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Form 1100-1
Rev. 11-82

NATURAL RESOURCES BOARD AGENDA ITEM

Item No. 689

SUBJECT: MASTER PLANNING - Approval of the master plan for Theresa Wildlife Area, Dodge and Washington Counties.

FOR September **BOARD MEETING**
(month)

TO BE PRESENTED BY: Steve Miller

SUMMARY:

The Concept Element of the Master Plan has been developed for the Theresa Wildlife Area, Dodge, Fond du Lac and Washington Counties. The Department proposes to manage the property for Canada goose use and duck production as well as provide public hunting, fishing and other compatible recreational uses.

RECOMMENDATION:

Natural Resources Board approval of the Theresa Wildlife Area Master Plan (Concept Element) including a land acquisition boundary modification.

LIST OF ATTACHED REFERENCE MATERIAL:

- No Fiscal Estimate Required
- No Environmental Assessment or Impact Statement Required
- No Background Memo

- Yes Attached
- Yes Attached
- Yes Attached

APPROVED:

Steven J. Miller
Bureau Director

8/9/85
Date

J.R. Huntoon
Administrator

9/5/85
Date

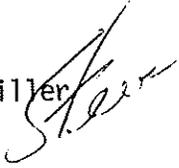
CD Reading
Secretary

9-6-85
Date

- cc: Judy Scullion - AD/5
- James Huntoon - AD/5
- Craig Karr - AD/5
- Carl Evert - OL/4
- Steven Miller - WM/4
- Dave Gjestson - WM/4
- Gloria McCutcheon - Milwaukee

RECEIVED
SEP 13 1985

CORRESPONDENCE/MEMORANDUM

Date: August 20, 1985 File Ref: 2300
To: C. D. Besadny
From: Steven Miller 
Subject: Theresa Wildlife Area

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 Southeast 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 annually produce 1,500 ducks, provide 16,500 participant-days of recreation, 500,000 fall use-days by Canada geese and 17,000 participant-days of goose watching activity.

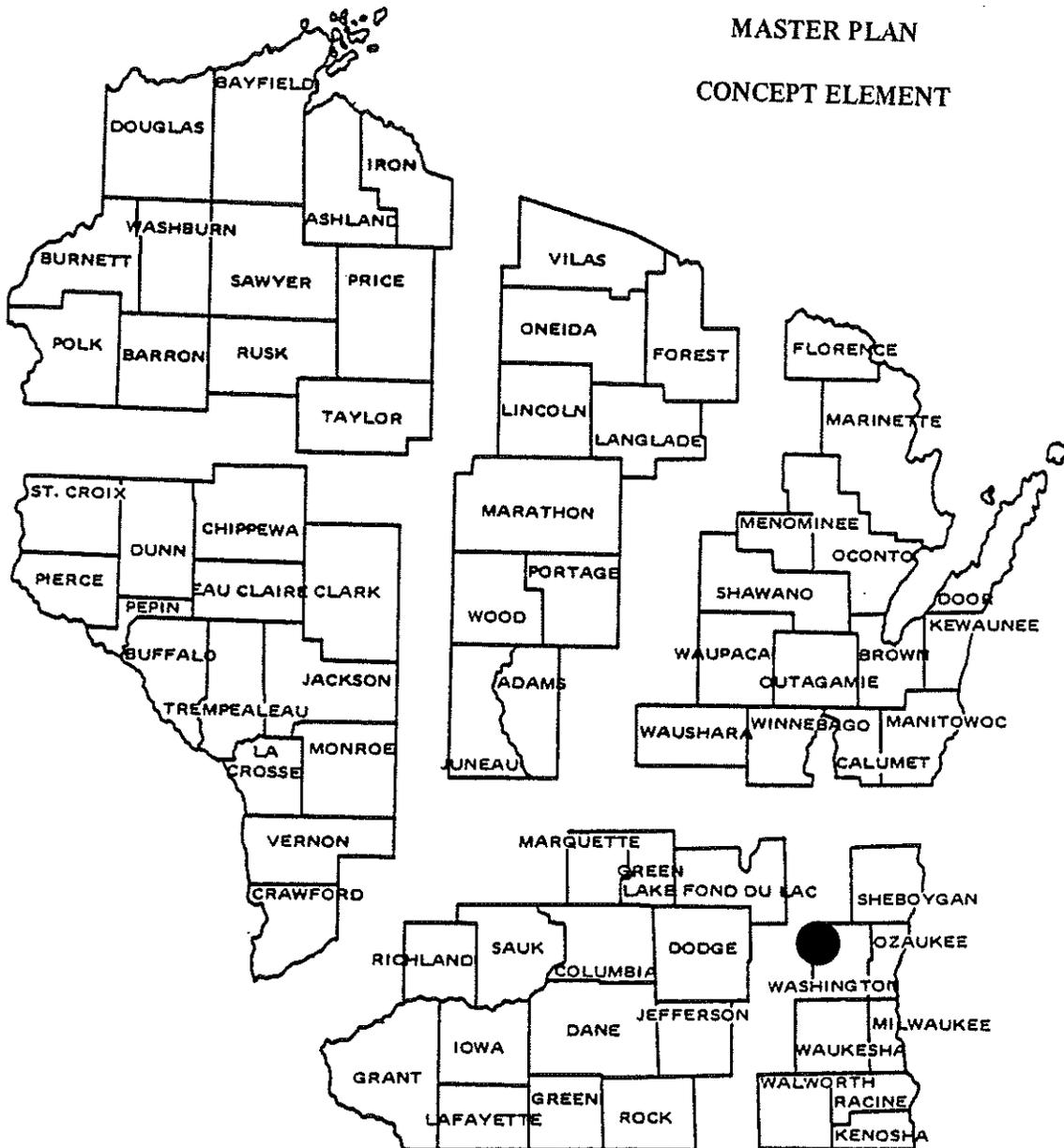
Presently, the state controls 5,298.29 acres of a 5,990.13-acre goal. No change in purchase goal is necessary to achieve the proposed goal and objectives for this property. However, an acquisition boundary modification is recommended.

