

NATURAL RESOURCES BOARD AGENDA ITEM

Item No. 68-11

SUBJECT: MASTER PLANNING - Approval of the master plan for the proposed Hinkson Creek Fishery Area, Columbia County.

*#10 Profit
11/16*

FOR December BOARD MEETING
(month)

TO BE PRESENTED BY: Jim Addis

SUMMARY:

Currently, 160.25 acres are owned in fee title along Hinkson Creek, Columbia County, all acquired under the remnant program on this popular trout stream.

The master plan prepared by the Department recommends that the parcels owned serve as the base for a fishery area with an approved boundary and an acreage goal of 260.0 acres.

The needed additional 99.75 acres to complete the goal ~~would be obtained from the Lafayette County Remnant Program.~~ *is an acreage goal increase of 99.75 acres.*

The entire property will be classified as a fish and wildlife area (RD₂) if the proposal is approved.

*Note - Chmn. Hemp asked for the above deletion, and that the acreage goal be increased. He felt that the remnant program should retain its acreage goal for program purchases.
CE*

RECOMMENDATION:

That the master plan be approved.

LIST OF ATTACHED REFERENCE MATERIAL:

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

- Yes Attached
- Yes Attached
- Yes Attached

- cc: Judy Scullion - AD/5
- Doug Morrisette - SD
- Carl Evert - OL/4
- Ron Poff - FM/4
- Vern Hacker - Oshkosh

APPROVED:

James J. Addis
Bureau Director

Oct 25, 1985
Date

James R. Hunter
Administrator

11/4/85
Date

W. Resadine
Secretary

11-7-85
Date

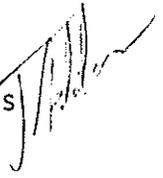
CORRESPONDENCE/MEMORANDUM

STATE OF WISCONSIN

Date: October 11, 1985

File Ref: 2100

To: C. D. Besadny

From: James T. Addis 

Subject: Master Plan for the Proposed Hinkson Creek Fishery Area, Columbia County

A Conceptual Master Plan and an accompanying environmental assessment have been prepared by a Department task force for the proposed Hinkson Creek Fishery Area, Columbia County. They are attached for your review and approval.

Many agencies and individuals have read the 45-day review copy of the master plan. The comments of outside reviewing agencies and responses by the task force are attached as an appendix to the master plan.

Similarly, the Environmental Assessment has been made available to the public with announcement of its availability made in area newspapers. Nine responses were made to the announcement which were studied by the Bureau of Environmental Analysis and Review before the assessment was approved.

Hinkson Creek is a popular trout stream that is heavily used, especially by the people of Columbia County and the immediately adjacent 7 counties, which at last count, had a combined population of almost 550,000 people.

The master plan shows that currently, 160.25 acres are state-owned in fee title along Hinkson Creek, which were acquired under the Columbia County Remnant Program at a cost of \$60,000. It also recommends that the land currently owned serve as the base for an approved fishery area, and with an additional 99.75 acres, to be transferred from the Lafayette County Remnant Program to have an acreage goal of 260.0 acres. The proposed boundary is shown in figures within the master plan.

Development of the property will consist of brushing of streambanks, the establishment of some artificial trout spawning areas, placement of brush bundles as current deflectors, and creation of some half-log structures to increase carrying capacity and improve fishability.

Wildlife management activities will improve cover for upland gamebird nesting, and food supplies for resident species. Management of upland hardwoods for mast production will benefit squirrels, deer, wood ducks and nongame species.

Forest management of the mostly aspen, oak and a few pines on the property, will be to maintain the aspen type for its wildlife value.

None of the lands within the proposed boundary are considered suitable for use as natural or scientific areas.

Your approval is requested to submit the master plan to the Natural Resources Board at their December meeting.

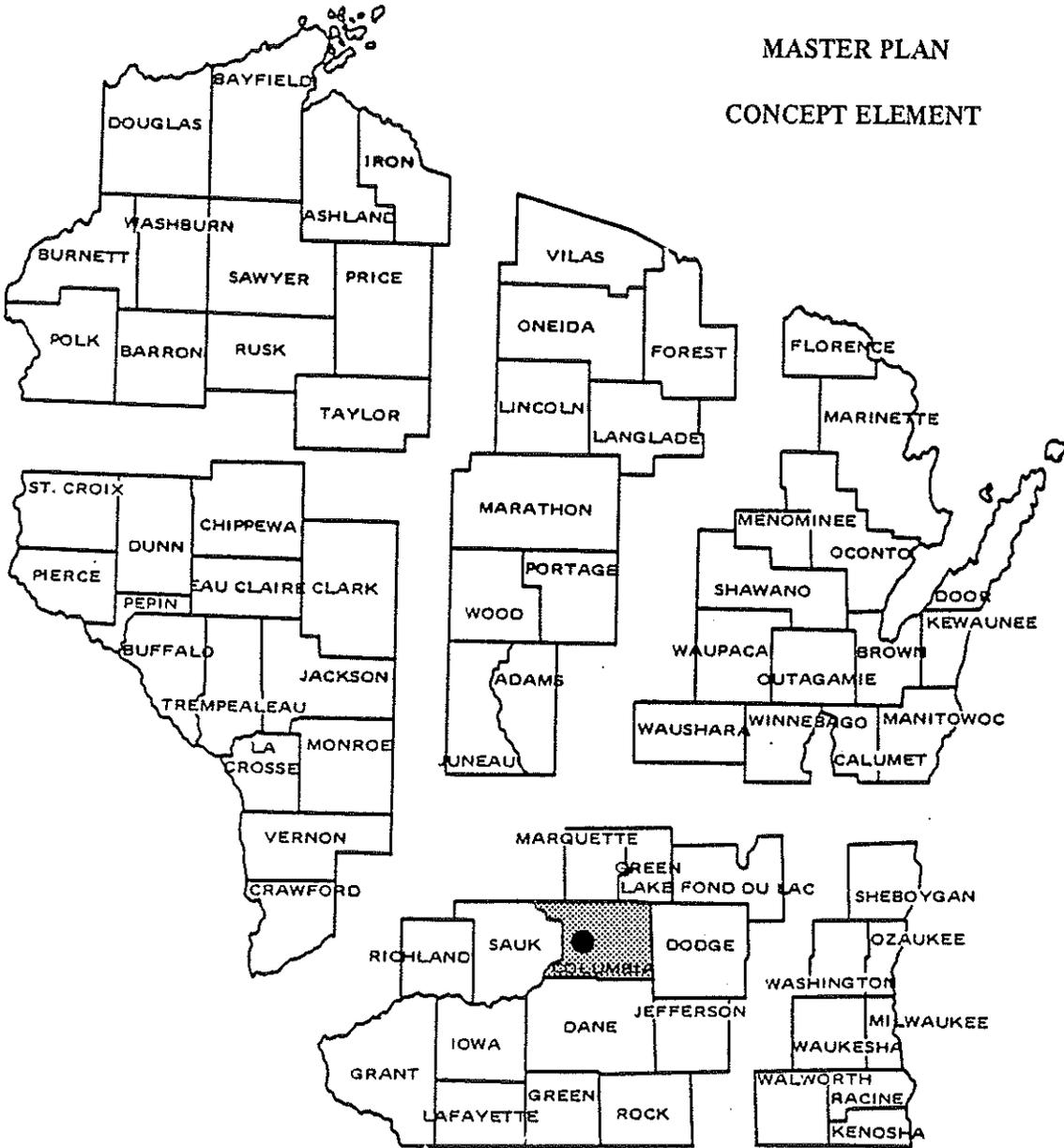
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PROPOSED HINKSON CREEK FISHERY AREA

COLUMBIA COUNTY

MASTER PLAN

CONCEPT ELEMENT



Property Task Force

Approved by Natural Resources Board

Leader - Tim Larson, Fish Manager
Patrick Kaiser, Wildlife Manager
Dennis Mahy, Forester

_____ Date

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SECTION I - ACTIONS

GOALS AND OBJECTIVES

Goals:

To provide a public use area along Hinkson Creek, Columbia County, emphasizing preservation and management of the trout fishery, compatible management of wildlife and forest resources and to provide for other recreational activities while maintaining the aesthetic qualities of the area.

