

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
Madison, Wisconsin

ITEM RECOMMENDED FOR NATURAL RESOURCES BOARD AGENDA

TO THE SECRETARY:

Date July 21, 1980

FROM: John M. Keener

SUBJECT: MASTER PLANNING - Approval of conceptual master plan for
Thunder Lake Wildlife Area, Oneida County.

1. To be presented at August Board meeting by John Keener.

2. Appearances requested by the public: None.
Name _____ Representing whom? _____

3. Reference materials to be used:
Memorandum dated July 21, 1980 from John M. Keener to Anthony S. Earl.
Thunder Lake Wildlife Area Master Plan (Concept Element).

4. Summary:
The Concept Element of the Master Plan has been developed for the Thunder Lake Wildlife Area, Oneida County. The Department proposes to manage the property for waterfowl and wildlife associated with northern bogs as well as general public recreation.

5. Recommendation: That the Natural Resources Board approve the Concept Element of the Thunder Lake Wildlife Area Master Plan.

APPROVED:

C. D. Besadny 7-22-80
C. D. Besadny Administrator Date

A. C. Damon _____
A. C. Damon, Deputy Secretary Date

Anthony S. Earl 7/27/80
Secretary Date

- cc: Judy Scullion - ADM/5
- C. D. Besadny - ADM/5
- Ron Nicotera - ADM/5
- Art Doll - PLN/6
- John Keener - WM/4
- Jim Huntoon - OL/4
- Eric Jensen - IGP/3
- Dave Gjestson - WM/4
- John Brasch - Rhinelander

Signed:

John M. Keener
John M. Keener, Director
Bureau of Wildlife Management

CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: July 21, 1980

File Ref: 2300

To: Anthony S. Earl

From: John M. Keener *JMK*

Subject: Thunder Lake Wildlife Area Master Plan

The final Concept Element of the subject Plan is presented for your approval. The Plan has been subjected to a 45-day review by the appropriate Department functions, advisory groups and other resource agencies.

Comments received have been reviewed by the Bureau of Wildlife Management and the North Central District. Agreement was reached on the treatment of comments, the majority of which were incorporated into the final draft. Advisory group and outside agency comments along with Department responses are shown in the Plan Appendix. No public controversy has been brought to our attention during the review process.

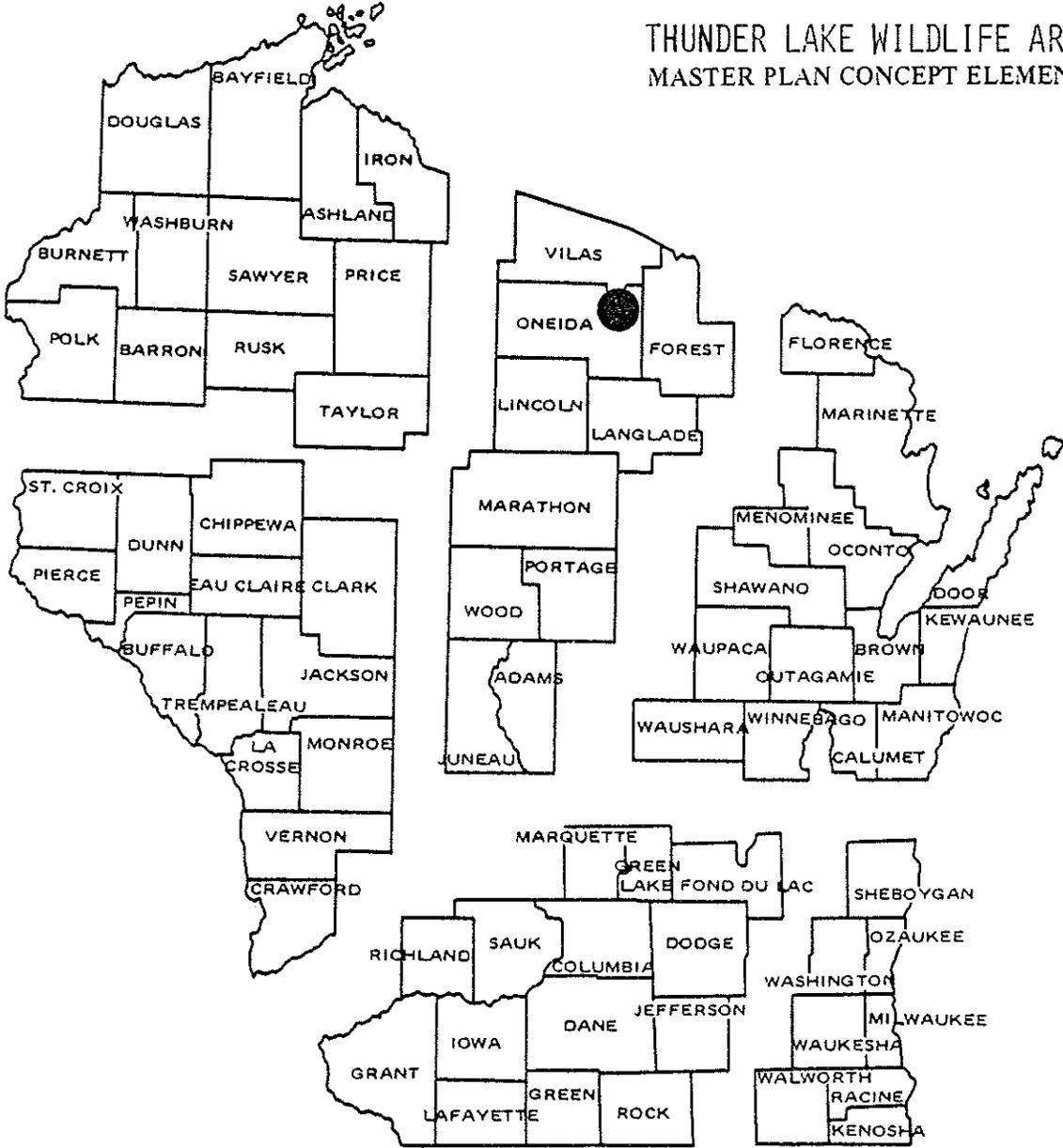
The Plan establishes objectives to produce ducks, osprey and sharp-tailed grouse and perpetuate wild rice on the property. Additional benefits include public trapping, fishing, cross country skiing, wildlife observation, photography, hiking and berry picking. Forest products are provided when consistent with property objectives.

