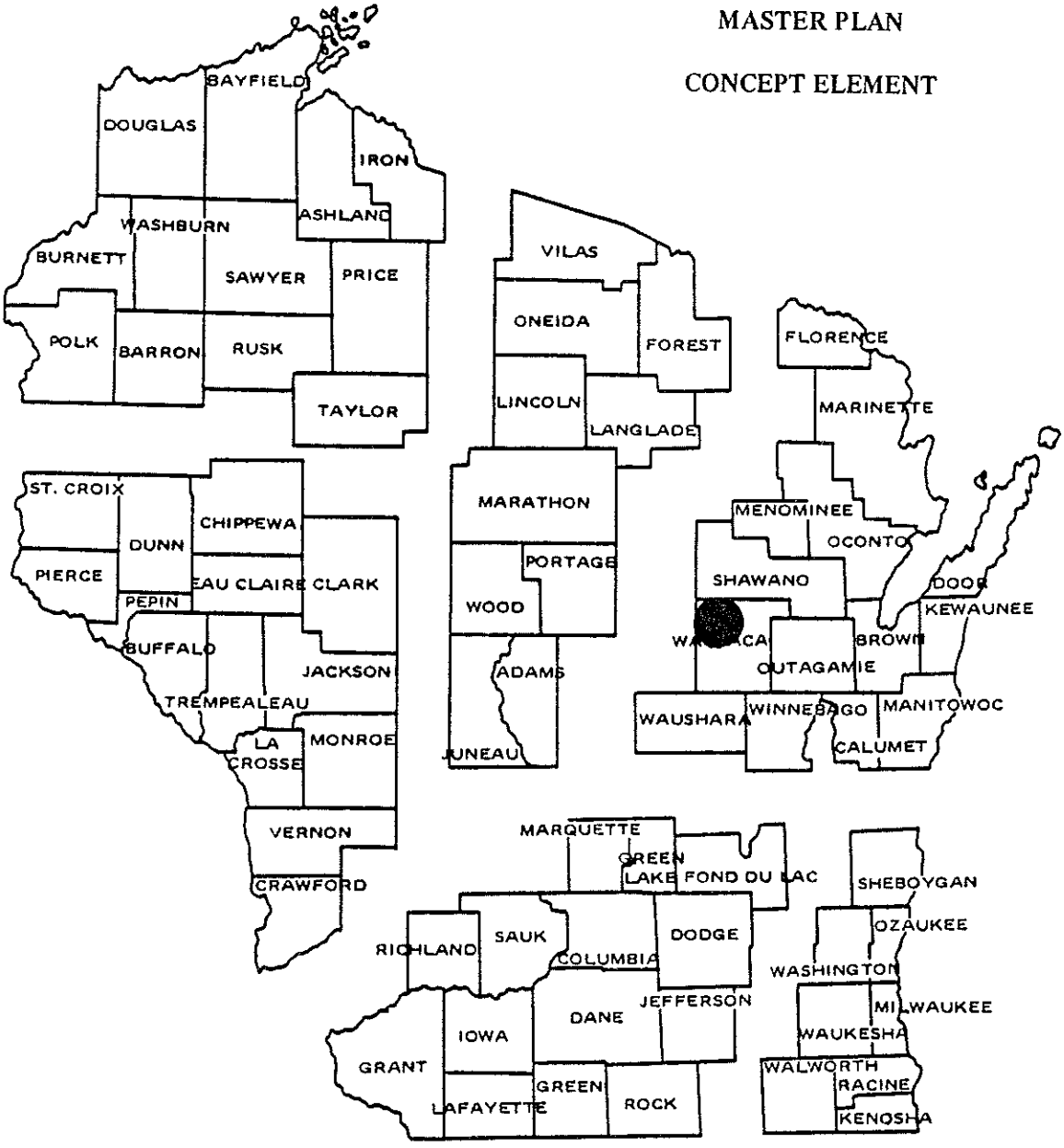
MYKLEBUST LAKE NATURAL AREA

MASTER PLAN

CONCEPT ELEMENT



Property Task Force

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WISCONSIN DEPARTMENT OF NATURAL RESOURCES
MADISON, WISCONSIN

MYKLEBUST LAKE NATURAL AREA MASTER PLAN - CONCEPT ELEMENT

Section I: Actions

A. GOALS, OBJECTIVES AND OTHER BENEFITS

Goal:

Through management zoning, utilizing the Department's uniform land use classification system, protect the natural and scientific values of Myklebust Lake and facilitate compatible scientific, educational and non-intensive recreational uses.