DLG :mg

TERESA WILDLIFE AREA

MASTER PLAN

CONCEPT ELEMENT

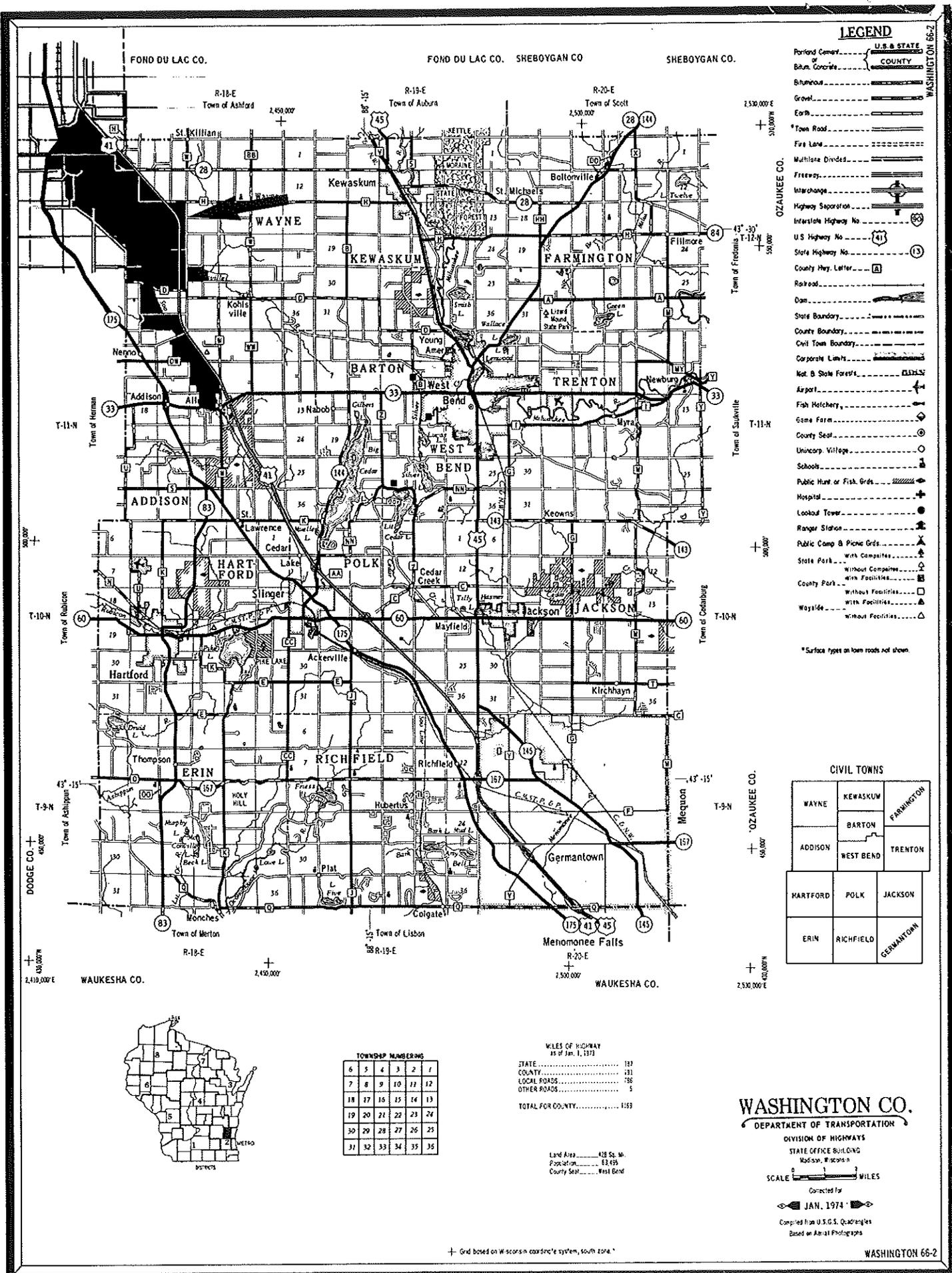


Property Task Force

Leader: Tom Howard, Wildlife Manager
Jim Micelli, Forester
Wayne Schutte, Park Manager
Edward Schumacher, Fish Manager

Approved By: Board app
Sept 85

Date: Sept - 85



LEGEND

- Portland Cement U.S. & STATE
- Barre Concrete COUNTY
- Bituminous
- Gravel
- Earth
- Town Road
- Fire Lane
- Multilane Divided
- Freeway
- Interchange
- Highway Separation
- Interstate Highway No.
- U.S. Highway No.
- State Highway No.
- County Hwy. Letter
- Railroad
- Dam
- State Boundary
- County Boundary
- Civil Town Boundary
- Corporate Limits
- Nat. B. State Forest
- Airport
- Fish Hatchery
- Gam Farm
- County Seat
- Unincorp. Village
- Schools
- Public Hunt or Fish Grids
- Hospital
- Lookout Tower
- Ranger Station
- Public Camp & Picnic Grids
- State Park
- County Park
- Wayside

*Surface types on town roads not shown.

CIVIL TOWNS

WAYNE	KEWASKUM	FARMINGTON
	BARTON	
ADDISON	WEST BEND	TRENTON
HARTFORD	POLK	JACKSON
ERIN	RICHFIELD	GERMANTOWN

TOWNSHIP NUMBERS

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

MILES OF HIGHWAY
as of Jan. 1, 1973

STATE	137
COUNTY	131
LOCAL ROADS	756
OTHER ROADS	5
TOTAL FOR COUNTY	1153

Land Area 418 Sq. Mi.
Population 83,499
County Seat West Bend

WASHINGTON CO.
DEPARTMENT OF TRANSPORTATION

DIVISION OF HIGHWAYS
STATE OFFICE BUILDING
Madison, Wisconsin
SCALE 1" = 10 MILES
Corrected for
JAN. 1974

Compiled from U.S.G.S. Quadrangles
Based on Aerial Photographs

+ Grid based on Wisconsin coordinate system, south zone.

FIGURE 1 LOCATOR

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SECTION I - ACTIONS
GOAL, OBJECTIVES AND ADDITIONAL BENEFITS

Goal: To manage a state-owned wildlife area for Canada goose-use and duck production, as well as provide public hunting, fishing and other compatible recreational uses.

Annual Objectives:

1. Produce one duck per acre on 1,500 acres of permanent water (1,500 ducks).
2. Provide 16,500 participant-days of hunting opportunity as follows:

<u>Activity</u>	<u>Participant-days</u>
Ducks	6,000
Geese	7,500
Pheasants	1,000
Deer (bow and gun)	1,500
Other	500

3. Provide 500,000 fall use-days by Canada geese by 1985.
4. Provide opportunities for 17,000 participant-days of goose watching activity.

Annual Additional Benefits:

1. Provide 5,000 angler-days of warm water fishing.
2. Accommodate 10,000 participant-days of other recreational and educational uses including cross-country skiing, hiking, canoeing, and scenic and nature observation.
3. Provide a harvest of about 3,000 muskrats.
4. Contribute to the habitat of other wildlife including migratory, and endangered and threatened species.

RECOMMENDATIONS
(Figure)

A series of 5 subimpoundments in the 160 acres are managed to store runoff with subsequent vegetation disturbance occurs on the property totaling about 160 acres. A similar management regime is following 2 subimpoundments (135 acres) located in the east central portion. with summer drawdown and are reflooded

Drawdown and reflooding is accomplished through gravity flow and/or pumping through 8 water control structures. Although this management technique is currently operational, about 3,000 feet of level ditching within impounded areas will be necessary to facilitate drawdown and reflooding.

A mile-long dike in the northwest part of the property and a 60-foot 5-section dam (one section is a bottom draw radial gate) form the main flowage of 1,500 acres. The dam is currently operated to: 1) perform post-waterfowl season drawdown as a flood control measure and to minimize water and ice damage to the dike and dam; 2) partially flood the flowage basin in spring after the flood danger subsides to provide duck brood habitat, encourage the growth of aquatic vegetation, discourage cattail and brush invasion in the deeper areas of the flowage basin, and to allow the land management practices on the upper watershed impoundments previously described; and 3) attain full flood of the main flowage basin and facilitate flooding of subimpoundments previously described in order to provide water in refuge areas and encourage waterfowl and hunter dispersal on the property during the waterfowl season.

In addition to main and subimpoundment management, there are 2 runoff ponds with water control structures on the property. One (Town of Theresa) floods about 7 acres with a 2-foot head. The other (Town of Wayne) floods about 1.5 acres with a 2-foot head. Periodic drawdown as a vegetation disturbance management technique is appropriate for such runoff ponds. An existing 10-acre run-off pond near the intersection of Beaver Dam Road and U.S. highway 41 in Washington County can be managed similarly.

Eight potholes have been constructed which collect runoff water and serve as waterfowl pair ponds; future development of 25 to 30 pair ponds can be accommodated.

The potential to develop additional runoff ponds exists on property that is currently state-owned and on private property once acquired within the proposed boundary. Twelve such sites have been identified; 4 on state-owned land and 8 on private lands. Water quality and control are concerns which need coordination with affected landowners and local governmental units. Informational meetings will help formulate future treatment.

Level ditching exclusive of those associated with subimpoundments has been developed in several wetland areas, totaling approximately one mile. The vast acreage of Type II wetlands within upper reaches of the main flowage and in their peripheral areas responds well to this type of wetland development. Additional level ditching in 7 separate areas (totaling from 2 to 3 miles in length) can be developed in the future.

Prescribed burning in upland and lowland areas will be conducted to minimize nesting cover losses due to brush succession as well as to restore the vitality of important grass nesting cover. Where prescribed burning is not feasible due to lack of fire control, approved herbicides or mechanical mowings may be utilized as brush control techniques. In areas rapidly overgrown with undesirable cattail growth, recently developed management techniques including selected herbicide use (using the appropriate cautions) and cattail crushing may be appropriate in order to continue to provide open water for waterfowl brood use.