Presently, the state owns 2,070.27 acres. No change in ownership acreage or boundary is necessary to achieve the proposed goal and objectives for this property.

DLG:mg

cc: Judy Scullion - ADM/5
C. D. Besadny - ADM/5
Ron Nicotera - ADM/5
Art Doll - PLN/6
Jim Huntoon - OL/4
John Keener - WM/4
Eric Jensen - IGP/3
Dave Gjestson - WM/4
John Brasch - Rhinelander

THUNDER LAKE WILDLIFE AREA
 MASTER PLAN CONCEPT ELEMENT



Approved by Natural Resources Board:

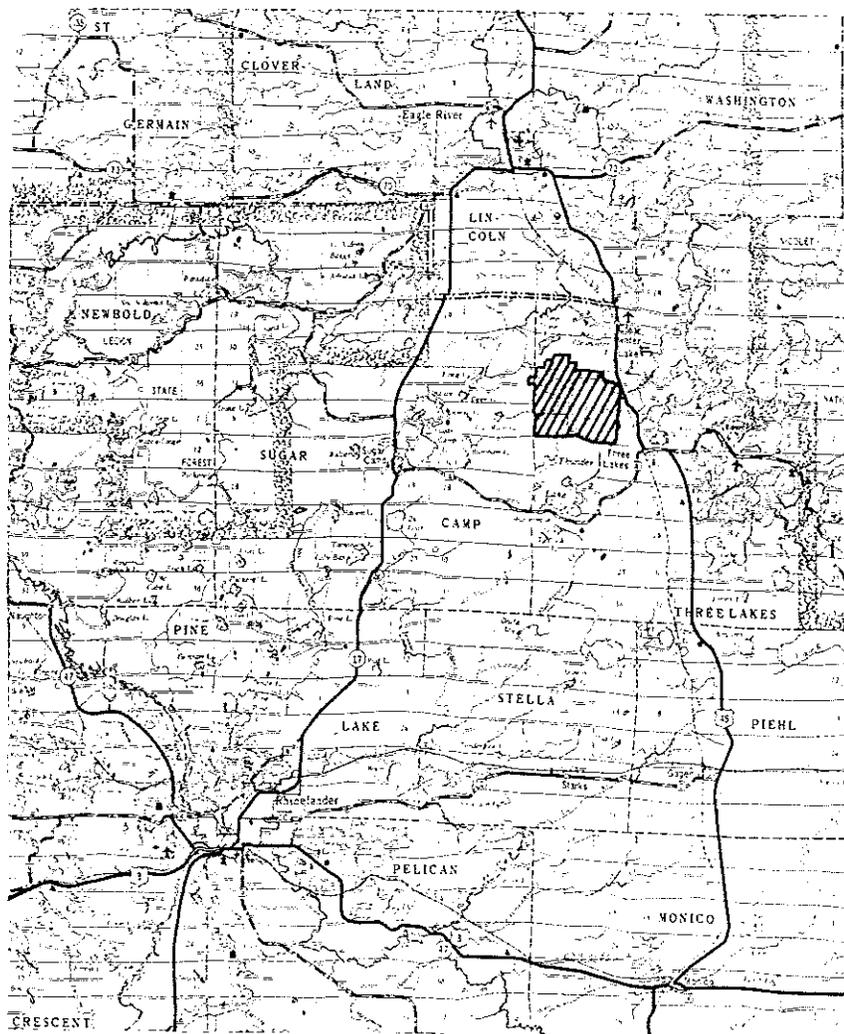
PROPERTY TASK FORCE

Leader – PHILLIP V. VANDERSCHAEGEN,
 ASSISTANT AREA WILDLIFE MANAGER
 MICHAEL T. GILES, ASSISTANT AREA FORESTER
 RONALD L. THEIS, ASSISTANT AREA FISH MANAGER

_____ Date

Submitted: APRIL 3, 1980

FIGURE 1



LOCATION MAP THUNDER LAKE WILDLIFE AREA

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BACKGROUND INFORMATION

The Thunder Lake region is part of the legacy left by the glaciers which covered northern Wisconsin during the Pleistocene epoch. The glaciers scraped and gouged many depressions thus creating many lakes such as those in Vilas and Oneida Counties. After the recession of the last glacier about 14,000 to 15,000 years ago, development of the marsh itself began. The glacier left a large shallow lake where the wildlife area is located. Over the thousands of years since the retreat of the glacier, organic matter (peat) has filled in the original lake creating a large marsh with several lakes. Thunder Lake is the largest of these; two smaller lakes, Rice and One Stone, still exist on the marsh.

