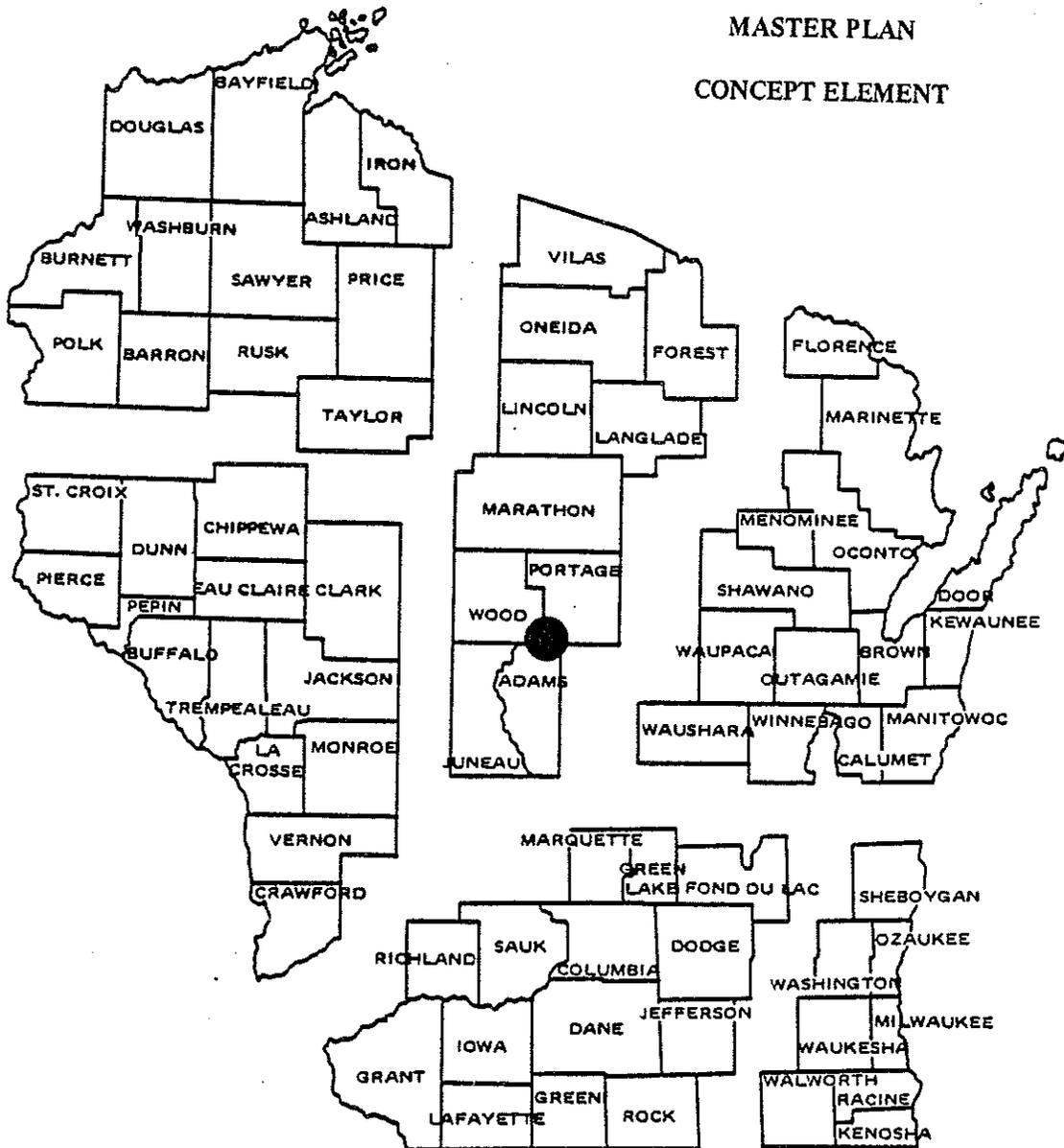


BUENA VISTA MARSH, LEOLA MARSH AND

PAUL J. OLSON WILDLIFE AREAS

MASTER PLAN

CONCEPT ELEMENT



Property Task Force

Approved By: NRB

Leader: Bruce Gruthoff, Area Wildlife Manager
Jack Hoisington, Forester
Jack Zimmerman, Area Fish Manager

Date: 10-27-82

FIGURE 1 PROPERTY LOCATOR

Madison - 100 miles south
Milwaukee - 150 miles southeast
Chicago - 234 miles southeast
Twin Cities - 192 miles west

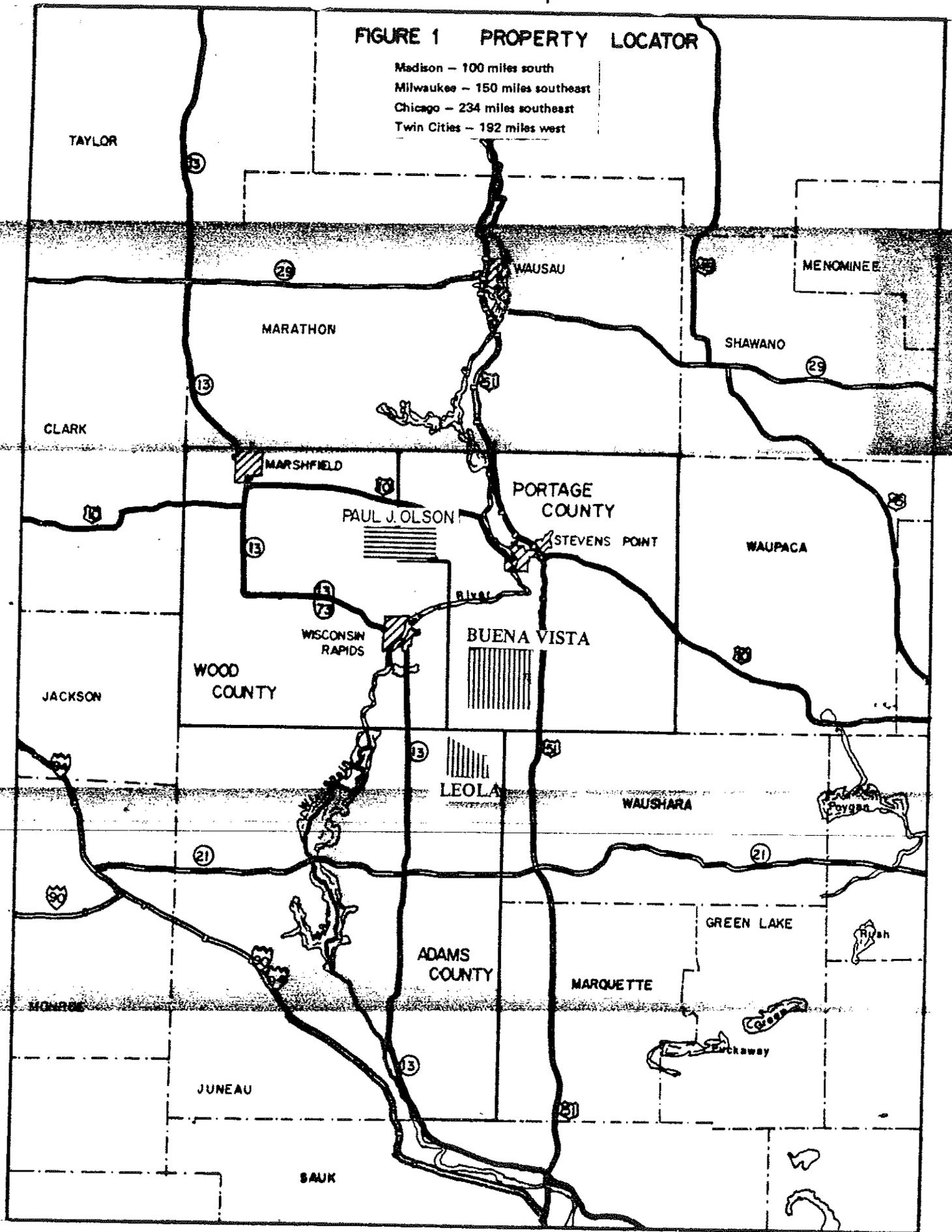


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BUENA VISTA MARSH, LEOLA MARSH AND PAUL J. OLSON WILDLIFE AREAS

Section I - Actions
GOAL, OBJECTIVES AND OTHER BENEFITS

Goal: To manage a complex of 3 wildlife areas for populations of prairie chickens (Wisconsin threatened species) to assure their long term existence and provide compatible public use opportunities.

Annual Objectives:

1. Maintain a minimum population of 345 male prairie chickens as follows:
 - a. Buena Vista-250
 - b. Leola-20
 - c. Paul J. Olson-75
2. Provide an average of 500 participant days of prairie chicken observation opportunities.

Annual Additional Benefits:

1. Provide 7,000 participant days of hunting and trapping opportunity including:
 - a. Deer (gun and bow) - 3,000
 - b. Ruffed grouse/woodcock - 1,500
 - c. Ducks, rabbits, squirrels and other small game - 2,000
 - d. Furbearers - 500
2. Harvest forest products consistent with property objectives.
3. Contribute to the habitat of other wildlife including migratory endangered species.
4. Provide 350 participant days of dog trial opportunity.

RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

The boundaries and developments of the 3 wildlife areas are shown in Appendix B and C. A special dedication of Dane County Conservation League lands is recommended as follows: Paul Olson of Madison has been involved with prairie chicken management since its inception. His interest and contribution over the past 30 years has provided leadership vital to the survival of an extremely unique resource. His special role in coordinating the purchase of critical prairie chicken habitat in the townships of Sherry and Carson in the name of the Dane County Conservation League (DCCL) Prairie Chicken Foundation as well as his continuing support of management for the species is most deserving of commendation. As a result, the Department recommends renaming the DCCL project the Paul J. Olson Wildlife Area.

Improvement of the quality and quantity of grassland habitat will be the primary method of reaching the goal in relation to the greater prairie chicken population. In part, this will involve the establishment of better grass cover through plowing, disking and planting about 200 acres per year.

The 200 acres of grass will be divided into 20-acre strips and distributed over the entire property each year. Plantings will consist of a timothy-brome mixture on the wetter sites and switchgrass on the drier sites. The activity will continue until about 2,300 acres of the entire complex is composed of the improved grasses. The development of this scattered pattern of nesting cover will require a minimum of 10 years to complete.

Another 1,800 acres of land, consisting of 20 and 40-acre strips scattered equally around the 3 areas, will be disturbed each year by the use of prescribed burns, hay mowing, controlled grazing and limited cropping. The farming effort also provides a critical winter food supply for the prairie chicken and other resident and itinerant wildlife.

Approximately 40 acres of willow brush on the Paul J. Olson Unit in Sections 34 and 35, Town of Sherry, will be eradicated by the use of brush mowing and herbicide ground application. The Carson bog in Sections 22 and 23 of T24N, R6E (west part of Carson) will be preserved in its current condition. Openings in the bog will be maintained by periodic hand cutting of the invading birch, tamarack and spruce.

Five hundred acres of willow and aspen scattered over much of the Buena Vista area will be eradicated in an attempt to increase the quantity of nesting and brood cover for grassland wildlife species.

