongoing	Bernice Hausmann, former owner	Information on property
10/25/88	Francis Trcka, Assistant Environmental Impact Coordinator	Review of environmental assessment

Project Name: Lapham Peak Master Plan County: Waukesha

DECISION (This decision is not final until certified by the appropriate authority)

29. Compete either A or B below.

A. EIS Process Not Required X

Analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion therefore, an environmental impact statement is not required prior to final action by the Department on this project.

B. Major Action Requiring the Full EIS Process ..... _

The proposal is of such magnitude and complexity with such considerable and important impacts on the quality of the human environment that it constitutes a major action significantly affecting the quality of the human environment.

SIGNATURE OF EVALUATOR Date

Signed

12-23-88

NOTED: AREA DIRECTOR OR BUREAU DIRECTOR Date

Copy of news release or other notice attached? _X_ Yes ___ No

Number of responses to notice 38
Public response log attached? _X_ Yes ___ NO

CERTIFIED TO BE IN COMPLIANCE WITH WEPA

District Director or Director of BEAR

Date Signed

12-23-88

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to sections 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Note: Not all Department decisions respecting environmental impact, such as those involving solid waste or hazardous waste facilities under sections 144.43 to 144.47 and 144.60 to 144.74, Stats., are subject to the contested case hearing provisions of section 227.42, Stats.

This notice is provided pursuant to section 227.48(2), Stats.

November 24th, 1988

Susan Oshman, District Park Planner
Dept. of Natural Resources
2300 N. Dr. Martin Luther King Drive
Milwaukee, WI 53212

Dear Sue,

As a supporter and citizen member planner of previous LAWCON, ORAP and SEWRPC programs, an outdoor education professional for Milwaukee Schools, long-time emeritus member of the Waukesha County Park and Planning Commission, past Board Member of American Youth Hostels, and a former long-time resident on Government Hill Road, I would like to express my strong support for the draft master plan as published for Lapham Peak.

There are, however, several comments I would wish to have on record:

1. Highway C from I-94 to 18 appears crucial to your planning. Currently, the narrowness of the road and the heavy large truck traffic make it particularly hazardous for bicycle travel to connect with the Drumlin Trail. I would presume, however, you have already been made aware of the problem and a need for widening and a bike lane, or rerouting of truck traffic.

2. The 100 campsites along with the other uses of the area would, in my opinion, strain the capacity of the area. I would suggest you consider decreasing the number.

3. Our previous experience with a successful hostel (years ago) on Lapham Peak would indicate a great deal of popularity for this type of outdoor recreation opportunity here. Perhaps one of the homes on property purchased could be earmarked for this purpose.

I regret that I have been unable to participate more fully in the public hearings, but as Mr. Weizenicker knows, I am overjoyed with the Lapham Peak prospects.

Sincerely,

George T. Wilson
320 E. Pleasant St., #102
Oconomowoc, WI 53066

GTW/lcw

November 25, 1988
W287 S1949 Highway DT
Waukesha WI 53188

Susan Oshman, Park Planner
Dept. of Natural Resources
2300 N. Martin Luther King Drive
Milwaukee WI 53212

Comments on Lapham Peak Master Plan, from Russ Evans, Chair of Waukesha County Committee, Ice Age Trail Council

1. An underlying problem with the objectives as stated in the Plan is the conflict between intensive uses and the maintenance of the natural landscape (or at least its present state, as altered by the Hausmanns, past farming practices, roads, etc.). Such damaging uses as parking lots, traditional campgrounds, and horse trails should be seprated as much as possible from areas which can be left alone for wildlife, nature observation, etc.

2. The route of the Ice Age Trail as laid out in the plan seems reasonable <u>if</u> agreements can be made now with the Schoeningers and the Timm estate so the Trail can be laid out on these properties now. Waiting for years until these properties are acquired would mean that the Trail would be broken here for all that time. If such agreements aren't made (and the Ice Age Trail Council could probably work on them itself), another route should be chosen, probably near the eastern boundary of the Lapham Peak Unit. (I know there are problems finding a route along the northern edge, between the northeast corner and Highway C; I've looked for one myself.)

3. In the northwest corner the Plan shows the Ice Age Trail crossing proposed horse trails twice. This seems unnecessary; they should be separated to eliminate both crossings. I understand that there is a usable spring in this area; if so, the Trail should be routed past it so hikers can use it.

4. When the Ice Age Trail is built it should be narrower, steeper, and less well-maintained than the present ski trails. A pedestrian trail need not be designed for vehicles or for people to walk two or more abreast. "Mountain" or other bicycles should not be allowed on the Ice Age Trail--as the Southern Unit KM State Forest decided they should be early in 1988.

5. The shelter or hut for the Ice Age Trail is well planned for the southeast part of the property in a wooded, fairly remote area. Another shelter is being planned on Trail-owned property about 4½ miles southwest from this point, which would be a good interval.

As the planning progresses for this section of the Trail, our local committee would like more input into the process--as well as your consulting with Gary Werner, the IAT coordinator from Madison. (My telephone numbers are: 524-7197 or 968-4489).

Russel C. Evans

Russel C. Evans

District Park Planner,
Susan Oshman
P.O. Box 12436
Milwaukee, 53212

November 19, 1988

Dear Ms. Oshman,

I have just read about the planned improvements for Lapham Peak Park, in our local paper, The Index. I would like to suggest a desperately needed improvement to aid cross country skiers of the surrounding area: a lighted cross country ski trail. This is something that is very badly needed if a skier is to maintain any level of training. Most skiers have less than one hour per day to train because of the necessity of earning a living and the rapid loss of daylight at this season of the year. Therefore, a lighted trail of even 2 or 3 kilometers, preferably a bit more, would be an absolute God-send. I hope that this improvement will receive serious consideration as there are many serious citizen ski racers, including my wife and I and our three children, in this area. Please help us in this matter, thank you.