During the late 1800's and early 1900's, lands in the vicinity of the marsh became settled. About 1916, development by the Three Lakes Drainage District started in the marsh. The existing ditches were dug to facilitate drainage for wire grass production. These drainage ditches extend south of the present wildlife area and south of County Highway A. Shortly after development was completed, the drainage project was abandoned. Later, three dams were built on the marsh, two of which are no longer used. The dam at the outlet of Thunder Marsh continues to be maintained. Wildfires were common on the marsh and this undoubtedly explains the open nature of the marsh.

In 1948, the Town of Three Lakes, the Three Lakes Sports Club and the Hodag Sports Club suggested the creation of a game acquisition project on the marsh. Acquisition of the wildlife area by the Wisconsin Conservation Department began in the early 1950's.

Management activities practiced on the area have included prescribed burning, limitation of vehicle access, planting wild rice, maintenance of a closed area and protection of a Scientific Area.

Thunder Lake Wildlife Area presently has an ownership goal of 2591.27 acres (2,070.27 state-owned) and is the only state wildlife area in Oneida County. The nearest population centers include Eagle River, eight miles north in Vilas County and Rhinelander, 15 miles to the south.

GOAL, OBJECTIVES AND ADDITIONAL BENEFITS

Goal:

To provide, through management of waterfowl and other wildlife associated with northern bogs, a state-owned wildlife area for public use.

Objectives:

1. Produce 90 ducks and provide 160 participant days of hunting.
2. Preserve a remnant sharp-tailed grouse population of at least 25 birds.
3. Perpetuate the wild rice resource on Rice Lake.
4. Maintain a minimum of one osprey nesting site.

Additional Benefits:

1. Provide 300 participant-days of trapping annually (beaver, mink and muskrats).
2. Accommodate 1,000 days of compatible day use activities annually including fishing, hiking, cross-country skiing, wildlife observation, photography and berry picking.
3. Contribute to the habitat of other wildlife including migratory endangered and threatened species.
4. Harvest forest products consistent with wildlife objectives.

RESOURCE CAPABILITY

Geology, Soils and Hydrology:

Thunder Lake Wildlife Area lies near the south end of the Canadian Shield. Bedrock in this region consists of early Precambrian basement granites, gneisses, greenstones and related rocks. The nearest known economic ore is a massive sulfide copper body in the Township of Pelican, 13 miles south of the wildlife area.

Upland soils are confined to a narrow strip on the northeast boundary of the wildlife area and a small piece on the west boundary. Soils on these sites tend to be well-drained, loamy and sandy.

Lowland areas make up the vast majority of the land within the property boundaries. Organic soils of the Dawson and Loxley series predominate. Water table depths in these soils vary from the surface to one foot. These soils are acid and have a high water holding capacity. The Dawson series has an eight-inch surface layer of reddish-brown peat underlain by dark reddish-brown muck 30 inches thick. The next layer is two inches of dark gray silt loam. Grayish-brown sand underlays this soil. Loxley series consist of a muck layer 10 inches thick underlain by 10 to 60 inches of peat. This soil is also acid with a high water holding capacity.

Limitations are placed on the potential uses of this area by the high water tables on most of the soils. This limits most development and restricts management options.

The following climatological data relate to the hydrology of the marsh complex. This information was collected at Rhinelander about 15 miles southwest of the marsh.

Average annual precipitation	30.77 inches
Average winter snowfall	55.6 inches
Average daily temperature	41.8°F
Average daily maximum temperature	52.1°F
Average daily minimum temperature	31.0°F

Precipitation is light during the winter, increasing in spring and summer. More than 60% of the annual precipitation falls in the five months of May through September.

Wildlife:

A wide variety of birds and mammals use the Thunder Lake Wildlife Area either as a permanent home or as a stop-over during migration.

Breeding game birds on the area include sharp-tailed grouse, ruffed grouse, mallard, common snipe, wood duck, blue-winged teal and black ducks. Although regional duck population is low compared to southern Wisconsin, the abundance of water makes it an important contributor to the statewide population.

Non-game breeding birds include sandhill crane, American bittern, pied-billed grebe, kestrel, harrier, alder flycatcher, sedge wren, yellow warbler, common yellow-throat, swamp sparrow, Lincoln's sparrow and red-winged blackbirds. A wide variety of migrating birds use the area including Canada geese, snow geese, scaup, teal, mallard, bufflehead, wigeon, wood duck, canvasback, redhead, American coot, many species of warblers, songbirds and marsh birds. Other birds which use the area, but are not known to nest there, include great blue herons, green heron, northern raven, bald eagle (endangered), osprey (endangered), red-tailed hawk and broad-winged hawk.

The most common mammals on the wildlife area are the aquatic furbearers including beaver, muskrat, mink and otter. Raccoons, striped skunk, coyotes and red fox also use this area. White-tailed deer and snowshoe hare are the predominate game mammals present.