The opportunity to view prairie chicken courtship behavior from state blinds will be maintained at about 500 observer days utilizing a cooperative agreement with the University of Wisconsin-Stevens Point. Under this agreement, the Department will continue to direct the overall booming ground visitation program and the University will implement the specific activities including reservations, scheduling and on-grounds observations. A nominal fee will be collected from each participant and used to fund the visitation program.

Extreme caution will be utilized to ensure minimal risk of developing conflicts between the visitor and wildlife. During periods of low populations (total numbers on each booming ground), observer use will be adjusted accordingly to avoid potential negative impacts. During periods of high populations, an increase in observer use may be accommodated provided similar caution is utilized.

Approximately 1,000 acres of various aged aspen stands are scattered about the 3 properties (Appendix D). The age diversity will be maintained and will benefit ruffed grouse, woodcock and deer. Numerous songbirds also find this forest habitat to their liking.

The management of a large grassland complex interspersed with aspen and brushlands, wetlands and private farmlands produces a variety and abundance of wildlife that, in turn, provides for a great deal of hunting and other wildlife related recreational and educational activity such as birdwatching, nature study, photography and bird dog trials. Deer hunting during most years and waterfowl hunting during abnormally wet years provide for most of the user days. Woodcock and grouse hunting are also conspicuous activities.

Regarding potential historical or archaeological sites, all areas of development will be thoroughly investigated for the presence or absence of sites and appropriate protective measures will be taken for significant sites. If any are found during development, construction will be suspended until the State Historical Preservation officer is consulted. The site(s) will be evaluated and, if significant, would be preserved.

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

Buena Vista, Leola, and Paul J. Olson Wildlife Areas contain a total of 14,027.07 acres under the management control of the Department in cooperation with 2 private organizations: The Society of Tympanuchus Cupido Pinnatus (STCP) and the Dane County Conservation League (DCCL). Except for the Olson Unit, most of the land control is obtained through a lease arrangement described within the Background Information Section.

The lease agreement requires the Department to pay an annual rate of \$1.00 per acre or the property tax, whichever amount is greater. Annual lease payments have increased from \$11,195 for 7,755 acres in 1964 to over \$30,000 for 12,014 acres in 1982. No further leases are anticipated beyond the 1982 base.

Table 1. DNR Land Control Summary

Wildlife Area	State Ownership	Current Goal	Proposed Goal	Lease Acreage	Total Control
Buena Vista Marsh	0.00	0.00	0.00	11,754.00	11,754.00
Leola Marsh	620.00	620.00	620.00	260.00	880.00
Sherry-Carson	1,393.07	5,000.00	1,393.07	0.00	1,393.07
Totals:	2,013.07	5,620.00	*2,013.08	12,014.00	14,027.07

*Represents a state goal reduction of 3,606.92 acres

Land acquisition activities are to be controlled by STCP and DCCL. The property boundaries shown in the Appendix are only guidelines for the 2 organizations and are not to be confused with official purchase boundaries normally applied to state properties. STCP and DCCL may seek additional ownership with the following total ownership goals: Buena Vista Marsh - 14,000 acres; Leola Marsh - 1,800 acres; Paul J. Olson - 3,000 acres.

Maintenance and development costs average about \$30,000 each year. While development costs are expected to decline after 1986, maintenance costs will probably double in order to support completed development projects. If the land control increases over the 1982 level or if future budgetary constraints impact development projects in such a manner that objectives cannot be realistically obtained, adjustments will be pursued accordingly.

Lastly, while not an objective within this document, a distinct possibility exists for reclassifying the greater prairie chicken from "threatened" to "game bird" status. The Department intends to continue to monitor the prairie chicken population extremely closely over the next few years and, if the population continues to respond favorably, a reassessment of objectives will be made.

BACKGROUND INFORMATION

History of Property Creation

Buena Vista Marsh, Leola Marsh and the Paul J. Olson Wildlife Areas are included in one master plan because banding data indicates they are tied together by a population of greater prairie chickens. Most management on the 3 properties is directed toward the prairie chicken and the properties are handled under one administrative unit. The complex is within one hour driving distance of 100,000 people (1970). According to DNR projections, this is expected to double by 1990.

The Buena Vista Marsh Wildlife Area became established as a result of purchases that were made by private organizations, primarily STCP and DCGL. The area contains no state ownership, state purchase goal or official purchase boundary. Management is accomplished by leasing private lands.

Leola Marsh Wildlife Area was established in 1956 when the state began land purchasing. Ownership is now 620 acres and the state considers their ownership complete.

The Dane County Conservation League Project (Paul J. Olson Wildlife Area) was established in 1973 when that organization donated 1,232 acres to the state. Additional donations totalling 1,393.07 acres have been made.

Buena Vista and Leola Marshes

Buena Vista Marsh is located in central Wisconsin in southwestern Portage County. Leola Marsh is located directly south of Buena Vista and is situated in northern Adams County. Together, the 2 marshes comprise approximately 70,000 acres. Prior to the arrival of settlers, both areas consisted primarily of large sedge meadows surrounded by spruce-tamarack bogs. Many islands of sand were interspersed throughout the area and supported a climax vegetation of white pine. By the year 1900, the timber was almost completely logged off. Frequent wildfires were then common to the area.

During the very early 1900's, large scale drainage projects were initiated on both marshes with the intention of claiming the land for farming. About 110 miles of drainage ditches are located on Buena Vista and 40 miles on Leola.

Early farming attempts were generally unproductive. The "black soils" were discovered to be peats and required fertilizer and lime not available at the time. Sands did not produce much better. The 2 marshes also experience a high frost hazard with a strong possibility of at least one killing frost in the summer. Additionally, the original drainage ditches did not drain the lands effectively. Crops were difficult to plant during the spring and equally difficult to harvest in the fall.

The production of blue grass for seed harvest became the next dominant land use with many thousands of acres being cultivated. Seed farming involved early spring burns on a controlled basis and seed harvest in August. This was totally compatible with the resident prairie chicken population as it involved a minimum of nest and brood disruption. Most importantly, this type of farming left large acreages of residual nesting cover because the grasses were left to stand tall after the seed was stripped from the plant.

As the seed production industry fell to competition from foreign markets, a new land use materialized. Blue grass farms were easily converted to cattle ranches. Beef ranching then dominated the 2 marshes until the mid-1960's when muck farming, and later, irrigated cash crops began to share the 2 areas.

Land control for the Buena Vista and Leola Marsh Wildlife Areas began during the early 1950's when the seed industry gave way to cattle ranching. Some lands were initially leased for management of prairie chickens, but the real effort began when the Dane County Conservation League became involved and began purchasing land for the state to manage. The second significant push came when another group, the Society of Tympanuchus Cupido Pinnatus, LTD, of Milwaukee organized in the early 1960's and began an intensive drive to purchase land.

Paul J. Olson Unit

The Paul J. Olson Wildlife Area, located in extreme western Portage County and northeast Wood County, has a far different history. This area is composed of poorly drained silt loam soils but had, from settlement, had a much better farming history than the 2 marsh areas previously discussed.

Originally covered by northern mesic forest, the area was logged off in the late 1800's and was converted to farmland. Dairy farming has persisted for much of the current century. Because the heavy soils are difficult to drain, a significant amount of land, interspersed with the more tillable acres, is often too wet to farm. These are usually Type I and II wetlands and receive just enough attention from the farmers to keep them in grasses or sedges.

These somewhat moist grasslands have been just enough to support a remnant prairie chicken population. In the early 1970's, the 2 private prairie chicken groups began buying land in the Sherry-Carson area for management purposes.

Land Control

Land control on the 3 areas is accomplished in different ways. Leola Marsh Wildlife Area has 2 forms of control. The original 620 acres were purchased in fee simple title by the Wisconsin Conservation Department and remains under state ownership. The remaining 260 acres were purchased in 1977 by Tympanuchus Cupido Pinnatus and are leased to the Wisconsin Department of Natural Resources for management purposes and public use.

Control on the Buena Vista Marsh area does not involve any state ownership. Currently, there is a total of 11,754 acres under management agreement on this unit: 7,143 acres are owned by the Society of Tympanuchus Cupido Pinnatus, 4,311 acres by the Dane County Conservation League and 260 acres by various organizations and trusts. All of these lands are under long-term leases to the Department.

The Paul J. Olson Unit differs from the long-term lease arrangement in that lands are purchased either by the Society of Tympanuchus Cupido Pinnatus or the Dane County Conservation League and are then deeded to the Wisconsin Department of Natural Resources as a gift. Deed restrictions require that the lands be managed principally for prairie chickens or revert to the previous owner. Current state ownership is 1,393.07 acres.

The Department will continue to lease the lands in Leola and Buena Vista under agreement not to exceed the current leased acreage of 12,014 acres. Additional lands in these 2 units which may be purchased by private organizations will be managed under agreement with DNR without lease.

Property boundaries for these 3 areas have been drawn up for the principle private cooperators to satisfy the biological requirements of the prairie chicken flocks involved. Boundaries do not follow the normal criteria used in constructing boundaries for most other state wildlife areas. The main difference is that to be effective for prairie chicken management, the land acquisition plan utilized by the private cooperators concentrates on purchasing land in a scattered pattern of ownership rather than attempting to block in each acre. For example, Buena Vista has approximately 40,000 acres of land within the boundary, but the purchase plan for STCP and DCCL calls for purchasing only 14,000 acres scattered within the boundary.

Acquisition of land by STCP and DCCL has nearly been completed on Buena Vista. These groups may acquire an additional 920 acres in Leola Marsh. The Paul J. Olson Unit currently has a goal of 5,000 acres with 1,393.07 acres under management. Because of successful intensive management of the area, it is now recommended that the purchase goal be reduced from 5,000 to 3,000 acres. Direct land purchase by the Department is not involved in the land control program.

Current Management Activities and Uses

Primary management of the 3 properties consists of developing, improving and maintaining a grassland habitat. Development has involved the use of bulldozing, chain sawing, fire, herbicides, brush mowing and intensive grazing. Improvement and maintenance involves the use of fire, hay mowing and herbaceous seedlings.

Emphasis has also been placed on ensuring a substantial winter food source through sharecrop arrangements and farming by Department personnel. Forest wildlife management practices, mainly aspen management, has been implemented on approximately 1,000 acres on the 3 units. During the occasional wet fall, Buena Vista offers quality waterfowl hunting opportunities.

All 3 areas are used mainly by the public for hunting, trapping, berry-picking, birdwatching, nature study, photography and dog trialing. Most of the hunting pressure comes during the gun-deer season. However, the areas are also used by bow hunters and the limited forest cover is used significantly by grouse and woodcock hunters.

A portion of the Paul J. Olson Unit is northern bog and receives conspicuous blueberry picking use. Trapping and hunting of coyote and fox is a popular pastime on the 3 areas as is muskrat and mink trapping on the numerous drainage ditches that traverse the Buena Vista and Leola Units.

About 500 people are guided to observation blinds each year to witness the courtship behavior of the prairie chicken. The grassland habitat also attracts numerous other birdwatching delights such as the greater sandhill crane, upland plover, various grassland loving songbirds and birds of prey. Bird watching without the aid of guidance probably accounts for another 1,000 participant-days of use on the properties.

