

LEGEND

- | | | |
|------------------------|--------------|-------------------------------|
| Portland Cement | U.S. & STATE | Civil Town Boundary |
| Bitum Concrete | COUNTY | Corporate Limits |
| Bituminous | | Nat. B. State Forests |
| Gravel | | Airport |
| Earth | | Fish Hatchery |
| Town Road | | Game Farm |
| Fire Lane | | County Seat |
| Multilane Divided | | Unincorp. Village |
| Freeway | | Schools |
| Interchange | | Public Hunt or Fish, Gids. |
| Highway Station | | Hospital |
| Interstate Highway No. | | Ranger Station |
| U.S. Highway No. | | Public Camp & Picnic Grs. |
| State Highway No. | | State Park...with Campsites |
| County Hwy. Letter | | without Campsites |
| Railroad | | County Park...with Facilities |
| Don | | without Facilities |
| State Boundary | | Wayside...with Facilities |
| County Boundary | | without Facilities |
| | | Wisconsin State University |
| | | Vet. Mental Health Inst. |
| | | Vinc. Cong. Cor. Inst. |



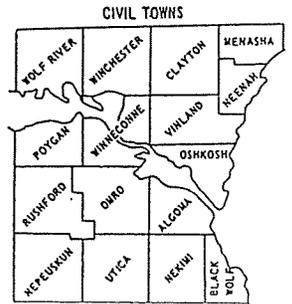
MILES OF HIGHWAY
as of Jan. 1, 1981

STATE	169
COUNTY	253
LOCAL ROADS	951
OTHER ROADS	3
TOTAL FOR COUNTY	1376

TOWNSHIP NUMBERING

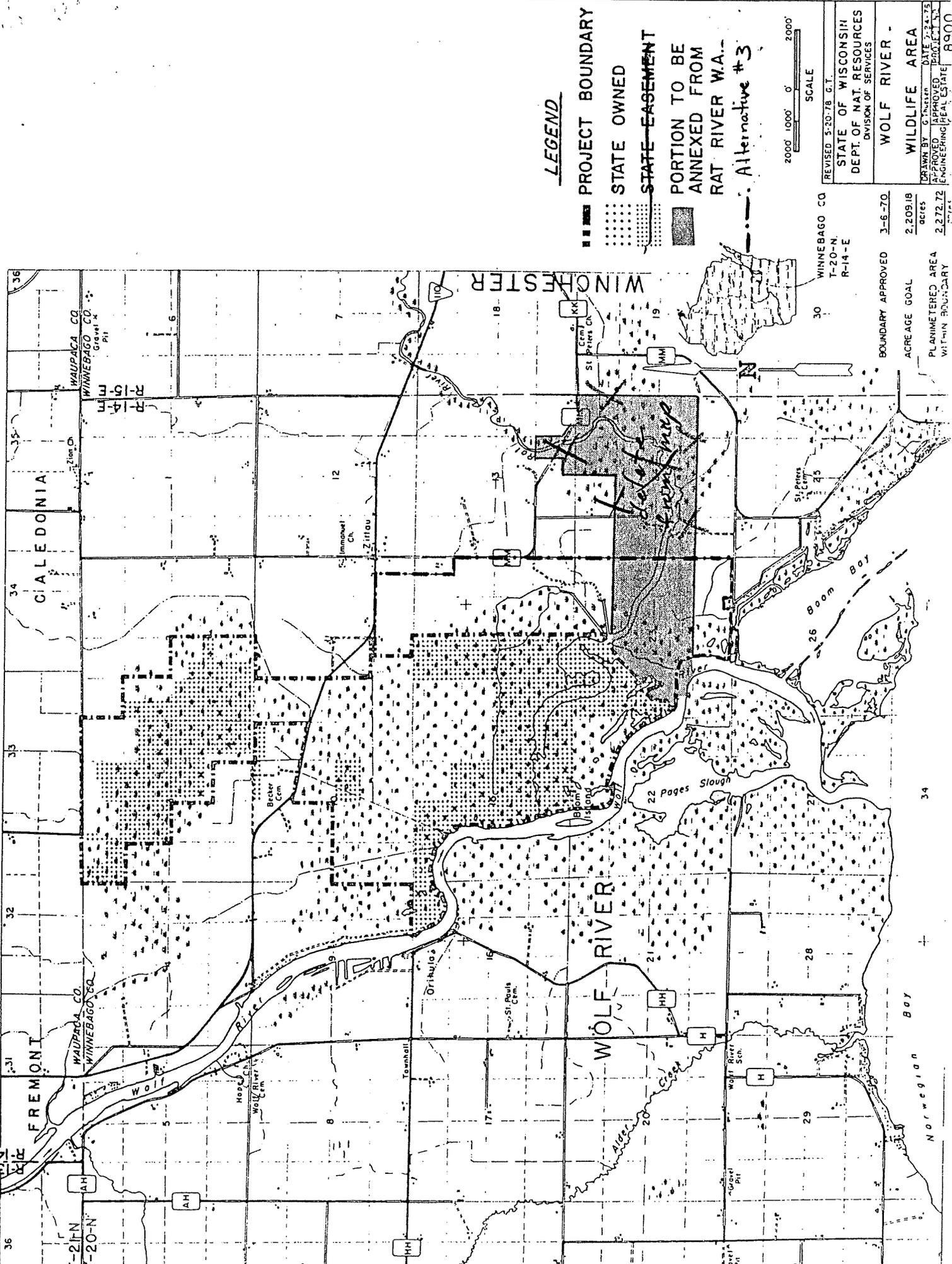
6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