Objectives:

1. Preserve and maintain native plant and animal communities of Myklebust Lake, so that natural ecological processes continue to function providing a benchmark area representative of the presettlement condition.

2. Encourage non-destructive research and class teaching in the natural sciences, and public nature study, to accommodate several research projects and up to 400 person-area contacts annually.

3. Accommodate public use for non-intensive recreational use, including nature appreciation, hiking, fishing and hunting, up to 400 person-area contacts annually, (fishing 200, hunting 150, other 150).

4. Limit Myklebust Lake access to walk-in only to protect the resource from abuse and overuse.

5. Manage the vegetation types outside of the scientific area and natural area zones to restore biotic communities native to the region and benefit both game and nongame wildlife species.

Additional Benefits:

1. Contribute towards a statewide system of scientific areas encompassing representative examples of the natural diversity of Wisconsin.

2. Contribute to health of surrounding land and regional water quality.

B. RECOMMENDED MANAGEMENT AND DEVELOPMENT

Myklebust Lake is recognized as a very high quality aquatic feature which should be preserved from development, overuse or misuse. The Department proposes by fee acquisition and/or easement to acquire the lake, outlet stream, surrounding wetlands and buffer including a total of 250 acres as a Natural Area. Most of the property, including the lake, would be managed as Scientific Area or Public Use Natural Area. Research and educational use by universities, schools, and the general public will be facilitated and encouraged. Limited non-intensive recreational uses will be accommodated, but management needed to facilitate this use will be

limited. Sixty acres of former agricultural land now in old field succession or pine plantation will be managed to enhance habitat for both game and non-game species of wildlife. Prescribed burning or planting may be used to encourage native warm season grasses and forbes in the old field and savanna vegetation types.

The pine plantation will managed by thinning so that the future pine forest will resemble, as much as possible, a natural forest community.

The only development needed is access control. An existing access road to the east shore of Myklebust Lake is already blocked by an adequate gate. The road to the gate needs minor improvement. Development costs are estimated to be less than $1,000 and should be implemented through the ORAP Small Development Projects budget.

Maintenance costs should be very low immediately but will increase with public use in the future. The scientific and natural areas section budget should provide about $200 annually for patrol and monitoring use. One small tract within the project boundary includes a set of old farm buildings; if acquired the buildings will be removed or salvaged.

C. MAPS

The project is located on Figure 1, project boundaries are shown on Figure 2, and land use classification on Figure 3. Vegetative cover types are shown on Figure 4.

Section II: Support Data

A. BACKGROUND INFORMATION

1. Scientific Areas Program

In 1951 legislation (ss. 23.27) was passed initiating the scientific areas program. These areas, containing the best remaining examples of terrestrial and aquatic plant and animal communities, geological features and archaeological sites, were to be set aside for research, class teaching and nature observation uses as well as for preservation of native diversity. To date, the statewide system of scientific areas has grown to 175 areas encompassing some 25,000 acres throughout Wisconsin.

Total use of scientific areas for 1977 was 250,000 visitor-area contacts, while documented uses for research, class or group use or nature study was 15,000 person-area contacts, up some 50% from the 1974 level. The current use is expected to be even higher.

In the early 1970's, a modest acquisition budget was established to purchase lands as state scientific areas based on recommendations of the Scientific Areas Preservation Council.

In 1979, legislation was passed which defines both scientific areas and natural areas and established procedures for acquiring such sites (Section 23.092). Funding for natural areas acquisition has been provided since the 1979-81 biennium.

2. History of Property

Systematic, natural area inventories conducted in east central Wisconsin between 1976 and 1979, identified Myklebust Lake as one of the best undeveloped examples of a deep, marl bottom lake. The surrounding land is used for dairy farming, however, extensive wetlands and to some extent protective ownership by two families contributed to preservation. The Myklebust farm was purchased and held for recreational use and potential development for the past 12 years. The Amonson tract was part of an active farm unit, but in recent years only the cropland has been used; the lake, woods and wetland used to some extent by the non-resident owners and friends for fishing and hunting.