Sincerely,

John Maki

John Maki

SOUTHEASTERN WISCONSIN REGIONAL PLANNING COMMISSION

916 N. EAST AVENUE • P.O. BOX 1607 • WAUKESHA, WISCONSIN 53187-1607 • TELEPHONE (414) 547-6721

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December 2, 1988

Ms. Susan Oshman
District Park Planner
Wisconsin Department of Natural Resources
Southeast District
2300 N. Dr. Martin Luther King Drive
Milwaukee, Wisconsin 53212

RE: SEWRPC CA-906-50

Dear Ms. Oshman:

Pursuant to a letter request dated November 1, 1988, from Mr. David L. Weizenicker, Director, Bureau of Parks and Recreation, Wisconsin Department of Natural Resources, the Commission staff has reviewed the preliminary draft of the Kettle Moraine State Forest-Lapham Peak Unit Master Plan and offers the following comments for your consideration:

1. Under the Commission-adopted regional plans, it is recommended that the primary environmental corridors in the Region be preserved and protected in essentially natural open uses. Such corridors are a composite of the most important individual elements of the natural resource base and have immeasurable environmental and recreational value. Specifically with respect to the Kettle Moraine State Forest-Lapham Peak Unit, under the Commission's adopted regional park and open space plan it is recommended that the primary environmental corridor lands within the Lapham Peak project boundary in Waukesha County be protected and preserved through acquisition by the Wisconsin Department of Natural Resources. Thus, the acquisition of those lands located within the recommended new Lapham Peak project boundary--which lands are generally located within the primary environmental corridors--would be in conformance with, and would serve to implement, the adopted regional plan.

2. Under the Commission's adopted regional park and open space plan, it is recommended that picnicking, nature study, recreation trail, and other natural resource-oriented facilities be developed within the Lapham Peak Unit. In addition, it is recommended that a segment of the Ice Age National Scenic Trail be developed within and adjacent to primary environmental corridor lands in the Lapham Peak Unit. Under the Kettle Moraine State Forest-Lapham Peak Unit Master Plan, it is recommended that a family campground, picnic areas and associated picnic shelter facilities, a nature center, and trail facilities for a variety of activities including hiking, horseback riding, and

cross-country skiing be developed at the site. It is also recommended that a variety of other resource-oriented facilities and needed support facilities such as roads and parking lots, be provided. The provision of these recommended facilities--including camping areas, picnic areas, a nature center, trail facilities, and other natural resource-oriented facilities and support facilities--would be in conformance with and would serve to implement the Commission-adopted regional park and open space plan.

3. The Commission staff has identified five additional areas adjacent to the recommended Kettle Moraine State Forest-Lapham Peak Unit project boundary which encompass areas of important natural resources. Under the preliminary draft of the second generation regional park and open space plan as that plan relates to Waukesha County, it is recommended that these areas be added to the Lapham Peak Unit project boundary. This plan update is currently under review by Waukesha County and by the Wisconsin Department of Natural Resources, Bureau of Management and Budget, Policy and Procedure Review Section.

   The areas recommended for addition are identified in red cross hatch on the attached one inch equals 2,000 feet scale aerial photograph covering the Kettle Moraine State Forest-Lapham Peak Unit area. Addition Area No. 1 consists of about 25 acres of wetlands, woodlands, areas of steep slope and wildlife habitat within the primary environmental corridor and is located in the southeast one-quarter of U. S. Public Land Survey Section 32, Township 7 North, Range 18 East, in the Town of Delafield. It is important to note that, in addition to the important natural resource values in this area, this area is required for continuity of the Ice Age National Scenic Trail corridor.

   Addition Area No. 2 is a seven-acre "island" within the recommended Lapham Peak Unit project boundary bounded by existing Department-owned lands and CTH C on the east and by the lands identified as the Schoeninger property on the north, west, and south. This parcel is located in the northeast one-quarter of U. S. Public Land Survey Section 30, Township 7 North, Range 18 East in the Town of Delafield and should be included in the long-range recommended Lapham Peak Unit project boundary to eliminate this small "island" within the site and to acquire the wetland and wildlife habitat within a secondary environmental corridor located in the eastern portion of the parcel.

   Addition Area No. 3 consists of about 10 acres of woodlands and wildlife habitat within an isolated natural area and is located in the northeast one-quarter of U. S. Public Land Survey Section 30, Township 7 North, Range 18 East, in the Town of Delafield.

   Addition Area No. 4 consists of about 10 acres of wetlands and wildlife habitat within a secondary environmental corridor and is located in the northwest one-quarter of U. S. Public Land Survey Section 29, Township 7 North, Range 18 East in the Town of Delafield.

Addition Area No. 5 consists of about 15 acres of woodlands, wildlife habitat, and areas of steep slope within the primary environmental corridor and is located in the northeast one-quarter of U. S. Public Land Survey Section 29, Township 7 North, Range 18 East, in the Town of Delafield.

It is important to recognize that the natural resources within the environmental corridors and isolated natural area within Addition Area Nos. 1, 3, 4, and 5 proposed for inclusion in the Kettle Moraine State Forest-Lapham Peak Unit project boundary and identified in red crosshatch on Map 1 should not be construed as a Commission-recommended project boundary. It is requested that these areas be considered--along with other factors such as existing real property ownership boundaries, land acquisition costs, outdoor recreation facility development needs, and wildlife management considerations--in the determination of a final project boundary which would include these important natural resource features. It is suggested, however, that Addition Area No. 2 be included in its entirety within the final project boundary.

In summary, the Commission staff recommends that the important natural resource features and the lands required for outdoor recreation facility development located within the Kettle Moraine State Forest-Lapham Peak Unit project boundary be acquired as recommended in the preliminary draft of the master plan. In addition, the Commission staff recommends that five additional areas which encompass important natural resources be considered for inclusion in the final project boundary for outdoor recreation and natural resource preservation purposes.

The Commission staff appreciates the opportunity to review and comment on the preliminary draft of the Kettle Moraine State Forest-Lapham Peak Unit Master Plan and trusts that the foregoing comments will be helpful to you. If you have any questions on the enclosed comments or wish to discuss any of the Commission staff recommendations in detail, please do not hesitate to contact us.