Small mammals on the area include eastern chipmunk, red squirrel, northern flying squirrel, white-footed (deer) mouse, meadow vole and long-tailed weasel. Other than bald eagles and ospreys, no known threatened or endangered animal species use the area.

Vegetation:

There are several plant communities represented on the wildlife area, mainly lowland communities. Open bog is the most prevalent type (2,200 acres), followed by spruce-tamarack types (240 acres). These types intergrade with into each other with succession leading from open bog to spruce-tamarack forest.

Lesser communities present include alder, northern sedge meadow, wild rice-aquatic, ditch bank growth of mixed aspen-birch, lowland aspen and upland mixed hardwood-aspen-birch forest. Timber management is not presently conducted on the area because of the lack of mature timber.

The open bog type is characterized by ericaceous shrubs (leatherleaf, laborador tea, cranberry and blueberry), bog birch, willows, sedges and sphagnum moss. Scattered trees are present in the open bog, including black spruce, jack pine, aspen and tamarack.

The second major community on the area, spruce-tamarack, is characterized by dominance of black spruce and tamarack trees. Because of the gradient from open bog to complete forest, all stages of succession are present. There are islands of black spruce in what is relatively open bog, areas where young spruce and tamarack are invading open bog, brushy bog and lowland forest present on the area.

A northern sedge meadow surrounds Rice Lake. This community is dominated by sedges (*Carex stricta* and other species of *Carex*), bluejoint grass, cattail, iris and various forbs. This community is characterized by its open nature and relative lack of shrubs.

An aquatic community dominated by wild rice exists in Rice Lake (118 acres). Abundance of wild rice varies from year-to-year and other aquatic plants are abundant, including Nuphar microphyllum, Utricularia and various pondweeds (Potamogeton).

The ditch banks, made up of spoil from the excavation of the ditches, and an ice-ridge on the east and north sides of Rice Lake provide a comparatively dry site for the growth of trees. Aspen is the most common tree with white birch, white pine and red pine also present.

There are no known threatened or endangered plant species found on the wildlife area.

Water Resources:

Rice Lake is the main body of water within the wildlife area. This is a shallow lake (three feet maximum depth) having slightly alkaline, medium brown water of low transparency. Northern pike, walleye, perch, bluegill, crappie, bullhead and sucker are present. Because of the shallow depth and dense aquatic vegetation, fishing is difficult. Rice Lake has a surface area of 118 acres and has 1.9 miles of shoreline. The outlet of Rice Lake flows northwest into Columbus Lake.

The other open water within the property boundary consists of a series of drainage ditches remaining from the drainage district. There are approximately 9.25 miles of ditch within the area. The water in these ditches is dark brown and acid (pH 6.4). Fish species present in these ditches include northern pike, sucker and minnows. Beaver are common in these ditches and their dams impede flow in several places.

Thunder Lake is adjacent to the area on the south and its outlet flows into a drainage ditch and then into Rice Lake. Thunder Lake has a surface area of 1,768 acres and has 10.6 miles of shoreline. The water is slightly alkaline and fairly clear. Fish species present in Thunder Lake include northern pike, muskellunge, walleye, largemouth bass, perch, bluegill, crappie, pumpkinseed, bullhead and sucker; no endangered or threatened fish species are known to be present.

There is a water control structure on the outlet which is operated by the Town of Three Lakes. It appears that operation of this dam has little impact on the wildlife area or Rice Lake. Commercial cranberry marshes are adjacent to this lake.

Historical and Archaeological Sites:

There are no known archaeological sites on the Thunder Lake Wildlife Area. The existence of the former drainage district and remaining ditches hold some historical interest as remnants of a stage of northern Wisconsin settlement. Before development of any part of the wildlife area, the Historic Preservation Division of the State Historical Society will be consulted.

Land Ownership: (Figure 2)

The Wisconsin Department of Natural Resources owns 2,070.27 acres within the wildlife area boundary and has an ownership goal of 2591.27 acres. There are six private landowners having land within the property. The Town of Three Lakes owns one government lot and the State of Wisconsin Land Commission owns about 383 acres. The acreage goal does not represent complete ownership of the acreage within the property boundary. Most of the private land within the boundary is undeveloped and is unsuitable for residential development. Only one residence is located within the wildlife area boundary.

Current Use:

Access to the property is provided by Rice Lake Road, an east-west town road running through the center of the wildlife area. There are no developed parking areas on the state-owned lands. However, ample parking is provided by the Town of Three Lakes boat landing adjoining Thunder Lake.