An option has been obtained to purchase the 111 acre Myklebust (Erickson, et al.) tract. the Department plans to purchase this tract and the Amonson tract at the earliest opportunity. Several smaller parcels within a gross boundary of 250 acres should be acquired later when available from willing sellers.

B. RESOURCES CAPABILITIES AND INVENTORY

Soils, Geology, and Hydrology

Myklebust Lake lies within the Central Sand Barrens and Meadows Natural Division in an area of rolling, irregular topography with numerous lakes and wetlands in ground moraine of the Cary stage, Wisconsin Glacier. Soil types in addition to a large area of muck are sandy loam and a small area of loamy sand -- Chetek, Onamia and Plainfield series.

Myklebust Lake is a drained lake having no appreciable inlet, but a permanent small outlet stream flowing about a half a mile through tamarack swamp to the South Branch of the Little Wolf River.

Fish and Wildlife

Detailed inventories of fish and wildlife have not been conducted, however, the lake is known to support bluegills, largemouth bass and northern pike. The total productivity is likely restricted by the high marl content, however the lake has a reputation of annually producing a few large northern pike.

Beaver activity on the outlet stream has been reported on several occasions. A small, low-head dam is located in the tamarack swamp on the outlet stream. Some minor damage to shoreline vegetation is visible. Otter have been observed on the lake. Waterfowl use of the lake is reported to be low, but during one early fall field inspection, the outlet stream was heavily utilized by wood ducks and blue-wing teal.

The diversity of terrestrial habitats -- shrub swamp, tamarack, oak-pine forest, old fields -- furnish excellent habitat for white-tailed deer, gray squirrel, raccoon, ruffed grouse and woodcock.

No endangered or threatened species are known to occur on the property, however, inventories are needed and will be conducted following acquisition. Appropriate protection will be provided for any endangered or threatened species located.

Vegetative Cover

Myklebust Lake lies within the tension zone between northern hardwoods province and the prairie-forest province and thus supports both northern and southern vegetation elements.

The upland forests are mixed hardwood and conifer, (northern dry-mesic) with soft maple, red oak, paper birch, and white pine. A small sandy area supports an oak-pine savanna of scattered bur oak, jack pine and red pine. Wetland forest types include tamarack swamp (northern wet forest) along the outlet stream, swamp hardwoods (northern wet-mesic) including soft maple, black ash, alder with white pine, a small open bog with black spruce and a small area of willow-dogwood (shrub carr). Some of the abandoned agricultural land was planted to pine 10-15 years ago. The balance varies from tightly sodded brome grass fields to a rapidly converting pioneer forest of sumac, hawthorns, white pine and soft maple.

Generally the forest types are in fair silvical condition, having been logged in past years. However, two small areas of scenic "old growth" white pine and red oak occur on the east shore and southwest shore of Myklebust Lake. White pine is reproducing successfully, especially in old fields and young forests, south and northwest of the lake.

Myklebust Lake supports an extensive emergent aquatic vegetation of bulrush, cattail and bureed. Shallows have extensive patches of floating water shield and water lily. Wild celery and wild rice are also included in the list of aquatic plants. Endangered or threatened species of plants have not been reported on the property, but more extensive inventories are planned.

Water Resources

The Waupaca County Surface Water Inventory states, "This lake is a wilderness-marl type basin having exceptionally clear water. The acreage of surface water listed is 19.7. The maximum depth is 37 feet with over 45% of the lake being more than 20 feet in depth. Total alkalinity is listed as 219 (ppm $CaCo_3$), a very hardwater lake. Public access has been available only by difficult canoeing up the outlet stream. A good private access is located on the east end of the lake and another more difficult access is located on the Amonson tract on the northwest shore.

A "classic" small acid bog lake is located in wetlands southeast of Myklebust Lake and provides a sharp contrast. This approximately 1/50 acre lake is surrounded by a floating open bog mat and black spruce swamp.

Historical and Archaeological Features

Historical or archaeological features of significance have not been located, however, it is likely that archaeological features exist on the

property. The very limited development plan should not affect any archaeological features.