Two dog trials are held each September. Both trials are of national significance and bring people from as far away as Georgia and New York. These people are of the opinion that the Buena Vista Wildlife Area is one of the finest dog trial areas in the United States.

RESOURCE CAPABILITIES AND INVENTORY

General Character

Buena Vista and Leola, both having once been a huge sedge meadow, are characterized by having a high water table. Both currently consist of drained peat soils and Newton sand with scattered islands of higher Plainfield sands. The drained peat soils are capable of growing luxuriant grass for grazing. Both areas have a long history of farming, but because of poorly drained soils and frequent summer frosts in many scattered pockets, cash cropping has not become a dominant land use. This latter condition is more pronounced on Buena Vista.

The Paul J. Olson Unit differs markedly from the Buena Vista and Leola Units and differs within itself. A major portion of the eastern edge of this area consists of a large, bog-like conifer swamp characterized by deep peat soils. The remainder has scattered peat soils but is dominated by poorly drained to well drained silt loams. From the time of logging, this area has supported good farms on the better drained soils. Generally, the area is a dairy economy and during periods of average or below average rainfall, the amount of tillable land increases. The reverse is true during wetter times.

Fish and Wildlife

Without question, those species of wildlife that depend on a grassland habitat are entirely manageable. The greater prairie chicken is a prime example. Wherever permanent grasslands have disappeared in their former range, the prairie chickens have disappeared. This project involves the management of a large grassland complex with a mixture of brushland, early successional forest and wetland habitat components. It is within DNR capabilities to maintain these habitats in their current condition.

Prairie chicken numbers seem to rise and fall in a cyclic pattern, perhaps a 10-year cycle similar to ruffed grouse. For the past few years, the population seems to have been rising as indicated by the increase in males on the booming grounds during April. The population cycle apparently peaked in 1981. Male birds observed that spring included 550 on Buena Vista, 75 on Leola Marsh and 302 on the Olson Unit. Spring surveys in 1982 indicated a decline of 7%.

Twenty-five mammalian species are year round residents of the wildlife area complex. Common game species include white-tailed deer, red fox, cottontail rabbit, raccoon, muskrat, mink and striped skunk. Common nongame species include woodchucks, masked shrew, star nosed mole, eastern chipmunk and white footed mouse. Uncommon species include otter, red squirrel and Franklin ground squirrel.

Some 76 species of birds are known to frequent the area during the summer months. Common species include sandhill cranes, great blue heron, mallard, blue-winged teal, wood duck, red-tailed hawk, woodcock, mourning dove, belted king fisher, tree swallow, starling, common yellowthroat, northern oriole and rose-breasted grosbeak. Occasional visitors include least bittern, green-winged teal, shoveler, American coot, herring gull, eastern wood pewee, western meadow lark, pileated woodpecker, short-eared owl, harrier, kestrel and snipe.

About 30 additional species of birds have been sighted on the area during the migration period. These include whistling swan, common loon, Canada goose, snow goose, wigeon, canvasback, scaup, osprey (Wisconsin endangered species), greater and lesser yellowlegs, dunlin, and various song birds. Winter residents include horned lark, northern shrike, snow bunting and occasionally, snowy owl and gyrfalcon.

Fish species common within wildlife area waters include eastern brook trout, brown trout, white sucker, mottled sculpin, pearl dace and blacknose dace. Less common varieties include northern pike, hornyhead chub, central mudminnow, brook stickleback, northern redbelly dace, and Johnny darter.

Common reptiles and amphibians include garter snake, hog-nosed snake, red-bellied snake, painted turtle, snapping turtle, American toad, leopard frog and wood frog. The wood turtle, a Wisconsin endangered species, is known to be found on the area.

Water Resources

The Paul J. Olson Unit is mostly devoid of surface waters. There are no surface waters on currently controlled lands. Mill Creek and one of its tributaries as well as Moccasin Creek can be found at certain points within the existing boundary. All are warmwater streams with a warmwater fishery.

Buena Vista and Leola contain numerous drainage ditches. Many of the ditches are merely straightened streams or extensions of meandered streams. Many of these support a brook and brown trout fishery with natural reproduction in their headwaters. Other ditches become quite warm at certain periods of the year and support little or no fishery. Buena Vista and Leola are both organized drainage districts. Drainage laws, in most cases, preclude any management work that might be done to improve the warm or coldwater habitat for fish.

¹ By definition, those grasslands that are used in such a manner as to permit large expanses of grasses and other herbaceous plants to go into the winter in an undisturbed or full standing condition so as to provide nesting habitat for the following spring season.

Historic and Archaeological Features

At this time, there are no known historical or archaeological sites of significance. However, the State Historical Society will be contacted and advised before scheduling any major development on these lands.

Buena Vista, Leola and that portion of Paul J. Olson In Wood County have not been surveyed for properties of historical or architectural significance and no information is available.

An architectural survey has been made of portions of Portage County, including sections on Sherry-Carson of architectural interest: a log farm building on the east side of CTH "S", located 1.1 mile south of Mill Creek bridge; a brick schoolhouse on the west side of Fifth Avenue, .4 mile north of CTH "M"; a barn of exceptional size on the north side of County Line Road, 1.5 miles east of CTH "S"; a log and plank barn on the east side of Third Avenue, 0.7 mile south of the intersection of CTH "G" and "M". None of these buildings have been evaluated in terms of their eligibility for inclusion on the National Register of Historic Places.

There are also 6 archaeological sites in the Olson Unit: copper artifacts (Pt-farm in the SW of Section 15 and the SE of Section 16, T24N, R6E, Portage County; in the S 1/2 of Section 12, T24N, R5E; 2 campsites, a group of garden beds and the N 1/2 of Section 13, T24N, R5E, Wood County. Like the architectural sites, none of the archaeological sites have been tested and evaluated in terms of their eligibility for inclusion in the National Register.

There are no known archaeological sites in either Buena Vista Marsh or Leola Marsh. However, this may simply reflect the fact that these areas have not been systematically surveyed for such resources. It is felt that these areas, like the Olson Unit, have a high probability of containing prehistoric and historic archaeological material.

Land Use Classification

Buena Vista, Leola and the Olson Unit should be generally classified as Fish and Wildlife Development Areas (RD2). The exception would be the existing Scientific Areas and the administrative headquarters site. The 3 areas' combined size and controlled acreage make it possible to effect, through management, the environmental requirements to fulfill this plan's proposed goal and objectives. At the same time, the habitat is such that frequent and diversified management techniques need to be employed to retain its current, productive state. To merely sit back and protect this area would not be enough.

MANAGEMENT PROBLEMS

Muck farming and irrigated vegetable crops have recently become a significant land use on the Buena Vista and Leola areas. By itself, this is not a threat to the goal and objectives contained in this Plan. However, this manner of growing crops uses an inordinate amount of pesticides that usually are applied by airplane. The newer pesticides are designed to be short lived in the environment, but many of them are extremely "hot" for their short time of activity.

Drift of pesticide sprays from target areas to nontarget areas has been documented. Surface waters and groundwater are also contaminated. This has to be considered a threat to the welfare of the wildlife living on these properties and possibly the people working and recreating on these areas.

Pesticide use in the Paul J. Olson Wildlife Area, mainly a dairy economy, is light in volume and not considered a threat.

The potential for waterfowl management exists. However, at this point in time, the drainage district does not approve of wetland restoration or development within district lines.

The invasion of grasslands by aspen, willow and spirea is an annual problem and results in a constant struggle to prevent succession from the current grass cover to woody cover. At this time, the Department has a number of management tools at its disposal and requires the use of all of them to stay ahead of the brush and trees including prescribed fire, mowing, plowing and reseeding, herbicides, bulldozing, hand clearing and intensive grazing.

The 3 wildlife areas are not composed of natural grassland and, consequently, the problem of succession will always have to be considered. The problem becomes acute when one considers the loss of one or more of the present tools through budgetary or social constraints.

RECREATIONAL AND EDUCATIONAL NEEDS AND JUSTIFICATION

Due to public demand, the Department developed a program through the years whereby the general public could observe the ritualistic mating dance of the prairie chicken on several traditional "booming grounds". Department personnel guided, by reservation, approximately 500 visitors annually to temporary observation blinds from early April to early May. While 500 people is significant, the Department received far more annual requests than could be satisfied. "Booming" has definitely grown in popularity and provides people a positive recreational and educational experience. It has also provided the Wisconsin prairie chicken devout public support.

Due to manpower and budgetary limitations, the Department has only recently developed an agreement with personnel from the University of Wisconsin-Stevens Point to execute and administer the "booming" program. A small fee is now charged to offset program expenses. It is hoped that this program could be expanded in the future to meet the recreation demands for this popular activity.

The Wisconsin prairie chicken project is one of a kind. After many years of research, acquisition with private funds and development, the project is showing many signs of being a wildlife management success story. Wisconsin now boasts the largest remaining population of greater prairie chicken east of the Mississippi River and for all practical purposes, the only viable population.

Just as important, a secondary benefit has been the creation of possibly the largest grassland community east of the Mississippi River. The entire situation resulted from an obligation that is as real today as it was at inception. A public demand and awareness for fulfillment is increasing each year. The sum of all actions outlined in this Plan is intended to improve and maintain this unique wildlife community.

OTHER ALTERNATIVES

The extremes of management are represented by 2 alternatives; one in which there would be no more management and the other in which the current management scheme would be enlarged to purchase and develop all acres within the boundaries of the 3 areas. Adoption of the former would mean eventual extirpation of the prairie chicken from central Wisconsin. Grasslands would quickly revert to brush and timber lands consequently changing the habitat type from one of prairie grouse to one of forest wildlife.

The alternative to greatly expand the program would result in a huge financial burden, loss of additional crop and pasturelands and an eventual maintenance burden that possibly could not be handled from a physical and financial standpoint.

Another alternative exists wherein the majority of the controlled lands could be converted to permanent wetlands. This alternative is not considered to be valid since at least 2 of the areas are within drainage districts, farms would be impacted and the grassland wildlife community would be negatively affected.

APPENDIX A

Master Plan Comments

Henry Kolka
Wild Resources Advisory Council
September 25, 1980

The Property Task Force of Bruce Gruthoff, Jack Holsington and Jack Zimmerman of the Buena Vista Marsh, Leola Marsh and Paul J. Olson Wildlife Area Master Plan Concept Element are to be congratulated for producing a very credible document. The Wild Resources Advisory Council places this Master Plan Concept element amongst the top ones reviewed.

General Review

The Wild Resources Advisory Council wishes to congratulate the Task Force for presenting a fairly substantial Master Plan Element for the composite Wildlife Properties of Buena Vista, Leola and Paul J. Olson. The Council after carefully analyzing the document and discussing the history and research studies of the project area with Frederick Hamerstrom sees the necessity of some minor modification to strengthen the Concept Element before Natural Resources Board review. Briefly the Council considers:

1) The wildlife inventory on pages 7, 8, 9 and 10 is one of the best listings of wildlife areas reviewed up to date. Unfortunately, very little use of this excellent list is made in the text of the document. Recent proposed legislation could result in funding for preserving and enhancing the habitat for nongame species on wildlife areas.