Annual Objectives:

1. Manage 3 miles of coldwater stream to provide 700 angler-days of quality trout fishing for brook trout.
2. Provide 700 hunter-and trapper-days for white-tailed deer, fox and gray squirrels, ring-necked pheasants, ruffed grouse, woodcock, common waterfowl species, cottontail rabbits, red foxes, raccoons, muskrats and beavers, through management techniques compatible with preservation of the trout stream resource.

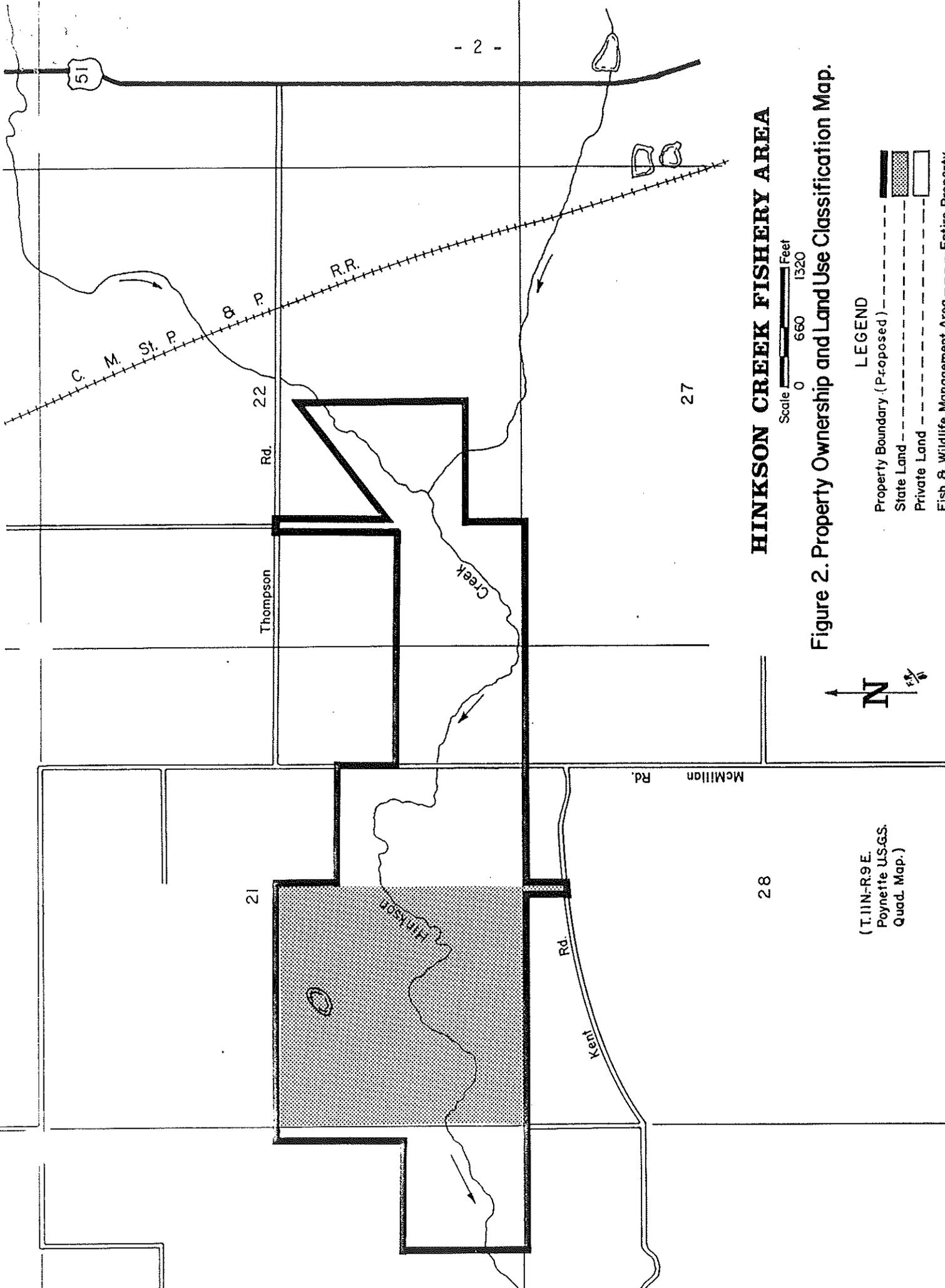
Annual Additional Benefits:

1. Allow for 800 user-days of other recreational and educational use such as hiking, nature study, photography, berry and nut gathering and snowshoeing.
2. Manage timber lands for aesthetics, while allowing timber cutting with consideration given to its impact upon wildlife and integrity of the landscape.
3. Benefit nongame species indigenous to the area, as well as any resident or migrant endangered and threatened species.

RECOMMENDED MANAGEMENT AND DEVELOPMENT PROGRAM

The recommended management and development program for the proposed Hinkson Creek Fishery Area is designed to improve angler opportunities for a quality trout fishing experience. The recommended property boundary allows public access to the stream, enhancement of the trout fishery and management of wildlife habitat. Development, in general, will be minimal. The boundary and state ownership are shown on Figure 2, and existing and planned developments are illustrated on Figure 3.

Acquisition in the past on this proposed fishery area has been under the Columbia County Remnant Program, and current state ownership on Hinkson Creek is 160.25 acres. It is recommended that a named fishery area be established with that remnant as the base, with an acreage goal of 260.0 acres and the proposed boundary shown.



HINKSON CREEK FISHERY AREA

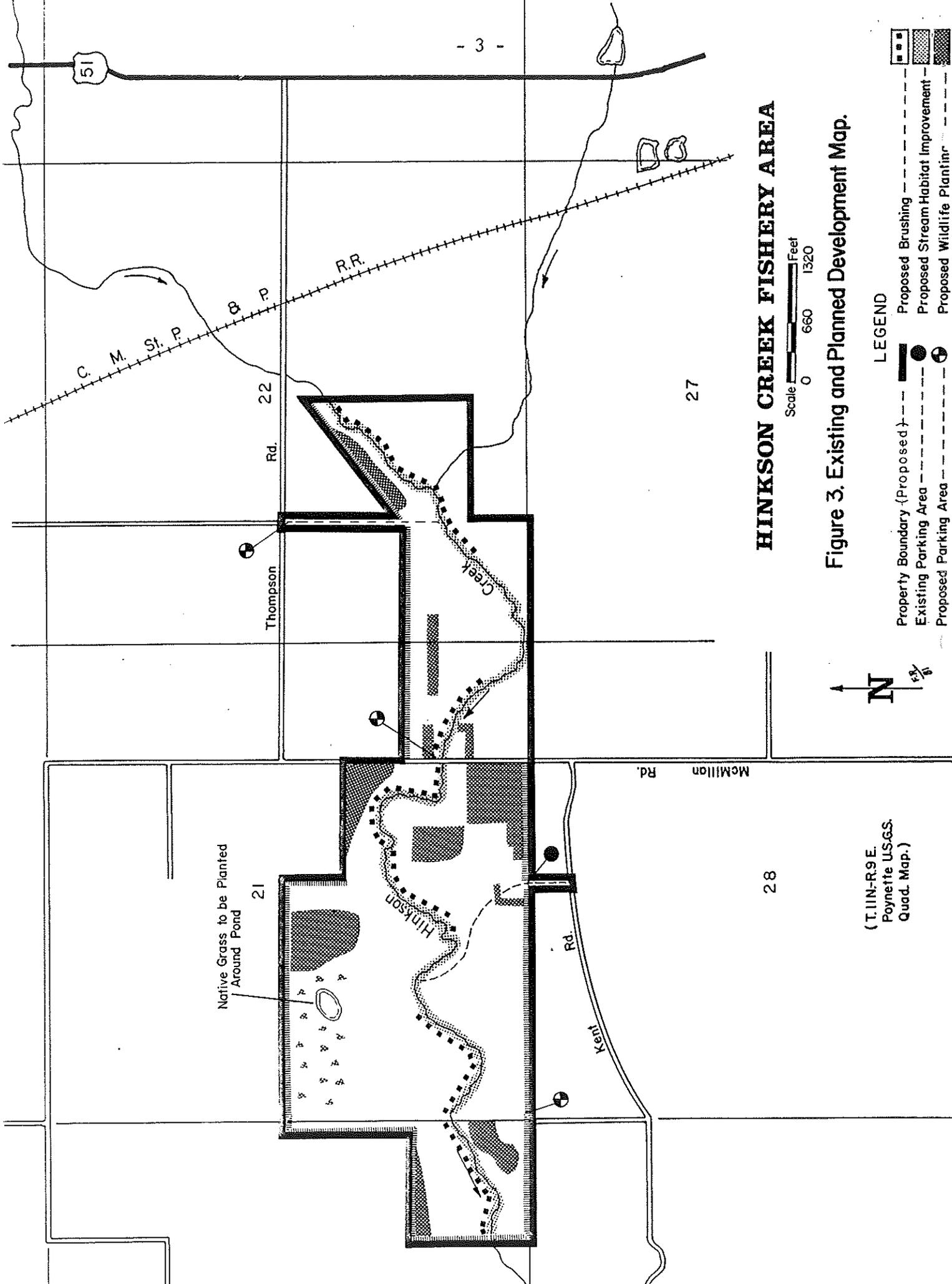
Scale 0 660 1320 Feet

Figure 2. Property Ownership and Land Use Classification Map.