Land Use Potential

Inclusion of adjoining wetlands and an upland buffer zone provides not only the watershed protection needed to preserve the high natural quality of Myklebust Lake, but also provides limited non-intensive recreational experience, and opportunity for enhancing wildlife habitat on lands disturbed by past land use.

With these multiple resource values, the project area easily meets the criteria for natural areas and scientific areas described in section 23.092 and Department manual codes.

Resource Protection

Myklebust Lake, the outlet stream and wetlands bordering the north and south shore of the lake and the outlet meet the Scientific Areas Preservation Council's criteria for scientific area; this zone would encompass 95 acres (Figure 3).

The east shore of Myklebust Lake with a walk-in access, the adjoining oak-pine forest to the north and the wetlands with shrub carr-spruce bog to the south, and the oak savanna, are included in an a public use natural area zone of 95 acres.

Resource Development

Abandoned agricultural land, both old field and pine plantation have potential for wildlife habitat development. Sixty acres are classified Wildlife Development.

C. MANAGEMENT PROBLEMS

No difficult management problems are anticipated. Some problems could result from converting what has been a privately held lake to one under public control. Though access will intentionally be limited, increased recreational use and educational use by the public could result in littering and misuse of the property. This should not be a serious problem, provided that maintenance funds are programmed for control and monitoring use in the Scientific and Natural Areas Section budget.

Experience with similar DNR properties in southern and eastern Wisconsin indicates that local fears of public overuse do not materialize. If warranted, the Department has the option of restricting public use on natural areas and scientific areas.

Beaver populations are quite high in the vicinity. The current population is a minor threat; if dams are built higher, removal will be necessary to prevent flooding damage to the shoreline timber on Myklebust Lake.

White pine both in natural stands and plantations is affected to some degree by blister rust and a tip weevil. No control is warranted at this time and future needs for control are unlikely.

D. RECREATION NEEDS AND JUSTIFICATIONS

Systematic inventories of central Wisconsin counties have documented a continuing loss of natural areas. Lakes with potential for recreational and residential use are especially threatened by second home developments. Undeveloped lakes with the development potential of Myklebust Lake are almost non-existent in central Wisconsin. Similar lakes in the area which have been developed have lower water quality and frequently water quality problems.

Myklebust Lake will fill a significant gap in the scientific area system. Of the 30 aquatic community types needed for the system, undeveloped deep clear water lakes are the most difficult to secure for research and teaching purposes.

"Wilderness" lakes can provide a high quality recreational experience. With limited access, the lake, surrounding wetlands and uplands will fulfill public recreational needs described in the Waupaca County Recreation Plan. (The plan lists Myklebust Lake as a unique ecological resource.)

E. ANALYSIS OF ALTERNATIVES

This project could be limited to providing public access to a small, now private lake. With this alternative, the lake would eventually be surrounded with residential development since the Village of Iola is less than a mile distant. Overuse of the lake, both public and private would certainly occur. The high natural values would be lost. Eventual private development under a no action alternative would also lead to loss of the natural values.

Acquisition of the lake and a smaller buffer as scientific area has been considered. However, limiting public recreational use would be difficult and unwarranted. Also, the smaller project acreage due to budget limitations would likely lead to future encroachment or pollution problems.

The alternative of acquiring conservation easements and/or protection through local zoning has been considered. However, efforts to secure conservancy zoning for the upland shore would no doubt fail. Conservation easements may be a feasible alternative to fee acquisition for several small tracts of wetlands on the project boundary which are part of farm units. The owners of the two larger tracts on Myklebust Lake, as non-resident landowners, are not likely to consider easements a feasible alternative.

The alternative of extending the project is undesirable since the project boundaries were drawn specifically to exclude agricultural land. The existing boundaries adequately protect the resource.