2) The charts, though well designed, lack reference order and pertinent information. Why not label "Property Locator", as Figure 1, "Buena Vista Wild Area Land Control" as Figure 2, etc. This will allow reviewer to make reference to charts without the waste of a lot of words. The Charts of Buena Vista and Paul J. Olson should use the same legend to eliminate interpretive confusion.

3) The Master Plan Concept Element of wildlife areas should consider education just as important an objective as recreation. Actually on these composite properties education is more important than recreation and it should be given visibility in the goal and objectives as well as in the text.

DNR RESPONSE: A new source of funds has not materialized. Figures have been corrected; education elaborated upon in text.

Comments and Recommendations

1. Table of Contents, Item 4 under Section II.

The Wild Resources Council suggests that the statement read "Recreational and Educational Needs and Justifications."

Item 5 under Section II. The WRAC suggests that the word Other be inserted before Alternatives. The recommended management is handled in the text before Other Alternatives are head lined on page 11.

DNR RESPONSE: Concur; text modified.

2. Goal.

The WRAC suggests that after the word prairie chickens--and associated wildlife be inserted.

DNR RESPONSE: Do not agree; management programs are specifically designed around prairie chickens.

3. Management and Development Program.

The WRAC considers the insertion of and itinerant between resident and wildlife as realistic.

DNR RESPONSE: Concur; text modified.

4. pp. 1, 3rd paragraph.

Herbicide application is a very touchy tool used on wildlife areas of Wisconsin. The Council recommends it's discontinuance.

DNR RESPONSE: While DNR agrees that the use of herbicide is a sensitive issue, it provides an additional, legitimate aid to management when used under prescribed limits.

5. Recommended Management

Evidently the composite property managers consider the viewing of prairie chicken courtship dances in need of expansion from 500 visitors a day to 800. This is well and good, however, the WRAC expresses serious concern over possible exploitation and potential harm inflicted on this unique natural phenomenon (if the public viewing is contracted to some other agency or party). Under no circumstances should the welfare of the prairie chicken be jeopardized.

DNR RESPONSE: Concur; text modified. Note 800 level eliminated.

6. Chart on Buena Vista Wildlife Area

This chart lacks 2 important location identifications: 1) The showing of the two Sections of Scientific Areas number 85; and, 2) The location of public observable prairie chicken booming grounds.

Since the Paul J. Olson chart shows the location of its "booming ground, possibly 2 symbols could be used; one for designated public observation sites and the other for known booming, non-observation sites. The WRAC again wishes to stress the need for a common legend for all 3 properties.

DNR RESPONSE: Scientific Area added to figure. Do not feel distinction of booming grounds is warranted; symbol removed.

7. pp. 5, third paragraph from top of the page.

WRAC recommends following insertions: Line 3 after recreational add and educational. Same line after nature study add photography.

DNR RESPONSE: Concur; text modified.

8. pp. 5, paragraphs (from the top) 4, 5, 6, 7 and 8.

There is too much statistical confusion in the stated acreages under existing controls and projected needs. The WRAC recommends a more understandable analysis--why not consider a table presentation? The Council considers the future of a viable prairie chicken population extremely important for the welfare of the species as well as the need for sufficient quality habitat to perpetuate this objective. The Council supports the Task Force's recommendation of prairie chicken habitat enlargement and expected enhancement to the Natural Resources Board.

DNR RESPONSE: Concur; text modified.

9. Current Management Activities and Uses (add an s to use).

In the inventory of uses (first sentence), WRAC recommends the addition of nature study and photography. The Council acquiesces to the concept of Task Force's strong endorsement of dog trials only with safeguards. It should be carefully and constantly monitored so that deleterious impacts on the major goal of the 3 properties will be avoided. The last paragraph of this section is a gem even if the Council questions the advisability of the last 3 sentences. The first part of the paragraph does a beautiful job of reviewing the wildlife riches of the project areas. It certainly projects greater non-consumptive future public use of this type of environment.

DNR RESPONSE: Concur; text modified.

10. Wildlife Inventory.

The WRAC considers this listing as outstanding and one of the best of all Master Plan Concept Elements for Wildlife Areas.

DNR NOTE: Detailed listing summarized after review purpose served.

11. Scientific Areas.

WRAC recommends that the segments of Scientific Area number 85, the Quarry Prairie and the Buena Vista Meadow or Prairie Chicken Preserve be shown on the Buena Vista Wildlife Area chart and likewise be identified in the Legend.

DNR RESPONSE: Concur; Scientific Area identified.

12. Creek names.

The paragraph mentions 2 creeks, Mill and Moccasin. The chart on page 4 doesn't show either. The only streams labeled are Mile and Spring Branch. Please correct either the text or the chart.

DNR RESPONSE: Text corrected.

13. Management Problems.

Harmful impact from drift of chemical sprays and surface and ground water contamination, when detected, should be channeled to the legal arm of the DNR for court action. Considering the importance and the fragility of the target specie, sitting back and taking these environmental assaults is not a sensible way to go.

The last sentence should also include and carrying on nature study.

DNR RESPONSE: Concur with law enforcement recommendation. Do not agree with text change; recreating adequate.

14. Re-title heading to: Recreation and Education Needs and Justifications.

DNR RESPONSE: Concur; heading modified.

15. page 11, first paragraph.

Reference has already been made to this. WRAC recommends that the designated viewable "booming grounds" be shown on a chart or charts, wherever the management has designed them to be.

16. page 11, paragraph 3.

The WRAC favors the first option and recommends it.

17. Recreation and Education Needs and Justifications.

The WRAC considers this summation paragraph as something very special and most outstanding. However, since it establishes a position for present and future generations to enjoy and treasure the people that set the tune and pace for this unusual achievement should receive some visible credit. The Council urges that the Project Task Force weave into this exception paragraph the men that contributed most to basic research which culminated into this success story. Certainly credit should be given to Frederick Hamerstrom for his 22 years of dedicated work on the project and also to Ray Anderson for his academic revelations in disciplined study of the project. Since this Master Plan Concept Element sets the guidelines for the project areas for a number of years into the future, the recommended piece of illuminating history increases the appreciation of the reader for the project.

DNR RESPONSE: While the Department agrees that such credit is warranted, a host of individuals have contributed to the property management regime over the years. Deciding who should receive mentioning and who should not is very awkward. After consultation with several individuals, including Dr. Hamerstrom, it is felt that the Department has adequately expressed its appreciation in numerous other, more appropriate documents. Further, the situation is clarified by this appendix entry.

Additional Comments

After further consultation with the experts in the realm of prairie chicken in Wisconsin, the Wild Resources Advisory Council makes the following additional recommendations. The 2 new recommendations are to be considered with the original draft.

1. Annual Objectives, item 3.

The WRAC objects to the Task Force's use of absolute numbers, such as 500 and 800 participant days of prairie chicken observation. A more realistic system would be to gear the viewer numbers to chicken populations. Since the prairie chicken population is cyclic, observer numbers should, in a broad way, reflect these natural rhythms.

2. Recreation and Education Needs and Justifications. Addition to comment, number 16.

As stated previously, the WRAC favors the first option--DNR control and operation of the prairie chicken observers. The council does have a suggestion: Since DNR operations are not now and may be less sufficiently funded, the Council suggests that a fee charge be made to all regulated viewers. The money collected could then be used to defray the cost of viewer operations.

DNR RESPONSE: Concur with concept. However, it has been implemented through a cooperative agreement with the University of Wisconsin - Stevens Point.

Richard W. Dexter
Compliance Coordinator
Historic Preservation Division
The State Historical Society
September 22, 1980

We have reviewed the concept element for Buena Vista Marsh, Leola Marsh and the Sherry-Carson Wildlife Area.

Buena Vista, Leola and that portion of the Olson Unit in Wood County have not been surveyed for properties of historical or architectural significance and we have no information on such sites in these areas.

An architectural survey has been made of portions of Portage County, including sections on the Olson Unit of architectural interest: a log farm building on the east side of CTH "S", located 1.1 mile south of Mill Creek bridge; a brick schoolhouse on the west side of Fifth Avenue, .4 mile north of CTH "M"; east of CTH "S"; a log and plank barn on the east side of Third Avenue, 0.7 mile south of the intersection of CTH "G" and "M". None of these buildings have been evaluated in terms of their eligibility for inclusion on the National Register of Historic Places.

There are also six archeological sites in the Paul J. Olson Wildlife Area: copper artifacts (Pt-65) were found on the Olson farm in the SW 1/4 of Section 15 and the SE 1/4 of Section 16, T24N, R6E, Portage County; 2 campsites were found in the S 1/2 of Section 12, T24N, R5E; 2 campsites, a group of garden beds and a cemetery were reported in the N 1/2 of Section 13, T24N, R5E, Wood County. Like the architectural sites, none of the archeological sites have been tested and evaluated in terms of their eligibility for inclusion on the National Register.

There are no known archaeological sites in either Buena Vista Marsh or Leola Marsh, however, this may simply reflect the fact that these areas have not been systematically surveyed for such resources. We believe that these areas, like the Olson Unit, have a high probability of containing prehistoric and historic archaeological material.

We recommend that prior to any significant ground-disturbing activities our office be contacted so that our staff may determine if these activities could adversely affect valuable archaeological material.

Should you have any questions on this matter, please contact me. My telephone number is (608)266-2732.

DNR RESPONSE: Concur; text modified.

Forest Stearns
Scientific Areas Preservation Council
October 7, 1980

We have reviewed the Buena Vista Marsh, Leola Marsh, and Paul J. Olson Wildlife Area Master Plan and offer these comments.

1. The concept plan on page 10 mentions the 2 state scientific areas; however, their location is not given. The 2 areas are Buena Vista Quarry Prairie, T21N, R7E, SE 1/4 SE 1/4 Section 2, 40 acres; and Buena Vista Prairie Chicken Meadow, T22N R7E S 1/2 SE 1/4 Section 26, 80 acres. This information should be in the text and the areas identified on the Buena Vista map.

DNR RESPONSE: Concur; map corrected.

2. The ongoing natural area inventory of the Scientific Areas Section has identified one site with natural area values in the Paul J. Olson Wildlife Area. The site is Tenmile Creek through Section 34, T21N R6E, including the stream and alder border. We recommend that all or a considerable portion of this area be classified as a public use natural area.

DNR RESPONSE: Map reviewed was in error; Tenmile Creek is not within the wildlife area boundaries.

3. The property locator (p. 1) and land control map (p. 4) show Paul J. Olson Wildlife Area in different areas.

DNR RESPONSE: Map corrected.

4. Has the recent interest in uranium in this area had any impacts on these areas?

DNR RESPONSE: None.