LEGEND

- Property Boundary (Proposed) - - - - -
- State Land - - - - -
- Private Land - - - - -
- Fish & Wildlife Management Area - - - - -
- Class II Trout Water - - - - -
- Entire Property - - - - -
- Entire Stream - - - - -

(T.11N-R.9E.
Poyner's U.S.G.S.
Quad. Map.)



HINKSON CREEK FISHERY AREA

Figure 3. Existing and Planned Development Map.

LEGEND

- Property Boundary (Proposed) - - - - -
- Existing Parking Area - - - - -
- Proposed Parking Area - - - - -
- Existing Fencing - - - - -
- Proposed Brushing - - - - -
- Proposed Stream Habitat Improvement - - - - -
- Proposed Wildlife Planting - - - - -
- Proposed Access Trails - - - - -

(T. 11N-R.9E.
Poyette USGS.
Quad. Map.)

Lands within the boundary would include the middle 3.0 miles of Hinkson Creek and adjacent parcels necessary to provide a buffer zone along that portion of the stream. As in the past, all purchases will be from willing sellers, with the prices to be determined by comparative appraisals.

If the recommendations to create the Hinkson Creek Fishery Area are approved by the Natural Resources Board, using the proposed boundary, the following actions will be necessary:

1. Natural Resources Board establishment of the Hinkson Creek Fishery Area ✓
with an acreage goal of 260.0 acres.
2. Transfer of 160.25 acres from the Columbia County Remnant Program to the Hinkson Creek Fishery Area for parcels already acquired. *Do this*
3. Reduction of the acreage goal of Columbia County Remnant Program by 160.25 ~~to~~ acres.
4. Transfer of 99.75 acres from the Lafayette County Remnant acres to the Hinkson Creek Fishery Area. *NO*
5. Reduction of the acreage goal of Lafayette County Remnant acres by 99.75 *NO* acres.

As parcels are acquired, development will be proposed. Costs to acquire are estimated at \$80,000 (\$800 per acre, 1985 valuation). Costs are estimated at \$50,000 to \$65,000 for development activities. Once significant development has occurred, maintenance and operations cost would be less than \$1,000/year.

Parking space for user's vehicles will be provided by four small parking lots (4 vehicles, \$400/lot). Such parking areas will be restricted to the perimeter of the property boundary, just off town roads. Existing open areas and wildlife trails provide adequate access to the stream for public use and management activities. Establishment of sod cover may be necessary on the accessway off Thompson Road. Fishery Area signs will be placed at three locations. The boundaries of all properties will be marked by signs. Approximately 2 miles of fence will be built or maintained where necessary to control livestock.

Trout habitat improvement will be conducted throughout the property. Approximately 2.0 miles of the stream would benefit from streambank brushing. Impact of brushing on water temperature will be monitored and evaluated. Placement of brush bundles as current deflectors to scour silty areas and establishment of streambank grass cover and half-log cover structures will be used to increase the carrying capacity and improve fishability. This work will cost \$4.00 per foot, or approximately \$42,000 and will be obtained from Trout Stamp funds. Additional hiding cover might also be provided by the recently designed sand bag boom cover. Such structures could cost up to \$500 each, depending on the amount of volunteer labor used. Approximately 30 boom covers could be used within the fishery area.

Artificial spawning redds (\$500 each) will be installed and evaluated to determine the potential for improving natural reproduction. Impoundment of streamflow due to beaver activities is a perpetual problem. Beaver dams will be removed as necessary to prevent habitat degradation.

Wildlife management activities will improve cover, for upland gamebird nesting, and food supplies for resident species. Management techniques will include native grass seedings, grain crop plantings, shrub and tree plantings and timber management. Approximately 60 acres are suitable for plantings and 45 acres are available for prescribed forest management.

Native grasses will be seeded in some of the marginal cropland, pastureland, and idle grassland areas. Cost to establish native grass cover is estimated at \$100/acre or could be accomplished through sharecrop agreements. Field corn will be planted in suitable fields through sharecrop agreements with a portion of the DNR's share left as winter wildlife food. Establishment of shrub borders will be used to diversify habitat.

Management of upland hardwoods for mast production will benefit squirrels, deer, nongame species and wood ducks. Numerous old trees will be left standing on the property to provide nesting cavities for wildlife. If necessary, wood duck nesting boxes will be used to increase production. Biennial maintenance is required for nesting boxes to be productive and could be accomplished with cooperating groups, such as school groups and scouts.

Forested areas on the property are mostly aspen, oak and a few small pine plantations.

The majority of the aspen is young, less than 20 years, having developed since grazing was eliminated. Management will be to maintain the aspen type for its wildlife value. Grouse and woodcock would be the main species benefited. This is accomplished by a series of small clearcuts over a period of years to develop a diversity of age classes. Depending on markets, this may be accomplished by timber sale, fuelwood sale or youth camp labor.

Oak on the area is generally of low quality. Management will be to maintain or increase the amount of oak. A sheltered type system would be used, holding a scattering of large crowned trees as long as possible for acorn production. Oak wilt is a problem on the area. Control measures and salvage of dead material for fuelwood purposes is recommended. A combination of commercial and fuelwood sales will be used to accomplish cutting needed to maintain the oak. If natural reproduction is inadequate, seedlings will be planted.

Planting of approximately 15-20% of the current open land to red or white pine is recommended. Plantings will be managed on a 20-25 year pulpwood rotation to keep stands in a dense cover stage for wildlife. The existing pine plantations with large trees will be managed for pulpwood.

All areas proposed for development will be examined for the presence of endangered and threatened wild animals and wild plants. If listed species are found, development will be suspended until the District Endangered and Nongame Species Coordinator is consulted, the site evaluated and appropriate protective measures taken.

A complete biological inventory of the property will be conducted as funds permit. Additional property objectives may be developed following completion of such an inventory.

SECTION II - SUPPORT DATA BACKGROUND INFORMATION

Hinkson Creek Fishery Area is located in south-central Wisconsin, in southwest Columbia County. Hinkson Creek flows just north of the Village of Poynette, 25 miles north of Madison and 11 miles south of Portage. U.S. Highway 51 crosses the headwaters region of the creek and Interstate 90-94 lies immediately downstream from its confluence with Rowan Creek. Hinkson Creek is one of the few brook trout streams in southern Wisconsin. It provides for a quality fishing experience and fishing pressure is heavy on those portions of the stream accessible to the public.

Current state ownership on Hinkson Creek is 160.25 acres, representing 61.6% of the proposed acreage goal of 266 acres. Land acquisition has been under the Columbia County Fishery Remnant Habitat Program, established in 1962. This ownership includes 0.75 mile or 25% of total creek frontage within the property boundary. Present ownership is in fee title. Only 15% of the total acreage within the proposed boundary is suitable for farming. Twenty acres of Department land are currently farmed under a sharecrop agreement. The remaining Department land (86%) is currently used for fish and wildlife, forestry and outdoor recreation purposes.

Past management of the Hinkson Creek fishery was limited to stocking. From 1954-78, approximately 1,500 yearling brook trout were stocked annually. In 1979, an experimental change to fall fingerling stocking was initiated with an annual quota of 3,000 established. The most recent survey (1978) showed growth rates of stocked brook trout to be excellent. Natural reproduction and recruitment were primarily limited to the headwaters. Therefore, maintenance of the brook trout fishery throughout the larger, more fishable waters of the stream is dependent on stocking. The stream and adjacent lands provide for a quality trout fishing experience. Past development activities have included boundary marking, construction of a parking lot and posting with a Fishery Area sign.

