

STATE OF WISCONSIN  
DEPARTMENT OF NATURAL RESOURCES  
Madison, Wisconsin

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OCT 8 1980  
BUREAU OF  
REAL ESTATE

ITEM RECOMMENDED FOR NATURAL RESOURCES BOARD AGENDA

TO THE SECRETARY:

Date October 6, 1980

FROM: John M. Keener

SUBJECT: MASTER PLANNING - Approval of conceptual master plan for the Colburn Wildlife Area, Adams County.

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

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

3. Reference materials to be used:  
Memorandum dated October 6, 1980 from John M. Keener to Anthony S. Earl.  
Colburn Wildlife Area Master Plan (Concept Element).

4. Summary:  
The Concept Element of the Master Plan has been developed for the Colburn Wildlife Area, Adams County. The Department proposes to manage the property to improve and maintain fish and wildlife habitat, game and nongame, and their populations as well as to provide an opportunity for harvest in such a manner that the primary wildlife values will not be reduced.

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

APPROVED:

C. D. Besadny 10-8-80  
C. D. Besadny, Administrator Date

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

Anthony S. Earl  
Secretary Date

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

Signed:

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

# CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: October 6, 1980

File Ref: 2300

To: Anthony S. Earl

From: John M. Keener *gmK*

Subject: Colburn 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 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.

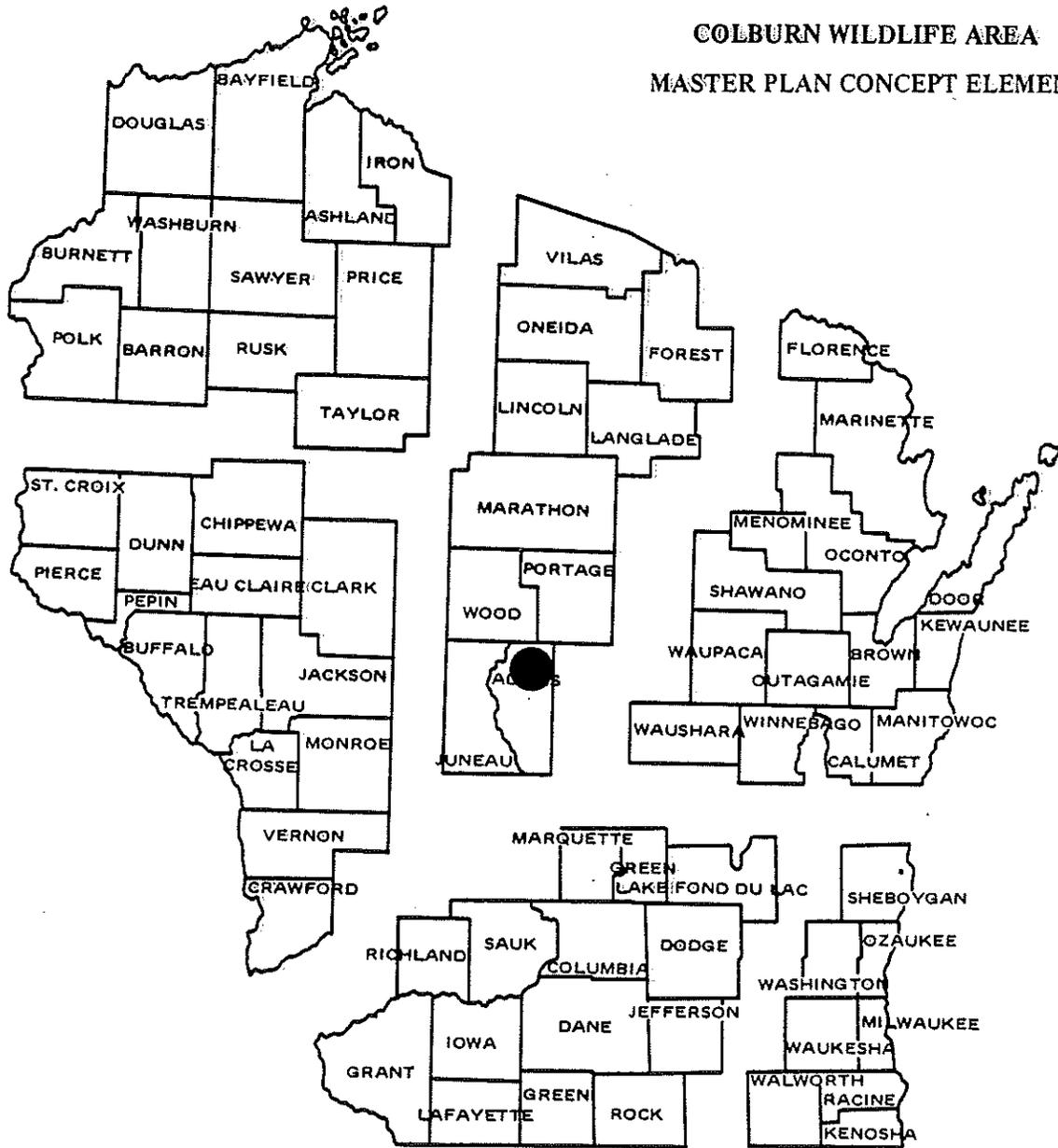
The Plan establishes objectives to produce deer, ruffed grouse, waterfowl and Sandhill cranes as well as to provide public hunting and fishing opportunities. Annual additional benefits include providing benefits to other wildlife and accommodating a variety of other recreational and educational opportunities.

Presently, the state owns 4,884 acres. The acquisition goal is 4,989 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  
H. S. Druckenmiller - EI/3  
John Brasch - Rhinelander  
Dave Gjestson - WM/4

COLBURN WILDLIFE AREA  
 MASTER PLAN CONCEPT ELEMENT



Approved by Natural Resources Board:

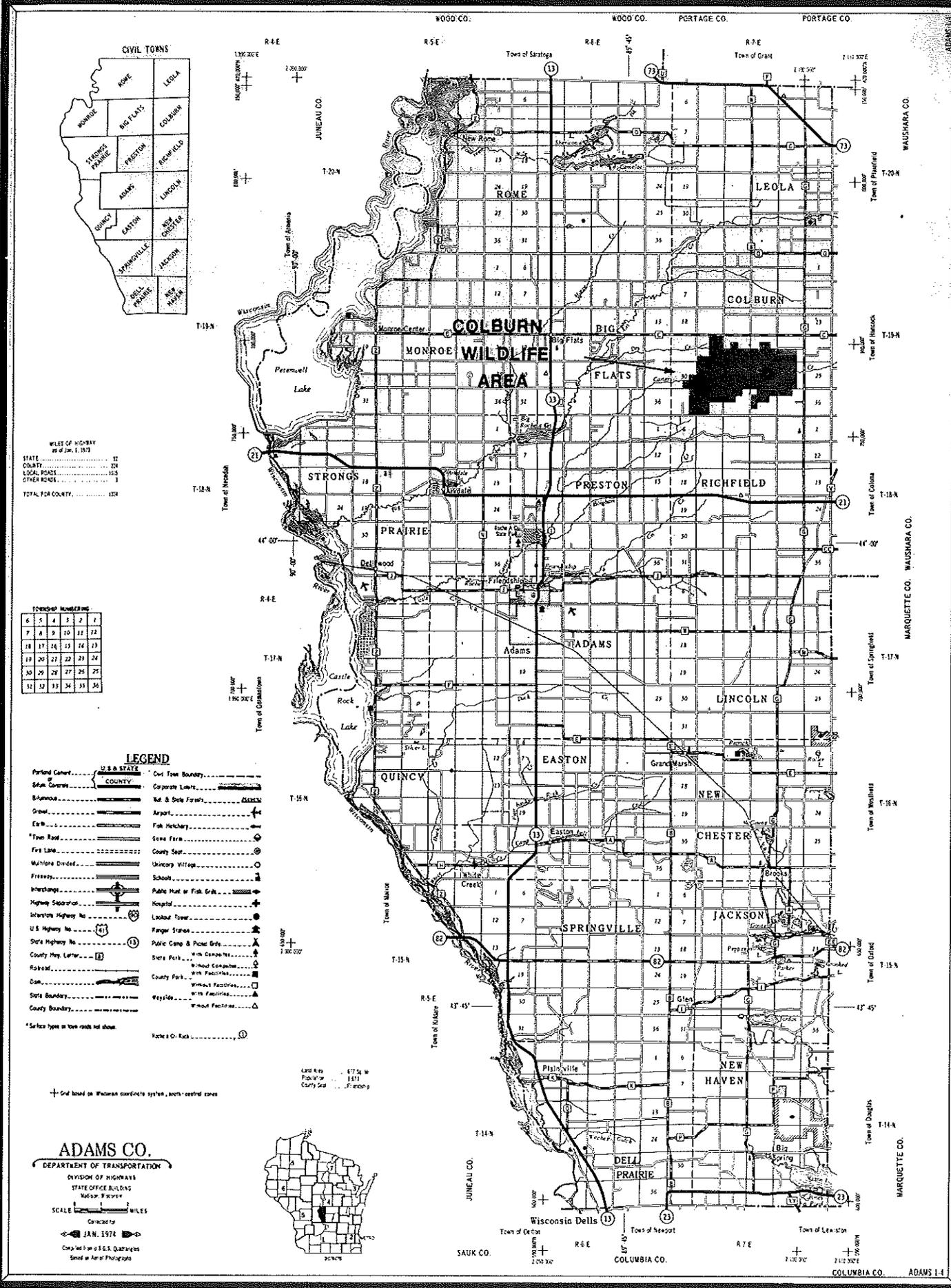
PROPERTY TASK FORCE

Leader — JAMES R. KEIR, WILDLIFE MANAGER  
 JACK F. ZIMMERMANN, FISH MANAGER  
 JACK W. HALBREHDER, FOREST MANAGER

\_\_\_\_\_  
 Date

Submitted: JUNE 1, 1980

# -1- FIGURE 1



STATE ..... 24  
 COUNTY ..... 24  
 LOCAL ROADS ..... 153  
 OTHER ROADS ..... 8  
 TOTAL FOR COUNTY ..... 104

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

- LEGEND**
- Portland Cement..... U.S. & STATE
  - Other Concrete..... COUNTY
  - Shoreline.....
  - Gravel.....
  - Earth.....
  - Time Road.....
  - Fire Lane.....
  - Multiple Divided.....
  - Freeway.....
  - Interchange.....
  - Highway Separation.....
  - Interstate Highway No. 41.....
  - U.S. Highway No. 13.....
  - State Highway No. 11.....
  - County Hwy. Letter.....
  - Roadbed.....
  - Can.....
  - State Boundary.....
  - County Boundary.....
  - Civil Town Boundary.....
  - Corporate Limits.....
  - Nat. & State Forest.....
  - Airport.....
  - Fish Hatchery.....
  - Game Farm.....
  - County Seat.....
  - Unincorporated Village.....
  - School.....
  - Public Hall or Fish Grk.....
  - Hospital.....
  - Lodging Tower.....
  - Finger Station.....
  - Public Camp & Picnic Grs. with Campsites.....
  - State Park with Facilities.....
  - County Park with Facilities.....
  - Reserve without Facilities.....
  - Reserve with Facilities.....
  - Reserve without Facilities.....

**ADAMS CO.**  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
 STATE OFFICE BUILDING  
 MADISON, WISCONSIN  
 SCALE 1" = 1 MILE  
 Corrected for  
 JAN. 1974  
 Compiled from U.S.G. Quadrangles  
 Based on Aerial Photographs

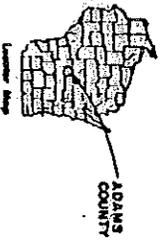
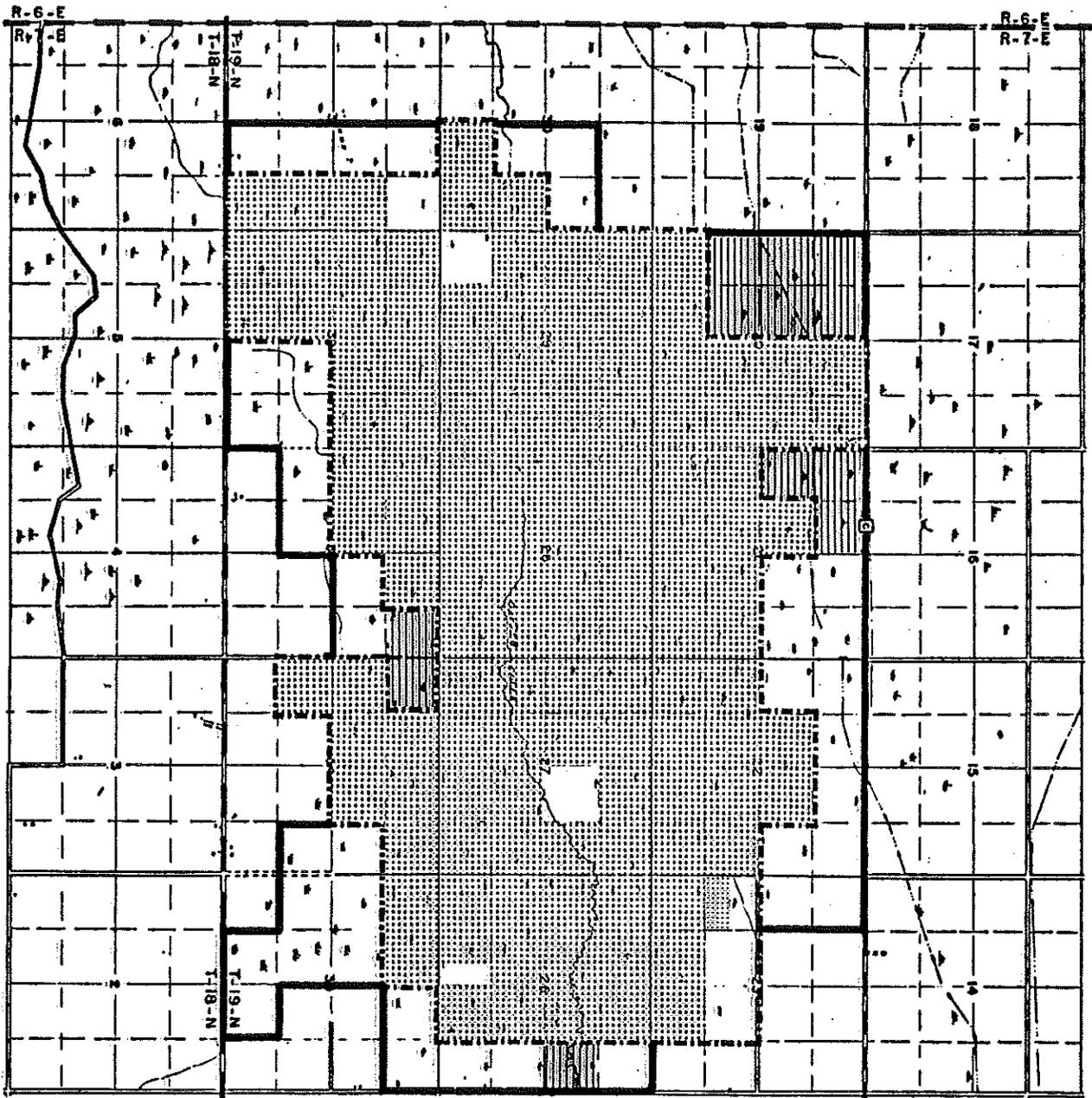