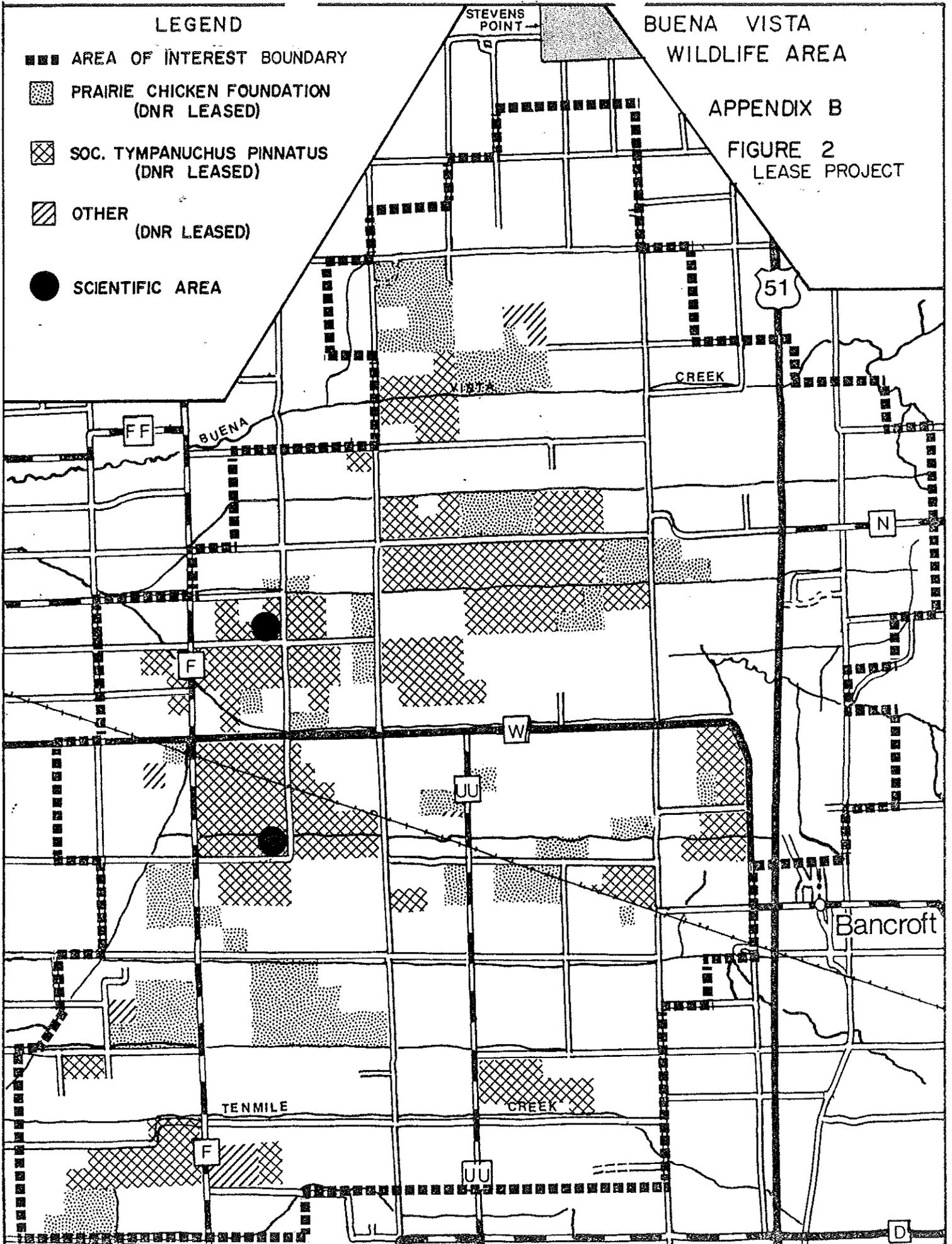
LEGEND

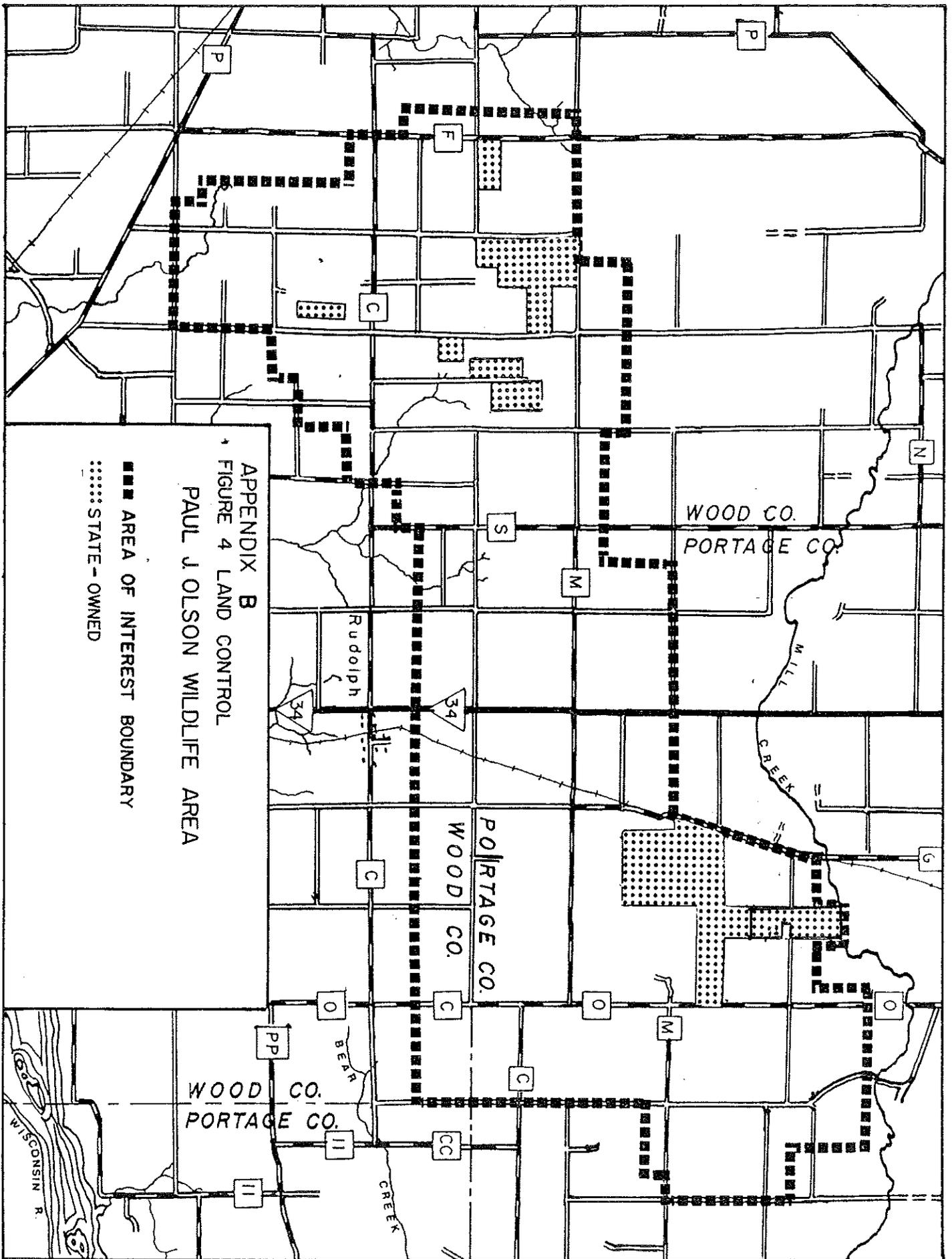
- ■ ■ AREA OF INTEREST BOUNDARY
- ▨ PRAIRIE CHICKEN FOUNDATION (DNR LEASED)
- ▩ SOC. TYMPANUCHUS PINNATUS (DNR LEASED)
- ▧ OTHER (DNR LEASED)
- SCIENTIFIC AREA

BUENA VISTA WILDLIFE AREA

APPENDIX B

FIGURE 2
LEASE PROJECT





APPENDIX B
FIGURE 4 LAND CONTROL
PAUL J. OLSON WILDLIFE AREA

■ ■ ■ AREA OF INTEREST BOUNDARY
..... STATE-OWNED

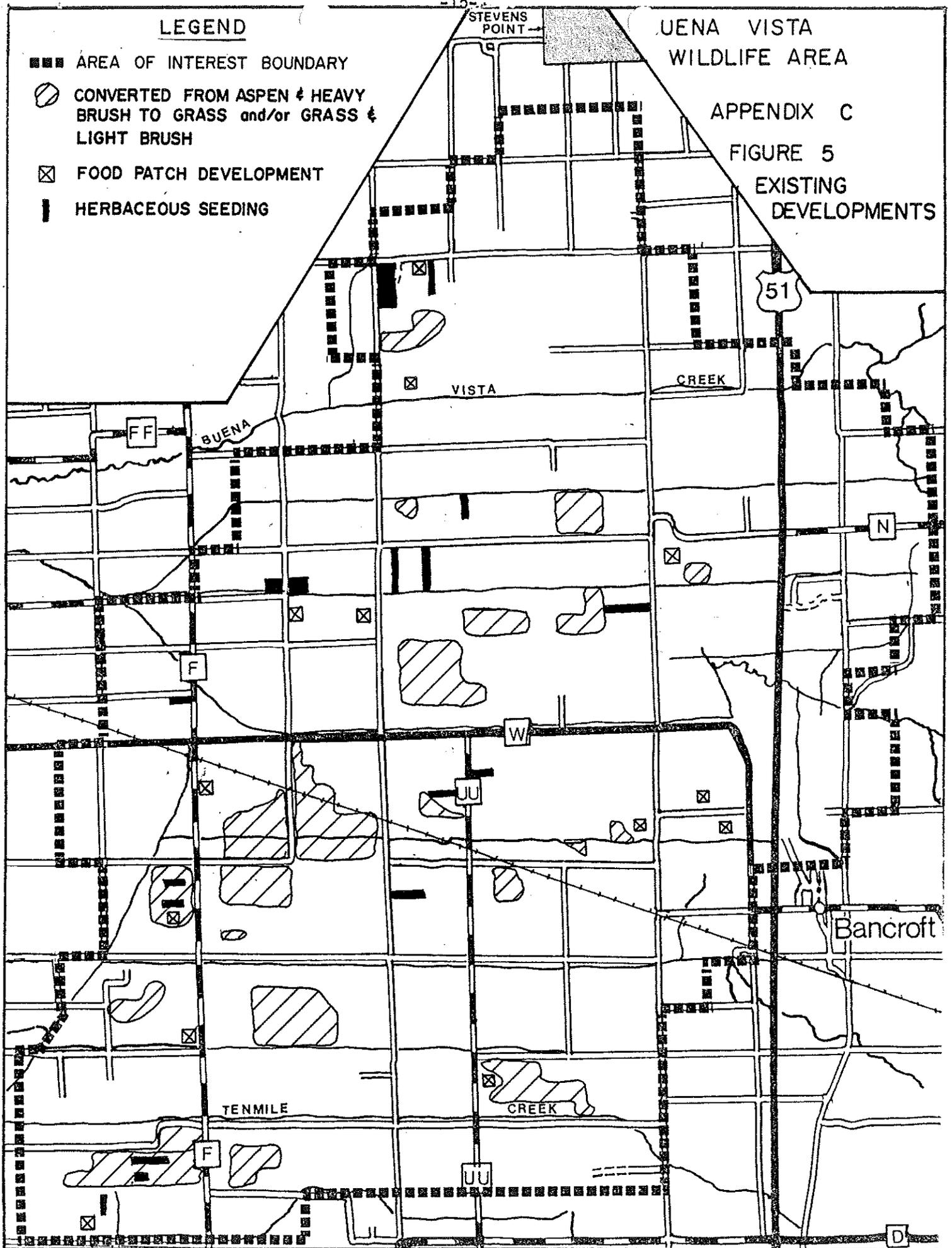
LEGEND

- AREA OF INTEREST BOUNDARY
- CONVERTED FROM ASPEN & HEAVY BRUSH TO GRASS and/or GRASS & LIGHT BRUSH
- ⊗ FOOD PATCH DEVELOPMENT
- ▬ HERBACEOUS SEEDING