RESOURCE CAPABILITIES AND INVENTORY

General Description of Area

Hinkson Creek drains a small watershed (9 square miles) as it flows a distance of 6 miles to its junction with Rowan Creek, a tributary to the Wisconsin River. An abundance of springs throughout the stream course maintain water temperatures capable of supporting a high quality brook trout fishery. Over 600 acres of marsh adjacent to the creek are, in general, bordered by agricultural fields. Distant bluffs border the lower stream valley. For the most part, alder growth and marsh isolate the stream from surrounding land uses. Roads cross the stream at three locations.

Soil types are reflected by land usage. The near stream and marsh areas are composed of poorly drained muck type soils. An abrupt change in vegetation is noted on higher ground where more sandy soil supports forests and lands with a more loamy soil texture have been cleared for agriculture. The variation in soil and vegetation types produces excellent wildlife habitat.

Geology, Soils and Hydrology

Soils in Columbia County have, for the most part, been influenced by glacial action. Soils were derived from sandstone and limestone bedrock formations as well as wind blown sediments. Formation of organic type soils, typical of marsh areas, were derived from decomposing aquatic plants of shallow lakes and waterways.

Soil types are of two major associations. Houghton and Adrian muck of the Houghton-Adrian-Palms Association comprise the majority of the stream area soils. These are very poorly drained organic soils, underlain by sandy or loamy sediment. Left undrained, these soils provide for water storage, wildlife habitat and recreational usage. If drained and cultivated they become subject to wind erosion. The adjacent higher ground is predominantly Plainfield loamy sand of the Plainfield-Okee Association. This is a well drained sandy soil allowing limited agricultural usage due to its poor water-holding capacity. If put in production, it is best suited for pine plantations. Plainfield soils are commonly forested or pastured. Blowout areas occur within this soil type.

Soils of the upper watershed of Hinkson Creek contain a greater amount of loam. They are commonly of the Lapeer-Wyocena Association, most of which are actively cropped.

Hinkson Creek is a small marsh-drainage system. Water is supplied by over 600 acres of adjacent wetlands which provide abundant seepage to maintain a stable streamflow. In addition, runoff from a 9.0 square mile watershed causes periodic flooding as the stream has a gradient of only 4.0 feet per mile. The average rate of streamflow gradually increases to about 5.0 c.f.s at its mouth.

Fish and Wildlife

Past DNR surveys of Hinkson Creek have recorded 12 fish species including brook trout, white suckers, northern muddlers, creek chubs, pearl and red-belly dace, common and blacknose shiners, fathead and brassy minnows, Johnny darters and Michigan brook lampreys. The stream is managed for brook trout. Natural reproduction occurs where the substrate is adequate in the headwaters area; however, that portion of stream is too small to be considered fishable. Stocking is necessary to provide a fishery in the downstream sections of the creek. Growth is excellent and survival is sufficient to allow the presence of 14" brookies.

Trout population estimates have been most recently conducted on a 0.42-mile long, 0.67-acre study area on existing state-owned property. Studies in March of 1983 and 1984 showed 157 and 371 native brook trout per mile, less than 6.0 inches, and 71 and 616 stocked trout per mile, respectively. An October, 1984 survey showed 95 native brook trout, 6.0 to 7.9 inches and 5 stocked trout per mile of stream. Fall stocked trout, which were placed in the stream at 6.0-7.0 inches, were 7.0-8.0 inches the following March and 9.0-11.0 inches a year after planting.

No specific inventory has been undertaken to identify the fauna of the Hinkson Creek area. However, as part of the EIS for the Columbia Generating Station, extensive studies of bird and mammal species were conducted on the developed area prior to its development. Since the power plant site is located only 4 miles north of Hinkson Creek and contains similar habitat types, the species listed in the EIS are felt to be typical of those present on, or near, the Hinkson Creek Fishery Area.

The EIS studies indicated that 39 mammal species may inhabit the area. Those species which can be managed for hunting or trapping include muskrats, raccoons, red foxes, mink, white-tailed deer, fox and gray squirrels and cottontail rabbits. Beaver are known to inhabit the stream.

The presence of 153 bird species has been documented in the area of the Columbia Generating Station and may also be present on the fishery area. Those of interest for hunting purposes include the common waterfowl species, ring-necked pheasants, woodcocks, and ruffed grouse. It is likely such endangered species as the bald eagle and osprey, along with the threatened red-shouldered hawk and loggerhead shrike, pass through the area. Sandhill cranes have been sighted along Hinkson Creek. Cranes probably nest within the proposed boundary.

Ten species of amphibians and 10 species of reptiles have been documented in the area. Presence of the ornate box turtle (endangered) and the Blandings turtle and glass lizard (threatened) are noted at the Columbia Generating site, but have not been documented on Hinkson Creek.

Vegetative Cover

Land usage and vegetative cover are closely related to soil types. Figure 4 shows the major vegetation types within the recommended boundary. Forest reconnaissance has been done on this area and cover types are tabulated in Table 1 and basic types are shown on Figure 4.

Table 1. Cover Types of State-owned Lands on the Proposed Hinkson Creek Fishery Area, Columbia County, as Determined by Reconnaissance Survey.

<u>Vegetation Type</u>	<u>Acres</u>	<u>Percentage</u>
Aspen	43.0	27.0
Alder	46.0	29.0
Grass and Herbaceous	33.0	21.0
Agricultural	26.0	16.0
Keg Marsh	<u>12.0</u>	<u>7.0</u>
	160.0	100.0

Alder growth is heavy along the majority of the stream course. Wetlands are the predominant land type adjacent to the stream. Islands of upland scattered throughout the wetlands and contiguous with higher ground support low quality timber, farmland, pasture or idle fields. The sandy soil provides an infertile environment. Best use of these lands is for wildlife and recreation.

Endangered and Threatened Species

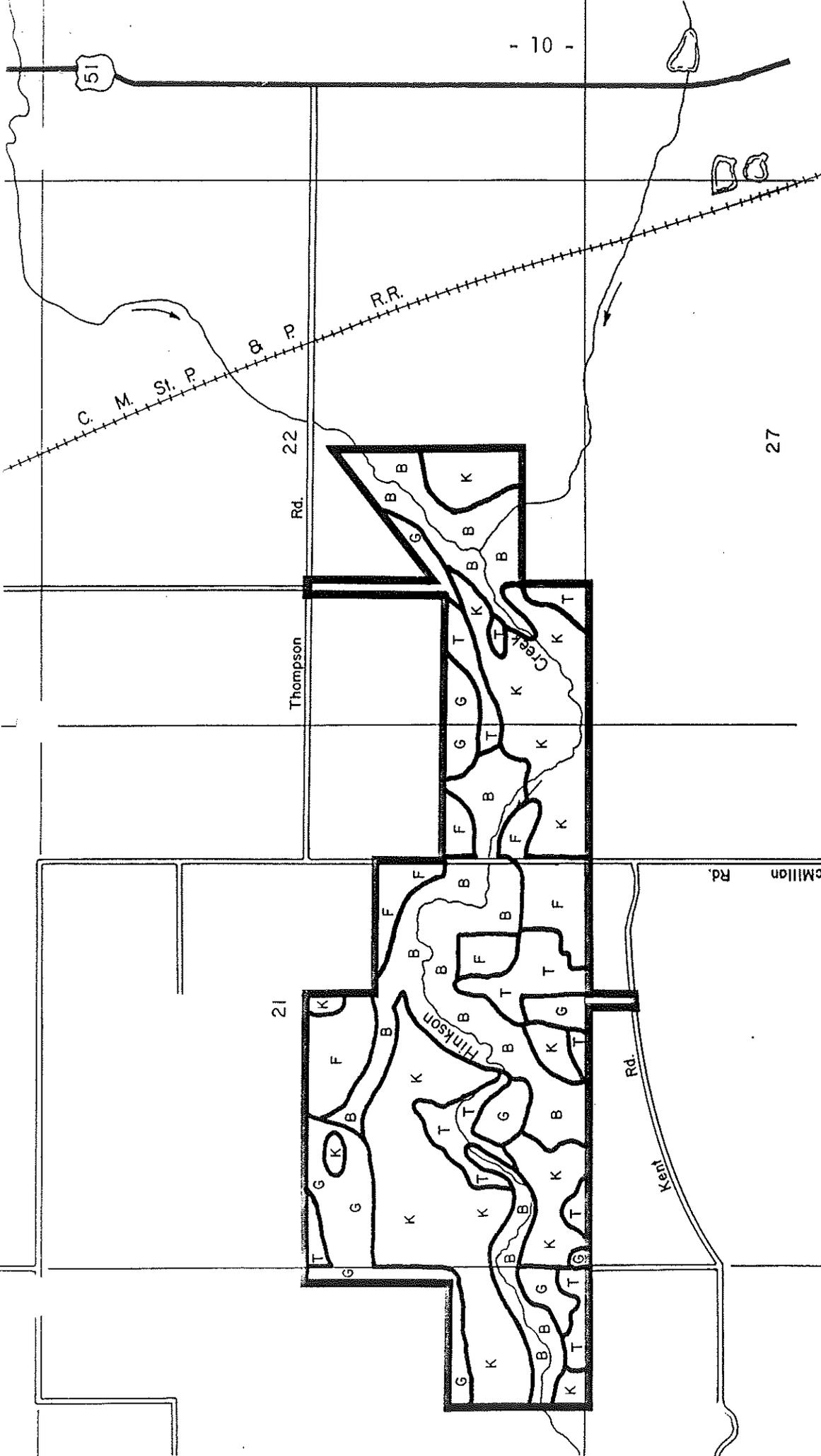
An intensive search for endangered and threatened species has never been made on the proposed Hinkson Creek Fishery Area, but observations by scientific personnel of various disciplines on a number of visits have failed to identify any. Thus, at present, no endangered or threatened species of fish, amphibians, molluscs, mammals, birds, reptiles or wild plants are known to be present on the property.