Sincerely,

Kurt W. Bauer
Executive Director

KWB/aa
Enclosure
D056
cc: Mr. David L. Weizenicker, Director, Bureau of Park and Recreation, Wisconsin Department of Natural Resources, Madison
Mr. Walter J. Tarmann, Director, Waukesha County Park and Planning Commission
Mr. Gary Werner, State Trail Coordinator, Ice Age Trail Council

SOME COMMENTS ON THE LAPHAM PARK

MASTER PLAN

First of all, I should say that we are no stranger to this project or to the D.N.R. staff involved with it. Our County officials have communicated with D.N.R. officials a few years back to ensure that interpretive facilities/programs, planned at the Lapham visitors center, didn't overlap very much or seem to compete with those being developed at the nearby Retzer Nature Center. Since that time we have had fairly regular contacts with Mr. Paul Sandgren, working on area projects of mutual concern or interest.

Secondly, this is one area where we have almost no landscape familiarity based on on-site contact. From driving to the tower, the typical honeysuckle-buckthorn shrub layer south kettle moraine type of Curtis (1959) "southern dry forest" is seen to be prevalent along the drive. Also, because of the botanical interests of the former large property owners, the Hausmann family, we have heard a good deal about significant xeric prairie and savannah vegetation --e.g. the yellow puccoon.

Thirdly, in examing the plan sent to us, it seems that there is a fairly high intensity of development or trails generally throughout the property. In our park planning process we have the advantage of relatively small acreages. We also believe in interpretive programs based heavily on strong on-site examination of natural habitats and other features of each site. Hence we can justify an intensive on-site ecological inventory along with detailed airphoto mapping of essentially all stands of specific habitat. This detailed inventory process is exemplified by the 68 numbered plant cover types on the enclosed material. I would like to suggest that you add some of this procedure to your planning studies --not just at the Lapham unit, but in planning for all sites having significant natural landscapes. This doesn't seem impractical for your large scale projects if one only maps habitats from the more generalized part of the enclosed plant cover list --the generic habitats, as indicated by letters and simply rates stands "high/medium/low" quality, based on how close they approximate presettlement vegetation (estimate by plant community appendices of Curtis. 1959. Vegetation of Wisconsin). You have a number of people in D.N.R. quite qualified to do this --Ron Kurowski locally, e.g.

Fourthly, I would also like to see the results of a more detailed habitat inventory be incorporated itself as part of a planning process that seeks to minimally develop or intrude on the more sensitive/significant portions of larger natural landscapes. Besides the sequential development zones illustrated on page three, of the other enclosure, one can also integrate this approach into more efficient preservational planning by graphically analyzing trail system interrelationships with sensitive zones. For example, a high quality cedar glade could be entered with minimal intrusion by having a new trail go only thru the narrow, more distal part of the stand. Finally, I should say that the full procedure shown on page three couldn't ordinarily be expected out of your scale of operation. It was written for our full blown detailed inventory/planning procedure which was designed for smaller parcels (e.g. the vegetational part of the 1972 or 1973 Old World Wisconsin E.I.S.).

Sincerely,

Jerry Schwarzmeier by Am

Jerry Schwarzmeier
Senior Naturalist
Retzer Nature Center
December 6, 1988

PLANT COVER TYPES--WAUKESHA COUNTY PARKS
ECOLOGICAL INVENTORY

Key to Lists
- A. Aquatic or Lowland - List I
- AA. Terrestrial or Upland
  - B. Open (Contains low prairies) - - - - - - - - - - - - - - - - - List II
  - BB. Shaded (at least 10% shade from mature trees) - - - - - - - - List III
- AAA. Non-Standard Types - List IV

I. Wet Areas and Lowlands
(Conservancy-status wetlands are types #1-22, #31-32 and #59)

A. Aquatic Types [2]-VW
1. Algal/Submergent-P&P
2. Vascular Submergent-VW
3. Floating-leaved-TXB

B. Deep Marshes-TXB
4. Deep Marsh (Pond)-FWS

C. Shallow Marshes-TXB
5. Shallow Marsh-FWS
6. Weed Marsh (especially Purple Loosestrife)-P&P

D. Wet Meadows-TXB
7. Sedge Meadow-VW
8. Grass Meadow (Blue Joint)-P&P
9. Fresh Meadow-SEW
10. Fen-VW

E. Shrub Swamps-FWS
11. Bog-VW
12. Shrub Carr-VW
13. Shrub-Fen (Bog Birch & Cinquefoil) -P&P/SEW
14. Spirea Thicket-P&P
15. Alder Thicket-VW

F. Lowland Openings-P&P
16. Low Forest Edge-P&P
17. Lowland Savannah-TXB

G. Low Hardwood Forests-TXB
18. Aspen Thicket-DNR
19. Lowland Hardwoods-SEW (Wet-mesic-VW)
20. Wet Forest-VW

H. Low Conifer Forests-TXB
21. North Wet-mesic (Cedar)-VW
22. North Wet (Tamarack)-VW

II. Open Uplands (#31-32 have wet soil)

I. Agricultural-AG
23. Annual crop-AG
24. Cropped Forage-AG
25. Pastured Forage-AG
26. Vegetable/berry Crop-AG

J. Fields-TXB
27. Weedy Field-AG/TXB
28. Old-field (incl. 'Soil Bank' classification of USDA)-TXB
29. Old-field, Brushy-TXB
30. Old-field, Prairie-P&P

K. Prairies-TXB
31. Wet Prairie-VW
32. Wet-mesic Prairie-VW
33. Mesic Prairie-VW
34. Dry-mesic Prairie-VW
35. Dry Prairie-VW
36. Sand Barrens-VW

"Tall grass" Community (#31–33)
"Midgrass" Community (#34–36)

III. Shaded Uplands

L. Thickets-TXB
37. Upland Thicket-DNR

M. Wooded Openings-TXB
38. Forest Edge-TXB
39. Cedar Glade (incl. brushy Sub-type)-VW
40. Oak Barrens (incl. brushy Sub-type)-VW
41. Oak Openings (incl. brushy Sub-type)-VW
42. Parkland (Wild Parklands)[1]-TXB