UENA VISTA WILDLIFE AREA

APPENDIX C

**FIGURE 5
EXISTING DEVELOPMENTS**



LEGEND

■■■■ AREA OF INTEREST BOUNDARY

▨ FURTHER CONVERSION OF BRUSH TO GRASSLANDS

⊠ FOOD PATCH

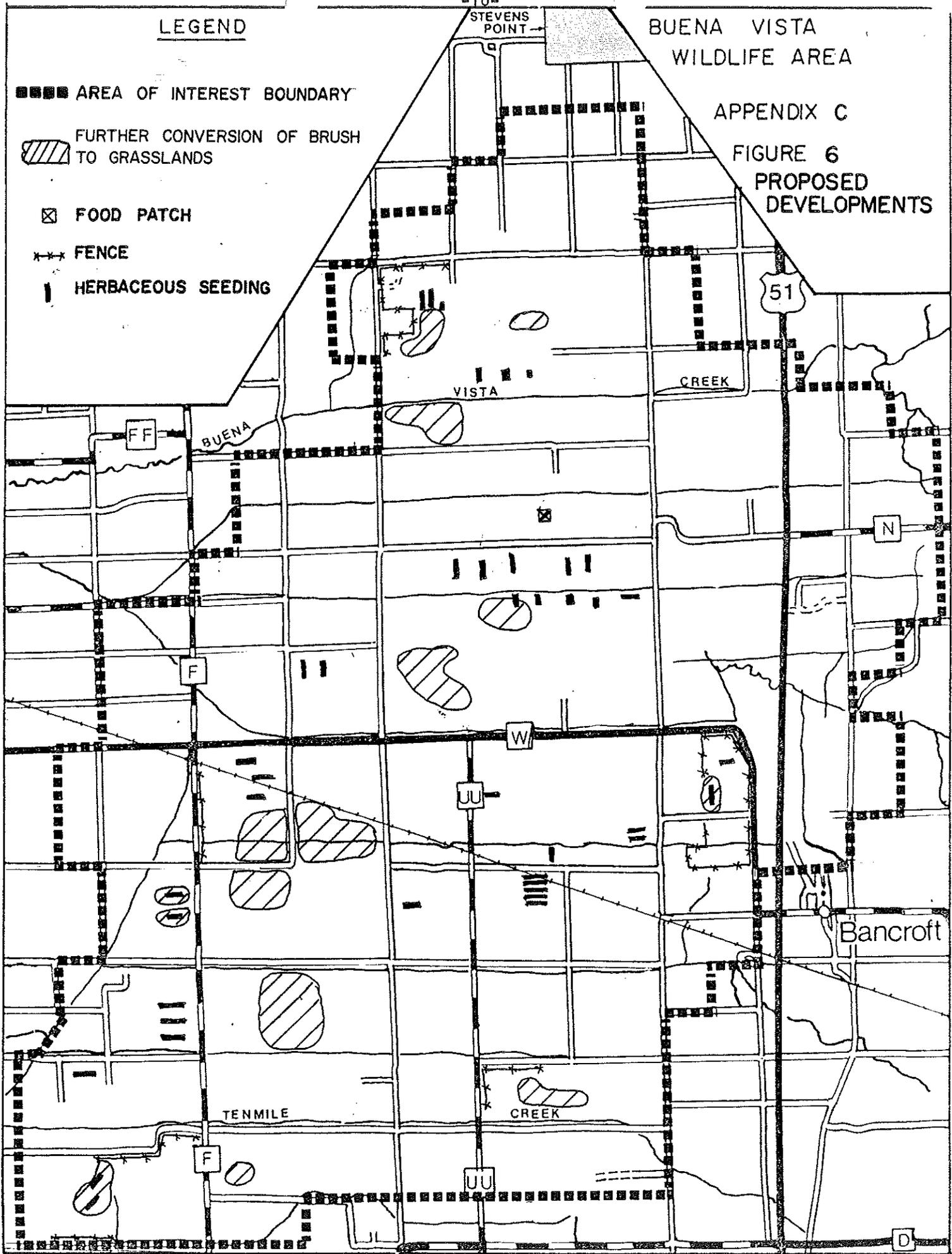
*** FENCE

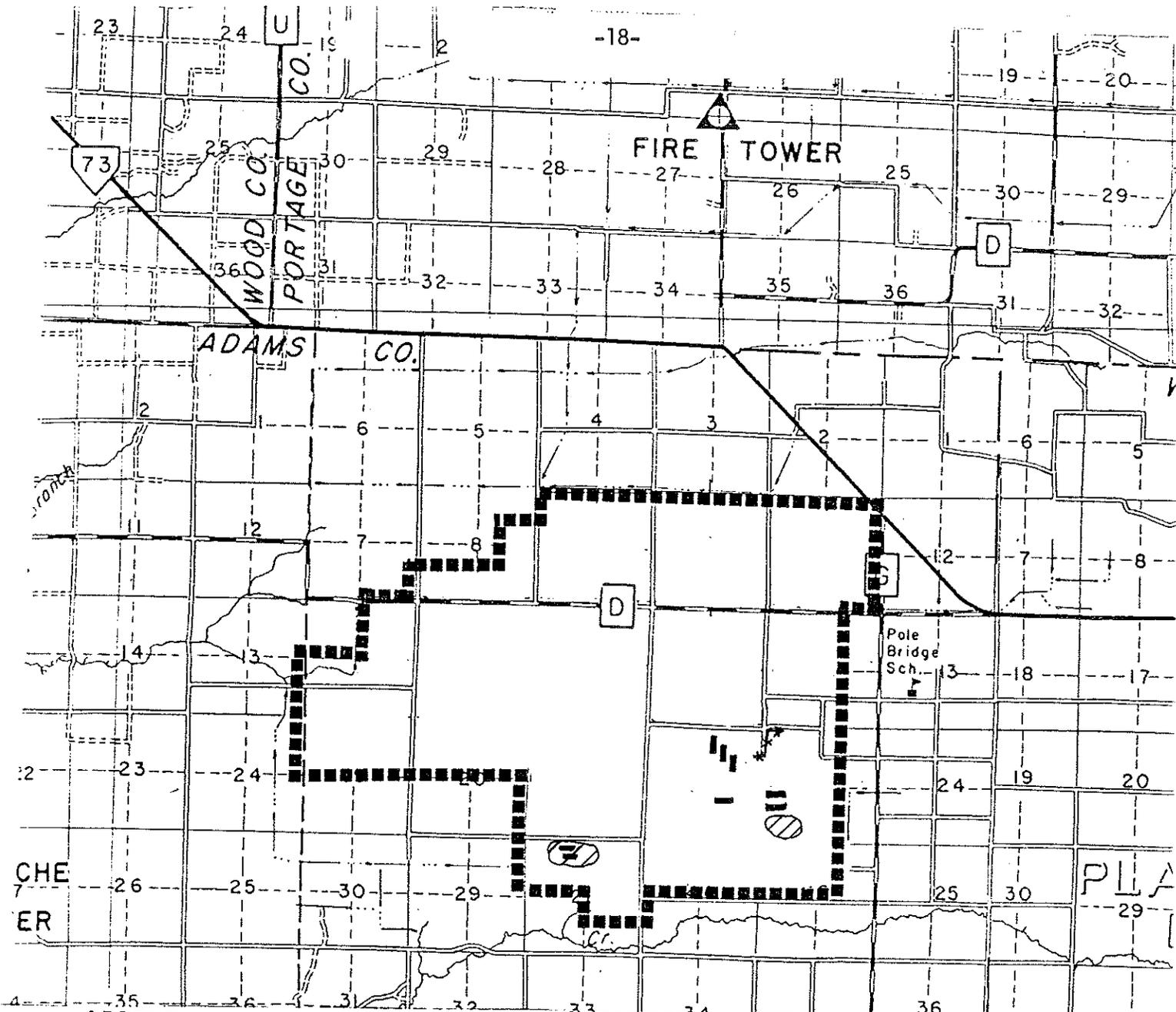
|| HERBACEOUS SEEDING

BUENA VISTA WILDLIFE AREA

APPENDIX C

**FIGURE 6
PROPOSED DEVELOPMENTS**



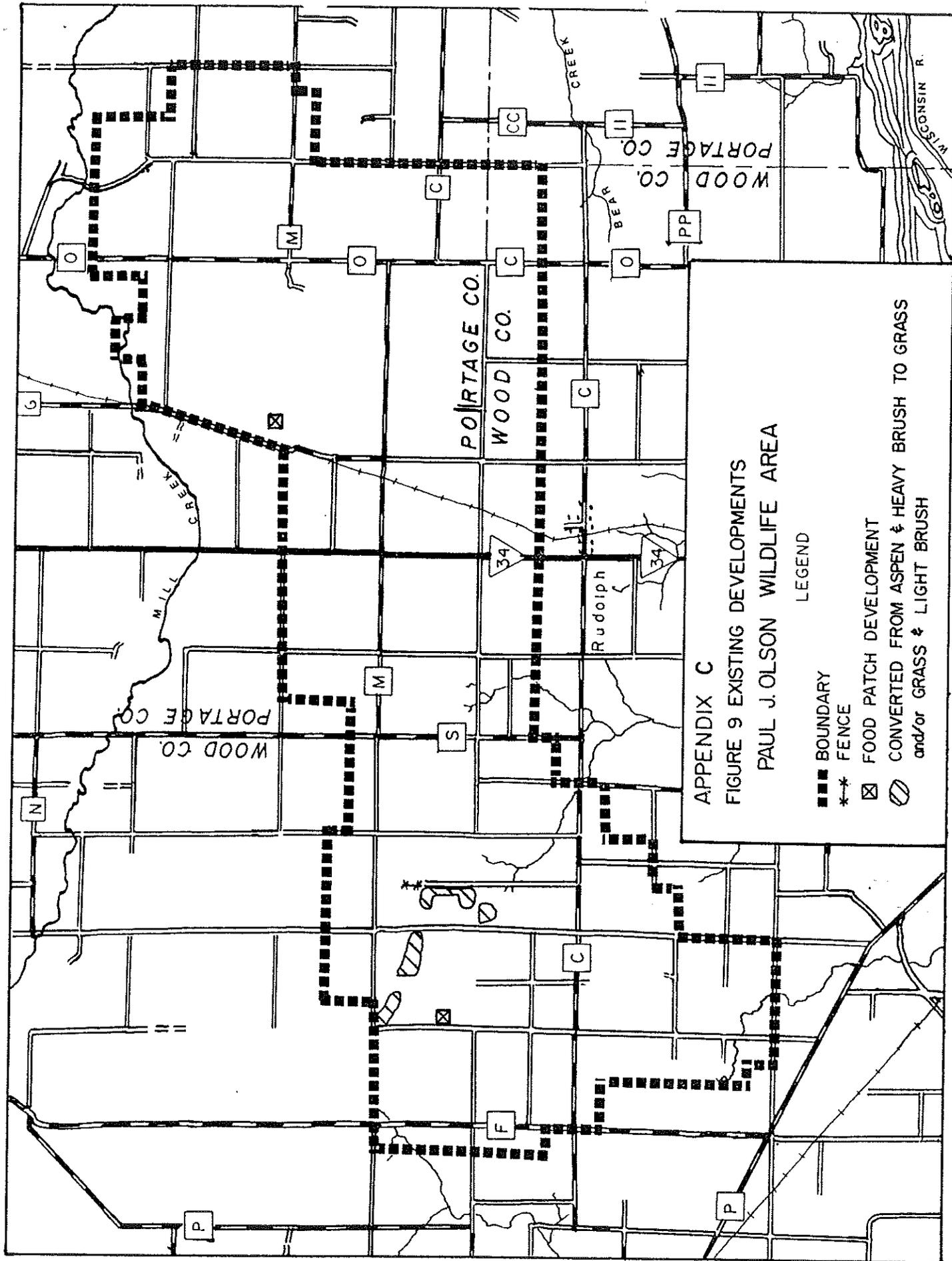


APPENDIX C
 FIGURE 8 PROPOSED DEVELOPMENT
 LEOLA MARSH WILDLIFE AREA

LEGEND

- BOUNDARY