Surface Water Resources

Hinkson Creek flows along at the relatively shallow gradient of 4.2 feet per mile, through predominantly marshlands. Water surface acreage is 4.4 acres which covers a distance of 6 miles. Average stream width is 12' on the lower two-thirds of the stream. Stream flow is augmented by 37 known springs. Average water flow gradually increases to 5 c.f.s. at its mouth. The water level is considered to be very stable. Though agricultural usage predominates on the higher grounds, the small watershed (9 square miles) and stable banks account for relatively non-turbid water during periods of heavy runoff.

The stream water temperatures seldom reach 70°F during the summer, an important factor for the less temperature-tolerant brook trout. Ice cover is common throughout the stream during the winter. Total alkalinity of 250 ppm CaCO₃, along with abundant aquatic insect life, allows an excellent summer growth rate for trout. Undercut banks, fallen logs and alder roots provide a modest amount of hiding cover throughout the stream.

The abundance of wetlands associated with Hinkson Creek, while important in maintaining excellent water quality of the stream, also provide valuable wildlife habitat.



HINKSON CREEK FISHERY AREA

Scale 0 660 1320 Feet

Figure 4. General Cover Map.

LEGEND

- Property Boundary (Proposed) - - - - -
- Timber - - - - - T
- Brush - - - - - B
- Marsh - - - - - K
- Grassland - - - - - G
- Farmland - - - - - F

(T.11N-R.9E.
Poyette U.S.G.S.
Quad. Map.)

A pond is shown in Section 21 on Figures 2, 3 and 4. It covers an estimated 0.75 acre and during wet periods ranges from 1 to 2 feet deep. At times the pond dries up completely. The pond is not named.

Table 2. Streams Within the Proposed Hinkson Creek Fishery Area Boundary, Columbia County.

<u>Name</u>	<u>Length in Miles</u>	<u>Acres</u>	<u>Classification</u>
Hinkson Creek	3.0	1.45	II

Historical, Architectural and Archaeological Features

According to records of the State Historical Society no known buildings of architectural or historical significance are within the Hinkson Creek Fishery Area. The fishery area does, however, contain at least one archaeological site and possibly, more. Data collected by the State Historical Society in the early 1900's indicates that there was an Indian village and a campsite within, or on the edge of the boundary of the fishery area. The exact locations are retained in the files of the Poynette fish management office and the State Historical Society.

These sites and any others of significant importance discovered on the property will be considered in management practices and development plans with appropriate measures taken. The State Historical Society will be contacted prior to any development of structures or soils on the area.

Ownership

The acreage goal of the proposed Hinkson Creek Fishery Area is 260.0 acres. To date, 160.25 remnant acres have been acquired at a cost of \$60,000. Three privately owned parcels, which contain 75% of the stream frontage within the boundary, remain to be acquired.

Current Use

The principle use of the Hinkson Creek Fishery Area is for brook trout fishing. Hinkson Creek is one of the few native brook trout streams in the southern portion of the state. Stocking is necessary due to the fishing pressure the area receives. Hunting for white-tailed deer, ruffed grouse, ring-necked pheasants, cottontail rabbits, add fox and gray squirrels are popular activities on the property. Beaver historically have plagued the stream and trappers are encouraged to remove them. Limited muskrat trapping also occurs. The area is frequently used by the McKenzie Environmental Center for outdoor education, as well as by hikers.

Land Use Potential

All lands within the proposed property boundaries are classified Resource Development Areas - Fish and Wildlife Development (RD₂). These lands are considered habitat suitable for fish and wildlife management. The present habitat has potential for improvement to create conditions more conducive to fish and wildlife reproduction and carrying capacity. Such activities will increase recreational opportunities.

MANAGEMENT PROBLEMS

Wildlife Habitat

Hinkson Creek presently provides water quality capable of supporting a native brook trout population. However, adequate reproduction is limited to the headwaters, upstream from the proposed fishery area. Narrow stream width and encroachment of grasses inhibit the fishability of this area. Spawning substrate is uncommon throughout the middle and lower sections of the stream. Installation of spawning gravel in selected areas may improve natural recruitment.

Excessive sediment buildup on portions of the lower half of the stream prevent wading and provide a less than adequate substrate for food production. Removal of the silt would be beneficial. Placement of brush bundles to deflect current may scour a channel in some areas and streambank brushing may allow enough sunlight to stimulate instream vegetation, thus providing fish cover and a more suitable substrate for aquatic invertebrates. Instream cover is provided mostly by undercut banks and root tangles, but could be enhanced with small half logs and boom covers on selected areas.

Livestock are present along 0.5 mile of stream in the area of the downstream boundary of the proposed area. Alder growth along the stream course helps to reduce the impact of livestock on the stream.

The marsh lands and brush which border most of the stream provide excellent wildlife habitat. Adjacent to this habitat, much of the land is cropped or pastured. Deer, grouse, woodcock and small game species utilize the stream bottom area. Further drainage or destruction of these lands would result in a loss of valuable wildlife habitat.

Waterfowl production could be enhanced by establishment of nesting cover on adjacent agricultural and grasslands.

Damming of the stream by beaver is detrimental to the trout resource. This is a continual problem as beaver continue to reinvade from downstream waters.

Water Quality

A 1.0-acre impoundment on the headwaters of the south branch raises summer water temperatures. Acquisition and removal of the pond is part of the expanded proposed alternative. Abundant spring seepage further downstream and along the north branch helps compensate for this degradation. The small watershed and adjacent marshlands which surround most of the stream course aid in maintaining a stable waterflow and reduced turbidity during heavy runoff. Protection of the wetland complex through acquisition should be done. Evidence of past grazing and drainage is present on a portion of the marshland just west of the railroad tracks.

Public Overuse

Due to the close proximity of population centers and small size of the proposed area, heavy public use would be expected. Brook trout are known to be more vulnerable to angling than brown trout. Overuse of the resource can significantly affect fish and wildlife populations, as well as detract from the aesthetic quality of the recreational experience.

Regulation Changes

Trout resources are limited in southern Wisconsin and presently receive excessive fishing pressure. To sustain a quality fishery, various stream habitat improvement techniques are available which can increase the carrying capacity of trout streams. However, such development activities themselves attract excessive fishing pressure. Therefore, more restrictive angling regulations are necessary to allow habitat work to be effective in maintaining or improving the quality of trout angling opportunities.

Private Development Encroachments

The majority of private land within the recommended fishery area boundary is lowland along the stream course which is not suitable for development. A few upland sites exist which could be developed, however, a current 40-acre minimum zoning restriction exists on agricultural zoned land in Columbia County. While residences currently exist adjacent to the property boundary, additional homesites will further degrade aesthetics and increase user/landowner conflicts. The greatest potential detriment of private development would be from drainage or pasturing of the marshlands which lie outside the designed property boundary. Such drainage would degrade the coldwater seepage into the stream and destroy valuable wildlife habitat.