WAUSHARA CO.  
 MARQUETTE CO.  
 WAUSHARA CO.  
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FIGURE 2



- LEGEND**
- PROJECT BOUNDARY
  - STATE OWNED
  - ALTERNATE BOUNDARY
  - ALTERNATE BOUNDARY

2,000' 1,000' 0' 2,000'  
SCALE

STATE OF WISCONSIN DEPT. OF NAT. RESOURCES DIVISION OF SERVICES	
WILDLIFE AREA COLBURN	DATE 7-12-24 PROJECT NO. 7520
DESIGNED BY J. Koenig	APPROVED BY J. Koenig
DRAWN BY J. Koenig	APPROVED BY J. Koenig
DATE 7-12-24	PROJECT NO. 7520

## INTRODUCTION

The Colburn Wildlife Area is located in the southern half of Colburn Township in northeastern Adams County (Figure 1). The area is 11 miles northeast of the Town of Friendship, 22 miles southeast of the City of Wisconsin Rapids and 71 miles north of Madison. The property lies within one hour driving time for 200,000 people (1970).

The approved boundaries of the wildlife area include 4,989 acres, of which 4,864 (97%) are presently under state ownership. Adams County (2 parcels - 55 acres) and 5 individual landowners (221 acres) own the remaining acreage within the wildlife area boundary (Figure 2).

Adams is a sparsely populated county, but its annual growth rate is the highest in the state. Since the 1970 census, the population has increased by over 30% with the 1977 population at slightly more than 12,000.

Property adjacent to the Colburn Wildlife Area is privately owned. The bulk of the land exists as undeveloped timber, marsh and agricultural land. The timber is harvested periodically and much of the farming is done on small, dry fields. Recently, however, agricultural irrigation has made real inroads into northern Adams County, and a new (1977) development has seen over 3,000 acres (all in one ownership) put under irrigation immediately north of the wildlife area.

Muck farming attempts have begun in several places in Adams County. The drainage associated with these attempts is a major threat to the large marshes found in portions of the county. The natural marsh habitat being destroyed is the same as that found on Colburn (Type VI, Shrub Swamp bordering on Type II, Inland Fresh Meadow). One of the largest drainage attempts is within two miles of the southern boundary of the wildlife area.

The Great Northern Nekoosa Paper Company, which owns large acreages in northern and northwestern sections of Adams County, also has some holdings near the western boundary of the wildlife area.

## BACKGROUND INFORMATION

### Historical:

The Colburn Wildlife Area is located immediately outside the east shore of glacial Lake Wisconsin. It is directly west of the terminal moraine created by the latest Wisconsin ice advance that occurred about 12,000 years ago.

The area is listed by Curtis as originally being a lowland conifer swamp, probably dominated by tamarack and black spruce. The land was settled in the late 1800's. Much of the timber was logged or pulped and extensive use of drainage ditches succeeded in destroying the composition of the conifer swamps. The marshes were used for grazing and as hay meadow land until the mid-1930's. Recent aerial photos still show signs of hand-dug ditches on some lowland sections of the wildlife area.

A 2½-mile long access trail through the middle of the present property was constructed by a CCC group in the 1930's. The purpose of this access was for fire protection, and this fire lane is still present today. Vehicular use is restricted to DNR management personnel.

In the late 1930's, a major part (3,654 acres) of the land included in the present acquisition boundary was purchased by a private, Milwaukee-based organization known as the Adams County Game Foundation. The purpose of this foundation was to conserve Wisconsin wildlife through preservation or development. The rest of the land still remained as private holdings or was acquired by the county through tax delinquency.

The intent of the Adams County Game Foundation was to develop the area for waterfowl. A dam was constructed across Carter Creek (near the section line between sections 28 and 29) and dike work was planned. However, the foundation's membership was widely dispersed by World War II and plans were never pursued beyond this point. The dam was washed out by high water during the war.

In 1947, the state approved purchase of certain lands in Colburn Township as part of the public hunting grounds system and 3,654 acres were purchased from the Adams County Game Foundation at a cost of approximately \$3.70 per acre. An additional 720 acres were purchased in 1949 from five private landowners. Total ownership through 1980 reached 4,884 acres.

A strip of privately-owned land surrounds much of the wildlife area and public road access exists only in a few places. This limits public access to certain portions of the area and frequently creates conflict between private landowners and Colburn Wildlife Area users.

A severe wildfire burned the area during the months of September and October, 1948. The boundary of the fire was almost identical to the current state ownership boundary. According to the fire report, 5,126 acres were burned. The majority of the timber now growing on the wildlife area dates from this fire.

The Colburn Wildlife Area was purchased for its value to forest game and its potential for waterfowl development. In 1959, department engineers ran levels through the marsh and developed preliminary plans for a series of small waterfowl impoundments. Construction was never initiated due to budgetary constraints, but the impoundments remained a part of proposed work plans until 1964. At this time, the plans were dropped due to an uncertain water supply (this situation occurred when the town rerouted a roadside drainage ditch) and the concerns of surrounding landowners about the potential damage that would result from elevated water levels.

The overriding purpose of the wildlife area is to provide a large area, accessible to the public, for recreational activities. Presently, hunting is the main recreational activity and will remain so for the foreseeable future. Other activities including cross-country skiing, snowmobiling, hiking, photography and outdoor educational efforts are provided as a result of ownership and Department publicity of state land control.

#### Early Management:

1. Timber Harvest - Beginning in 1955, nine timber harvest contracts were granted applying to portions of four sections (20, 21, 29, 34) on the Colburn Wildlife Area. The last contract was completed in 1960. Total harvest under these contracts included (acres): aspen - 773, jack pine - 54, white birch - 40, oak - 13, cottonwood - ½.
2. Pothole Construction - In 1964 eleven potholes were blasted using ammonium nitrate. As is the case with most blasted potholes, the waterfowl value has proved minimal and the potholes are used for little more than watering holes by other species.
3. Trail Seeding - In 1967, 2½ miles of walking trail were seeded to clover. The trails are still present, but little evidence of that seeding remains due to lack of maintenance. Trails will be maintained for hunter access through periodic mowing.
4. Impoundments - In 1967, a small section of the fire lane was improved to serve as a dike. A small impoundment with unreliable water levels resulted (SW¼ SW¼, Section 21).
5. Level Ditching - In 1968, 3,300 linear feet of level ditch were constructed at the extreme east edge of the state ownership (S½, Section 26). The ditching created open water in an area where it was lacking.
6. Forest reconnaissance of the area was completed in 1971.