N. Forests-TXB
43. Dry Forest-VW
44. Dry-mesic Forest-VW
45. Mesic Forest-VW
46. Cedar Forest[2]-TXB

O. Plantations (trees)-DNR
- 47. Conifer Plantation-DNR
- 48. Orchard-BOR
- 49. Native Grove-TXB
- 50. Non-native Grove-TXB

IV. Non-Standard Types ("Azonal", "intra-zonal", etc).

P. Irregular Uplands-TXB
- 51. Sunny Cliff-VW
- 52. Shaded Cliff (≥50% shade)-VW
- 53. Open Dune[4]-TXB
- 54. Sand Blowout-TXB

Q. Irregular Lowlands/Shorelands-P&P
- 55. Flats-FWS
- 56. Bars-BOR
- 57. Shores (incl Banks)-TXB
- 58. Beaches-VW
- 59. Pot Holes-DNR

R. Special Disclimaxes-TXB
- 60. Lawn (Turf)-TXB
- 61. Shaded Turf-(>10% shade)-TXB
- 62. Horticultural Stands-AG
- 63. Maintained Parkland-TXB
- 64. Bare Rights-of-way-P&P
- 65. "Made" Land[5]-SCS
- 66. Open Dumps-DNR
- 67. Quarries (incl. borrow pits)-BOR
- 68. Weed Meadow-P&P

Foot Notes

1. Opening is not discernably maintained by management.
2. Not a regular community per se, but a localized condition of habitat.
3. Irregular means 'azonal' or 'intra-zonal' in the context of vegetative cover types as they have formed irregularly-local types of soils.
4. Open Dunes have pre-forest edge cover.
5. "Made" land in the SCS definition of landfill etc.

Key to Source of Inventory Terminology:

"AG" - Agricultural Terminolgy

"BOR" - Bordner's 1930 "Wis. Land Economic Inventory"

"DNR" - Wis. D.N.R., Game Research Section

"FWS" - Fish & Wildlife Service, especially from the classic, Circular #39

"P & P" - Park & Planning (Wauk. Co. Park's Nature Program)

"SCS" - Soil Conservation Service of USDA

"SEW" - SEWRPC Wetland Classification Scheme, 1980.

"TXB" - Textbooks commonly used in ecology as Smith.. Ecol. and Field Biology

"VW" - Vegetation of Wis. (1959) by Curtis.

WAUKESHA COUNTY PARKS

ECOLOGICAL INVENTORY - EXPLANATION

AND APPLICATION OF RESULTS

I. Inventory Procedure. A site is divided into numbered map units on an aerial photo (if available) in the field. These map units reflect different stands of plant cover; i.e. areas having an essential uniformity of plant community type and history of usage. These map unitis are graded in the field once various features of each have been observed. Although not always recorded, the full format for observing each map unit follows:

(Stand #) Community Type--combined (Vegetative Grade)
Curtis-DNR Scheme:

D Dominant Species (account for an estimated 65% or more of the importance of all green plants or of the trees if a forest). Co-D- means Co-dominant.

C Common Species (account for an estimated 10 - 25% of the total plant importance).

I Infrequent Species (account for less than 10% of the plant importance).

GL Ground layer (tree seedlings, shrubs and herbs). The species of this stratum are ordinarily also broken down into whichever of the D C and I categories are seen in a stand.

-Wildlife Grade:

-Comments (include special features not adequately treated in the standard description e.g., very large ant hills, a clump of scarce orchids, description of fire scars, etc.).

The wildlife grade is an assessment made as if we were evaluating a map unit only on its value for vertebrate species. The vegetative and wildlife grades both use the following scale which indicates the value for preservation in a natural state or in the present state for units valuable only for wildlife. The vegetative grade is much better than the wildlife grade in indicating the value for preservation since it represents a more stable and more documentable relationship than does the wildlife grade.

"A" excellent
"B" very good
"C" good
"D" fair
"E" poor
"F" no known value

An example of typical communities for these grades are in the following section, Table 1.

TABLE 1. EXAMPLES OF SOME TYPICAL COMMUNITIES FOR THE SIX LETTER VALUES

Vegetative Grade	typical communities (wildlife values incorporated here only as one ecosystem component)	Examples of various wildlife value communities where vegetative (or ecological) values are "D" or "E"	Wildlife Grade
A - excellent	a forest with many virgin traits as high b.a.[a]. etc.	a fenceline with many weedy plants but that does provide very diverse habitat and a vital "connection"	A
B - very good	a forest with some virgin traits	a cornfield with a thick ground cover of annual weeds	B
C - good	a second-growth forest with low weed importance	an "old-field" of Kentucky bluegrass with moderately-dense litter	C
D - fair	a second-growth forest with high weed importance	an "old-field" of open brome grass	D
E - poor	an "old-field" with very few native relationships and species	a lawn	E
F - negative or no noticeable value	concrete or asphalt	concrete or asphalt	—

a. b.a. means basal area which is the number of square feet/acre of tree trunk cross sections.

Retzer Nature Center
October 1979
rev December 1987

III. Application of Inventory Results to Planning.

Regarding ecological (vegetative) values, on a regional level, all "A" areas, about 30% of B areas, about 10 - 15% of C areas, etc. should be preserved.

For localities desiring a small area of local preserved natural habitat or outdoor lab.etc., a site having an average ecological grade of "C" is ordinarily quite satisfactory. A rich, but recently-retired "old-field" demonstrating invasion of native herbs and forest species could even be very good for an outdoor lab even though its ecological grade may only be "D" or "D+".