Land Acquisition

The recommended property boundary bisects total ownership of some landowners. Such landowners are often not willing to sell only the land within the boundary. Therefore, acquisition of the entire parcel may be necessary and may include a homesite. That portion outside the boundary would be resold or traded for another parcel within the boundary.

RECREATION NEEDS AND JUSTIFICATION

Trout streams are relatively scarce in south central Wisconsin. Within Columbia County there are only 8 trout streams totaling 48.5 miles. Hinkson Creek contains 9% of the trout water in the county and supports one of the few fishable brook trout populations of the region. Excellent water quality and a food base which supports good trout growth provide an ideal situation for such a fishery. The marshlands and brush cover adjacent to the stream allow for a pleasing fishing experience. Consequently, protection, habitat improvement and provision for public access to Hinkson Creek is important. Further development within the watershed (i.e. homes, agricultural drainage, poor soil conservation practices, streambank grazing) will have a negative impact on water quality and aesthetics. Increased public ownership will prevent such development, provide better access and allow for stream improvement work, thereby increasing productivity and fishing opportunities. The wild lands adjacent to Hinkson Creek provide excellent habitat for wildlife. This is especially important because a good portion of the surrounding lands are used for agriculture. The diversity of animal and bird life would provide for many hours of nature study, hiking and hunting. Preservation of such lands outside the recommended fishery area boundary should be encouraged.

The Hinkson Creek Area is located close to major population centers and has excellent highway access. According to the Wisconsin Bluebook, an estimated 549,521 people lived in Columbia County and its 7 immediately adjacent counties in 1980. The immediate vicinity has many tourist-resort type attractions (i.e. Devil's Lake, Lake Wisconsin, Wisconsin Dells) which bring thousands of people through the area.

It is anticipated that the demand for recreational lands will increase significantly in the next 10 years. To meet this recreational demand and provide quality recreational opportunities, increased acreages of public lands will be needed. As declining energy sources become an increasing problem, recreational lands in southern Wisconsin will become much more important.

ANALYSIS OF ALTERNATIVES

Property Boundary Alternatives

Alternatives for the Hinkson Creek Fishery Area which were considered include:

1. Maintain the existing DNR property of 160 acres.
2. Acquire easement strips on remaining fishable trout water, with an acreage goal of 200 acres.
3. Recommended property boundary, allowing a public fishing area on that portion of the stream which provides for the best quality fishing experience with an acreage goal of 266 acres (Figure 2).
4. Include the entire length of Hinkson Creek and adjacent wetlands with an acreage goal of 893 acres.

Alternative 1 would provide 200 angler days of quality trout fishing annually. It would allow 300 participant-days of hunting, 50 participant-days of trapping and 400 participant-days of other recreational activities. Limited development activities could be conducted to enhance the fishery. Only limited public use of the fishery potential of Hinkson Creek would be realized.

Alternative 2 would provide 700 angling days for trout, 400 participant-days of hunting opportunity, 150 participant-days of trapping and 500 participant-days of other recreational activities. Property ownership would include the existing 160-acre DNR parcel and 36 acres of easement along a 9-rod width of the fishable portion of the creek, that being downstream from the center line of Section 22. Better access to the stream would be provided and stream improvement work could be conducted. Boundaries would be irregular and difficult to maintain. Fencing along much of the stream course would be necessary. Protection of valuable wildlife habitat and adjacent wetlands which maintain the excellent water quality of Hinkson Creek would not be insured.

Alternative 3 is recommended. It will allow for 700 angler days of high quality trout angling, 600 participant-days of hunting, 100 participant-days of trapping and 800 participant-days of other outdoor recreation. This property alternative provides a larger buffer zone between the stream and adjacent landowner usage than does the easement concept (Alternative 2). Aesthetic qualities of the area, benefiting all users, are improved. Fishing access is provided to the best portion of the stream and habitat improvement benefiting the fishery can be conducted. Adequate wetland protection would not be accomplished.

Alternative 3 includes the recommended property boundary based on current land acquisition constraints. The statewide acquisition goal of 1.3 million acres is within 300,000 acres of being complete, therefore allocated acreage for the Hinkson Creek Fishery Area must be accounted for under an existing acquisition program. Should the statewide acquisition program ever be expanded, then Alternative 4 is recommended for future consideration.

Alternative 4 includes the entire stream course and adjacent wetland and wildland habitat. It would provide 850 days of trout angling, 1,600 participant-days of hunting, 200 participant-days of trapping and 2,200 participant-days of other recreational uses. Expansion of the boundary would, most importantly, eliminate the potential for degradation of adjacent wetlands and the water quality of Hinkson Creek. It would also preserve adjacent wildlands from being converted to other land uses. Aesthetics of the entire Hinkson Creek area would be maintained. Stream improvement work could be conducted including removal of the impoundment on the headwaters of the south branch and sediment scouring or removal on the lower sector of the stream.

None of these alternatives significantly conflicts with existing land uses because relatively little agricultural land is included within any of the property boundary alternatives. Most of the land is presently used for forestry, wildlife and recreation. State acquisition would negatively impact private usage in direct proportions to the acreage involved.

Property Development Alternatives

The recommended development plan for this property is designed primarily to improve public access to the stream and allow for enhancement of the trout resource. The 3 parking areas are small and confined to the perimeter of the property. Existing wildlife trails provide sufficient user access. Recommended stream improvement measures are not considered intensive. Wildlife habitat will be maintained and a small acreage of open fields converted to nesting cover and food plots. The existing forestry resource is limited and will be managed for wildlife values and aesthetics. Selective cutting, for stand regeneration and sanitation will be done.

Reduction of development activities would result in less than adequate public access. Restriction of fish and wildlife management activities will result in less than optimal user opportunities.

Expansion of access development activities would encourage overuse of the resource, decreasing the quality of the user experience. More intense fish habitat improvements would involve heavy equipment, which would be damaging to the wet soil along the streambanks. To expand wildlife management activities would involve the purchase of additional uplands, which is not compatible with the acreage available for this fishery area. Expansion of forest management activities would involve forestry practices such as converting some open fields to pine plantations. Intense cropping of existing timber stands would conflict with management for aesthetics.

3754N

APPENDIX - Comments by outside reviewing agencies to the Hinkson Creek Fishery Area Master Plan.

During the period of 45 day review of the proposed Hinkson Creek Fishery Area, Columbia County Master Plan, a number of comments were received from persons or organizations from outside agencies. Their comments or questions, and Department responses where necessary, follow:

Francis W. Murphy, Chairman, Wisconsin Conservation Congress, Portage, WI 53901

Overall view of Plan: Excellent

I find the Plan well done and I accept the projections on behalf of the Conservation Congress. I am familiar with the area, I have hunted and fished through the entire area, particularly on the north side thereof. I consider this an extremely sensitive area, and I am opposed to any alternative other than number 4 and page 15.

DNR Response: Alternative 4 cannot be recommended because of the limited acreage goal allotted for this fishery area. To increase this goal would decrease acreage available on other trout streams. Current environmental laws will serve to protect the area from most development activities.

I don't see any high usage in the immediate future, but I think the resource has to be protected, by the acquisition of the entire bog area. Once you own a substantial portion of the area involved, it seems to me that the Master Plan should indicate acquisition of the land within the boundary areas, rather than easement or access development.

DNR Response: Fee title acquisition is preferred when possible.

Cynthia A. Morehouse, Bureau of Environmental and Data Analysis, Department of Transportation, Madison

We have reviewed the Master Plan for the Hinkson Creek Fishery Area in Columbia County. We have determined that the Recommended Management and Development Program would not have a significant adverse effect on our transportation facilities or interests. It is a concern of ours, however, that coordination with township officials should be initiated by your Department whenever you begin to acquire land which abuts the right of way of the township's roads or seek access for the proposed parking lots.

Thank you for the opportunity to review and comment on this Master Plan.

DNR Response: Noted. Driveway entrance permits are always obtained before developing a parking lot.

Dick Lindberg, Liaison, Wild Resources Advisory Council.

The Council has concluded that the Hinkson Creek property has no wild resource potential. Therefore, the Council will not comment on the master plan for this property.

Thank you for the review opportunity.

Earl L. Little, Aldo Leopold Chapter, Trout Unlimited, Beaver Dam, WI 53916.