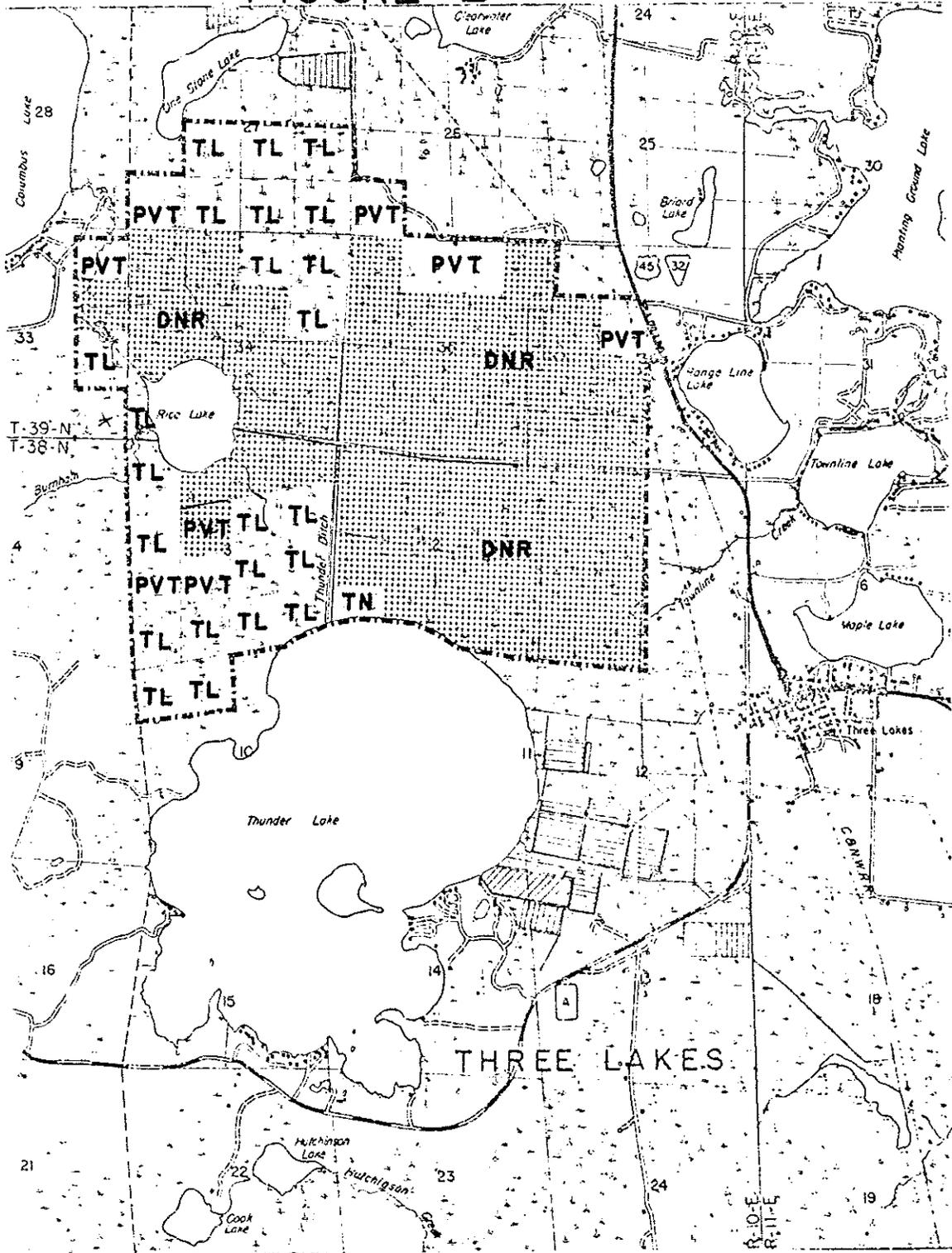
Waterfowl hunting along the ditches and the shore of Thunder Lake is the primary hunting use of the area. Deer hunting is also engaged in on the wildlife area, mainly during the November gun season. Trapping of aquatic furbearers (beaver, muskrat and mink) is done by local trappers. Hunting pressure on the area is low to moderate and trapping pressure is moderate. The closed area on Rice Lake has greatly reduced the hunting pressure on the area. Total hunting and trapping use is estimated at 460 participant days.

Very little fishing is done on the wildlife area (less than 25 angler days per year). The ditches are not fished and Rice Lake is rarely fished. A substantial amount of fishing occurs on Thunder Lake adjoining the wildlife area.

The property is visited throughout the spring, summer and fall by people engaged in bird watching and wildlife observation. This includes groups from Trees for Tomorrow Environmental Center at Eagle River.

Wild rice is harvested from Rice Lake by local residents. The rice crop varies from year to year and harvesting pressure varies with the crop.

FIGURE 2



THUNDER LAKE WILDLIFE AREA LAND OWNERSHIP MAP

- DNR- DEPT. OF NATURAL RESOURCES**
- TL- TRUST LANDS- STATE LAND COMMISSION**
- PVT- PRIVATE**
- TN- TOWN OF THREE LAKES**

Land Use Classification: (Figure 3)

One Resource Protection Area, the Rice Lake-Thunder Marsh Scientific Area, has been created on the wildlife area. Scientific Areas are natural areas which have been dedicated for preservation and are formally designated by the Scientific Areas Preservation Council. They are selected from the best remaining natural areas that contain nearly intact plant and animal communities, or unique and significant geological or archeological features. Scientific Areas provide outdoor laboratories for research and teaching and reservoirs of habitat diversity where natural features are preserved.

The present Scientific Area was approved in April of 1965 and includes Rice Lake and the surrounding marsh encompassing 250 acres. The main feature of the Scientific Area is Rice Lake, a shallow, soft water drainage lake which produced substantial amounts of wild rice. In recent years, the amount of wild rice produced on the lake has declined due to high water caused by beaver dams on the outlet or high rainfall during the early growth stages.

The remainder of the property is scheduled for resource development and is designated Wildlife Management Area (RD₂). These lands will be managed for wetland wildlife.