#### Recent Management

1. Aspen stands have been delineated using the forest recon. Hand cutting and shearing have been initiated to break up the even-aged character of the aspen stands.
2. One of the few oak ridges on the area has been commercially thinned in an attempt to stimulate understory growth.
3. Prescribed burns have been used to stimulate prairie vegetation in the natural openings on the wildlife area.
4. Twenty acres of red-osier dogwood have been mowed in an experimental attempt to rejuvenate browse quality.
5. Conifer clusters (white spruce and red pine) have been planted throughout the three large oak/aspen stands in compartment 1 of the forest reconnaissance. These plantings provide shelter and nest sites for a variety of wildlife species.
6. A waterfowl development proposal outlining the construction of several small impoundments has been submitted for funding under the state waterfowl stamp program.

## GOAL, OBJECTIVES AND ADDITIONAL BENEFITS

### Goal:

To create, improve and maintain fish and wildlife habitat, game and non-game, and their populations on a state-owned wildlife area, and to provide an opportunity for harvest in such a manner that the primary wildlife values will not be reduced.

### Annual Objectives:

1. Maintain an annual fall population of approximately 300 white-tailed deer and a cyclic low population of 500 ruffed grouse.
2. Provide 3,000 participant days of upland hunting: 2,500 for deer (1,500 bow, 1,000 gun) and 500 for ruffed grouse.
3. Provide approximately 1,200 man-days of fishing on one mile of trout stream (east section of Carter Creek).
4. Produce one duckling per acre of brood water on 300 acres and provide about 300 participant days of waterfowl hunting opportunity.
5. Maintain use of the marsh by sandhill cranes, both for nesting (an estimated 6-10 pairs) and for roosting and pre-fall migrational staging (an average of 100 birds).

### Annual Additional Benefits:

1. Benefit other species, primarily non-game and furbearers, associated with both the forest and marsh ecosystems.
2. Provide 1,000 participant days of small game hunting opportunity, primarily for squirrel, rabbits and woodcock.
3. Accommodate approximately 5,000 participant days of other recreational and educational activities to include field trips and nature study, cross-country skiing, showshoeing, hiking, photography, primitive camping and berry picking.
4. Provide harvest of merchantable timber consistent with wildlife objectives.

## RESOURCE INVENTORY

### Geology, Soils and Hydrology:

The Colburn Wildlife Area is within the geographical province of Wisconsin known as the Central Plain (also called the plain of Cambrian sandstone, descriptive of the underlying rock type). A portion of the Central Plain including the wildlife area is within the boundaries of the Driftless Area, an unglaciated "island" surrounded by territory once covered by ice.

Ancient glacial Lake Wisconsin was also within the Driftless Area and Colburn is immediately outside the eastern shore of this former lake.

The two dominant soil series on the wildlife area are Adrian and Newton. The Adrian series contains moderately deep organic soils of old lake basins. These soils have 18 to 40 inches of muck over sand or loamy sand. They are very poorly drained, have moderately rapid permeability in the organic part, and have high available water capacity.

The Newton series is characterized by deep, poorly drained sandy soils with sandy subsoils overlying outwash sand at depths of 10 to 30 inches. These are nearly level, rapidly permeable soils with low available water capacity. Groundwater is at or near the surface in wet seasons.

The area receives an annual rainfall of 31 inches. The sandy soils allow effective infiltration and percolation fostering strong base flows. An estimated 9 to 10 inches of rainfall reach the area streams as annual runoff. The watershed yields an estimated 1-2 cfs per square mile to the stream flow of Carter Creek.

Water Resources:

Carter Creek bisects the wildlife area from east to west and has an average width of 8-10 feet. Upstream portions of the creek within the property boundaries are Class II trout waters; lower sections are Class III. The water is of good quality, slightly basic and flows at an average rate of 10½ cubic feet per second. The watershed is small, totalling 40 square miles and portions of the creek have been known to go dry during hot periods of the summer.

Three ditches also supply water to the wildlife area from the north. This water supply creates a small stream known as Dry Creek (actually a ditch) which flows westerly out of the wildlife area and eventually joins Big Roche-A-Cri Creek. Water quality in these three ditches is of the same pH as Carter Creek, but may be more fertile due to agricultural practices north of the wildlife area.

Overall drainage of the watershed is to the southwest. The north/south fire lane serves as a quasi-dike and temporarily impounds water in several spots along its 2½-mile length.

Vegetation:

Three-fourths of the present ownership is lowland, primarily lowland brush species, off-site aspen, and open grass-sedge marsh (Figure 3). The remaining 25% is upland consisting mainly of aspen and oak. No endangered or threatened plants are known to be found on the wildlife area.

Lowland Type Acreage

- 1.	Lowland brush	1,441
2.	Open grass-sedge marsh	1,198
3.	Off-site aspen	997
4.	Flowage	19
	Subtotal:	3,655 acres

Upland Type Acreage

1.	Aspen	852
2.	Oak	270
3.	Jack pine	47
4.	Grass	30
5.	Herbaceous vegetation	10
	Subtotal:	1,209 acres
	Grand Total:	4,864 acres

The majority of lowland brush (1,241 acres) is willow, most of which is old-aged with very little new annual growth. Another lowland brush type consists of 116 acres of red-osier dogwood, primarily in the same condition as the willow (old-aged with little new annual growth). There are, however, large amounts of red-osier scattered throughout other stands on the wildlife area, particularly the aspen and off-site aspen. Much of this dogwood is in excellent condition and is heavily used as a preferred browse species by deer.

The third lowland brush type is alder. This important habitat component is scattered throughout the ecotone between the upland ridges and the lowland marsh. There is some alder in the willow-dominated lowland, particularly along the Carter Creek streambed.