About 850 acres are currently sharecropped on the property to provide cover diversity, nesting cover and winter food sources for wildlife. In addition, cropping patterns are utilized to suppress plant succession to ensure that valuable openings and nesting cover are maintained. The scope of the sharecropping program will increase as additional suitable land is acquired within the property boundary.

While much of the recommended management is directed towards duck production, increased emphasis should be given to management of peatlands and associated subimpoundments that will enhance their utility as goose feeding and nesting areas. The techniques described for management of the peatland and impoundments to facilitate drawdown and reflooding (some of which is currently scheduled) and vegetation management of these areas are of paramount importance in realizing the objective of providing 5-600,000 goose use days annually.

Six parking areas on the property will be maintained to accommodate hunters as well as other property users. A roadside observation point along highway 28 and 2 marsh overlooks located on Mohawk Road and Skyline Drive provide viewing for visitors. Informational and regulatory signs at these developments will be maintained. As new tracts are obtained, particularly in the southern portion of the property, additional parking facilities may be developed. Two boat launching facilities are maintained on the property and a third can be developed where the Rock River crosses Highway D.

In the past, 2 snowmobile trails have been maintained through land use agreement with local snowmobile clubs. These land use agreements have recently been discontinued. Provided interest is shown by local snowmobile clubs, alternate routes which avoid river and ditch channels and which utilize approved crossing structures can be accommodated.

Rooster pheasant releases at or above the current annual 400 bird level will continue. Stocking supplements natural production and helps satisfy demand for upland bird hunting opportunities. A put-and-take release design meets the needs expressed by the hunting public. Stocking levels will be reviewed annually and adjustments made to both numbers and release sites based upon use levels and habitat conditions.

Alternative stocking schedules designed to reduce excessive hunting pressure is being explored. The surrounding area is somewhat marginal pheasant range and stocking and harvesting hens was implemented in 1984. In addition, pheasant hunting hours close 2:00 p.m. daily from the second through fourteenth day of the season in an attempt to provide stocking times free from hunting pressure and allow for released birds to become oriented to their new environment. This closure also helps the Department to dispose pheasants better. Hunting quality has improved somewhat, but hunter reactions have been mixed.

About 12 miles of refuge boundary posting and 11 miles of boundary posting are currently maintained. An additional 8 miles of property boundary posting will