RESOURCE MANAGEMENT PROBLEMS

Several management problems limit current management practices. Incomplete land ownership complicates large scale work on the area. Inholdings of non-DNR lands prevent conducting prescribed burning of parts of the area. Lack of significant upland ownership adjacent to the marsh precludes any additional attempts to manage for significant levels of sharp-tailed grouse. In addition, future development of residences and other structures near the boundary will limit management options.

Soil fertility and high water tables impose limits on the capability of the area to produce wildlife and the ability to conduct prescribed burning. The low fertility of peat soils such as those on the wildlife area limits waterfowl production. In fact, some of the lowest duck production in Wisconsin occurs in this part of the state. High water tables keep the marsh wet for most of the year. While burned frequently between 1957 and 1967, since that time rarely do conditions permit prescribed burning.

LONG-RANGE RESOURCES, RECREATION NEEDS AND JUSTIFICATION

Outdoor recreation is one of the major avocations of local residents and tourists in Oneida and Vilas Counties. Populations in these two counties are growing at a much greater rate than other northern Wisconsin counties. As populations and tourism increase the demand for outdoor recreational opportunities will also increase.

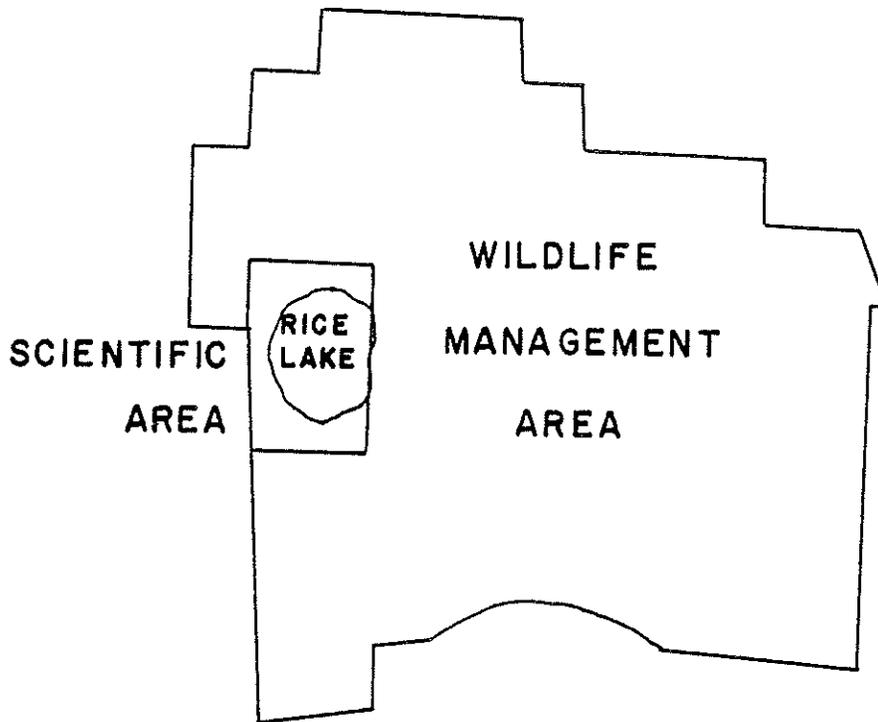
As human populations increase the amount of outdoor recreation available on private lands will decrease and use will increase on public lands. Some of this increased demand can be met by the proper management of the Thunder Lake Wildlife Area.

According to planning recommendations in the 1977 Wisconsin Outdoor Recreation Plan (SCORP), public needs require that in the event State Land Commission lands located with Oneida County are disposed of in the future, all such lands within a public forest boundary or which have water frontage with potential for development as public recreation facilities should be retained in public ownership. Further, establishment of a "wetland park" be considered for educational as well as recreational use on a year-round basis to emphasize that not just uplands are valuable environmentally.

ANALYSIS OF ALTERNATIVES

1. No action - Without any management, the marsh will undergo succession to brushy and wooded swamps. This will lead to large areas of lowland brush including willow and alder. Other areas will slowly be dominated by black spruce and tamarack. This conversion of types will lead to less desirable wildlife habitats.
2. Manage for timber production - The wildlife area is capable of producing swamp conifer timber stands. Black spruce and eastern tamarack are both suited to the environmental conditions present on the marsh. However, because of soil and microclimatic conditions on the marsh growth rates of these trees would be very slow. The necessity of long rotation times lowers the value of the marsh to produce timber.
3. Manage for higher levels of sharp-tailed grouse - The wildlife area is one of two places where sharp-tailed grouse are still found in Oneida County. In order to properly manage this area for increased numbers of sharptails, the public land ownership would have to be increased beyond the present goal. These lands are heavily forested. Because of the cost of acquisition and clearing of these upland areas, extensive sharptail management is not feasible.
4. Manage for deer and upland game - White-tailed deer and upland game species such as ruffed grouse depend upon aspen forests, forest openings and similar types. Because of the soil conditions on the marsh, management for these types would be impractical.

FIGURE 3



LAND USE CLASSIFICATIONS - THUNDER LAKE
WILDLIFE AREA

5. Reduce or eliminate the wildlife area - Reduction in size or total elimination of the wildlife area would not serve any useful purpose. Public ownership in the area consists mainly of lowland types that are unsuitable for agriculture, timber production, residential and commercial development. The only reasonable alternative use of the marsh would be as cranberry marsh and existing cranberry operations currently own marshlands that are not developed as cranberry marsh.