Overall view of master plan: Excellent.

The Plan is professional, well-thought out and complete. It has the endorsement of myself and anyone who has seen it.

Forest Stearns, Chairman, Natural Areas Preservation Council.

We have reviewed the Hinkson Creek Fishery Area Master Plan and generally support the goals, objectives and proposed management.

Since ornate box turtles, a state endangered species occur on the project area we recommend that site management give more attention to preservation of open habitat for this species. Tree planting proposed in openings seems inconsistent with their habitat needs.

DNR Response: Sand blow areas will be managed with consideration given to turtle spawning requirements. A balance will be achieved between turtle needs and grass/tree plantings.

Mitchell G. Bent, Chairman, Wisconsin Trout Unlimited, DePere, WI 54115.

Wisconsin Trout Unlimited is hereby presenting its views and suggestions for the Master Plan Review--Hinkson Creek Fishery Area. We appreciate the opportunity to participate in this process, and we trust that our comments will be of use to your Department in making decisions regarding implementation of the Master Plan.

In this overview, Wisconsin TU will make comments on a page-by-page basis. Comments will run from supportive to questioning to critical.

On page 4 in paragraph 2, there are five (5) actions listed as necessary. Wisconsin TU questions actions 2-5 insofar as why acreages must be transferred from different programs. What effect will these transfers have on the acreage goals in Columbia and Lafayette Counties?

DNR Response: Your concern points out the need for increasing acreage quotas for public recreation areas.

However, as Mr. Addis indicated in his recent letter to you, changing priorities since acreage goals were established show the need for acquisition at differing locations. High usage and demand for recreational opportunities at Hinkson Creek have established a high priority.

On page 6, last paragraph, Wisconsin TU is curious of the assertion that stocking of brook trout is an important management practice for the stream. Does this mean that stretches of Hinkson Creek are incapable of having native brook trout reproduce? If so, why is this? Could management practices be carried out that would help create the needed conditions for brook trout reproduction in the larger areas of the creek? Inasmuch as stocking of trout in a stream is known to cause increased angler pressure on those streams receiving hatchery-raised trout, perhaps a curtailment of stocking trout with added emphasis on creation of conditions to increase natural reproduction in more stretches of the creek should be given a higher priority than stocking of hatchery fish. This would not only create more natural conditions, it would also ease the financial cost of stream management by lowering or eliminating the cost of stocking trout raised in hatcheries.

DNR Response: Improvement of natural spawning areas in trout streams has been tried with little success to date. Research personnel are currently studying some new techniques. Available data shows the native trout population of Hinkson Creek to be low, thus stocking is required to support a fishable trout fishery. Brook trout are extremely vulnerable to angling. New fishing regulations raising the size limit from 6" to 9" and reducing the bag limit during regular season from 5 to 3 are aimed at maintaining a higher population of "quality" size trout in the streams.

On page 12, bottom paragraph, Wisconsin TU supports the statement regarding the detrimental effects of beaver on trout streams. Management practices should be carried out to reduce beaver usage of the Hinkson Creek Fishery area as much as possible.

DNR Response: Agreed.

On Page 13 under Regulation Changes, Wisconsin Trout Unlimited urges the Department to seriously consider implementation of increased restrictive regulations regarding trout harvest on Hinkson Creek should it be determined by the Department that they are needed to maintain a good trout fishery. It is indeed the case that trout streams that receive habitat improvement work often become subjected to short-lived (1-2 years) intense angling pressure which delays the accrual of positive results on the stream insofar as trout populations are concerned. Implementing restrictive creel limits on Hinkson Creek after stream improvement would likely produce quicker positive results as far as numbers and sizes of trout are concerned.

DNR Response: The directive at present is to simplify regulations, thus changing regulations based on given conditions on specific streams is not a tool presently available. The regulation change of 9" size limit, 3 bag limit to be implemented in 1986 in southern waters should improve the fishery of Hinkson Creek.

On page 15, several Alternatives are proposed for the Hinkson Creek Fishery area. Although DNR recommends Alternative Three, Wisconsin Trout Unlimited differs with the Department and recommends ALTERNATIVE FOUR as the proper way to go for this Master Plan. Alternative 4 would entail more land acquired and the resulting potential for increased public use and enjoyment. And, as the

paragraph on Alternative 4 states, expansion of the boundary would eliminate the potential for degradation of adjacent wetlands and the water quality of Hinkson Creek. Thus, we believe Alternative 4 is superior to Alternative 3, and we urge the Department and the DNR Board to use Alternative 4 in its final Master Plan.

DNR Response: The problem lies with the limited amount of acreage available statewide for public recreation areas. The acreage quota allotted to specific areas has to be scrutinized to provide for the best impact in most areas.

Wisconsin Trout Unlimited thanks the Department for being allowed to participate in the Master Plan Review for Hinkson Creek. We hope to receive answers to our questions, and we hope that our input will be used by the Department in the final recommendation.

DNR Response: Copies of all approved master plans will be sent to you containing an Appendix which contains your questions and Department answers.

Stanley A. Nichols, Wisconsin Geological Survey, Madison.

Overall view of Master Plan: Good

Page 7, par. 4 - The abundant seepage is probably groundwater.

Page 8, par. 1 - Again, the seepage may be groundwater. It would be useful to know what the groundwater contribution to the stream is.

DNR Response: The term seepage refers to the abundant groundwater springs (trickles). To determine the percent of groundwater contribution as compared to surface water would require an expensive survey. The groundwater contribution is obviously significant as the stream is cool enough to support brook trout and the creek is fairly stable during dry weather.

Page 8, par. 6 - Cranes have been sighted using the area.

DNR Response: Yes, correct.

3764N

DISTRICT OR BUREAU Southern District
DNR NUMBER

ENVIRONMENTAL IMPACT ASSESSMENT SCREENING WORKSHEET
(Attach additional sheets if necessary)

Title of Proposal: Hinkson Creek Fishery Area Master Plan

Location: County Columbia
Township 11 North, Range 9 East, ~~W2630~~
Section(s) 21, 22
Political Town Dekorra

Project:

1) General Description (overview)

It is proposed to acquire 266 acres of land, three miles of stream, to provide a public use area along Hinkson Creek, emphasizing preservation and management of its' trout fishery, compatible management of wildlife and forest resources and provide for other recreational activities while maintaining the aesthetic qualities of the area.

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

Trout streams are relatively scarce in south central Wisconsin. Within Columbia County there are eight trout streams totaling 48.5 miles. Hinkson Creek contains 9% of the trout water in the county and supports one of the few fishable brook trout populations of the region. Excellent water quality and a food base which supports good trout growth provide an ideal situation for such a fishery. The marshlands and brush cover adjacent to the stream allow for a very pleasing fishing experience. Consequently, protection, habitat improvement and provision for public access to Hinkson Creek is very important. Further development within the watershed (i.e. homes, agricultural drainage, poor soil conservation practices, streambank grazing) will have a negative (continued on attached page 1)

Authorities and Approvals:

- 1) Statutory Authority to Initiate Chapter 23.09
- 2) Permits or Approvals Required DNR Manual Code 3565.1, Corps of Engineers
- 3) Participants notified of above requirements? Yes No
- 4) Does this proposal comply with floodplain and local zoning requirements? Yes No

Estimated Cost and Funding Source:

\$150,000 Federal Sources
ORAP
Trout Stamp

Time Schedule:

1981 - 2010

EXISTING ENVIRONMENT

1) Physical (Topography-soils-water-air-wetland types)

Hinkson Creek is a small marsh drainage stream with a relatively low gradient (4 ft/mile). It flows a distance of 4 miles to its junction with Rowan Creek, a tributary to the Wisconsin River. Average stream width is 10' on the lower two-thirds of the stream. Average water flow gradually increases to 5 cfs at its mouth. Over 600 acres of adjacent wetlands provide abundant seepage, maintaining stable streamflow and water temperatures capable of supporting brook trout. The stream area soils are primarily muck of the Houghton-Adrian-Palms association. Soils on adjacent higher ground are predominately Plainfield loamy sand of the Plainfield-Okee association. The upper watershed contains more loamy soils of the Lapeer-Wyocena association. Air quality within the area is considered good.