Once a site is chosen for open space, the inventory map should be used to locate all significant expected impacts so that the worst impacts occupy the lowest grade areas and vice versa so that the highest grade areas recieve the lowest possible adverse impact. The full schedule when using both grades in locating all significant impacts, including moving and extended impacts, resulting from meeting required design and program standards, is in order of this sequence:

Develop 1st { Low Ecological Value (for vegetative) / Low Wildlife Value } before { Low Ecological Value (for vegetative) / High Wildlife Value } Develop or intrude upon 2nd

before { High Ecological Value / Low Wildlife Value } Develop 3rd

before { High Ecological Value / High Wildlife Value } Develop 4th

a. Apply this sequence first outside of the Wildlife I Zone. } Basically = sewage type primary environmental corridor

b. Apply second outside Ecological I Zone } Basically = less altered core of corridor

c. Apply last in Ecological I Zone if the latter is needed for development.

Zones represent corridor trends that are determined from a detailed analysis of trends in grades and other natural features. Ordinarily this is applied only to sites having fairly large acreages (200 or more).

Relocating or shifting impacts should be considered in the above framework. Important impacts that should be avoided are:

1. Runoff silt or salt deposits in areas with high ecological values.

2. Sewage seepage through soil into areas with high ecological values into water systems or into marshes.

3. Frequent human wandering from designated areas into fragile and highly-valued stands.

30 November 1988

Sue Oshman
District Park Planner
2300 N. Dr. Martin Luther King Drive
Milwaukee WI 53212

Dear Sue,

The Wisconsin Society of Biological Scientists, a non-profit group of professional biologists, would like to comment on the proposed master plan for the Lapham Peak Unit of the Kettle Moraine State Forest.

On the whole, the plan does an excellent job of improving recreational and educational opportunities while avoiding major impacts on the important natural resources of Lapham Peak. We congratulate the planning team. We do, however, have some suggestions that we hope will make the plan even more responsive to the needs of resource protection.

1. Page 3, 1st & 2nd full paragraphs. It's noted that 2 plant species from the "watch list" are found on the proprty--kittentail and "false foxglove" (Gerardia gattingeri? please specify). Since 1985, both have been included on the list of endangered and threatened species of Wisconsin, not just the "watch list." It's said the areas harboring these 2 species will be "protected" during development. But site protection will not suffice to preserve these two. Both are plants of prairies, oak openings, and/or open woodlands. Periodic site management (prescribed burning or manual cutting) will be required to prevent forest encroachment and preserve their habitats. The plan should specify the management measures that will be undertaken to preserve these 2 species at Lapham Peak.

   This section also speaks of pre-development surveys for the presence of other endangered or threatened species. We recommend that all new hiking, horse, or ski trails be included in these surveys. We suggest that the plan also make explicit the need for multi-seasonal surveys (April-September), not just single-visit searches.

2. Page 4, final sentence. "High bush cranberry" is not appropriate for planting at Lapham Peak, in our opinion. The native lowland plant is not suited to upland situations, while the European cultivar (Viburnum opulus) can be a troublesome invader of native hardwood forests. Experience with other non-native shrubs such as honeysuckle suggests that introduction of such stock be avoided.

3. Page 10, item B-1-e. The plan says that Cooper's Hawk, a state-threatened species, is found "in the area." More specifically, nesting of the Cooper's Hawk has been documented in 1987-88 in pine plantations on the property. The plan proposes to manage

such plantations by thinning, etc., which is acceptable. However, it should also specify the measures it intends to take to protect nesting Cooper's Hawks. We suggest, for example, that no thinnings be conducted during the hawk's breeding season (1 March-15 August). This cooperative measure between DNR staff, logging contractors, and research biologists has been used successfully in the South Unit of the Kettle Moraine for several years.

The same paragraph mentions the presence of Hooded Warbler ("watch list") at Lapham Peak but does not note the summer records of 4 other rare birds of forest habitats: Cerulean Warbler, Kentucky Warbler, Worm-eating Warbler, and Acadian Flycatcher. These species (including Hooded Warbler) have been proposed for and will probably soon be added to the list of state-threatened species. It seems prudent to consider protection and management needs for these 5 species now, rather than revise or disrupt the planning process in the near future.

In light of the presence of 1 threatened and 5 potentially threatened birds at Lapham Peak (plus other rare species), the statement in item e, para. 2 that "wildlife species...are the same as those found throughout southestern Wisconsin" seems inappropriate. In fact, Lapham Peak has a rather remarkable component of woodland wildlife species that are absent in most other parts of southeastern Wisconsin. The plan should deal with this fact and its implications, which leads us to our next suggestion.

4. Page 2, item A-1-i. The plan's objectives here include "diversity... of native wildlife." The simplest measure of wildlife diversity is the number of species (better yet, breeding species) on the property. By this yardstick, a longer species list is better. This dimension of diversity is useful but not sufficient in wildlife planning. We recommend that the plan incorporate 2 additional dimensions of diversity:

   (a) the composition of the species list (i.e., a shorter list with more rare species is preferable to a longer list of common species);

   (b) beyond local diversity within project boundaries, the property's contribution to regional diversity in the urban-agricultural landscape of southeastern Wisconsin (i.e., rare species present at Lapham Peak but seldom found elsewhere in the region).

   Lapham Peak has extensive stands of forest habitat in a region where most woodlands are small, isolated, and heavily disturbed. Lapham Peak also has several regionally rare and potentially threatened species of forest habitats. Thus we urge that objectives dealing with wildlife be reworded as follows:

   page 1, item A-1-h: Demonstrate forest and wildlife management practices that prepetuate and enhance the existing landscape of high-quality aesthetics and wildlife habitats, especially woodland habitats.

page 2, item A-1-i: Demonstrate wildlife management practices that perpetuate and enhance the diversity and abundance of native wildlife, especially endangered, threatened, and regionally-rare species.

5. Page 15, item 16, para. 2. We assume that the statement in the EIA about "cutting...dead and diseased trees" is based on common timber improvement practices. We believe that such practices are not appropriate at Lapham Peak, where timber production is (by statute) a subsidiary concern. We recommend instead that such trees be removed only where they constitute a safety hazard along trails, picnic areas, etc. Dead and dying trees are a vital habitat component for many wildlife species that forage on deadwood or use cavities for sheltering, nesting, roosting, or hibernating. Preservation of natural cavity trees is more efficient and economical than erection of nest boxes (page 3, item C-2), and protection of such trees is essential to the avowed objectives of perpetuating high-quality wildlife habitat and wildlife populations.