6. Expand ownership - Because of restrictive opportunities for recreational use as well as the limited demands placed on the wildlife area, expanding the present boundary is not warranted. Two active eagle nests are located on private lands adjoining the northwest corner of the wildlife area boundary. Easement acquisition could be pursued to protect these sites and would involve 160 acres. Limited budgets combined with the improving status of the bald eagle effectively eliminates state involvement. Private organizations such as Nature Conservancy or Eagle Valley Environmentalists (EVE) could be alerted to the opportunity as the need arises.

An increase in the acquisition acreage goal could also be pursued. By increasing the existing goal from 2591.27 to 3253.49 acres, the department could acquire all lands within the property boundary. In light of the costly nature of land acquisition statewide, future budget restrictions and other program priorities, the addition of 662.22 acres in this portion of the State for limited output advantage cannot be justified. Further, the likelihood of contrary development is judged remote.

7. Manage for waterfowl - Intensive waterfowl management would entail a large investment of money on an area with limited waterfowl potential. Soil types will limit the suitability of the area for intensive waterfowl management.

8. Manage as an open marsh - Management of the Thunder Lake Wildlife Area as an open marsh as it currently exists will result in the greatest benefits for the most species of wildlife. Sharptails, waterfowl, a variety of non-game birds and furbearers would benefit most from this management. As succession causes the conversions of other open bogs in the northern part of the state, the uniqueness of an open Thunder Marsh will increase.

RECOMMENDED MANAGEMENT PROGRAM

1. Property development - No construction activities are planned for this property.
2. Acquisition - Land acquisition of the remaining non-Department of Natural Resources lands within the property boundary should proceed with relative ease because all but 320 acres are owned by the State of Wisconsin Land Commission. Two hundred eighty acres are owned by private parties and 40 acres are owned by the Town of Three Lakes. The lands will be acquired on a willing seller-willing buyer basis. Boundary changes are not required at this time but will be following final negotiations with the Land Commission.
3. Habitat management - Management designed to maintain an open marsh will consist of hand clearing, prescribed burning and investigation of other techniques. Two areas can be burned using roads and existing ditches as firebreaks. These areas are shown in Figure 4.

In order to maintain the wild rice on Rice Lake, beaver activity on the outlet will be monitored. All dams will be removed.

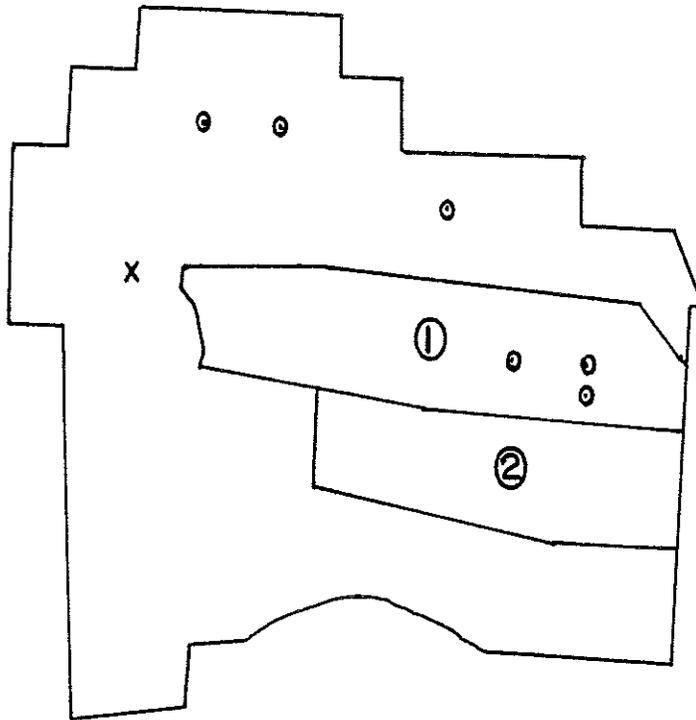
Artificial nest structures will be placed and maintained on Rice Lake and the marsh for wood ducks, osprey and kestrels (Figure 4).

4. Administrative Actions - The closed area on Rice Lake will be maintained in order to provide a sanctuary for local and migrating waterfowl.

The presence of the Scientific Area on Rice Lake should not limit management options on the lake. Enhancement and encouragement of wild rice is an objective of wildlife management and management of the Scientific Area.

Costs - Acquisition of lands within the boundary is estimated to cost \$155,000 in terms of 1980 dollars. Annual operations are projected to be \$200 to \$500 per year. A prescribed burn on the north half of Section 2 is estimated to cost \$500.

FIGURE 4



HABITAT MANAGEMENT ACTIVITY MAP
○ POTENTIAL PRESCRIBED BURN AREAS
X OSPREY NEST PLATFORM SITE
● KESTREL NEST BOXES

APPENDIX

Master Plan Comments

By: Forest Stearns

Representing: Scientific Areas Preservation Council

Date: June 27, 1980

We have reviewed the concept phase master plan for the Thunder Lake Wildlife Area and find the plan is compatible with the interests of the Scientific Areas Preservation Council.