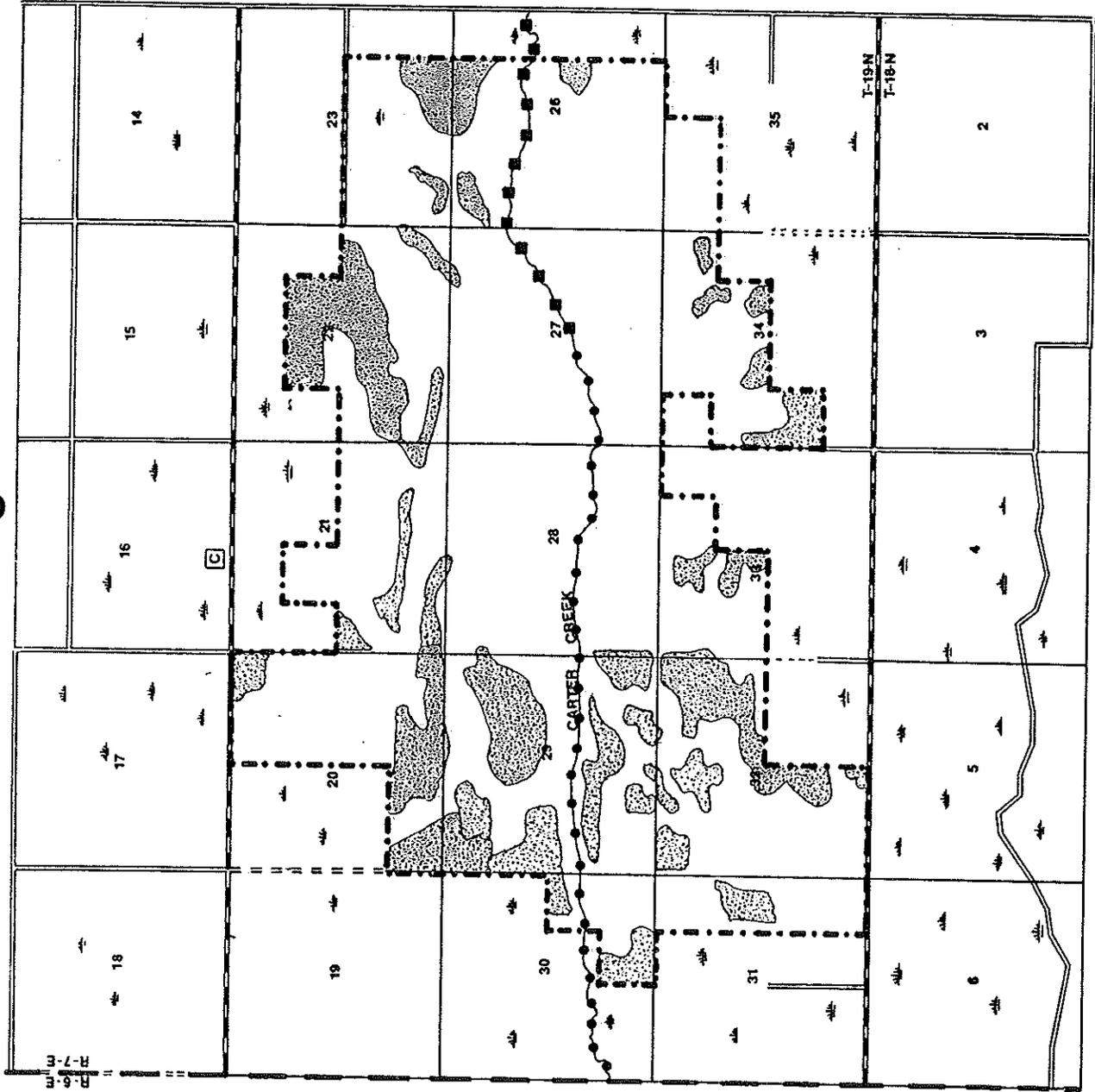
The open grass-sedge marsh is dominated by blue-joint, wire, and reed canary grasses and numerous sedge species. There is a continual threat of these remaining open areas being invaded by the lowland brush species.

The off-site aspen is characterized by a high water table, an understory of sedge species, and no forest reproduction. A few of the stands typed as off-site on the forest recon have the potential to be managed under the harvest rotation system being used for better quality aspen. This may be due to a difference in criteria used to define off-site aspen between wildlife management and the forest recon team. It may also mean these areas are gradually becoming drier and more manageable.

The majority of upland acreage (70%) is aspen. The timber quality is fair, but access to many stands is poor. Typical understory species are red-osier and gray dogwoods, blackberry and raspberry, black cherry, holly and serviceberry.

The other major upland component is oak (22%), mainly black with scattered white oaks. Typical understory species are hazel, aspen, black cherry and some of the viburnums.

FIGURE 3



R-6-E  
R-7-E

LEGEND  
TIMBERED AREAS INCL. GRASS  
WETLAND AREA  
CLASS II TROUT WATER  
CLASS III TROUT WATER

COLBURN WILDLIFE AREA

### Fish and Wildlife:

A fish survey has not been completed on that section of Carter Creek within the Colburn Wildlife Area. Some species common to the vicinity, such as brook trout, are present year round. Others, notably the northern pike, are present only seasonally.

Manageable game animals found on the area are the white-tailed deer, cottontail rabbit and gray squirrel. Other mammals commonly found include mink, weasel, fox, coyote, skunk and raccoon. A complete list of mammal species is maintained at the DNR office located in Adams-Friendship.

The two manageable upland bird species present are the ruffed grouse and woodcock. A variety of songbirds are commonly found.

Though considered primarily a forest habitat property, the wildlife area is dominated by lowland. Bird species associated with these low areas include waterfowl such as the wood duck, mallard, blue-winged teal, sora rail, great blue heron, American bittern, green heron, and sandhill crane.

No endangered or threatened species are known to be found on the property although the entire area has not been searched.

### Current Use Levels:

The wildlife area receives excessively heavy deer hunter pressure on opening weekend of the gun season. Hunter densities up to 70 per square mile are common. However, due to the large lowland areas, many of the hunters are restricted to a small portion of the property and hunter densities are actually much higher in these portions. Hunter density for the final seven days is moderate.

The majority of the property receives some hunter pressure during the deer archery season. Except for the chance occurrence of slightly crowded conditions for a few afternoons, hunting pressure is well distributed and is of high quality.

The Colburn Wildlife Area, particularly around the access points, is becoming well known as a productive grouse hunting area. Hunting conditions are crowded on the weekends through October. It is common to find five or six hunting parties in the cover adjacent to the access points. However, many grouse coverts receive little or no hunting pressure.

Use of the area for other activities is light but includes such things as trapping, woodcock hunting (mostly incidental to grouse), squirrel and rabbit hunting, waterfowl hunting, snowshoeing, cross-country skiing, berry picking and outdoor classroom education.

### Historical and Archaeological Features:

There are no known historical or archaeological features associated with the land within the wildlife area. Close liaison will be established with the Historic Preservation Division of the State Historical Society to ensure that reconnaissance and evaluation is completed prior to development of any portion of the wildlife area.

## LAND USE POTENTIAL AND ASSOCIATED RESOURCE MANAGEMENT PROBLEMS

The entire property has been designated a Fish and Wildlife Management Area (RD<sub>2</sub>). The primary purpose of this public ownership is to provide hunting recreation. Therefore, major management efforts will be geared toward benefiting huntable species. However, nongame species will also benefit.

The stands of better quality aspen are all even-aged, dating from the 1948 fire. Management plans require dividing this aspen acreage into 10-year age class blocks over the next 20 years. Four age classes will result, based on a 40-year age rotation for aspen. Approximately 25% of the aspen acreage will be in each age class.

Where possible, commercial sales will be used to achieve management objectives. However, because of some relatively low quality aspen present, poor access to many stands, and the current lack of aspen markets, commercial cutting may not be possible over the entire area. A shearing contract has been let to clear-cut approximately 125 acres. Contract handcutting has been attempted, but proved impractical on Colburn.

The small amount of oak present on the property exists on scattered, elevated ridges that add an important element of diversity to the wildlife area. This oak acreage will be maintained through accepted forest management practices, primarily even-aged management. Remnant, old trees will be left for use by tall tree wildlife residents.