Land Area 131 Sq. Mi.
Population 131,312
County Seat Oshkosh



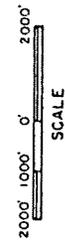
WINNEBAGO CO.
DEPARTMENT OF TRANSPORTATION

STATE OFFICE BUILDING
Milton, Wisconsin
SCALE 1" = 3 MILES
Corrected for
JAN. 1984
Compiled from U.S.G.S. Quads
Based on Aerial Photographs



LEGEND

- ■ ■ ■ PROJECT BOUNDARY
- ● ● ● STATE OWNED
- ▨ ▨ ▨ ▨ STATE EASEMENT
- ▩ PORTION TO BE ANNEXED FROM RAT RIVER W.A. - Alternative #3



REVISED 5-20-78 G.T.
STATE OF WISCONSIN DEPT. OF NAT. RESOURCES DIVISION OF SERVICES
WOLF RIVER -
WILDLIFE AREA
DRAWN BY G. HANSEN DATE 7-24-73
APPROVED [Signature] 10-1-73
ENGINEERING REAL ESTATE 890

WINNEBAGO CO
T-20-N
R-14-E

BOUNDARY APPROVED 3-6-70

ACREAGE GOAL 2,209.18 ACRES

PLANNED AREA WITHIN BOUNDARY 2,272.72 ACRES

36 35 34 33 32 31 30

WINCHESTER

WAUPACA CO
WINNEBAGO CO

R-14-E

CLAYTON

Immanuel Ck
Zittou

Becker Ck
St. Peter Ck

Wolf River

Pages Slough

Boom Bay

22

26

30

WAUPACA CO
WINNEBAGO CO

FREMONT

WAUPACA CO
WINNEBAGO CO

T-20-N
R-14-E

36 35 34 33 32 31 30

12 18 19 20 21 22 23 24 25 26 27 28 29 30

Wolf River Sch

Norwegian Bay

TABLE OF CONTENTS

SECTION I - ACTIONS

Goal, Objectives, and other benefits
Recommended Management

SECTION II - SUPPORT DATA

Background Information
Analysis of Alternatives
Agency and Advisory Group Comments

SECTION I - ACTIONS

GOALS, OBJECTIVES AND OTHER BENEFITS

Goal:

To manage a state-owned wildlife area for public hunting, trapping, fishing, and to preserve wetland and fish spawning habitats as well as accommodate compatible recreational and educational activities.

Annual Objectives:

Provide 1100 participant days of hunting, trapping, and fishing opportunities as follows:

<u>Activity</u>	<u>Participant-Days</u>
Deer (gun and bow)	200
Pheasant	50
Waterfowl	500
Furbearers	100
Warmwater fishing	250

Annual Additional Benefits:

1. Provide 100 participant-days of other recreation and education including hiking, boating, cross-country skiing, snowshoeing and nature observation.

2. Provide habitat for resident and migratory wildlife, including migratory endangered and threatened species.
3. Protect important fish spawning areas adjacent to the Rat and Wolf Rivers.
4. Provide small volume timber or fuelwood sales when consistent with the other property objectives.

RECOMMENDED MANAGEMENT

(Figure 2A & 2B)

Wildlife production and habitat preservation will remain as the primary objectives with hunting being the principle participant use. The entire property is classified as a Fish and Wildlife Management Area (RD2).

The Deltox Marsh, which lies north of STH 110 has had no wildlife related development initiated yet but does have a series of ditches that either border the property or run through a small portion of it. These ditches, which eventually run into the Wolf River, may provide a water source for some potential small flowages. There is potential for several shallow dug ponds or small flowages because of the shallow organic soils unlayed by a clay substrate. These areas will provide puddle duck pair territories, broodwater and resting areas for spring and fall