Thank you for the chance to comment on the plan. If you have any questions, please contact me.

Sincerely,

John Bielefeldt, Sec'y-Treasurer
Wisconsin Society of Biological Scientists
Box 46
Dousman WI 53118

cc: P. Sandgren, Lapham Peak Unit
D. Hills, BER

CORRESPONDENCE/MEMORANDUM — STATE OF WISCONSIN

Date: November 30, 1988 File Ref: 1650

To: D. L. Weizenicker - PR/4

1988 DEC -7 AM 9:10

Ronald F. Nicotera

From: Ronald F. Nicotera - ER/4

Subject: Lapham Peak Master Plan Review for Endangered Resources

The Bureau of Endangered Resources has reviewed the project area described in your memo of November 1, 1988 for the draft Lapham Peak Unit - KMSF Master Plan, Waukesha County.

Our data files contain the following information for this site: Accipiter cooperii (Cooper's hawk), State-threatened, and Regina septimvittata (queen snake), State-endangered, both occur in Section 32 of T7N R18E. These records (from 1978 and 1974, respectively) do not indicate exact locations. The queen snake may be utilizing the wetland areas along with those species listed on page 10, "Wildlife."

We know of 2 active Cooper's hawk's nests located in the planted pine stands. Removal of most of the conifers, leaving only a few individual trees in some areas is proposed in the Master Plan. (See p. 4, "Vegetative," and p. 15, "Biological.") This "almost complete" removal of pines would destroy nesting habitat. The Cooper's hawk requires larger areas of unbroken canopy for nesting habitat and show a strong preference for white pine plantations in southeast Wisconsin.

If pine stands used for nesting are to be cut or thinned anyway, we recommend **no** thinning of the pines between March 1 and August 15 (nesting season). Our office would aid the Bureau of Parks and Recreation with more specific management recommendations.

Recently we learned of several additional endangered resource occurrences within the Lapham Peak boundaries:

The presence of Wilsonia citrina (hooded warbler) within the Lapham Peak Unit has been verified, especially occurring in the Southeast portion, the NE1/4 of Section 32. Please **note** that the hooded warbler is presently proposed for the State-threatened list.

Four other birds, all proposed for addition to the Endangered/ Threatened list, occur throughout the wooded uplands, primarily in Section 32 and parts of the E1/2 of Section 29. They are: Dendoica cerulea (Cerulean warbler), Helmitheros vermivorus (worm-eating warbler), Oporornis formosus (Kentucky warbler), and Empidonax virescens (Acadian flycacther).

Again, specific protection and management of these rare woodland bird habitat need to be addressed and set forth. The proposed recreation development that may negatively impact the birds are the locations of the southern picnic area and Nature Center parking lots. These areas should be surveyed prior to construction.

As stated on page 15, "Biological", "some vegetative removal will occur to create vistas from use areas, along trails and overlook sites." We recommend that the vista sites and trails **not** be created near rare bird nesting trees. In agreement with DNR Manual Code No. 2532, we appreciate that in areas where rare species occur, dead and diseased trees be removed **only** when they pose a safety hazard. Dead and diseased trees are a critical component of many woodland species' survival.

[NOTE: Both paragraphs provided under "Biological" on p. 15 should be placed under "Physical" on p. 15; and the second paragraph under "Cultural - Archaeological/Historical" on p. 17 should be under "Biological" on p. 15. The Draft Master Plan is mixed with portions of the Draft Screening Worksheet, causing some confusion.]

What species of false foxglove (mentioned in the second paragraph of p. 3) have been identified and where on the property do they occur? Tomanthera auriculata (earred false foxglove) is listed as a Special Concern species; however, it is also listed as historically occurring in the state, having not been verified in the past 20 years, and suspected to be still extant. Gerardia skinnerana (pale false foxglove) is State-endangered and G. gattingeri (round-stemmed false foxglove) is State-threatened. If the false foxglove occurring in the area is identified as any one of these 3 species, please contact June Dobberpuhl, Natural Heritage Inventory botanist, at (608) 267-5037.

In addition, the presence of a false foxglove and kitten tails (Besseya bullii - Please **note** its state status is Threatened, it is not listed as Special Concern. Again, their locations need to be identified. These species presence indicate the possible occurrence of an oak opening, a state- (and global) critically imperiled natural community. If their occurrences do not overlap with an area to be managed for the nesting bird habitat, this area would also need specific management to maintain/restore the oak opening.

We have two final management recommendations. We recommend planting Vibirnum trilbum, if available, for vegetative management (mentioned on p. 4), rather than V. opulus or cultivars of any species. The exotic high bush cranberries can be very aggressive and could impact native species occurring in these areas.

Lastly, we suggest that most of the eastern portion of the Lapham Peak Unit (approximately the E2/3 of the E1/2 of Section 29) be returned to woodland, allowing the grassy areas to revegetate. This would gradually reduce the edge effect which is detrimental to most of the aforementioned rare birds and create a contiguous woodland corridor, connecting the larger woodland area in Section 32 with the smaller patches in the NE1/4 of Section 29 and the SE1/4 of Section 20. Woodland restoration in this area is particularly important if the southern parking lots are built in the proposed locations.

The Draft Master Plan states that all areas of development will be examined for the presence or absence of endangered/threatened species, and appropriate protective measure will be taken for significant sites. (See the second paragraph on p. 3.) When surveys are conducted and an endangered/threatened species is found, we would appreciate that our office be contacted. Our staff can provide the expertise for survey work and endangered resource management, if necessary. We would also add this information to the Natural Heritage Inventory database.

We are looking forward to assisting you with the development of specific endangered species and Natural Area management plans for Lapham Peak.