Ground cover, though comprised of a good variety of forb and shrub species, is sparse on many oak ridges. Commercial thinning of oak areas to stimulate undergrowth will be done when consistent with maintaining the oak type. Brush piles have been constructed in one thinned area and add greatly to the cover on that particular oak ridge.

Red-osier dogwood is a major browse for deer on the area, particularly in winter. Much of it exists in an overmature state with little new annual growth. Browse quality and quantity can be increased by mowing dogwood stands where feasible.

An adequate number of forest openings also exist. Though succession is slow on these sandy soils, openings maintenance will be done to counteract woody encroachment. Native prairie species occur in these openings and will be encouraged through periodic controlled burning.

Because conifer cover is lacking on the wildlife area, scattered clusters of white spruce and red pine have been planted along two oak ridges. These clusters will provide good winter shelter for many species of wildlife and will offer nesting sites to various songbirds. This practice may be extended in the future. The small amount of natural conifer cover (jack, white and Norway pine) will be maintained where possible.

Approximately 3,655 acres, or three-fourths of the wildlife area, consists of marshland too wet for producing timber. Some of this acreage is gradually drying out and slowly converting to aspen. Some of the areas containing dense willow, alder and dogwood growth serve as good deer habitat. The brushy edge around the marshes is top quality habitat for several wildlife species. The sedge marsh serves as habitat for sandhill cranes and several songbird species.

Much of the lowland acreage is poor waterfowl habitat, essentially dry many years, but wet enough to attract these birds in years of high water. Water quality is good and the topography is such that several small impoundments (20-100 acres each) could be constructed with a resulting increase in duck production (Figure 4). Impoundment size would be limited by the small watersheds and the flooded areas would not attract the massive hunting effort that would occur on a more intensively managed waterfowl area.

Based on similar projects elsewhere in Wisconsin, the two duck species expected to respond to this management are the wood duck and mallard, 2 of Wisconsin's 3 major breeding waterfowl species. The expected breeding pair composition after development is as follows: 50-60% wood ducks and 30-40% mallards; the remainder comprised of a variety of species including blue-winged teal and hooded merganser.

Private ownership (most of which is posted against trespass) peripheral to the wildlife area presently limits management opportunities for brood water impoundments as well as access to certain portions of the property. A boundary extension (Figure 2) would allow for more waterfowl management possibilities and provide good quality upland habitat (primarily aspen). In addition, public access would be possible to areas presently receiving little use.

Additional pair ponds can be constructed in the Type II marsh areas. Waterfowl production will benefit and the habitat diversity as well as the visual aesthetics of the wildlife area will be enhanced.

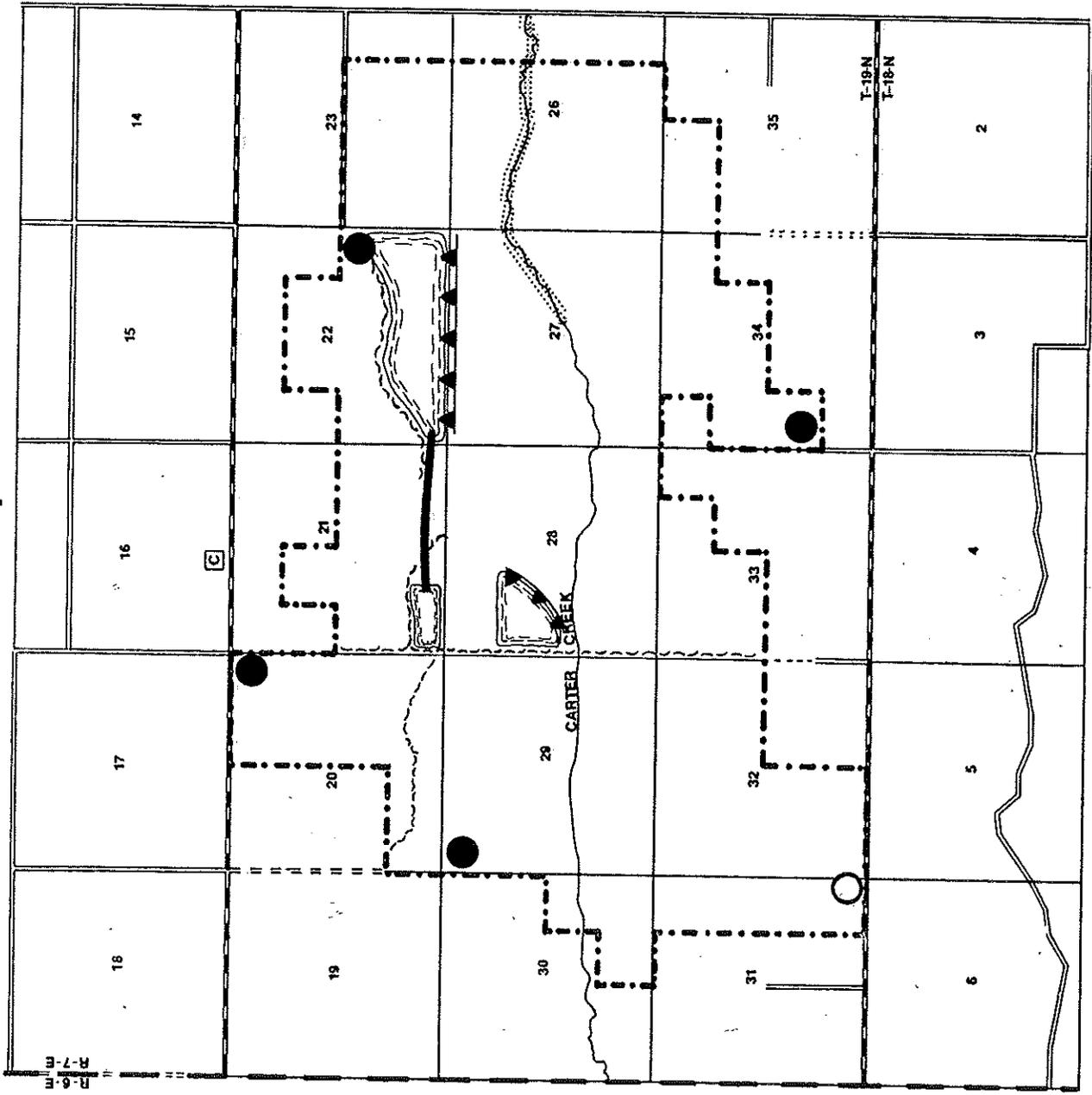
Beaver have been reintroduced into the area and presently have created several small impoundments along Carter Creek and some of the adjacent drainages. These flooded areas are being used by furbearers, waterfowl and associated birds such as rails and bitterns. The beaver will be controlled within the upper section of stream designated as Class II trout water consistent with department policy.

Carter Creek is Class I trout water upstream from the wildlife area. The initial 1 to 1½ miles of stream within the wildlife area (Class II portion of Carter Creek) have the potential for improvement with a management program involving brush removal for bank stabilization and placement of in-stream structures (half-logs) to create needed cover for trout.

Very little brushy encroachment into the marshland along Carter Creek has occurred in the eastern 1/3 of the property. This area is presently used by nesting sandhill cranes and is also used as a local pre-migration staging area by these birds in early fall. Management efforts will be aimed at maintaining this "openness" (through the use of herbicides, if possible) to maintain crane use. Cranes may also make use of the upstream ends of some of the impoundments as nesting sites.