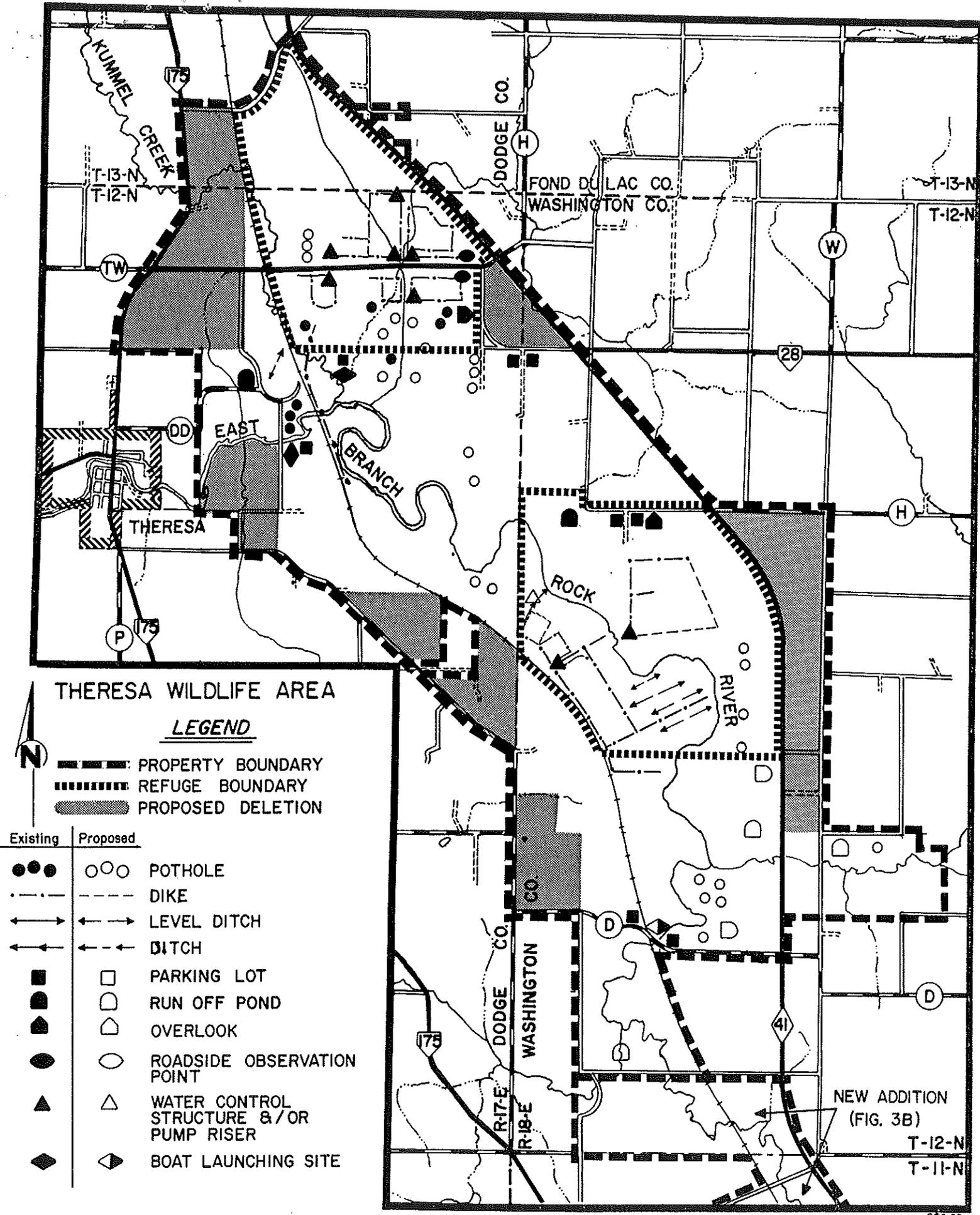


FIGURE 2A. EXISTING & PROPOSED DEVELOPMENTS

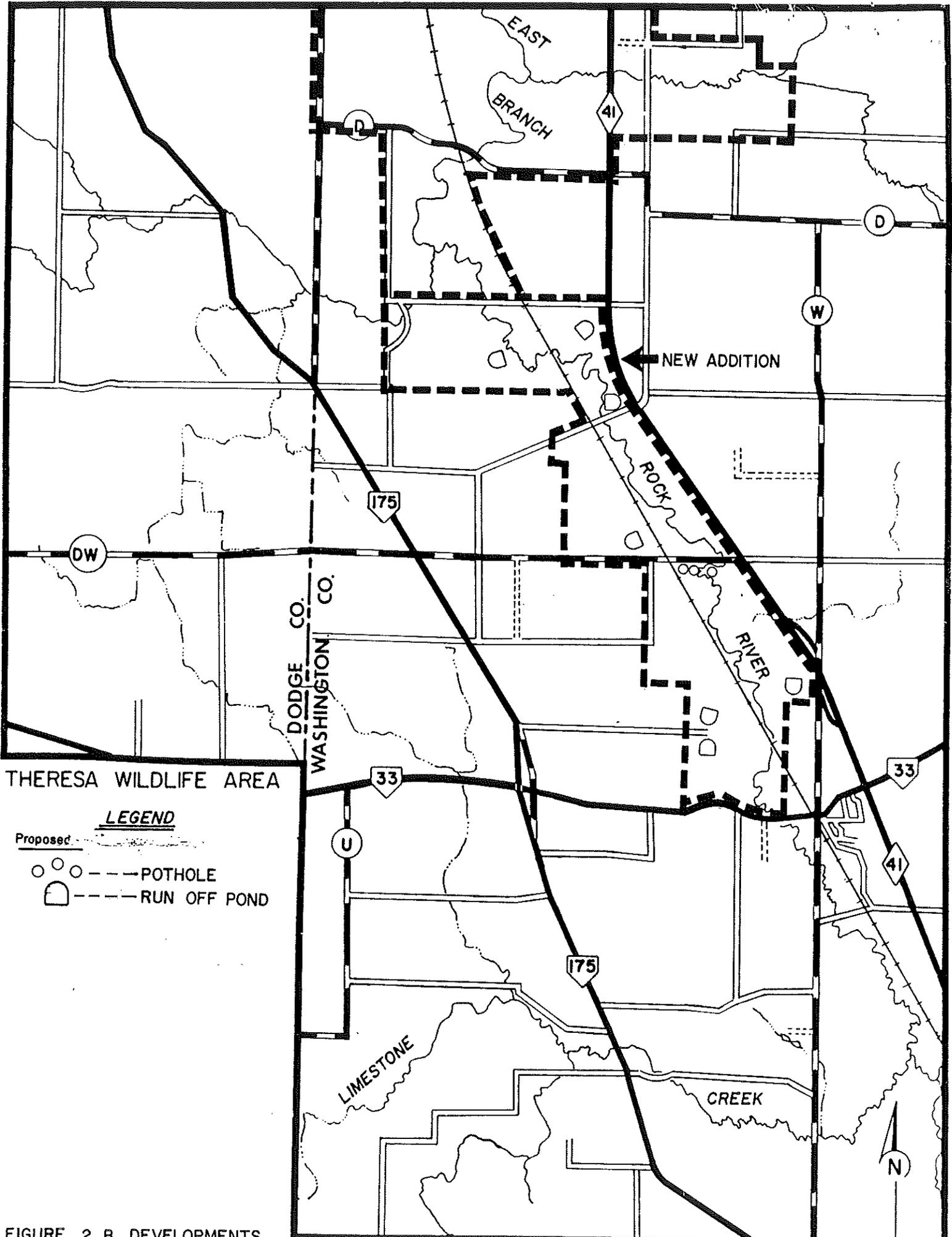


FIGURE 2 B DEVELOPMENTS

The East Branch of the Rock River, which includes all of the wildlife area, was treated to eradicate carp in 1971. This waterway was subsequently restocked with northern pike, walleye, perch and bluegill.

Other resource management on Theresa Marsh includes sharecropping over 800 acres of cropland surrounding the marsh to provide food, cover, and nesting areas for waterfowl and upland game, and annual stocking of about 400 rooster pheasants to supplement local populations. Maintenance of refuge, boundary, and informational posting is done annually.

Brush invasion is controlled to a limited extent through sharecropping, water level manipulation, burning, and chemical or mechanical treatment.

Periodically, landowners within current property boundaries are contacted about possible land sales. Annual lease agreements totaling nearly 350 acres are made with landowners in or adjacent to the marsh. The leased lands provide additional hunting opportunity and help satisfy the demand for upland game (primarily upland bird) hunting.

Ownership

The current acquisition goal of 5,990.13 acres within a currently authorized property boundary is nearly 90% completed by acquisition of 4,740.3 acres in fee title and 557.93 in easement. The Recommended Management and Development Section of this plan addresses relocating the property boundary which will result in a net decrease of 75.56 acres within the boundary. No change in the acreage goal is recommended.

All lands presently owned and recommended for inclusion within the acreage goal are necessary for the adequate management and protection of the wildlife area. Marginal lands which don't contribute significantly to achieving property objectives are deleted to keep statewide purchase goal within the established limit.

RESOURCE CAPABILITY AND INVENTORY.

Soils and Geology

The Theresa Marsh region is a glaciated area of ground moraine and old lake basins. The marsh proper is a large old lake basin left when a glacial lake drained. The ground moraine surrounding the Theresa Marsh is gently sloping to steep and contains many drumlins. Hennepin and Hocheim soils occupy the steeper slopes; Theresa soils the gentle slopes. They are well drained. Mayville, Lamartine, Brookston and Pella soils occupy plan to slightly concave interdrumlin areas and upland drainage-ways. They are moderately well to very poorly drained.

Houghton soils occupy about 90% of the area in the old lake basins or depressions. In a typical profile, the surface layer is black mucky peat about 10 inches thick underlain by at least 42 inches of dark brown, partly decomposed plant remains. The high water table is at the surface most of the year.

Fish and Wildlife

Fish species known to inhabit the East Branch of the Rock River and its tributaries include northern pike, largemouth bass, bluegill, pumpkinseed, sunfish, green sunfish, rock bass, mottled sculpin, white sucker, pearl dace, southern red belly dace, longnose dace, yellow bullhead, black bullhead, brown bullhead, brown trout, brook trout, stone roller, common shiner, central mudminnow, bluntnose minnow, creek chub, brook stickleback, black striped topminnow, stonecat, and carp.

Theresa Marsh was chemically treated with antimycin to remove the rough fish population in 1971 as part of the Rock River Fishery Rehabilitation Project. Following the treatment, minnows, panfish, northern pike and walleyes were stocked. Carp are again present in small numbers in the marsh and chemical retreatment may be necessary in the future to control the carp population to maintain water quality and waterfowl habitat.

Presently, the marsh proper has little public fishery value. A limited game fish population does exist, but receives little public use. The marsh has high value as a rearing marsh for northern pike. Northern pike fry, stocked in the spring, contribute to the fishery of the Rock River as they migrate downstream.

The area is presently occupied by species of wildlife common to wet marshes and disturbed woodlot and agricultural fields. Common game mammals found on the area and responding to management are white-tailed deer, squirrel, and cottontail rabbit. Furbearers present include raccoon, fox, mink, and muskrat. A variety of other small mammal species (skunk, weasel, mice, voles, etc.) are also present.

Many birds inhabit the area both seasonally and permanently. Common game birds that will benefit from management activities include mallard, blue-winged teal, wood duck, Canada goose, ring-necked pheasant, woodcock, and Hungarian partridge. Ruffed grouse have been recorded, but are uncommon. Other birds using the area include sandhill cranes, egrets, red-tailed hawks, mourning doves, robins, wood thrushes, gold finches, song sparrows, meadow larks, wrens, and a variety of warblers.

Wisconsin DNR's Bureau of Endangered Resources has no record of endangered or threatened species of amphibians, molluscs, mammals, birds, reptiles, or plants known to be present on the property. A 1971 record of longear sunfish (threatened species) has been made in the East Branch of the Rock River. As a result, care will be taken when water treatment activities are implemented.

Vegetative Cover (Figures 4A and 4B)

The following vegetation types are found within the current boundary of 7,296 acres.

Northern Hardwoods - Includes more than 50% sugar maple, basswood, beech and white ash; 50 acres.

Swamp Hardwoods - Contains mainly silver maple, black ash and American elm; 837 acres.

Farmland - Contains cropland and pasture; 1,347 acres.

Upland Grass - Represented by abandoned agricultural fields; 140 acres.

Lowland Brush - Represented by alder, willow, red osier and silky dogwood; 1,465 acres.

Upland Brush - Consists of hazel, grey dogwood, sumac and juneberry; 119 acres.

Lowland Grass - Predominantly canary grass; 994 acres.

Water - Includes ditches, creeks, ponds and flowed areas; 1,896 acres.

Cattail; 448 acres.

Much of the lowland vegetation acreage listed for lowland brush, cattail and lowland grass are a composite of these vegetation types. In particular, cattail is found throughout most of the lowland brush type and in much of the shallow flowed area.

Water Resources

The East Branch of the Rock River bisects the wildlife area from southeast to northwest. This is the major stream of northwest Washington County and, including the portion in Dodge County, contributes over 6 miles of waterway and nearly 25 acres of surface water. The average width is about 35 feet and the average gradient is 3 feet per mile. A dike and dam cross this waterway on the west side of the project creating a 1,500-acre flowage at full pool in the fall and about an 800-acre flowage at drawdown. Tributaries to the Rock River (Kohlsville Creek, Brownsville Creek, and Lomira Creek) provide a good water supply utilized in the management of subimpoundments on the peat lands.