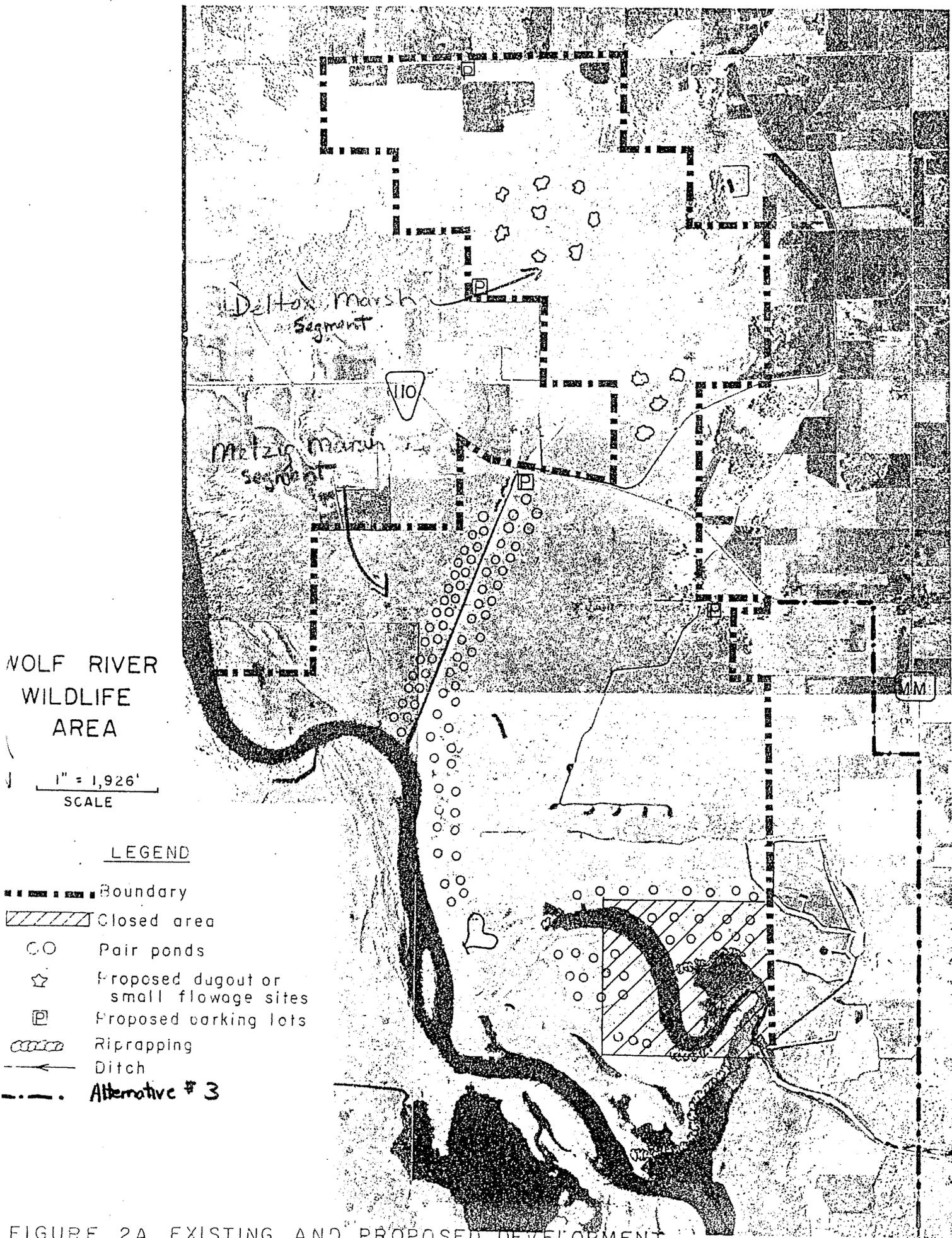


FIGURE 2A EXISTING AND PROPOSED DEVELOPMENT

WOLF RIVER WILDLIFE AREA

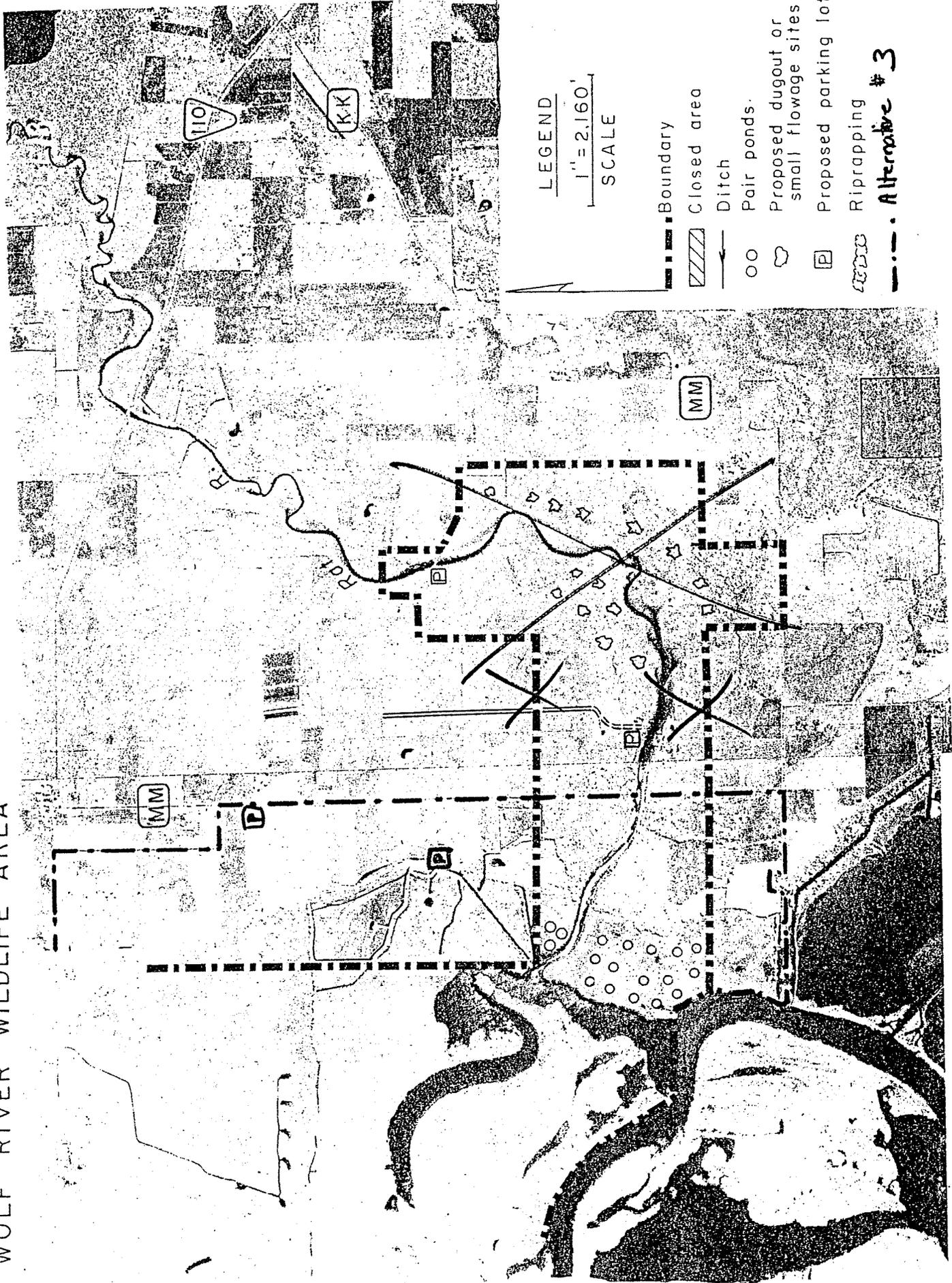


FIGURE 2 B EXISTING AND PROPOSED DEVELOPMENT

migrants. The dominant canary grass cover type should be converted to a higher quality grass for nest cover on drier sites while other sites will be converted to a shrub-forb complex for greater type diversity and hunting cover. Higher ground should be sharecropped on a rotational basis for winter food and cover for small game. Two parking lots should be built to facilitate public access.

Metzig Marsh, which lies south of STH 110, has had some wildlife development completed prior to state ownership. This consists of a series of six potholes connected to a ditch system. An additional 100 pair ponds could be added to this area by digging them mechanically or by blasting them. A few ponds would be dug and evaluated for their use by waterfowl before the remainder would be dug. Fewer but larger shallow scrapes (2-3 acres) could be excavated instead of pair ponds. There may be the potential of a small flowage west of the current closed area. Both these projects should increase waterfowl and muskrat production on the property. The potential for improved nesting cover is limited due to poorly drained soils and spring flooding. Drier areas could be improved for nesting by periodic burning, whereas the wet areas will remain a shrub-carr complex that will provide winter deer and pheasant cover. A closed area of 180 acres presently exists in the Metzig Marsh. This closed area should be evaluated to see if it is providing any value to waterfowl. If it is not, it should be eliminated. A number of wood duck houses could be erected and maintained in the narrow hardwood stands

that exist near the river. These hardwood stands could provide wood for small fuelwood sales but access would be limited to winters when good ice conditions exist. Development of two parking lots are planned to facilitate public access.