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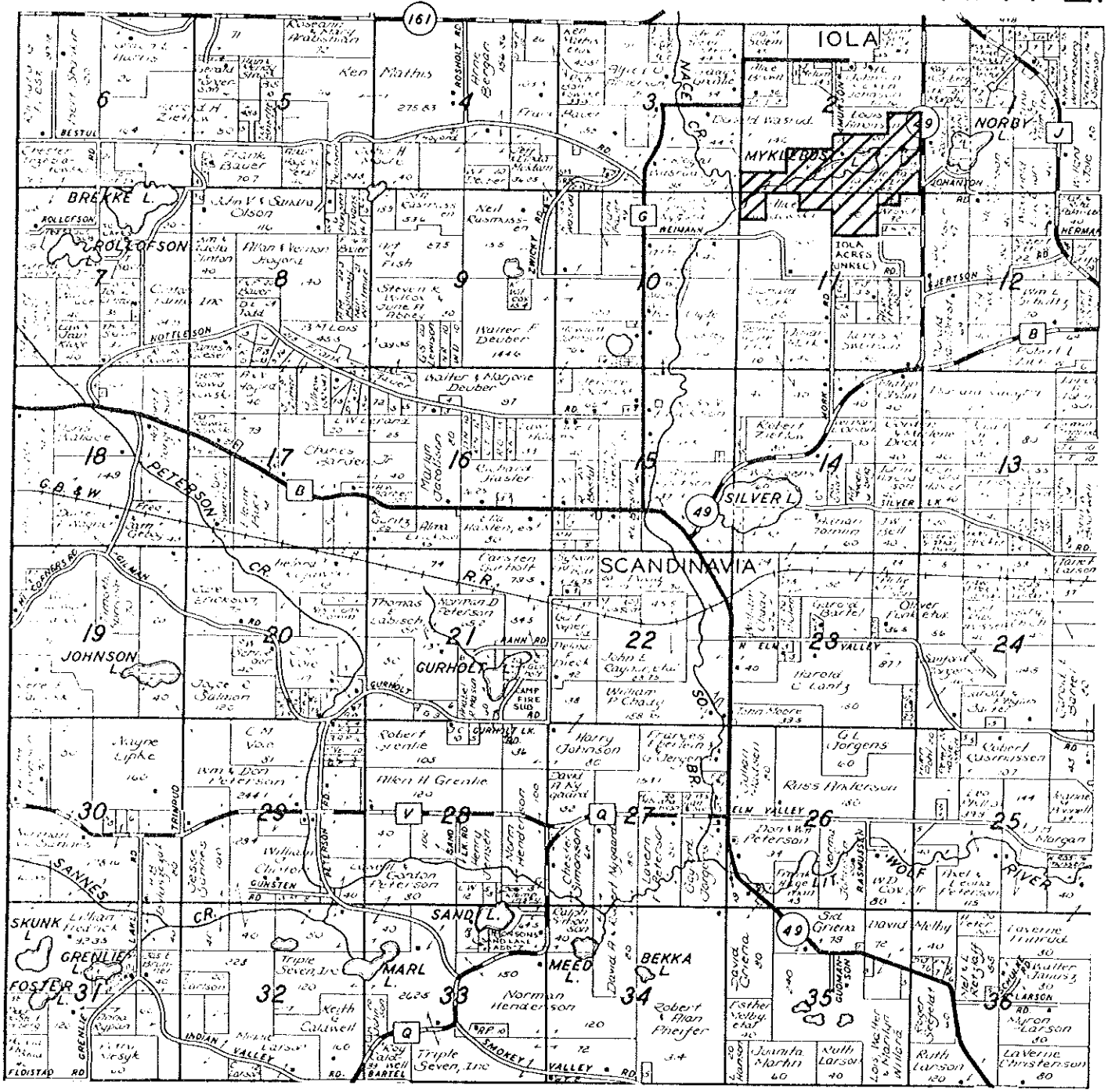
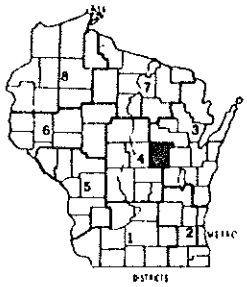