Water resources on the property include:

Subimpoundments - 250 acres.

9 ponds - 20 acres.

6 miles of Rock River - 25 acres.

2 miles of Lomira Creek - 2.4 acres.

1.5 miles of Brownsville Creek - 1.5 acres.

1/4 mile of Nolan Creek - .75 acres.

Kohlsville Creek 2 miles long - 2.2 acres surface water.

There are nearly 1,900 acres of surface water within the current property boundary including ditches, creeks and flowed areas. The entire watershed area which ultimately flows through the east branch of the Rock River is estimated to be 52,400 acres.

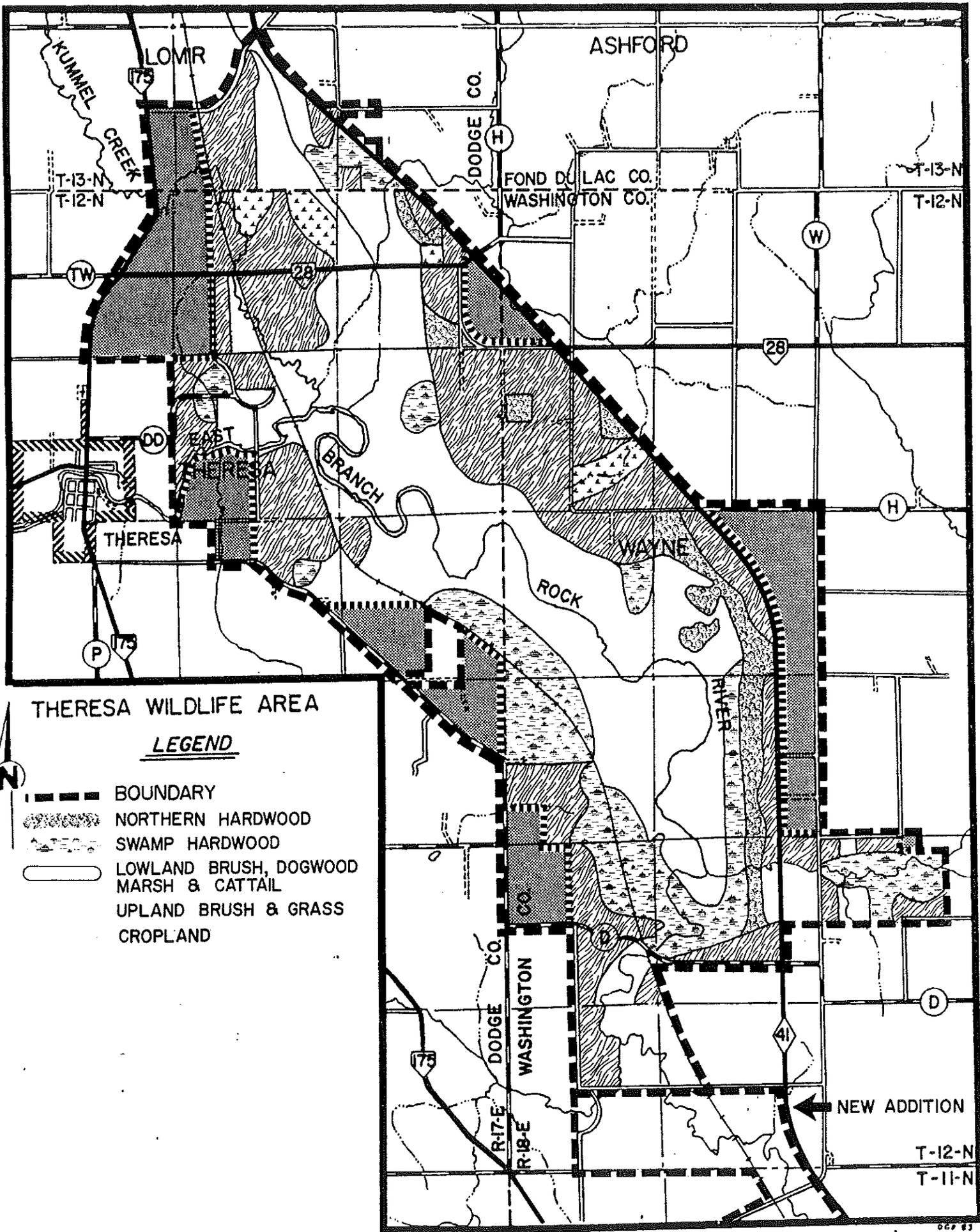


FIGURE 4A VEGETATION

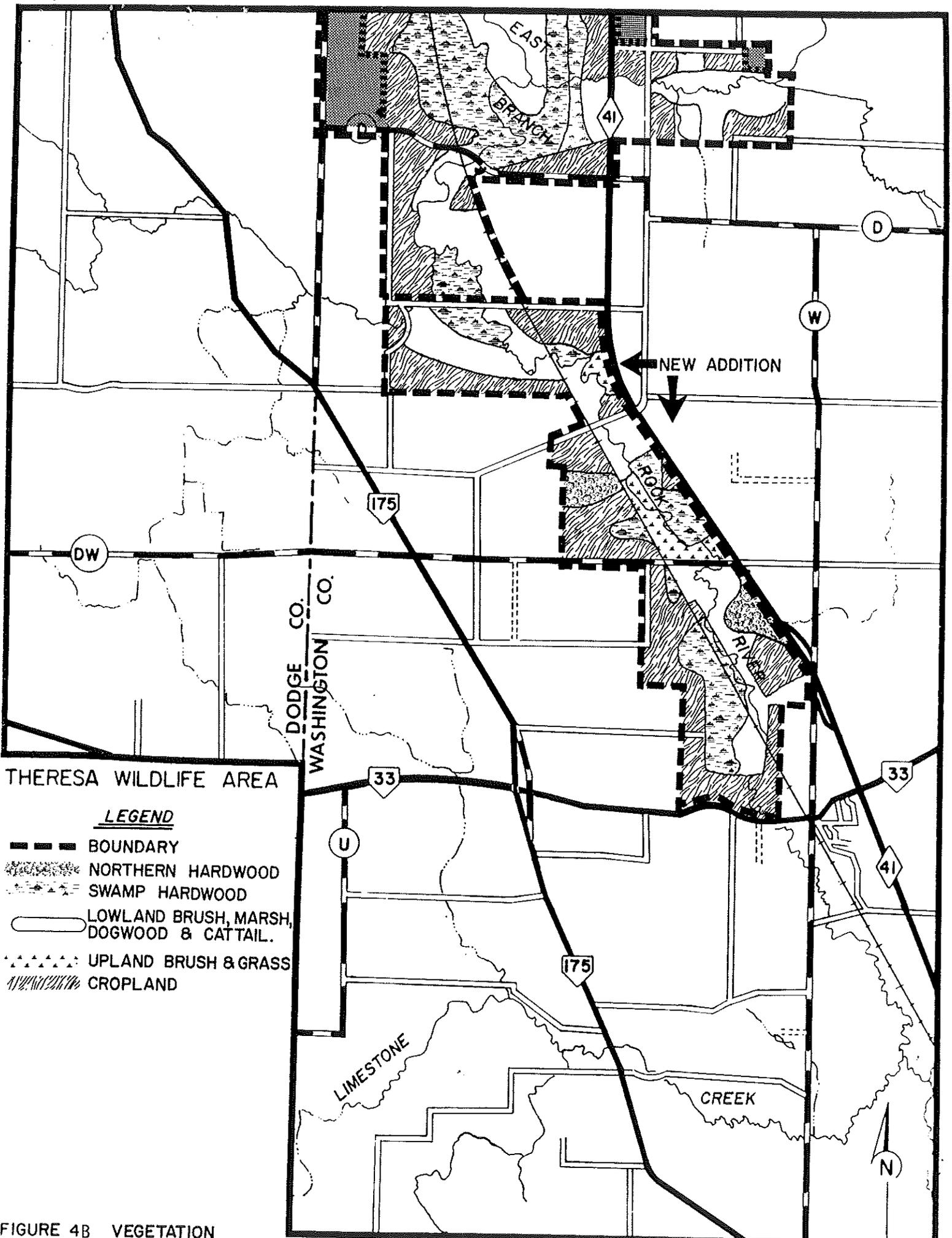


FIGURE 4B VEGETATION

Historical and Archaeological Features

The files of the Historic Preservation Division of Wisconsin's State Historical Society reference only one known archaeological site in the wildlife area; a prehistoric campsite located on the southwest bank of the east branch of the Rock River in the SW1/4 of Section 12, T12N, R17E.