Two hundred eighty two acres at the mouth of the Rat River that is currently within the acquisition boundary of the Rat River Wildlife Area as well as 460 acres east of the current Wolf River Wildlife Area boundary, could be added to the project. This is being suggested because the preservation of the wetlands for waterfowl and fish spawning habitat more closely aligns itself with objectives of the Wolf River Wildlife Area. Control of this area will reduce the threat of habitat destruction due to intensive farming or residential development, and will provide more public land for hunting and trapping. The potential for pothole development exists in the wetlands of this area. Two parking lots are proposed to facilitate public access. The existing agricultural fields should be converted to nesting cover or maintained to provide winter food. The Northern Hardwood stands should be managed to provide optimum wildlife habitat. There is the potential of using commercial timber sales or fuelwood sales to accomplish this.

No endangered or threatened species are known to exist on the property although a group of Forsters Tern made an unsuccessful attempt to nest about one mile south of the property boundary. These birds apparently came from the well established colony in

Lake Poygan. Due to lack of appropriate habitat and the problem of predation any attempt to help establish a colony on the Wolf River should be fully evaluated. Before any developmental projects are initiated, the site will be further examined for the presence of endangered or threatened species and if found, the Bureau of Endangered Resources will be consulted. Additional property objectives may be developed in the future to encourage the use of the property by endangered and threatened species such as the Forsters Tern.

All areas of future development will also be investigated for the presence of historical or archaeological sites. Should any sites be found, the State Historical Preservation Office will be consulted.