MYKLEBUST LAKE
WAUPACA COUNTY
FIG. 1



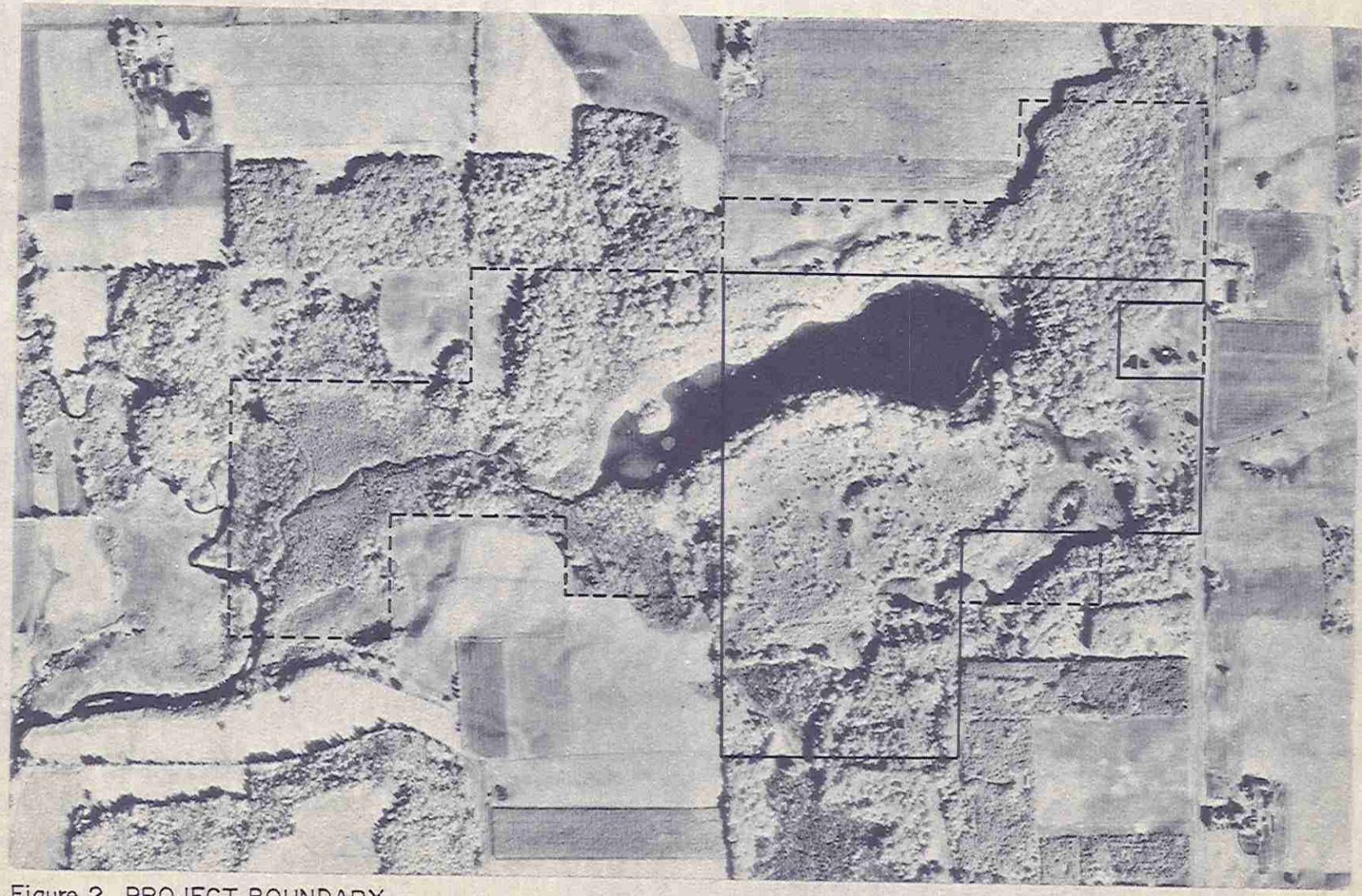


Figure 2. PROJECT BOUNDARY

—— CURRENT ACQUISITION

---- FUTURE ACQUISITION

1/4 MILE

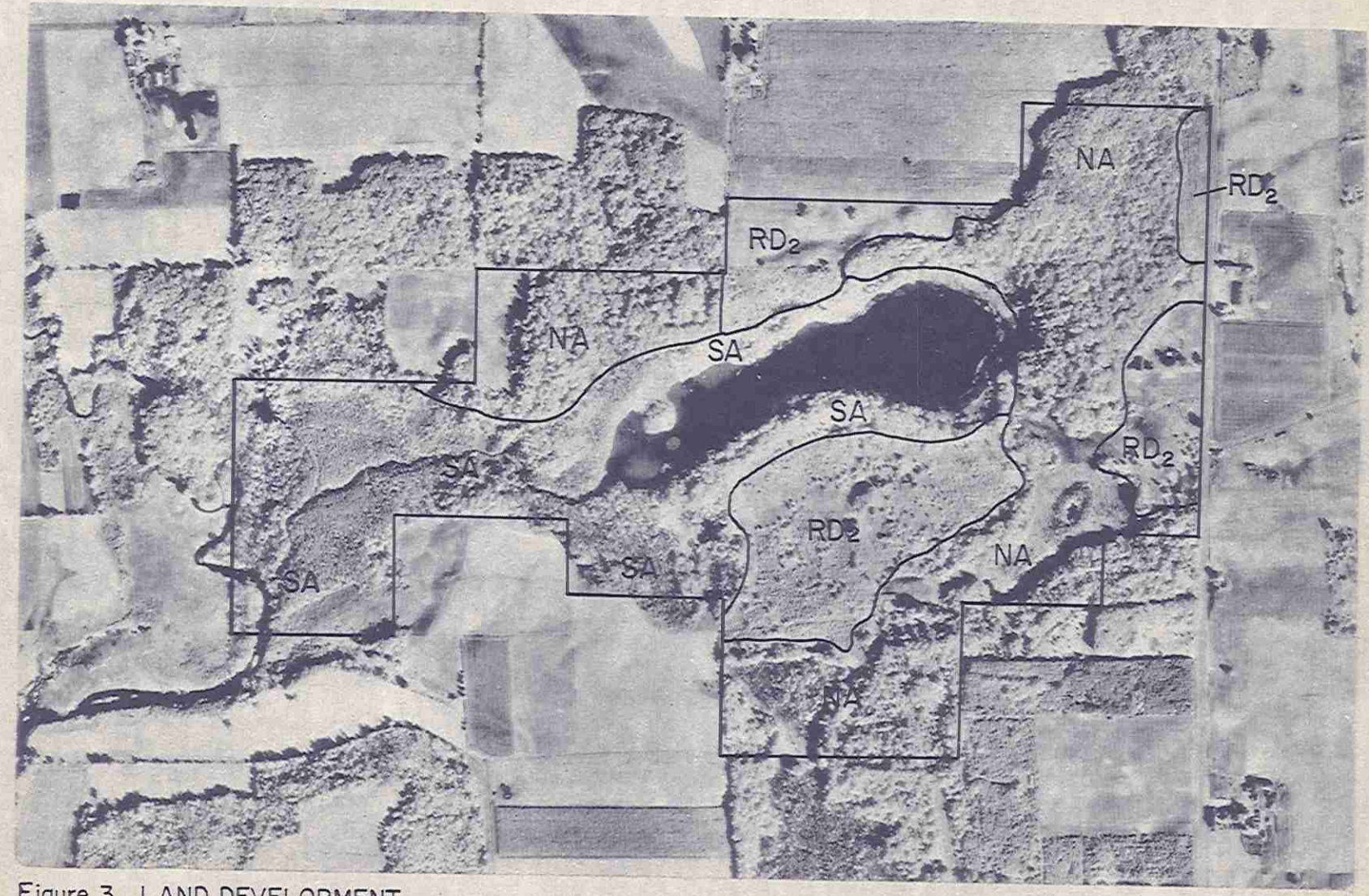


Figure 3. LAND DEVELOPMENT