It is possible that other sites may be present as no systematic survey for such sites has been conducted in the wildlife area. Prior to any major development in the area, the State Historical Society will be contacted to review such development plans for potential impact on archaeological material.

Land Use Potential

The original justification for initiation of this property remains its primary purpose today; a fish and wildlife management area. This primary use designation reflects the property's potential for fish and wildlife production through effective management of the basic resources contained therein.

MANAGEMENT PROBLEMS

Management problems associated with the Theresa Marsh Wildlife Area fall into 2 major categories: Resource Management Problems and Resource User Problems.

Resource Management Problems

Natural succession of vegetation from grass/sedge to cattail or to woody species is a continuous process in the shallow wetland areas of the property. This process is retarded through annual mowing or periodic ground disturbance within peatland subimpoundments and by flooding, burning, mechanical or chemical means in other areas.

Prescribed burning on a large scale presents some problems due to lack of fire control. Private inholdings or property lines which cross open marsh areas make creation of fire breaks extremely difficult. Further development of level ditches and subimpoundments will provide permanent firebreaks in wetland areas. If brush encroachment is not controlled, much of the marsh will eventually revert to a lowland hardwood swamp and thus seriously reduce the waterfowl production capabilities of the property.

Resource User Problems

Overuse during the opening day and the following two weekends of both pheasant and waterfowl seasons results in competitive hunter attitudes and related deterioration of hunting quality. Some form of hunter control may be necessary in the future as demand for hunting opportunity increases further. Heavy use invariably brings related problems of littering, vandalism to signs, buildings and structures, and illegal snowmobile, motorcycle, and off-road vehicle use.

In recent years, goose harvest on the wildlife area and on private lands immediately adjacent to the property has steadily increased. Harvest levels may no longer be compatible with the level of goose-use days. Some form of hunter control is necessary to control harvest and to reduce the high level of competition among hunters. Inclusion of this area within a controlled goose hunt quota zone would be the most logical measure of hunter and harvest control at this time.

Lands adjacent to the wildlife areas are very desirable as homesites. Subdevelopments next to wildlife areas create problems. Dogs and cats roam loose on the area disturbing wildlife populations, people over-run nesting cover, crops, and other fragile habitat, and the opportunity for game law violations and hunter-landowner conflict increases.

RECREATIONAL NEEDS AND JUSTIFICATION

The bulk of land and waters available to the public for hunting and inland fishing are found in other regions of the state (State Comprehensive Outdoor Recreation Plan, 1981). However, the wildlife area is located in that portion of the state with the highest population density (1980 population of Milwaukee, Waukesha, Ozaukee, and Washington Counties is approximately 1,400,000; Wisconsin Blue Book, 1981-82).

From surveys of known and projected population growth in this area, indications are that recreational demand on Theresa Marsh Wildlife Area and general urban influence on habitat and land use will greatly intensify in the future (Southeastern Wisconsin Regional Planning Commission). It is already evident that the present high cost of motor fuels is forcing a variety of users who normally bypass southeastern Wisconsin wildlife areas to recreate in the wildlife area and other properties in southeastern Wisconsin. Most authorities speculate that this trend will continue.

Many resource-related issues, including the slowing of habitat loss via purchase of long-term easement, habitat management on public land, protection of wetlands and water quality improvement have been identified by Wisconsin's Comprehensive Outdoor Recreation Plan. The management and development recommended for the wildlife area is compatible with that plan.

The management of Theresa Marsh Wildlife Area primarily addresses waterfowl and upland game needs. Management strategies identified in Wisconsin's Comprehensive Fish and Wildlife Management Plan designed to meet wildlife resource goals and objectives and which relate to the recommended management and development of the wildlife area include:

Geese - Identify and develop needed satellite areas throughout East Central Wisconsin. Identify management actions that will attract and hold geese on satellite areas. Assess controlled hunting techniques that will provide better hunting condition around high density goose concentration areas.

Ducks - Acquire and protect critical wetland habitat via wildlife areas. Continue use of state waterfowl stamp monies for developing, managing, preserving, restoring, and maintaining wetland habitat and for producing waterfowl and ecologically related species of wildlife. Complete acquisition, development, and maintenance, with emphasis on waterfowl production. Intensify management efforts to increase waterfowl production on state properties.

Pheasants - Implement a more effective system of stocking to discourage excessive hunting pressure. Release and harvest hens in marginal pheasant range. Identify and protect actual wetland and nesting habitat.

Individually and in concert, these strategies implemented in the overall management of the wildlife area contribute to satisfying hunter and recreational demand in Wisconsin.

ANALYSIS OF ALTERNATIVES

Based on the property's goals and objectives, public need, and the preceding assessment of the problems and capabilities, the major resource management alternatives for the Theresa Marsh Wildlife Area include:

1. Status Quo, with elimination of major development actions.
2. Reducing the scope of the entire property and associated development.
3. Enlarging the scope of the entire property associated developments.
4. Intensifying development.
5. Managing with a different species emphasis.
6. Reducing maintenance and patrol.

Status Quo

As is the case with any of our major wildlife areas, restricting management on Theresa Marsh to "as is" would not realize the full potential of the area as a waterfowl and upland game production area. Although major flowage development has been completed, additional waterfowl habitat development including level ditching, runoff ponds, potholes, and dense nesting cover is necessary to capitalize on the property's potential as a waterfowl area. Theresa Marsh has become a significant goose satellite area in southern Wisconsin and some of the proposed developments are planned with the objective of increasing goose use to the potential capacity of the property.

A major problem in wetland areas is natural plant succession to woody species with associated detrimental effects on waterfowl use. Allowing natural succession to proceed in the main flowage would negate, to a large extent, the acquisition and development efforts that have already been accomplished.

An additional consideration regarding this alternative is the ever increasing demand for recreational opportunities on our wildlife area, particularly near urban centers. The status quo alternative is not consistent with our desire to resolve this demand as identified in Wisconsin's Comprehensive Fish and Wildlife Plan.

Reducing Property and Management

The 'reduced-scope' alternative entails halting further acquisition efforts on the property, reducing the property boundary to existing state ownership, and confining our management activities to that land currently owned by the state. The end results of this action include subjecting much of the wetland corridor of the Rock River to other development which may not be consistent with wise wetland resource uses. Reducing the adequacy of a wildlife area to meet recreational demands in a region of high population density is likewise not in conformance with wise resource management.

A very realistic approach to development of Theresa Marsh has been recommended in this master plan. The need for the acquisition of key wetland and upland areas is recognized as well as the adjustment of property boundaries to exclude areas not essential to the property's goals and objectives. From this perspective, the alternative of "reducing the property" has been adopted in part.

Reducing the scope of the ultimate development of the resources identified herein would undermine the cost-effectiveness of the initial acquisition of the resource base. The development and maintenance proposals recommended in the master plan represent that level which complements initial acquisition yet remains consistent with goals and objectives.

Enlarge Property and Management

Recognition of the value of the wetland resource and its potential to help meet goals and objectives led to the recommendation to enlarge the property's boundary along the Rock River basin on the southern extremity of the wildlife area. Enlarging the property further to the south is precluded by the location of the Village of Allenton, and in other directions by the presence of either existing developments (including U.S. Highway 41) or high value agricultural property.

The scope of the proposed developments recommended for the property is consistent with resource capabilities. Further developments of property wetlands are not warranted.