SECTION II SUPPORT DATA

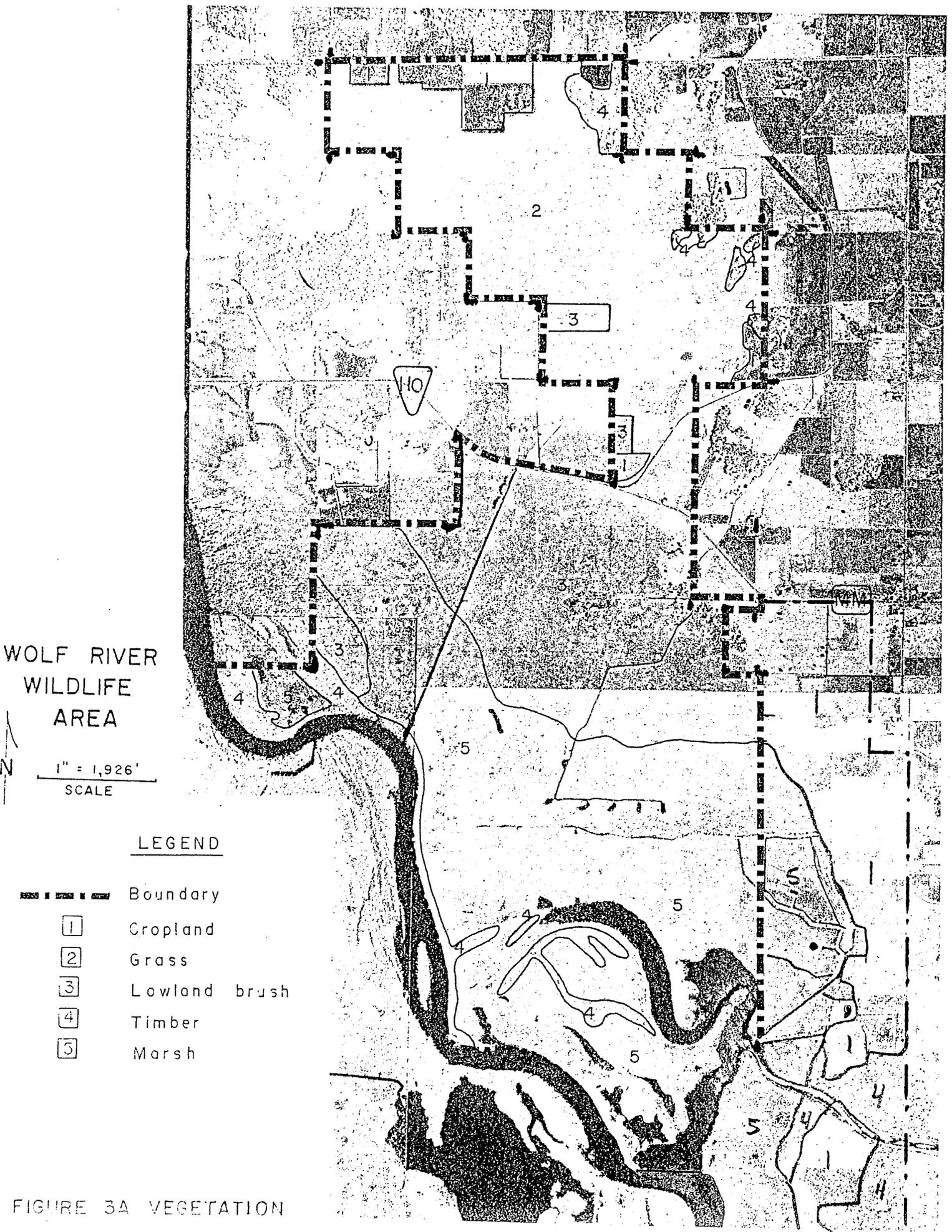
BACKGROUND INFORMATION

Physical Setting: (Figure 1) The Wolf River Wildlife Area is located in Northwest Winnebago County in the Town of Wolf River. STH 110 bisects the property, dividing it into the two segments. The Village of Zittau is one mile east on STH 110. It is a wetlands area associated with the confluence of the Wolf and Rat Rivers. The entire property is part of a poorly drained depression with slopes from 0 to 2%. It has imperfect drainage by means of a ditch system running south into the Wolf River.

Vegetation: (Figure 3A & B) The Deltox Marsh segment was once a wire grass marsh that was important in the local rug industry but has now converted to a canary grass and sedge marsh with scattered stands of willow. The Metzsig Marsh segment consists of a lowland brush and grass complex (shrub-carr) with cattail in the wetter sites. Stands of soft maple and brush occupy narrow ridges of alluvial deposits along the Wolf River channel and along old oxbows where sediments were deposited in the past. Spoil banks along the excavated ditches also have maple, willow and tag alder growing on them. Uplands are used primarily for agriculture though a portion is covered by oak-hickory-aspen woodlots.

<u>Vegetation</u>	<u>Acres</u>
Grass	595.9
Lowland Brush	518.6
Cattail Marsh	1186.0
Agricultural Land	186.4
Timber	289.9
Water	<u>112.0</u>
	2888.8

Soils: The soils of Winnebago County were, for the most part deposited by glaciers. The major soil type throughout the property is Houghton, Willette muck. This type is nearly flat, very poorly drained organic material with depths from 16 to more



WOLF RIVER
WILDLIFE
AREA

1" = 1,926'
SCALE

LEGEND

- Boundary
- 1 Cropland
- 2 Grass
- 3 Lowland brush
- 4 Timber
- 5 Marsh

FIGURE 3A VEGETATION

WOLF RIVER WILDLIFE AREA



FIGURE 3B VEGETATION

than 51 inches. Substratum is made up of clayey or loamy deposits. The higher ground consists of a Zittau-Poy type. These are somewhat poorly drained, level to gently sloping soils that have a clayey subsoil underlain by sandy material.

History: Activity on the Wolf River Wildlife Area began in 1947 with the leasing of 441 acres from the Deltox Rug Company for public hunting. This continued until 1968 when the land was purchased. At that time, it was felt that this tract could be a nucleus of a wildlife area with good potential for ducks, geese, and pheasants. The major development effort was to be a diked impoundment which would flood the wetland type using a lift pump and the nearby Wolf River as a water source. Because of costs, small size and scattered ownership this was never accomplished. Principle uses have continued to be deer and pheasant hunting. Some sharecropping is conducted annually to provide wildlife food patches. Developments on the Metzsig Marsh segment include 1 1/2 miles of level ditching and six potholes dug by the Wings Inn Hunting Club prior to DNR acquisition in 1978 and 7300 feet of rock rip-rapping done by DNR in 1972 to protect eroding wetlands along the river and slough channels.

Current Activities: Current activities on the Wolf River Wildlife Area are quite limited. Occasional pheasant stocking takes place on the Deltox Marsh and the 180 acre closed area on the Metzsig Marsh is maintained. The 7300 feet of riprap that was constructed in 1972 to stabilize the shoreline is monitored to

see if any maintenance capping is necessary. Fall hunter use surveys are conducted to determine levels of deer, waterfowl and pheasant hunting. Limited marsh hay cutting is allowed on Deltox.

Management Problems: Because the property as a whole does not receive a great deal of hunting or trapping pressure, human related problems are not a major concern at this time. The possible exception to this would be occasional crowding of duck hunters near and illegal entry into the closed area.

Lack of access is probably the biggest human related problem. The vast majority of the property is landlocked by private property. This problem was partially alleviated in 1984 by the leasing of some road frontage property on the north side of STH 110 and on Marsh Road located on the north end of Deltox Marsh through the accelerated lease program. These contracts are automatically renewed annually unless otherwise notified by the lessee.