- * * FENCE
- HERBACEOUS SEEDING
- ⊘ FURTHER CONVERSION OF BRUSH TO GRASSLANDS

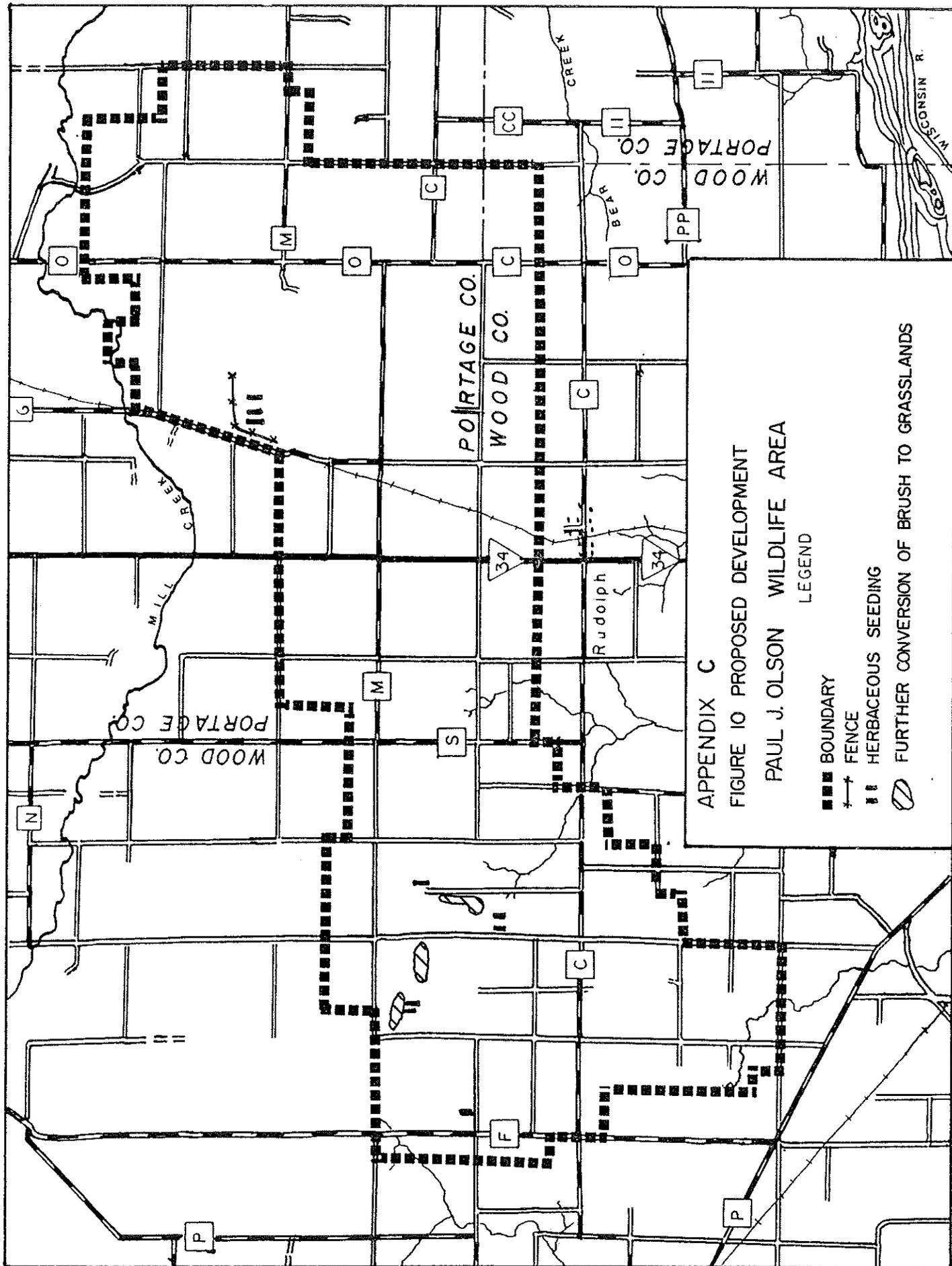




APPENDIX C
 FIGURE 9 EXISTING DEVELOPMENTS
 PAUL J. OLSON WILDLIFE AREA

LEGEND

- ▬ BOUNDARY
- - - FENCE
- ▨ FOOD PATCH DEVELOPMENT
- CONVERTED FROM ASPEN & HEAVY BRUSH TO GRASS and/or GRASS & LIGHT BRUSH



APPENDIX C
FIGURE 10 PROPOSED DEVELOPMENT
PAUL J. OLSON WILDLIFE AREA
LEGEND
■ BOUNDARY
+ FENCE
|| HERBACEOUS SEEDING
/ FURTHER CONVERSION OF BRUSH TO GRASSLANDS