More Intensive Development

Proposed and existing impoundments and flowages could be enlarged by increasing dike length and height. Although some additional benefit to wetland wildlife species would occur, costs would outweigh benefits. Dikes extending close to the Rock River would erode, as an existing dike is doing, as the river's meanders become more pronounced.

Additional nesting cover would be needed to complement additional flowages. Clearing wooded tracts would be necessary to greatly increase the amount of land available for nesting cover. This would destroy some of the area's diversity, decrease potential wood duck nesting areas, and would be cost prohibitive.

Additional parking lots are unneeded since this aspect of development is presently adequate. Hiking trails and ski trails are deemed unwise choices due to inadequate manpower for maintenance. Trails are probably unneeded since users make extensive use of the dike system for hiking. Skiers and hikers are free to break their own trails anywhere on the property.

A variety of developed and maintained trails for hiking, skiing, horseback riding, and snowmobiles are available on nearby Department properties and at many county and city parks.

Manage With a Different Species Emphasis

The only other major game species which has management potential at Theresa Marsh, and for which demand exceeds supply, is the ring-necked pheasant. Pheasant production is limited and stocking is hampered because of extensive floodable lowlands. Increasing the stocking rate would not increase the population, but would provide additional recreation. Crowding of hunters would increase since more people would be attracted. Crowding would be accentuated because many hunters would not utilize the lowland areas unless the distribution of stocked pheasants in wetlands were greatly increased or cover were managed to produce improved hunting cover. Lowland stocking would require the development of access roads through wetlands.

Crowding could be lessened by more frequent stocking with fewer birds released on each stocking date. If stocking frequency were doubled and pheasants were stocked 3 times per week, overall costs would approximately double.

Participant-days of hunting recreation could only be doubled if pheasants were well distributed over the entire property. A small number of additional small game licenses would be sold as a result of increased pheasant stocking on the area. Because more southeast Wisconsin residents would hunt on the area, instead of traveling to more distant hunting areas, energy would be conserved.

Less Property Maintenance and Patrol

Lowered patrol would result in increased property abuse. Wildlife would be disturbed frequently by off-road users and nesting habitat would be deteriorated. Predation by dogs and cats could also diminish production.

Lowered maintenance could worsen relations with nearby landowners. Complaints of vandalism and littering would become more common and reduced boundary posting would aggravate trespass problems. Local officials would apply political pressure for better area maintenance.

Nesting fields would become choked with brush, thus decreasing their production potential. The productivity of flowages would deteriorate when dikes and flowage structures were no longer able to impound extensive areas of water. Hunting and trapping opportunities would be greatly decreased and participant days would decline as habitat quality worsened. Less wetland wildlife would be produced and attracted for hunting, trapping, nature photography and observation, and other uses.

A considerable amount of public funds would be wasted if developments were allowed to deteriorate.

Recommended Alternatives

In summary, the recommended management and development section of this master plan proposes those actions which are considered appropriate to maximize the potential of the property to meet the goals and objectives as outlined. These actions include adjusting the property boundary and acreage goal; main pool and subimpoundment water regime management; wetland developments including additional level ditching, runoff ponds, and potholes; conducting prescribed burns and mechanical or chemical treatments in selected areas; sharecropping uplands; pheasant stocking; and general maintenance of user facilities.

3015L

APPENDIX
Review Comments

By: Dick Lindberg
Representing: Wild Resources Advisory Council
Date: October 30, 1984

The Wild Resources Advisory Council wishes to advise that this property contains no values within the scope of its interests. However, the Council would like to make the following suggestions for plan additions.

1. The plan for this property and Village of Theresa development plans should be coordinated to assure that municipal actions will not pose a threat to the wetland resource. A protective buffer zone, for example, could be established.
2. The plan should mention how the Department might go about improving water quality in the marsh. Meetings with upstream landowners (farmers) might be a good starting place.
3. Recommendations for the protection and management of nongame wildlife species, including threatened and endangered, should be a part of the plan. Again, the emphasis on huntable wildlife management is not fully acceptable.
4. If natural areas (SAPC definition) are present, they should be mentioned in the plan and protected by management decisions. If none are present, it would be helpful to say so.
5. A special caution on the use of chemicals (page 4) is recommended. Especially in that some of the chemicals mentioned may contain traces of DDT.

DNR RESPONSE: Most recommendations have been incorporated into the plan's text. No endangered or threatened species are known to be found on the property. Nongame benefits will occur as game habitat is managed. No specific nongame management need has been identified and "general" nongame management cannot be justified when property funding sources remain hunting and fishing license revenues. No potential natural areas exist on the property.

By: Forest Stearns
Representing: Scientific Areas Preservation Council
Date: November 7, 1984

We have reviewed the Theresa Wildlife Area Concept Master Plan and find that the property goals, objectives and proposed management do not affect our program interests.

By: Rick Julian
Representing: United States Fish and Wildlife Service
Date: October 22, 1984

Good to excellent plan. Additional long-term projection could be of value (maximum carrying capacity--desired) for the area. This would provide further direction for those to follow.

In regard to the planned hunting of hen pheasants, if the releases are to be on PR lands, the impacts of hen hunting will have to be documented (for resident birds). Some monitoring of the impacts on selected areas should also be conducted.

DNR RESPONSE: Only periodic monitoring through hunter interviews are conducted. Because wild hen pheasant densities are known to be limited (probably less than 40 on the entire property), losses have no significant impact on regional populations or future hunting opportunity on the wildlife area. To the contrary, hen shooting has increased the recreational opportunity for less cost and does not produce measurable impact on local populations.

By: Kurt W. Bauer
Representing: Southeastern Wisconsin Regional Planning Commission (SEWRPC)
Date: November 6, 1984
RE: SEWRPC No. CA-617-03

Pursuant to your letter request of September 10, 1984, the Commission staff has reviewed the preliminary draft of the Theresa Wildlife Area Master Plan as that plan affects areas in the Southeastern Wisconsin Region and offers the following comments for your consideration.

1. Under Commission adopted regional plans, it is recommended that the primary environmental corridors of the Region be preserved and protected in essentially natural open uses. As you know, such corridors are, in effect, a composite of the most important individual elements of the natural resource base and have immeasurable environmental and recreational value.

With respect to the Theresa Wildlife Area, under the Commission's adopted regional park and open space plan, it is recommended that the primary environmental corridor lands within the immediately adjacent to the existing Theresa Wildlife Area be protected and preserved through acquisition by the Wisconsin Department of Natural Resources. Thus, the acquisition of those lands located within the initial and proposed new Theresa Wildlife Area project boundary--which lands are generally located within the primary environmental corridor--would be in conformance with and would serve to implement the adopted regional plan.

The attached map (too large to be incorporated into this plan; on file with DNR) shows the initial Theresa Wildlife Area project boundary proposed to be retained in red and the lands proposed to be added to the Theresa Wildlife Area project boundary in pink. The attached map also shows the primary environmental corridors within the initial and proposed expansion of the project boundary in green. It is especially important to note that the Commission staff fully supports the expansion of the Theresa Wildlife Area project boundary to the south as proposed in the preliminary draft of the Theresa Wildlife Area master plan.

2. The preliminary draft of the Theresa Wildlife Area master plan also proposes the deletion of the land shown in orange on the attached map from the Theresa Wildlife Area project boundary. The Commission staff generally supports this recommendation. However, the Commission staff suggests that the primary environmental corridor lands located east of USH 41 in the southeast one-quarter of U.S. Public Land Survey Section 17 and the northeast one-quarter of Section 20, Township 12 North, Range 18 East, be considered for retention within the Theresa Wildlife Area project boundary. These primary environmental corridor lands--shown on the attached map in light blue--encompass an area about 60 acres in size and consist of wetlands and high value wildlife habitat.
3. The Commission staff has identified two areas of land adjacent to the proposed addition to the Theresa Wildlife Area project boundary which are located within the primary environmental corridor and suggests that these two environmental corridor areas be considered for inclusion in the project boundary. These areas are identified in dark blue on the attached map. The first area consists of a 20-acre wetland located on the southwest one-quarter of U.S. Public Land Survey Section 9 Township 11 North, Range 18 East. The second area consists of 55 acres of wetlands and high value wildlife habitat located in the southeast one-quarter of U.S. Public Land Survey Section 9 and the northeast one-quarter of Section 16, Township 11 North, Range 18 East.