Flowage development potential is limited because of the flatness of the property and the excessive peat depths in certain locations. Any diked flowage would probably have to be completely surrounded by a dike which would make the cost prohibitive. Any excavation on Deltox Marsh could probably be done during the dry part of the summer, but on Metzsig Marsh, work would be limited to frozen conditions.

AN ANALYSIS OF ALTERNATIVES

1. Status Quo: (Figure 4A) This alternative would retain the Wolf River Wildlife Area as is. No modification in the acreage goal of 2299.45 acres or addition of the lower Rat River would take place.

Currently 441.17 acres are under fee title on the Deltox Marsh segment with 268.55 acres remaining to be purchased. If the remaining acreage is purchased, it will provide more upland for sharecropping and nesting cover, better blocking for posting and provide secure access on the north end of the property.

Currently 1178.35 acres are under fee title on the Metzsig Marsh segment with 411.06 acres remaining to be purchased. This acreage will provide more marsh for potential development, better blocking of the boundary and better access to STH 110.

This alternative will provide all existing property objectives but will not provide for the added upland habitat benefits, or spawning marsh protection that the recommended alternative would.

WOLF RIVER WILDLIFE AREA



1" = 1,926'
SCALE

LEGEND

- Boundary
- State owned
- Delete

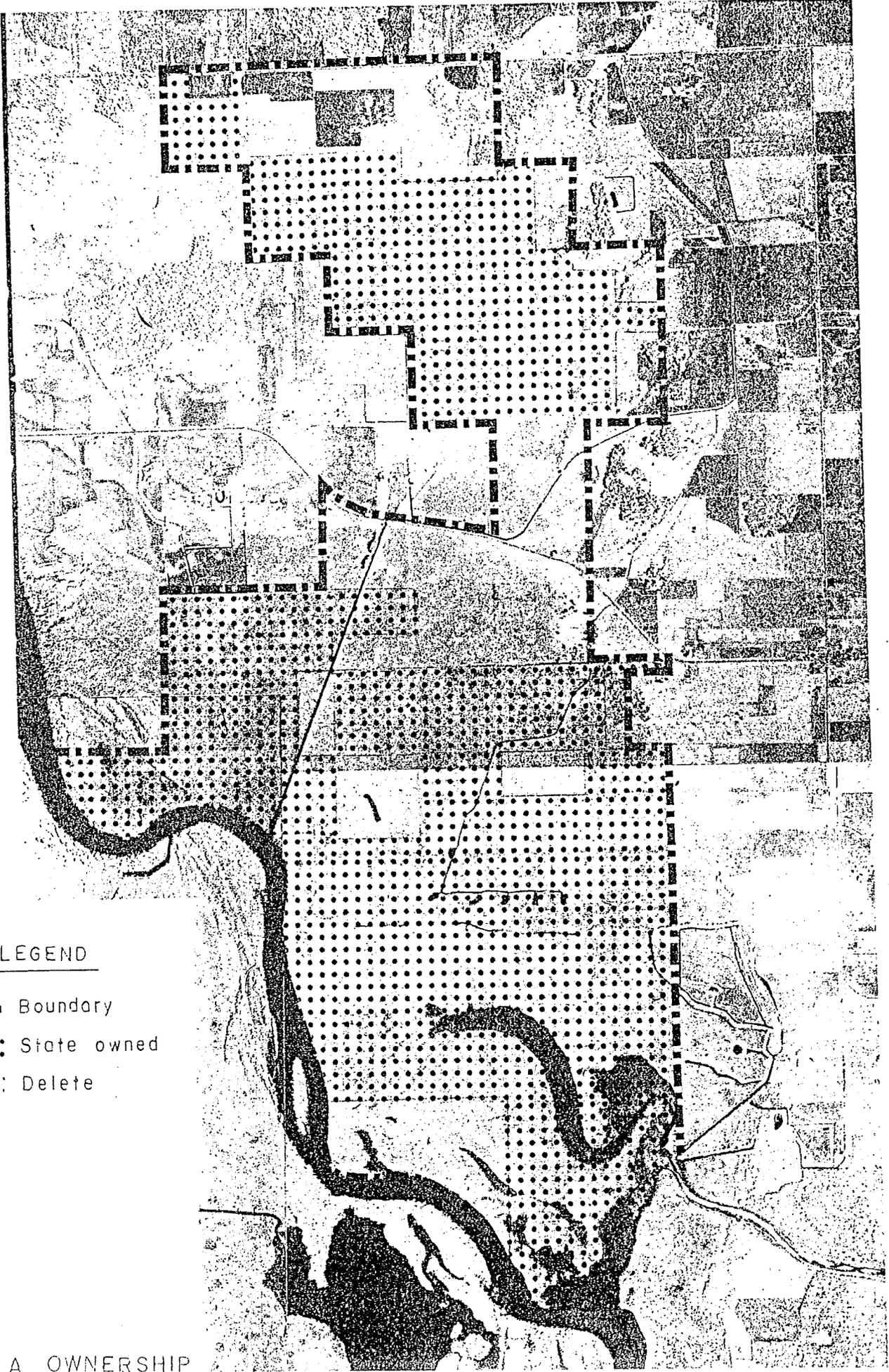


FIGURE 4A OWNERSHIP
Alternative 1

2. Annex Rat River Section: (Figure 4B) The goal for Deltox and Metzsig Marshes would remain the same but a total of 639.4 acres, of which 103 acres are already under fee title, would be added to the project. This would provide control for the preservation of additional fish spawning and waterfowl habitat, provide some uplands for sharecropping or DNC, and provide better access from So. Zittau Road and Rat River Lane. This would make the total project 2938.85 acres.