Existing trails allow minimal but adequate access to most sections of the Colburn Wildlife Area (Figure 3) and will be maintained. Room for expansion exists if future use levels so dictate. The current emphasis is on maintaining limited access.

FIGURE 4



R-6-E  
R-7-E

- LEGEND**
- PARKING AREAS - EXISTING
  - PLANNED
  - TRAILS
  - PLANNED
  - ▲ DIKES
  - ~ FLOWAGES
  - ⋯ STREAM HABITAT IMPROVEMENT
  - TRANSFER DITCH

COLBURN WILDLIFE AREA

## LONG RANGE RESOURCE, RECREATION NEEDS AND JUSTIFICATION

Surveys show Wisconsin sportsmen spent 8,428,000 man-days hunting in 1975. Estimates indicate this will increase to 10,356,000 man-days by 1995 (+26%). The surveys also show Wisconsin has 5,300,000 acres of public land and 604,000 acres of public waters, exclusive of the Great Lakes. Most of these lands and waters are in the northern part of the state.

The Wisconsin Outdoor Recreation Plan of 1977 projects the level of increase for hunting in Region 5, which includes the Colburn Wildlife Area, to be 26% by 1995. Current per capita hunting participation by Region 5 residents is 70% above the state average.

Adams County has no county forest acreage and essentially no state-owned land managed for wildlife other than Colburn. Much of the private land is posted against trespass.

The recent expansion of irrigation agriculture in the area immediately surrounding Colburn has served to eliminate large blocks of wildlife habitat and associated hunting land. Large food processing corporations are moving into the area and the demand for more irrigated land is growing. This demand has created a significant land use change in central Wisconsin.

The decrease in private lands available for recreational hunting due to agricultural uses and increased posting, combined with the continuing increase in the recreation minded urban and suburban population emphasizes the necessity for public lands and their intensive development and management for maximum wildlife production and associated recreational opportunities.

## ANALYSIS OF ALTERNATIVES

### 1. No Management

Under this alternative, forest succession will result in poor wildlife habitat. Access trails and openings would brush in, aspen stands would deteriorate and convert to different types, and no commercial value would be obtained from timber.

The marsh areas would likely remain too wet for forest game habitat and too dry for wetland wildlife. Brush species would gradually encroach into the open eastern end of the marsh and sandhill crane utilization would end. Carter Creek would remain a low quality trout stream.

Retaining the existing property boundary and ownership goals will confine future public use and management to the existing site. Public access will remain relatively restrictive.

### 2. Status Quo

A continuation of the existing management regime will tend to optimize wildlife production for forest game and waterfowl species. Habitat development including timber harvest, conifer planting, small flowage construction and stream improvement would continue. Brush control would continue in order to maintain valuable wildlife openings as well as to preserve critical habitat components for sandhill cranes.

Public access would remain unchanged. While opening weekend hunting pressures would remain high on the property perimeter, the vast majority of the property would continue to provide a quality hunting experience for those willing to work at it.

Public ownership would be confined to the existing boundary. While this limits the existing program within Adams County, it enables the Department to utilize declining acquisition funds in other critical areas while still providing valuable public recreational opportunities on the Colburn Wildlife Area.

### 3. Enlarge Property

The large boundary extension shown in Figure 2 would allow the state to purchase much of the buffer strip of posted land surrounding the wildlife area. State ownership would provide public access to productive sections of the wildlife area which now receive little or no use.

State ownership of the acreage delineated within the proposed expansion would add valuable upland acres to the property as well as provide the opportunity for three additional small brood water impoundments totalling 150 acres.

Adams County has little public land. There is no county forest acreage and little state-owned land other than Colburn. Together with the land use changes involving irrigation agriculture that eliminate hunting opportunity, the lack of public land presents a strong justification for property expansion. Colburn may one day be an island of forest and marsh surrounded largely by irrigated vegetables.

The smaller boundary extension shown in Figure 2 recognizes funding limitations of the acquisition program and offers an alternative which would provide more wildlife habitat, a larger public use area and improved access within more reasonable budget constraints. The tracts identified were selected because of their strategic location as well as their blocking relationship with adjoining state-owned land. These additional lands would provide more room for the user, but do not involve critical habitat components necessary for wildlife.

4. Reduce Property Size

Short-term monetary gains could not offset the loss of a state-owned wildlife area for which acquisition is largely complete. There is very little other public land in Adams County. The opportunity for maximum wildlife production would be lost and the action would be contrary to the intent of the Wisconsin Conservation Commission when it approved the present wildlife area boundaries.

5. Manage Primarily for Timber

Timber quality is low and does not warrant a significant management effort even if access was improved and better markets were developed.

6. Limit Management Objectives to Forest Wildlife

Three-fourths of the wildlife area exists as non-forest land and much of this acreage is marshland. Though succession is working to dry wet areas, it will be hundreds of years before a significant part of this acreage is naturally converted to manageable forest.

One possible management practice could involve artificial drainage of sections of these wetlands to speed up successional conversion. However, with the present emphasis on wetland preservation, a DNR proposal to drain marshland is not a reasonable alternative.

Water quality and local topography are adequate to allow a certain amount of water management in the form of small impoundments. To continue to carry on a program that provides for only forest wildlife would not allow for developing the full potential of the wildlife area.

7. Manage Extensively for Waterfowl

Because of high development costs, excessive environmental disruption to a classified trout stream, present location of private lands peripheral to the property, and uncertain quantity of water, this alternative was rejected.

8. Improve Entire Length of Stream for Trout

The western portions (lower stream area) of Carter Creek inside the property boundary do not have the potential for in-stream trout habitat improvement. These portions of the stream often go dry during hot periods of the summer.

RECOMMENDED MANAGEMENT ALTERNATIVE

The recommended management program is alternative number two which includes a continuation of the practices already initiated in the upland habitat type (aspen, oak, and conifer management) whenever consistent with wildlife objectives and when markets allow, timber will be harvested commercially.

Primary development funding would come from the Pittman-Robertson program. Costs for development and maintenance for the past 12 months (1979-80) have totalled approximately \$5,500. Maintenance costs are projected to average \$2,000 per year.

Three small flowages are planned for construction on the drainage-ways north of Carter Creek. Approximately 150 acres of brood water will be created at a cost of about \$100 per acre. Funding could come from the State Waterfowl Stamp program. This activity will create a brood production area where none presently exists and would provide 300 participant days of waterfowl hunting annually.

Additional wetland management will involve a continuation of red-osier dogwood mowing and maintenance of the brush-free condition in the eastern sections of the property through the use of herbicides or controlled burning. The latter practice will maintain the habitat necessary for continued sandhill crane use. The Bureau of Fish Management will initiate, based upon their management priorities, a trout stream improvement program on a selected portion of Carter Creek. Funding should be available through the State Trout Stamp program. An evaluation of all management efforts will be made at periodic intervals.

The existing acquisition boundary and acreage goal (4,989 acres) will remain unchanged. Posting of boundaries and access areas will be improved to minimize trespass and improve public familiarity with the property. A property brochure will be developed to provide for the informational needs of the user and will include a map of the wildlife area.