We suggest that in the preparation of future plans, more detailed project maps be included - such as, copies of aerial photos, USGS topo base maps, or plat maps.

cc: Gary Birch - EA/6
Paul Matthiae - ER/6
Jim Morrissey - SED
Tom Smith - SED
John Bielefeldt - Racine County Parks
Don Reed - SEWRPC

SCHOOL DISTRICT OF WAUKESHA
222 Maple Avenue
Waukesha, Wisconsin 53186
Phone: 521-8848

ENVIRONMENTAL EDUCATION, K-12
SCIENCE, K-6
Jack C. Finger, Chairperson

November 29, 1988

RECEIVED

David L. Weizenicker, Director
State of Wisconsin
P. O. Box 12436
Milwaukee, WI 53212

Dear Mr. Weizenicker:

Thank you for providing me the opportunity to respond and provide input into the Lapham Peak master plan. It is a wonderful facility and opportunity for the citizens of this state today and long into the future. The DNR must be congratulated for it's foresight in seeking green space in southeastern Wisconsin it is greatly needed, for too many reasons to list.

I think the plan is well thought out, keeping in mind the many interest groups waiting to see such a facility. I would recommend less trail length for horses. There is a sufficient number of trails in the area and the need to restrict trails use during non-snow months for one purpose doesn't seem to fit the multi purpose strategy of the plan. There appears to be a very narrow-minded attitude among horse owners regarding their trails.

The Ice Age Trail plan and system should encompass what can be built today and include a potential trail route. I feel there is an need to get likers to the Park & Ride lot on I-94 now as well as in the future so I would suggest putting a trail in now to complete the trail segment from the Drumlin Bike Trail to I-94. As you know the trail currently is marked and opperational to the tower, but unfortunately there is a gap for those who want to travel north to the national certified Nagawankee Park segment.

It will also be nice if special vista areas be opened up, along the trail to provide views of the glacial topography so evident in the area.

Thank you.

Sincerely,

Jack Finger

Jack Finger

ro

16465 Willow Ridge Ln.
Brookfield, Wis. 53005
11/17/88

Susan Oshman
DNR
Milwaukee

Ms Oshman:

I am very much in favor of your plan to expand Lapham Park. I use the park quite a bit and am very pleased with how it is developing. I am particularity interested in mountain biking and cross-country skiing. Thanks.

Otto H. Scharpf

Public Comment Log
Lapham Peak Master Plan
Environmental Assessment

1. Carol Hoppe called and voiced her support for the project. She said she had an interest in expediting the American youth hostel concept.

2. Lee Borowski called on the hot-line and said that lighted cross-country ski trails should be a number one priority. He also said he approved of the plan.

3. Steve Schuld called and asked questions regarding the project boundary and inquired as to the likelihood of some of the lands being purchased.

4. An anonymous caller supporting the concept of a lighted ice rink.

5. An anonymous caller supporting a skating pond.

6. An anonymous caller requesting a family group camp area with a shelter providing electricity. Groups of thirty to fifty families would utilize such a facility.

7. Jim Stork called. The plan looks thorough and well done. Likes the idea of wildlife blinds. Should plant with native species only. Should minimize the disturbance over trail routes. Suggested more land should be acquired that the plan calls for.

8. George T. Wilson, Oconomowoc, letter dated November 24, 1988 (attached).
   a. We realize Highway C is not suitable for bicycling. Our intention is to utilize Cushing Park Road to connect the park with the Glacial Drumlin Trail. An interior bike trail will be constructed to connect Cushing Park Road with the park entrance road.
   b. The actual size of the campground will be determined by the resource capability and size of the area available for the campground at the time of construction. A 100 unit-campground is considered ideal in size, but is certainly not the final number.
   c. Our intention is to utilize one of the homes for this purpose. The timetable for the establishment of an American Youth Hostel facility will depend on the landowner's willingness to sell.

9. Russell Evans, Waukesha, letter dated November 25, 1988 (attached).
   a. We recognize the potential problems development may create for wildlife habitat. Thus, this plan was developed intentionally leaving the eastern portion of the property with trail development only. As the plan is developed, intensive recreational development (camping, picnicking, etc.) will take up less than 10% of the present 671 acres currently in public ownership. The remaining 90% is extensive recreational development (trails only).
   b. Point well taken. We would be willing to work with the Ice Age Trail Council and the effected landowners to try to work out an agreement in advance of these lands being acquired.
   c. Because we do not own a majority of the property west of Highway C, actual trail routes have not been determined. Where

the land is acquired and trails are located, these concerns will be kept in mind.

d. We recognize the fact the Ice Age Trail is primarily a pedestrian trail. As the trail is laid out and built, it will be constructed with these concerns in mind.

10. John Maki, letter dated November 19, 1988 (attached).
    a. Requesting lighted cross country ski trails. Lighted trails have been proposed as part of this Master Plan.

11. Southeastern Wisconsin Regional Planning Commission letter (Attached).
    a. The commission proposes four additional parcels be considered for addition to the Lapham Peak project boundary. They further recommend that a seven acre parcel be added to the project boundary. This parcel has been included in the project.

12. Jerry Schwarzmeier, Nature Retzer Nature Center, letter (attached).
    a. He recommends a more detailed habitat inventory be developed. As funds become available and the staff is expanded, an onsite naturalist could conduct a detailed survey.

13. John Bielefeldt, Wisconsin Society of Biological Scientists letter (attached).
    a. Downy False Foxglove, Aureolaria, birginica is the species of false foxglove identified at Lapham Peak. It has been changed in the Master Plan to a reflect that this species is threatened. Management practices to perpetuate the species have been specified in the plan.
    b. The planting of high bush cranberry at Lapham Peak has been removed from the plan.
    c. It has been identified in the plan that Cooper's Hawk nest in the pine plantations of Lapham Peak. A provision that no thinning of the pines during the hawk's breeding season has also been added to the plan. The other four "watch" list species have also been added to the Master Plan.
    d. Editorial comments.
    e. So noted.