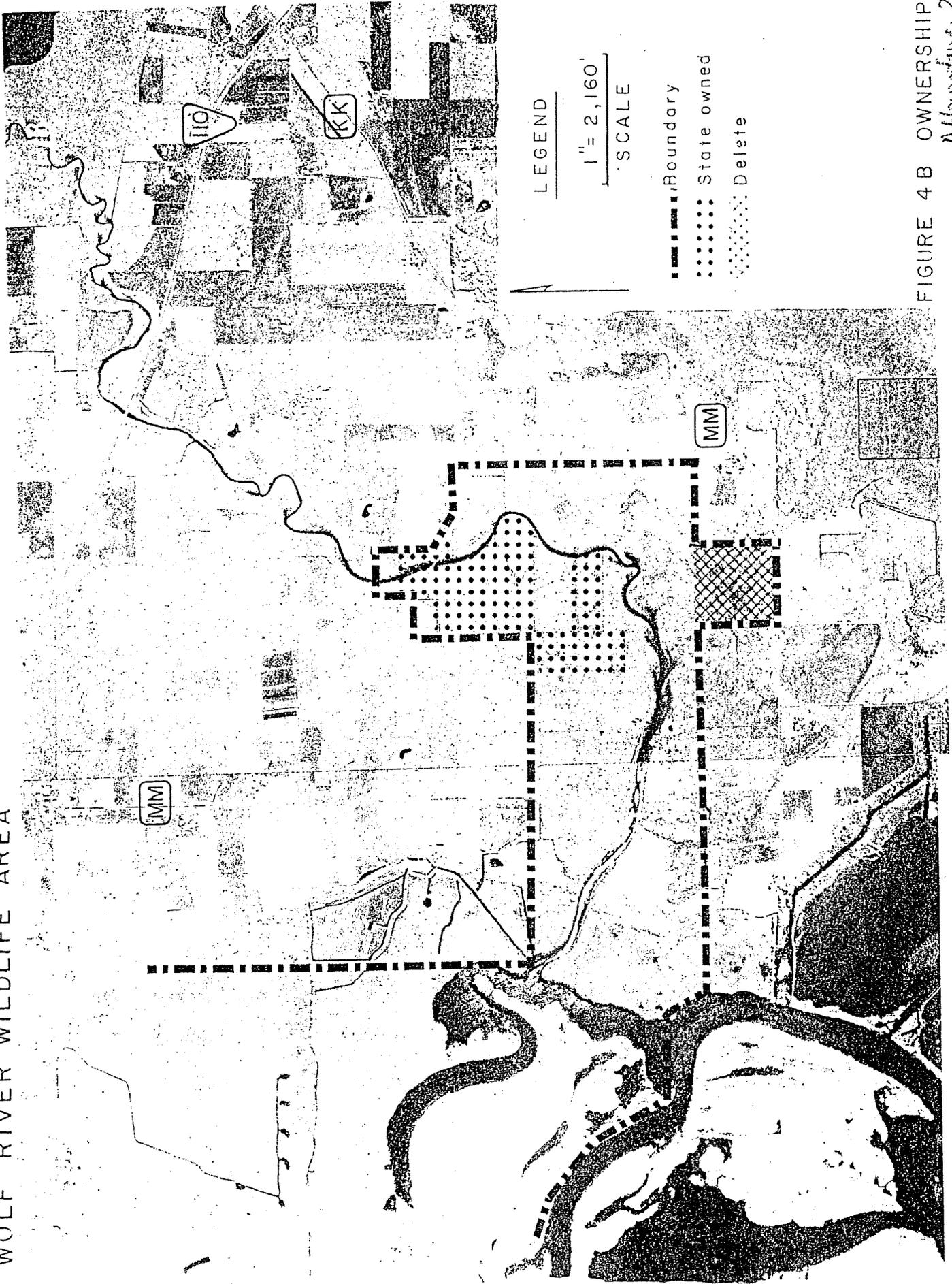
This was the alternative that was originally considered to be the best course of action. We now consider alternative 3 to be the most appropriate.

3. Expand Project to the East (Figure 5): -Recommended Alternative- Add 742 acres to the existing Wolf River Wildlife Area acreage goal of 2299.45 to make a total of 3041.45. Two hundred eighty two acres of this will come from the portion annexed from the Rat River Wildlife Area, and 460 acres will come from property outside any previously approved acquisition boundary.

This action will add 361 acres of badly needed uplands adjacent to duck breeding and brood habitats that can be developed as duck nesting habitat. The added uplands will also provide habitat for a variety of upland game and nongame species.