All areas of development will also be examined for the presence or absence of endangered and threatened species and appropriate measures will be taken for significant sites. If any sites are found during development, construction will be suspended until the Office of Endangered and Nongame Species (DNR) is consulted. The site(s) will be evaluated and protective measures taken for significant sites.

#### MASTER PLAN COMMENTS

Thomas J. Evans  
Chief, Mineral Resources Section  
Geological and Natural History Survey  
June 12, 1980

The staff of the Geological and Natural History Survey has reviewed the Concept Element on the Wildlife Master Plan for Colburn Wildlife Area in Adams County. Based on this review, I have no additional comments or suggestions for your document.

Thank you for the opportunity to review and comment.

Herbert L. Riechman  
University of Wisconsin-Extension  
Adams County  
June 10, 1980

#### Major Comments:

Perhaps goal should include: To maintain a wilderness area for quality outdoor recreation experiences, i.e., hunting and fishing.

DNR RESPONSE: Do not concur; such a goal statement would be misleading in light of DNR definition of "wilderness".

#### Additional Comments:

It is my opinion the Colburn public hunting grounds should be left in a more inaccessible state to preserve the integrity of the land and wildlife and plant community. I do feel, however, additional acreage should be purchased in fee simple, or attempt to secure easements for public use of adjustment lands.

DNR RESPONSE: Concur with maintaining "inaccessible state", but cannot agree with expansion of ownership. The rationale is provided within the Alternatives Section.

Forest Stearns  
Scientific Preservation Council  
June 26, 1980

We have reviewed the concept phase of the Colburn Wildlife Area master plan and find no conflicts with interests of the Scientific Areas Preservation Council. Our Adams County natural area inventory has been completed and no natural areas or scientific areas were located within the project boundaries.

Henry Kolka  
Wild Resources Advisory Council  
June 23, 1980

The Wild Resources Advisory Council are very pleased and wish to commend the Colburn Wildlife Area Master Plan Concept Element Property Task Force for presenting a very concise and articulate document. The Council urges the Task Force to be more aggressive in establishing an enlarged workable public unit in a County that is notable for vast wetland areas and limited acreages for general public use. The diagnosis and management projections for the proposed area are excellent.

#### General Review

The Wild Resources Advisory Council is very impressed with the Task Force's Colburn Wildlife Area Master Plan and wishes to commend it for its product. The assessment of the resource and the proposals for management indicate a high professional level of expertise of the planners. The Council urges that the Task Force be more forceful in its projection of an expanded project area. Consider these facts: (1) Where else in Wisconsin have 4,864 acres of land been acquired for around \$25,000; (2) A county very typically rural, with expanding trend of posting private land; projected growth of population and paucity of public land is in dire need of blocks of publicly owned lands; (3) The need of protecting our wetland habitats from constant draining efforts; (4) And most important for projects operation, the expansion of the project area will solve the access and use of the total area. The WRAC supports your proposed alternate boundary as depicted on Figure 2, pp. 2, as the best solution to project area management as indicated in your Goals and Objectives on page 4. The Council urges the Natural Resources Board approval of this proposal. The WRAC judgements of the documents and its recommendation are based on the careful analysis of the text and the interpretive value gained by examining the 7½ minute USGS quadrangle of Coloma S. W.

Comments and Recommendations

1) Introduction, paragraph 2.

The Wild Resources Advisory Council recommends that the Natural Resources Board approve the expansion of the project area to include all lands within the black lines on page 2 (Figure 2). The Council assumes that this boundary is the one that sets up the expanded project at 5,160 acres, of which 94% is already acquired. The Council suggests that in Figure 2 (page 2), the striped alternate boundary be omitted or at least justified more clearly in text. The Council further suggests that the black lined alternate boundary be relabeled as expanded project boundary.

DNR RESPONSE: Additional justification added to text. Do not agree to relabeling the boundary alternative; label is adequate.

2) Introduction, 5th paragraph.

Since the drainage of wetlands threatens the marshes south of the project boundary, this practice provides the project area a solid reason for expanding it. Legal action against wholesale destruction of wetland habitat could also be resorted to.

3) Historical, 7th paragraph.

The WRAC sees this problem as another reason for expanding the project boundary.

4) Historical, last paragraph.

The WRAC recommends that educational be inserted near the end of the first sentence. It would read "for recreational and educational activities".

DNR RESPONSE: Concur; text modified.

5) Early Activities, item 3.

WRAC has a question. Should the trail be allowed to deteriorate because of lack of maintenance? Why?

DNR RESPONSE: The Department is unable to afford trail reseeding because of questionable cost/benefit. However, the trails will be maintained in a reasonable manner for public access.

6) Recent Activities.

The WRAC finds the management listed quite appropriate. We do question item 2. It is our hope that some wooded areas are allowed to reach mature status since these are a living space for many of our desirable wildlife species. (We are not referring to aspen types.)

7) Goals and Objectives.

The eliminate misunderstanding the WRAC urges the addition, within commas, after the word habitat, game and nongame, and their populations, etc. In addition, the Council recommends after harvest the insertion of word and observe.

DNR RESPONSE: Concur; text modified.

8) Annual Objectives and Annual Additional Benefits.

The WRAC finds these proposals very appropriate for an environment of the type found in the project area. Item 4 under Annual Additional Benefits sounds OK providing it considers the welfare of wildlife that use the higher canopy trees as their living space.

9) Total Acreage, paragraph 2.

The second sentence should be restructured, besides since when is alder brush "an important habitat component"? The Council is unaware of any positive benefits of brush alder.

DNR RESPONSE: Do not concur; alder brush, in addition to providing habitat diversity and important brood habitat components for ruffed grouse, is utilized in the fall by woodcock and ruffed grouse. It provides cover for feeding and loafing woodcock as well as food and cover for grouse.

10) Fish and Wildlife.

The WRAC is very critical of Master Plan Concept Elements that generalize in species lists, like songbirds, shorebirds, birds of prey, small mammals, etc. Nor are we pleased or satisfied with reference of complete lists in some local DNR office. The Council needs a good if not complete list of all wildlife, plants and animals, in the project areas, to judge whether all of these components received proper consideration in the planning process.

The Council is very pleased with the partial listing in the next to the last paragraph.

DNR RESPONSE: Beyond listing major species along with endangered and threatened species, the Department sees little value in lengthy lists. Further, survey information is almost always incomplete and would require significant dollar expenditures to complete. The Department does not envision correcting this disparity very soon.

11) Current Use Levels.

WRAC finds this assessment exceptionally well presented.

12) Land Use Potential and Associate Resource Management Problems.

WRAC considers this a very well presented section. The Council has a few sporadic comments.

1) Oak forests on elevated ridges--Council recommends leaving remnants for taller tree wildlife residents.

DNR RESPONSE: Concur; text modified.

2) The Council endorses the practice of expanding prairie patches using controlled burn.

3) The Council endorses property expansion to achieve a more balanced use of the property.

4) The Council endorses practical expansion of pond areas.

5) The Council endorses the improvement of the upper Carter Creek.

13) Enlarge Property.

The WRAC has already stated its position on this issue. We favor expansion.

14) The WRAC finds the charts very adequate and acceptably interpretative. The Council made a recommended change under item one of Comments.