It is important to recognize that the environmental corridor land proposed for consideration for inclusion in the Theresa Wildlife Area project boundary and identified in blue on the attached map should not be construed as a Commission recommended project boundary. It is only being requested that these areas be considered--along with other factors such as existing real property ownership boundaries, land acquisition costs, and wildlife management considerations--in the determination of a final project boundary.

4. The Commission staff has also noted that there are three large areas of land within the proposed Theresa Wildlife Area project boundary which are not located within the Commission identified primary environmental corridor. These lands are currently in agricultural use. The Commission staff recognizes that under the proposed management plan for the Theresa Wildlife Area, some of these lands will be utilized for wildlife management purposes, including lands for the provision of nesting cover and winter food sources for wildlife. However, the three areas identified in brown on the attached map appear to be large for such purposes, and therefore, the Commission staff suggests that the Department consider the deletion of such agricultural lands from the project boundary. Specifically, about 420 acres of agricultural lands in U.S. Public Land Survey Section 7, Township 12 North, Range 18 East; about 140 acres of agricultural lands in the west one-half of U.S. Public Land Survey Section 19, Township 12 North, Range 18 East; and about 150 acres of agricultural lands in the east one-half of U.S. Public Land Survey Section 5, Township 11 North, Range 18 East should be considered for deletion from the Theresa Wildlife Area project boundary.

In summary, the Commission staff recommended (DNR response shown last): 1) that the primary environmental corridor lands within the existing Theresa Wildlife Area project boundary and the proposed new addition to the Theresa Wildlife Area project boundary be acquired as recommended in the preliminary draft of the Theresa Wildlife Area master plan; 2) that those lands outside of the primary environmental corridor located east of USH 41 in U.S. Public Land Survey Sections 17 and 20, Township 12 North, Range 18 East, and those lands located west of the Soo Line railroad right-of-way in U.S. Public Land Survey Section 19 and 30, Township 12 North, Range 18 East, be deleted from the Theresa Wildlife Area project boundary as recommended in the preliminary draft of the Theresa Wildlife Area master plan; 3) that two areas of primary environmental corridor land located immediately adjacent to the proposed Theresa Wildlife Area project boundaries be considered for inclusion in the new project boundary; and 4) that three large areas of agricultural lands be deleted from the proposed Theresa Wildlife Area project boundaries.

Finally, we might note that the Allenton Sanitary District in the Town of Addison has recently completed a sewerage facilities plan that recommends the construction of a new sewage treatment plant. One of the plan sites

under consideration lies within the proposed Theresa Wildlife Area project boundary just north of STH 33. You may wish to discuss this matter with representatives of the Sanitary District. The appropriate contact person is Mr. La Mont Albers Superintendent of Public Works - Allenton Sanitary District at 414-629-5761.

The Commission staff appreciates the opportunity to review the preliminary draft of the Theresa Wildlife Area master plan and trusts that the foregoing comments will be helpful to you. Should you have questions on the enclosed comments or wish to discuss any of the Commission staff recommendations in detail, please do not hesitate to contact us.

DNR RESPONSE: The SEWRPC review was very thorough and appreciated by the Department. The local Wildlife Manager will coordinate planning with the Allenton Sanitary District as suggested. The support for the basic plan is acknowledged. However, the Department cannot support the recommended additions and deletions for the following reasons:

1. Statewide land acquisition ceilings prevent the agency from expanding purchasing without acreage trade-offs.
2. The lands not included in the new boundary would not add significant contributions to the proposed objectives.
3. The agricultural land is necessary for wildlife production. Without these uplands, the wetland management regime will not serve its intended purpose.
4. Wetland zoning protection should provide adequate protection of that critical habitat type without DNR ownership.
5. State payment in lieu of taxes insures minimal impact on the local tax base.

By: Stanley A. Nichols
Representing: Wisconsin Geological and Natural History Survey
Date: November 5, 1984

Excellent plan. No significant comment

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ENVIRONMENTAL ASSESSMENT

SEP 16 1983

Applicant: WDNR - SED Wildlife Management

Title of Proposal: Theresa Marsh Wildlife Area Master Plan

Location: County - Washington	County - Dodge
Political Town - Wayne	Political Town - Theresa
Township 12N, Range 18E	Township 12N, Range 17E
Section(s) - 7, 17, 18, 19, 20, 28, 29, 30, 31, 32	Section(s) - 1, 2, 11, 12, 13, 14
Political Town - Addison	Political Town - Lomira
Township 11N, Range 18E	Township 12N, Range 17E
Section(s) - 4, 5, 6, 9, 16	Section(s) - 35, 36

PROJECT SUMMARY

1. General Description (brief overview)

As described in the Conceptual Phase of the Theresa Marsh Wildlife Area, the Wisconsin Department of Natural Resources proposes to manage a state-owned wildlife area for waterfowl production, seasonal goose use, and to provide public hunting, fishing, and trapping as well as accommodate other compatible recreational activities as land acquisition of approximately 1200 acres through fee or easement acquisition within a revised property boundary (see the accompanying ownership map for details of the proposed revisions to the property boundary); development of 7 runoff ponds totalling approximately 40 acres through the construction of some 5000 feet of dike; development of 20 to 25 excavated pair ponds; development of 2 to 3 miles of level ditching, sharecropping nearly 1000 acres through conventional farming techniques to provide diversity in nesting cover, food patches, and hunting cover, management of wetland vegetation through drawdown and flooding on nearly 2000 acres; treatment of undesirable brush on selected sites through burning, mechanical, or chemical control; conducting selective cutting on wooded areas to improve wildlife habitat; maintenance of roads, parking areas, and informational and regulatory posting; maintenance of water control structures and dikes; stocking of pheasants and certain fish species to supplement local populations.

2. Purpose and Need (include history and background as appropriate)

Approval was granted for acquisition and development of this wildlife area by the Wisconsin Conservation Commission in 1948. By the late 1960's, nearly 5,000 acres had been purchased and by 1968, a mile long dike was constructed on the Rock River near Theresa Station which created a 1,500 acre flowage. Subsequent development provided for sub-impoundments on peat lands totalling 135 acres, three runoff ponds totalling nearly 20 acres and nine runoff ponds which collect surface runoff water. Two refuges were established on the wildlife area to provide feeding and resting areas for waterfowl.

These developments coupled with management of the adjacent uplands for wildlife food and cover resulted in greatly increased use by waterfowl. Subsequently, hunting opportunity increased on the wildlife area and continues to increase with the level of development.

The bulk of land and waters available to the public for hunting, inland fishing, and other outdoor recreational pursuits are found in other regions of the state. However, the wildlife area is located in that portion of the state with the highest population. From surveys of known and projected population growth in the area, indications are that in the future recreational demands on the Theresa Marsh Wildlife Area and general influence on habitat and land use will greatly intensify. Many resource related issues, including the reduction of habitat loss via purchase or long term easement, habitat management on public land, protection of wetlands and water quality improvement, have been identified by Wisconsin's Comprehensive Outdoor Recreation Plan. The management and development recommended by the conceptual phase of the Theresa Marsh Wildlife Area Master Plan is compatible with this plan. Similarly, the Master Plan is compatible with the needs recognized in the Strategic Plan of the Comprehensive Fish and Wildlife Management Planning System as continued acquisition, development and management of the area as proposed will help meet the goals outlined therein.

A further indication of the purpose and need for the actions addressed by the Master Plan is recognition that Wisconsin's Southeastern Regional Planning Commission's recommendations regarding natural resources management in this area are compatible with the goals, objectives, and additional benefits described by the Master Plan.

3. Authorities and Approvals (list statutory authority and other relevant local, state, and federal permits on approvals required)

The master planning process is authorized by Wisconsin Administrative Code NR 1.415. Applicable Wisconsin Statutes governing

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