14. Jack Finger letter (attached).
    a. Voiced his support for the project and the plan.

15. Ron Nicotera, Bureau of Endangered Resources memorandum (attached).
    a. Paragraph Number Two. The Department does not own any property in section 32 that contains wetlands.
    b. Paragraph Number Three. It is not our intention to clear cut or remove large blocks of conifers. This has been removed from the Master Plan.
    c. Paragraph Number Four. The plan notes that no thinning will take place between March 1 and August 15.
    d. Paragraph Number Five. The hooded warbler has been noted in the plan to be proposed for the state-threatened list.
    e. Paragraph Number Six. So noted in the plan.

f. Page Two, Paragraph Number One. It is our intention to survey these areas prior to construction.
g. Page Two, Paragraph Number Two. So noted. We will check these areas prior to removal.
h. Page Two, Paragraph Three. These changes have been made in the Environmental Assessment.
i. Page Two, Paragraph Four. The species found at Lapham Peak has been identified as downy false foxglove. This has been noted in the Master Plan.
j. Page Three, Paragraph One. High bush cranberry has been removed from the plan.
k. Page Three, Paragraph Two. Our intention is to maintain these open areas for diversity. The primary plant materials that are revegetating these areas are honeysuckle, black locust, and prickly ash. Our intention is to remove these.
l. Page Three, Paragraph Three. We would like to utilize the Bureau of Endangered Resources to do such surveys as needed.
m. Page Three, Paragraph Four. So noted. We will be doing this during the construction of each specific project.

16. Gary Birch, Bureau of Environmental Analysis and Review, memorandum.
    a. Questioned whether there is conflict between the "no hunting" deed restriction and the proposal in the plan to open up the area to deer hunting.

17. Carl Evert, Real Estate.
    a. Wanted clarification on the acreage goal. Section rewritten.

18. District Environmental Protection.
    a. Commented on management of the deer and wild turkey populations. Noted.

19. Dave Gjestson, Bureau of Wildlife.
    a. Many editorial comments.
    b. Offered hunting on lands with a deer restriction as an alternative. Section expanded to accommodate.

20. Ed Trecker, District Parks Supervisor
    a. Editorial comments.

21. Dave Weizenicker, Bureau of Parks Director.
    a. Editorial comments.
    b. Asked about the deer management.
    c. Deed restriction conflict.

22. Rod Nelson, Bureau of Parks, Chief of Operations.
    a. Editorial comments.
    b. Requested operations budget data be added.
    c. Section expanded to accommodate.

23. Al Stenstrup, Havenwoods State Forest Superintendent and Lapham Peak Master Plan Task Force member.
    a. Wrote a section on education programs. Section added.
    b. Editorial comments.

24. Jim Treichel, Bureau of Parks, Chief Park Planner
    a. Editorial comments.
    b. Suggested modifications to the map.

Comments From Open Forum

1. The new entrance road should be given number one priority.

2. Horses, horses, horses give them access.

3. Would like horses allowed on the Ice Age Trail.

4. Would like horses allowed on the Glacial Drumlin Trail.

5. Would like more horse trails on the west side of Lapham Peak.

6. Rustic development, gravel parking lots, horse camping with bathroom, water, electric hookups.

7. I support the youth hostel concept.

8. Would like to see a marked access from Highway 83.

9. Opposed to horses on hiking trails. Keep them on their own trails.

10. Think campground is a great idea.

11. In favor of the skating trails.

12. Would like a lot of hiking trails.

13. More horse trails.

14. Use hiking/ski trails for horse trails until others can be developed.

15. Would like to not see the camping developed.

16. Would like the whole property fenced.

17. Would like the spring on the north property to be restored.

18. Concerned about location of campground and road because it may affect land values near it.

19. Overall plan except the land values concerned is very positive.

20. Concerned about the number of wells that will be drilled and how it will affect the water table.

21. Until lands of Highway C are purchased, open all trails to every kind of use especially horses.

22. Concerned for the heavy deer population and Lyme disease.

23. Fencing in all property lines.

24. Don't thin the pines during droughty times.

25. Questioning liability of the fishing pond.

26. Enough fishing opportunities in the area already exist.

27. Support the "no hunting" concept.

28. Like to see Highway C speed limit reduced to 35 miles per hour.

29. When trail connectors are added from the subdivision, please notify the town board.

30. Good idea of moving the radio tower.

31. Nearby horse owners could help develop horse trails.

32. Would like to see an enclosed shelter included in the campground.

33. Would like to see more horse trails than what is shown on the map.

34. Feel that it is a good idea to keep bicycles separate.

35. Think the plan for the park is great.

36. Want to see lighted ski trails and a warming hut for skiing.

37. Would like to use the nature center for a meeting room.

38. Would like a sledding hill.

39. Would like dressage and steeple chase over fences for horses.

40. If horses facilities are contingent upon implementation of the bridle fee, remove it, it is discriminatory.

41. Opposed to timber sales.

42. Fishing pond is a waste of taxpayers dollars.

43. Concerned about the capabilities of the septic system for the campground.

Response to Comments

Numbers 2-6, 9, 13, 14, 21, 31, 33, 39, 40.

The site of the Lapham Peak project boundary was expanded west of Highway C and increased in size by 302 acres to accommodate horses. Due to the nature of the terrain east of Highway C, we did not feel we could adequately accommodate horses in this area without causing some serious erosion damage. We will attempt to connect the horse trails west of Highway C with the observation tower.

Number 18

The campground was located in as central of a location as possible so as to minimize the impact on adjacent landowners. Roads will be constructed with an adequate buffer between it and the adjacent landowners.

Number 19

We do not believe the plan as written will negatively impact any of the adjacent landowners. Special attention to their needs was a consideration early on in the planning process. Historically, land values adjacent to a facility such as this increase over time. Lapham Peak has been used extensively as a marketing tool by developers of nearby subdivisions.

Number 20

We checked with the DNR District Water Supply Supervisor on this issue. He advised that the location of the wells needed and their capacities would not impact on the water table on adjacent landowners water supply.

Number 38

A sledding hill has been identified in the final draft of the plan.

Number 43

The Delafield-Hartland sewage district will be extending service to the park boundary in the future. Should a functioning septic system be impossible to locate, this would always be an option.

SO:sbr

Dec88/4617/4