This action will also add 169 acres of developed marsh as well as

WOLF RIVER WILDLIFE AREA



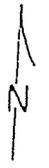
LEGEND

1" = 2,160'
SCALE

- Boundary
- State owned
- Delete

FIGURE 4 B OWNERSHIP
Alternative 2

WOLF RIVER
WILDLIFE
AREA



1" = 1,926'
SCALE

LEGEND

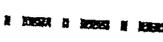
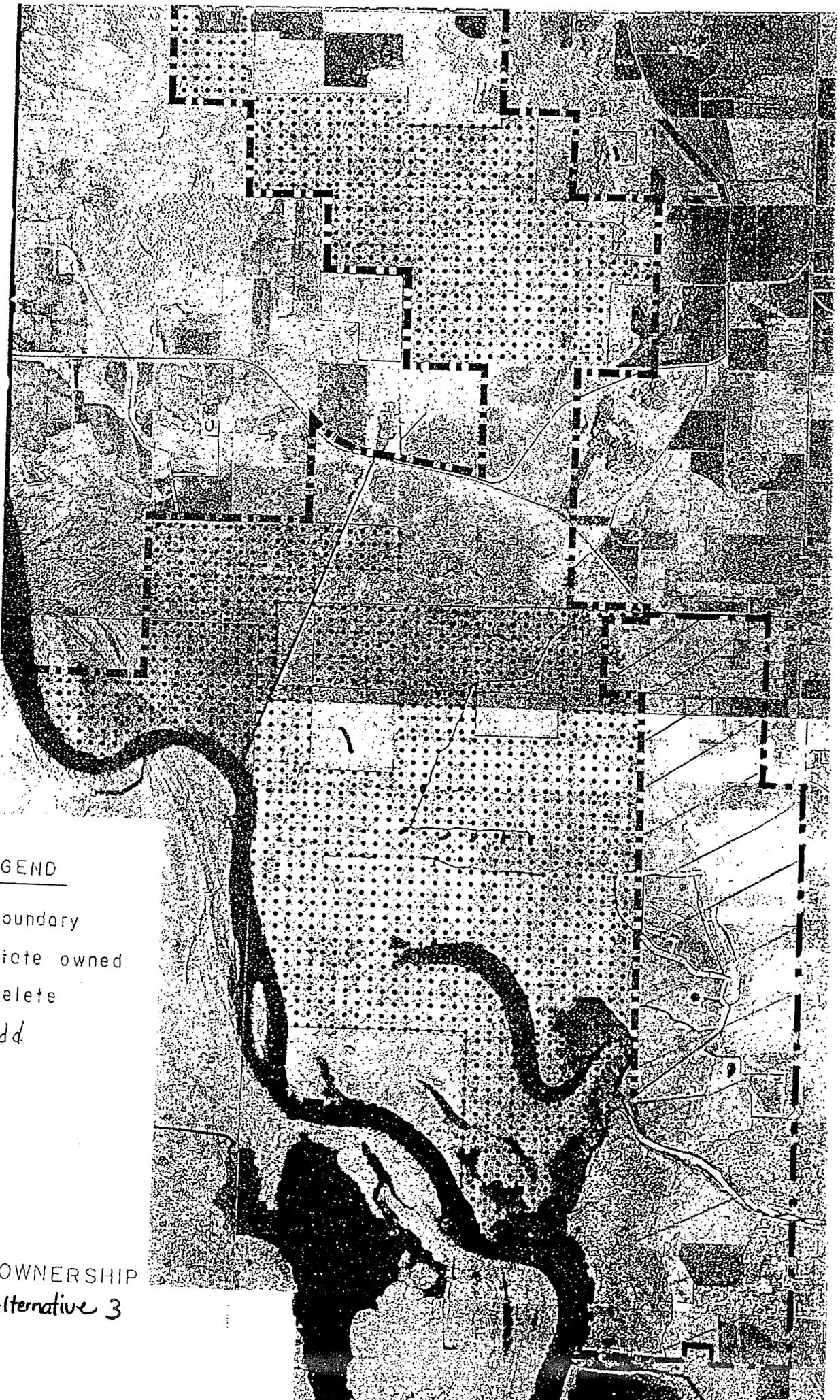
-  Boundary
-  Site owned
-  Delete
-  Add

FIGURE 5 OWNERSHIP
Alternative 3



107 acres of undeveloped marsh to the project. The privately developed marsh is currently being managed to produce ducks and furbearers and will compliment the existing state-owned marsh. The undeveloped marsh is adjacent to the mouth of the Wolf River and is needed to preserve fish spawning and waterfowl habitat.

This alternative will also provide blocking to facilitate posting as well as provide public access.

The combined effect of adding acreage outside the existing Wolf River Wildlife Area boundary to a portion of the Rat River annex will result in an increase of 102.6 acres over Alternative 2. This action will provide the greatest wildlife and fisheries benefit because it keys in on the critical habitat types needed for management and better meets property objectives and public needs. There are 103 acres of DNR ownership within the unneeded portion of the Rat River Annex that can be declared excess property and utilized for trade or direct sale.

Should this alternative be approved, the annual objectives should be increased to reflect the additional opportunities available.

4. Reduce Project Size: There are a variety of ways this could be accomplished:
 - A. Maintain existing ownership but eliminate any further acquisition. This will eliminate any sharecropping or dense

nesting cover on Delttox as well as restrict access and hunting opportunity. On Metzsig Marsh, it will reduce the potential of marsh development and reduce access and hunting opportunity.

- B. Maintain Metzsig Marsh acquisition goals but eliminate Delttox Marsh. This will add some marsh land that could be developed but will eliminate an area that has been available for public hunting since 1947, and some shallow excavated pond sites.
 - C. Add expansion of Metzsig Marsh to the east but eliminate Delttox Marsh. This will add badly needed uplands for dense nesting cover but will create the same problems as in "B" above.
5. Eliminate Project: Use acre allocation to gain uplands on the Rat River Wildlife Area or other projects within the Oshkosh area that might be considered of higher value.

Although this property has had little development on it in the past, its history of public use goes back 40 years. The addition of the upland for dense nesting cover will provide the missing ingredient that could turn this property into a duck and pheasant producing area as well as an area that provides badly needed public access. This alternative should not be considered unless all other avenues of acquisition on other properties is exhausted.