BUENA VISTA WILDLIFE AREA

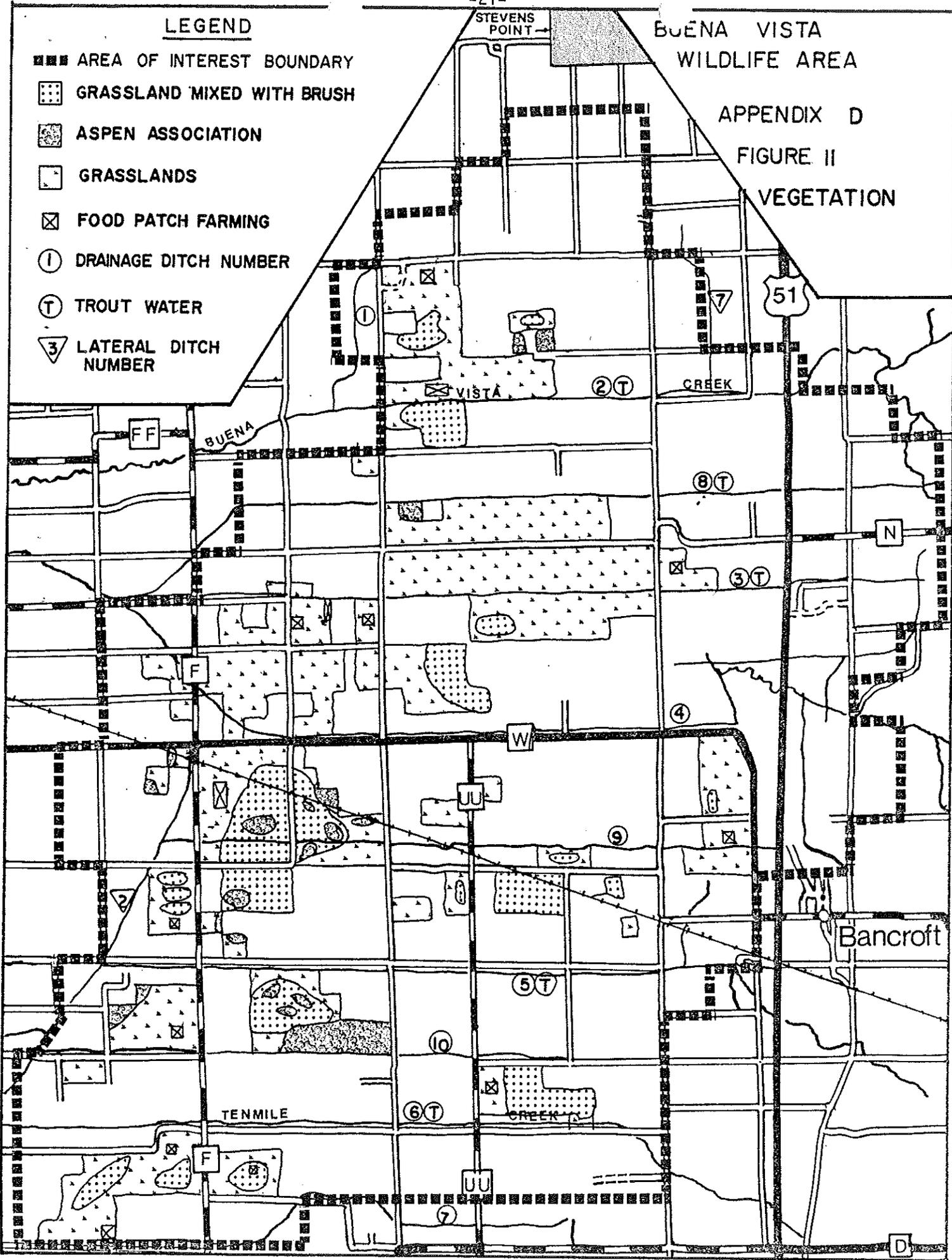
APPENDIX D

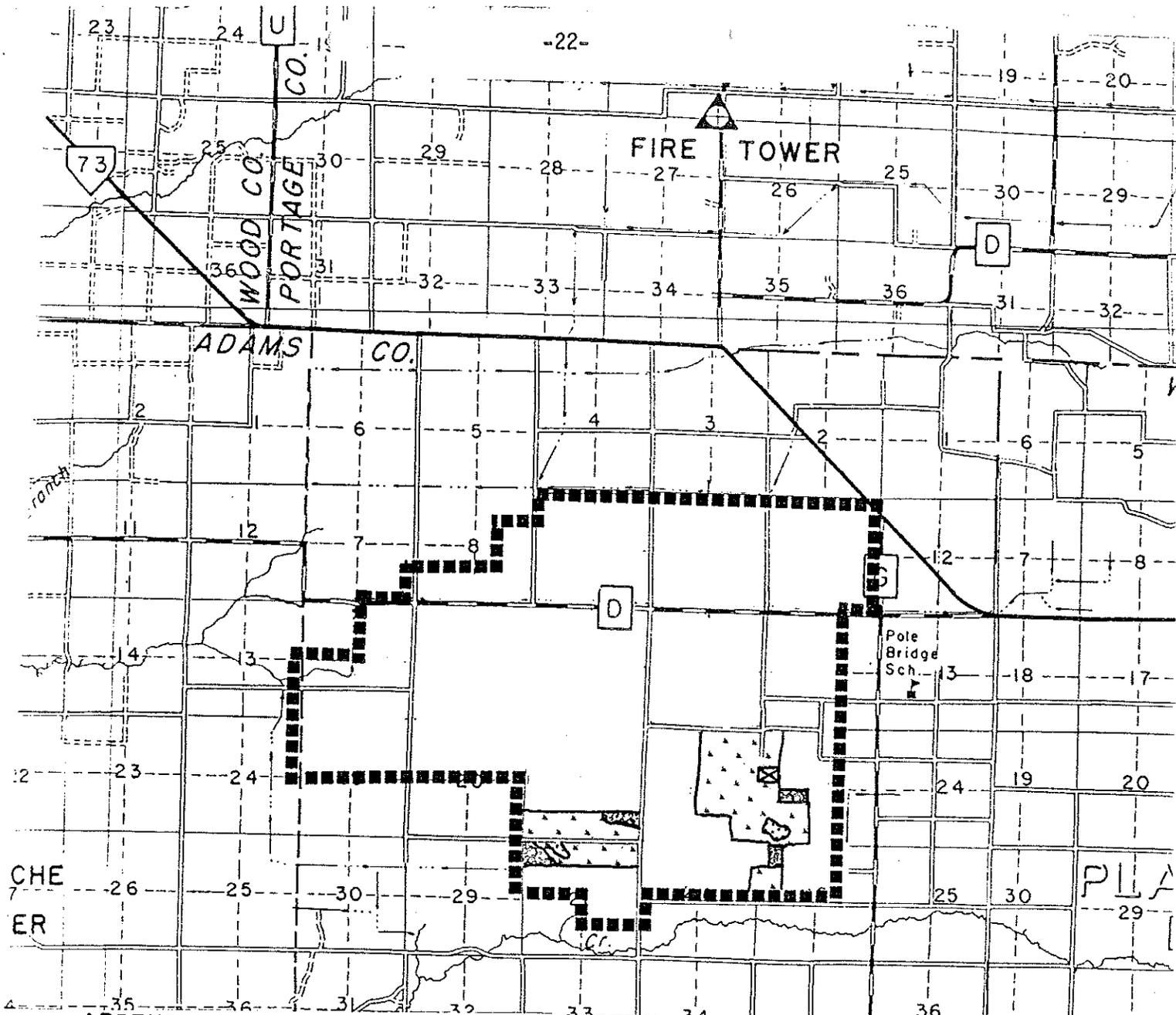
FIGURE II

VEGETATION

LEGEND

- ▣▣▣▣ AREA OF INTEREST BOUNDARY
- ▣▣▣▣ GRASSLAND MIXED WITH BRUSH
- ▣▣▣▣ ASPEN ASSOCIATION
- ▣ GRASSLANDS
- ⊠ FOOD PATCH FARMING
- ① DRAINAGE DITCH NUMBER
- Ⓣ TROUT WATER
- ▽ 3 LATERAL DITCH NUMBER

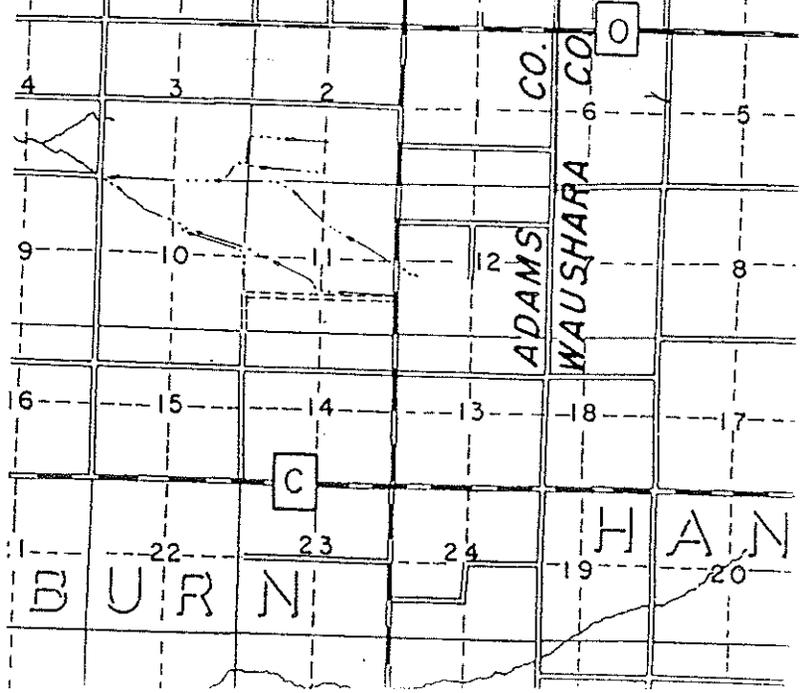


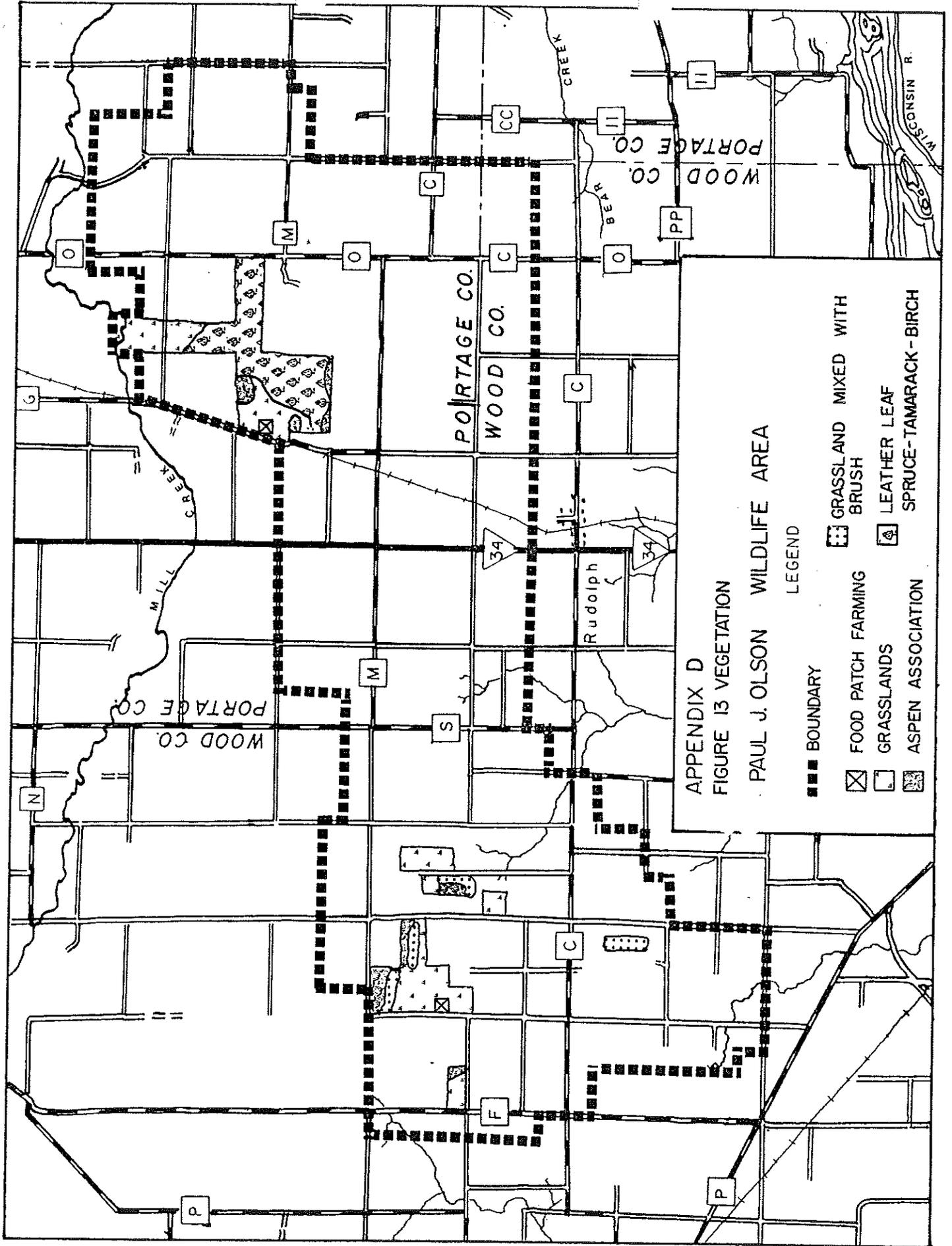


APPENDIX D
 FIGURE 12 VEGETATION
 LEOLA MARSH WILDLIFE AREA

LEGEND

- BOUNDARY
- ⊗ FOOD PATCH FARMING
- GRASSLANDS
- ▨ GRASSLAND MIXED WITH BRUSH
- ▩ ASPEN ASSOCIATION





APPENDIX D
 FIGURE 13 VEGETATION

PAUL J. OLSON WILDLIFE AREA

- LEGEND
- ▬ BOUNDARY
 - ⊗ FOOD PATCH FARMING
 - ▭ GRASSLANDS
 - ▨ ASPEN ASSOCIATION
 - ▤ GRASSLAND MIXED WITH BRUSH
 - ▧ LEATHER LEAF
 - ▩ SPRUCE-TAMARACK-BIRCH

APPENDIX E

Information Meeting

On the evening of June 8, 1981, Bruce Gruthoff, Rod Bush, and Robert Smith from the Rapids area and Ed Faber and Richard Steffes from the Bureau of Land Management in Madison met with individuals from the Portage County Board, members of the Portage County Drainage Commission, and other sundry persons to discuss the conceptual part of the Master Plan for the Buena Vista, Paul J. Olson and Leola game lands.

They had concerns for 3 items in the plan.

1. They expressed great dissatisfaction over the proposed gift of land to the Department of Natural Resources from the Dane County Conservation League. Their concern was based on taking the land off the tax roll. Ed Faber gave an excellent presentation on the cause and effect to no avail.
2. They had concern over the loss of drainage assessment they would receive if the Department had ownership of the land.
3. There was some mild concern for the development of waterfowl areas such as potholes and runoff ponds.

The people present instructed the County Board members at the meeting to send a resolution to each Department of Natural Resources board member, new and old, asking them not to accept the land if it were offered to the Department as a gift.

A copy of this memorandum will accompany the plan, which is being revised as instructed, omitting all mention of land gift in the Environmental Assessment Report and omitting all waterfowl production areas except for a runoff pond.