NA PUBLIC USE NATURAL AREA

SA SCIENTIFIC AREA

RD_2 WILDLIFE DEVELOPMENT AREA

1/4 MILE

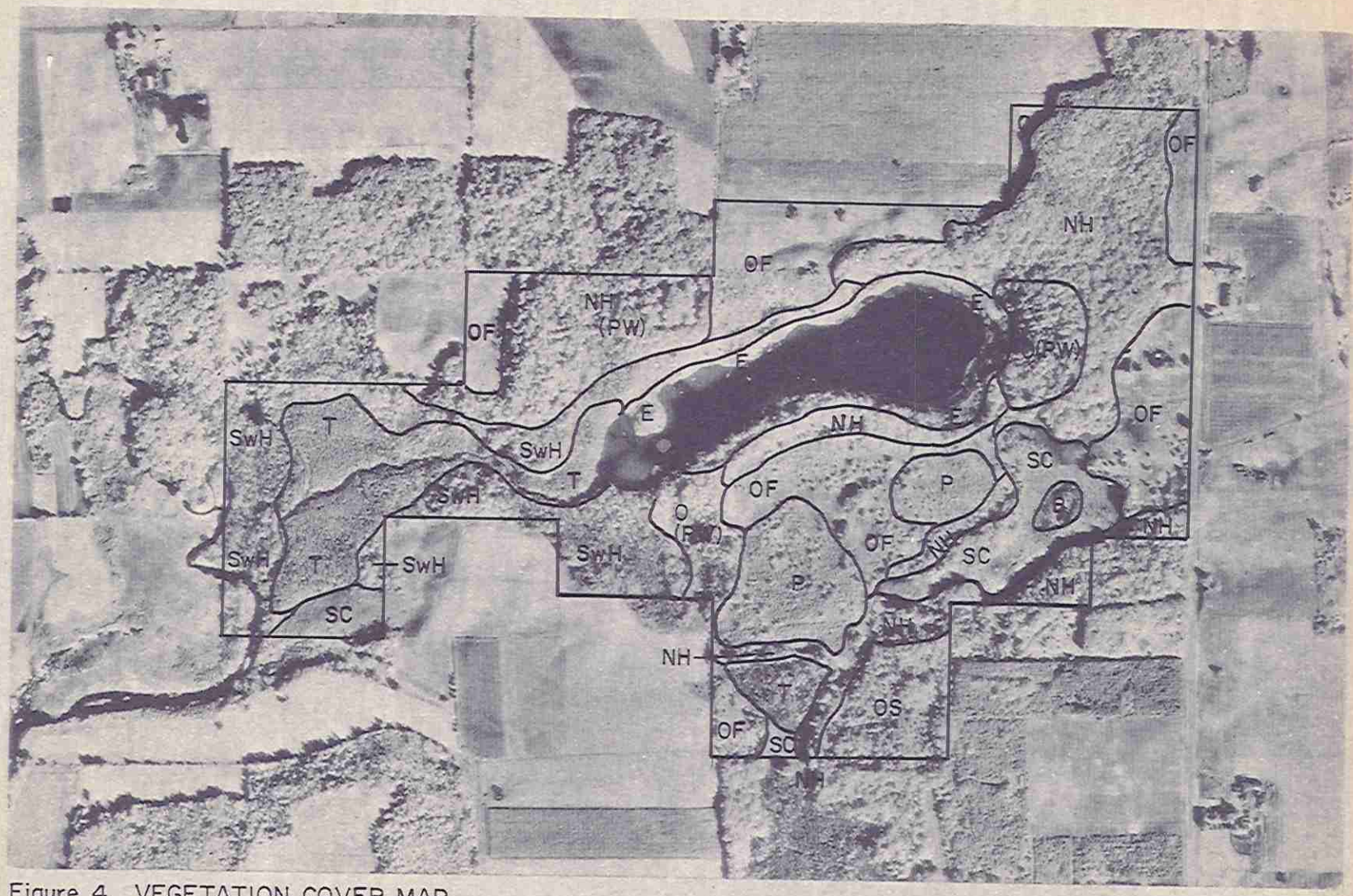


Figure 4. VEGETATION COVER MAP

NH(PW)	NORTHERN HARDWOOD with WHITE PINE
NH	NORTHERN HARDWOOD (Soft Maple, Red Oak, Aspen)
O(PW)	OAK with WHITE PINE
P	PLANTATION
SwH	SWAMP HARDWOOD (Black Ash, Elm, Soft Maple)
T	CONIFER SWAMP (Tamarack)
B	BOG
E	EMERGENT AQUATICS
SC	SHRUB CARR
OF	OLD FIELD
OS	OAK SAVANNAH
C	CROP

N

1/4 MILE