The objectives of perpetuating the wild rice resource in Rice Lake; the osprey nesting site and the remnant sharp-tailed grouse population are appropriate for this significant natural area. We agree that the management option proposed to encourage wild rice is compatible with the Council's designation of Rice Lake as a state Scientific Area.

Master Plan Comments

By: Henry W. Kolka

Representing: Wild Resources Advisory Council

Date: May 23, 1980

The Wild Resources Advisory Council was delighted to review the Thunder Lake Wildlife Area Master Plan Concept Element. The Thunder Lake Wildlife Area plan is undoubtedly the best presentation of a low relief wetland ecosystem that the Council has had the privilege of reviewing. The WRAC tips its hat to the project Task Force for its superb performance.

General Review

As I have indicated in my front letter to Wildlife Bureau Director, John M. Keener, the Thunder Lake Wildlife Area Master Plan Concept Element is as close to perfection as a document of this type can be. The assessment of the resource base of this ecosystem, its pluses and minuses, is exceptionally well presented and its proposed management plans are very realistic. Based on past and anticipated uses for the recommended project area, they are within attainment of the listed goals and objectives. The WRAC congratulates the Task Force for their superb performance and extends special commendation to Phillip Vanderschaegen for his input.

1. Background Information.

The WRAC recommends that the word gorged be stricken from the sentence. (It could be a typographical error.) The proper word to complete the intended meaning of the sentence should be gouged, a common glacial phenomenon.

DNR RESPONSE: Word corrected.

2. pp. 1--line 4, 1st paragraph.

The WRAC agrees that the listing 14,000 to 15,000 years ago for the withdrawal of the Woodfordian era of Wisconsin Glacial period is not positive and still considered controversial. However, quite a number of younger glaciologists would be inclined to suggest 11,000 to 12,000 years. This is not a serious issue, so take your pick.

3. Goals, Objectives and Additional Benefits.

The WRAC has no quarrel with any of the Task Force's statements. In fact, the Council is impressed with the total package.

4. Wildlife and Vegetation.

The species listing and analysis of wildlife and vegetation for the low wetland Thunder Marsh ecosystem is the best that the WRAC has reviewed, up to date. The Council appreciates the time and effort expended by the Task Force to achieve such a complete assessment.

5. pp. 3--Land Ownership.

WRAC has studied carefully both the MPCE map for Thunder Lake Wildlife Area and the 7 1/2 minute quadrangle of Three Lakes. It is the opinion of the Council that the Task Force's recommendation to enlarge the present holdings of 2,070.27 to 3,253.49 is valid and necessary to achieve the listed Goals, Objectives and Additional Benefits. WRAC urges that the Natural Resources Board actively initiate a policy for the procurement of the Trust Lands from the State Land Commission (about 883 acres) to fill in the existing void of the Task Force's recommended enlarged ownership goal. This will leave about 320 acres of private, and another ownership for future negotiation. Considering the concern of the NRB and a considerable segment of the public to conserve our remaining wetlands, by accepting the new project boundary of the Task Force would in a small but meaningful way partially alleviate this concern.

DNR RESPONSE: Contact with Trust Lands has been made and purchase interest expressed. Expect positive response.

6. Land Use Classification.

The analysis and discussion of the management of the 250 acre Scientific Area is exceptional. There is no way that the philosophy and the concepts of this Scientific Area could be better presented than in the first two paragraphs under the above heading.

7. Land Use Classification--last paragraph.

The last sentence does a beautiful job of summarization, "These lands will be managed for wetland wildlife."

8. Recommended Management Program.

The Task Force recommendations for acquisition, habitat management and administrative action are realistic, sound and environmentally sensible. The WRAC supports them and recommends for NRB approval.

9. The maps used in the Thunder Lake Wildlife Area report were functional and helpful in reviewing the document. The WRAC had only one question directed to figure 2, pp. 4. Is the western portion of the Scientific Area's block below Rice Lake continuing on along the southwest shore of Rice Lake, DNR or Trust Lands property? Figure 2 is not clear on that point on the chart sent to me.

DNR RESPONSE: Figure 2 corrected.

Master Plan Comments
By: J. Evan Moynaert
Representing: North Central Regional Planning Commission
Date: May 16, 1980

Major Comments: (Resource Management Problems) and (Land Ownership): Is the private land in the area zoned? If it is zoned, are residential uses permitted, and what is minimum lot size? Is any of the residential land suitable for mound or conventional on-site septic systems? What would the impact be of development near the boundary? You may wish to contact John Vanney, Oneida County Zoning Administrator, 715/369-4651.

DNR RESPONSE: Zoning office contacted. The area is zoned forestry and recreation. Recreational zoning allows developments of home sites, hotels, motels, taverns, campgrounds, etc., requiring a minimum of 50,000 sq. ft. for back lots. Such development within or near DNR boundaries could have a negative impact on the wildlife area; primarily affecting aesthetics and boundary maintenance costs.

Editorial Comments: Overall, this is the most readable DNR Master Plan which I have seen. The writing style is direct and clear with very little jargon. Most important, the reader does not have to be a natural-resource specialist to understand what is being said.

Additional Comments: The Town of Three Lakes controls the water control structure on Thunder Lake. Does control of this structure have any impact on the wildlife area?

DNR RESPONSE: Water control has no impact; text modified to reflect the status.