2) Biological

a) Flora Land usage and vegetative cover are closely related to soil types. Basic cover types are tabulated below: Cover Types of the Recommended Hinkson Creek Fishery Area:

Marsh	- 156 acres	- 43%
Grassland	- 62 acres	- 17%
Brush	- 47 acres	- 13%
Timber	- 44 acres	- 12%
Cropland	- 54 acres	- 15%

Tag alder growth is heavy along the majority of the stream course. Grassed wetlands are the predominant land type adjacent to the stream. Upland areas located (continued on attached sheet 1)

b) Fauna

As part of the EIS for the Columbia Generating Station, extensive studies of bird and mammal species were conducted on the developed area. With this area located only four miles north of Hinkson Creek and containing similar habitat types, the species listed in the EIS are felt to be typical of those present within the Hinkson Creek Fishery Area boundary.

These studies indicate that 39 mammal species may inhabit the area. Those species which can be managed for hunting or trapping include muskrat, raccoon, red fox, mink, white-tail deer, fox squirrel, gray squirrel and cottontail rabbit. (continued on attached page sheet 1)

3) Social

The Hinkson Creek Project Area lies within a rural but well populated area. Outdoor recreation activities presently occur throughout the project area. Such use is highly valued by area residents. Various education uses are made of the public lands within the Project Area by the DNR MacKenzie Environmental Center and various Madison area naturalist groups.

4) Economic

The various recreational opportunities provided by the project area contribute to the economy of the area. The lands within the recommended project are best used for wildlife and recreational activities.

5) Other (include archaeological, historical, etc.)

According to records of the State Historical Society, no known buildings of architectural or historical significance are within the Hinkson Creek Fishery Area. The Fishery Area does, however, contain at least one archaeological site and possibly many more. Data collected by the State Historical Society in the early 1900's indicates that there was an Indian village in the SW₄, SW₄ of Section 22 (within the Fishery Area) and a campsite in the SE₄, SE₄ of Section 20 (on the western edge of the Fishery Area). (continued on

attached page 1

PROPOSED ENVIRONMENTAL CHANGE

1) Manipulation of Terrestrial Resources (include quantities – sq. ft., cu. yds., etc.)

Public access to the property will be provided by three small parking lots (4 car, \$400) at Such parking areas would be restricted to the perimeter of the property boundary, just off town roads. Existing open areas would provide road access to the stream for management activities. Establishment of sod cover may be necessary on the accessway off Thompson Rd. Public use of the property would be restricted to existing trails and game paths.

Wildlife activities will be focused primarily on management of existing wildlife habitat. A total of 60 acres of fields are suitable for food plots and dense nesting cover. Cost to establish such habitat would be \$100/acre or could be accomplished through share crop agreements. Wood duck nesting boxes could be located throughout the project area. Continued maintenance would be necessary and best accomplished with a cooperating group, i.e. school, scouts. Forestry practices would be limited. Timber occupies only 45 acres and is of low to medium quality. Management will reflect wildlife and aesthetic values.

2) Manipulation of Aquatic Resources (include quantities – cfs, acre feet, MGD, etc.)

Trout habitat development will be conducted throughout the property. Activities will not be intensive in nature. Approximately 2.0 miles of the stream would benefit from stream bank brushing. Impact of brushing on water temperature should be monitored and evaluated. Placement of brush bundles as current deflectors to scour silty areas, establishment of streambank grass cover and half log cover structures would increase the carrying capacity and improve fishability. Such work would cost \$4.00/ft. or approximately \$42,000. Significant natural reproduction is limited to that portion of the stream above the project area. A few artificial spawning redds (\$500 each) should be installed to evaluate the potential for improving natural reproduction. Impoundment of streamflow due to beaver activities is a perpetual problem, which requires periodic attention.

3) Structures

Project signs will be limited to three locations. Small signs will define the majority of the property boundaries and fences, approximately two miles, will be used along boundaries as required.

4) Other

Protection and enhancement of habitat benefiting all endangered or threatened species should be done. Maintenance of existing sand blow areas will benefit amphibian and reptile spawning.

5) Attach maps, plans and other descriptive material as appropriate (list)

Attached: Figure 2 - Property Ownership and Land Use Classification Map
Figure 3 - Existing and Planned Development Map
Figure 4 - General Cover Map

PROBABLE ADVERSE AND BENEFICIAL IMPACTS (Include Indirect and Secondary Impacts)

1) Physical Impacts

The primary intent of this project is to preserve the existing environment. Such action will eliminate private development activities within the project boundaries. Creation of four small parking areas on the perimeter of the property will have minor impact. Heavy public use of trails from these access areas will result.

2) Biological Impacts

Acquisition of project lands will preserve valuable natural habitat. Designed development activities will improve fish and wildlife populations. Forestry resources would be managed primarily for aesthetics and wildlife.

3) Socioeconomic Impacts

a) Social

Proposed management of the property will increase public use opportunities. Outdoor recreation and education activities will continue throughout the project area. Acquisition of private lands will occur but on a willing seller basis.

b) Economic

Increase in the amount of public managed land will provide added income to local businesses. Tax impact as a result of public ownership would not be detrimental to the township or school district. A minimal reduction in taxes to the county will occur.

Land will be taken off the tax role. Payments in lieu of taxes will be made.

4) Other (include archaeological, historical, etc.; if none, so indicate.)

Significant archaeological features will be preserved and administered with guidance from the State Historical Society.

PROBABLE ADVERSE IMPACTS THAT CANNOT BE AVOIDED

Public ownership of lands within the proposed boundary will occur, thereby eliminating the opportunity for private land ownership.

RELATIONSHIP BETWEEN SHORT-TERM USES OF THE ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

Ultimate acquisition of the land within the proposed property boundary will preserve the existing environment and provide for public use of the project area. Habitat development activities will improve the carrying capacity of the resource allowing for more user opportunities. Acquisition and development will occur over a long period of time with their short term effects being cumulative in nature.

IRREVERSIBLE OR IRRETRIEVABLE COMMITMENTS OF RESOURCES IF ACTION IS IMPLEMENTED

1) Energy

Energy consumption will result from vehicle and equipment use from acquisition and development activities.

2) Archaeological and historic features or sites

The intent of this master plan is to preserve and manage the significant archaeological and historic sites within the project area as advised by the State Historical Society.

3) Other

None known

ALTERNATIVES (No Action-Enlarge-Reduce-Modify-Other Locations and/or Methods. Discuss and describe fully with particular attention to alternatives which might avoid some or all adverse environmental effects.)

Property Boundary Alternatives

The recommended project boundary was designed to meet the minimal needs for a quality fish management property. It will not insure preservation of the resource and provide maximal user opportunities. Current departmental policy does not allow additional acreage beyond the present District acquisition quota. Therefore, acreage need be limited on each fishery area so public fishing areas can be provided on as many top quality trout streams as possible. Alternatives for the Hinkson Creek Fishery Area which were considered include:

1. Maintain existing DNR property, 160 acres.
2. Acquire easement strips on remaining fishable trout water, acreage goal - 200 acres.
3. Recommended property boundary, allowing a public fishing area on that portion of the stream which provides for the best quality fishing experience, acreage goal - 266 acres.
4. Include the entire length of Hinkson Creek and adjacent wetlands, acreage goal - 893 acres.

Alternative 1 would provide 200 angler days of quality trout fishing. It would allow 300 man days hunting, 50 man days trapping and 400 user days of non-consumptive recreational activity. Limited development activities could be conducted to enhance the fishery. Only limited public use of the fishery potential of Hinkson Creek would be realized.

Alternative 2 would provide 750 angling days for trout, 400 hunter opportunities, 150 trapper days and 500 user days of other recreational activities. Property ownership would include the existing 160 acre DNR parcel and 36 acres of easement along a nine-rod width of the fishable portion of the creek, that being downstream from the center line of Section 22. Better access to the stream would be provided and stream improvement work could be conducted. Boundaries would be irregular and difficult to maintain. Fencing along much of the stream course would be necessary. Protection of valuable wildlife habitat and adjacent wetlands which maintain the excellent water quality of Hinkson Creek would not be insured.

Alternative 3 is the recommended project based on the limited acreage allocation. It will allow for 700 angler days of high quality trout angling, 600 man days hunting, 100 trapper day opportunities and 800 user days of other forms of outdoor recreation. This property provides a larger buffer zone between the stream and adjacent landowner usage than does the easement concept (Alternative 2). Aesthetic quality of the area, benefiting all users, is improved. Fishing access to the best portion of the stream and habitat improvement benefiting the fishery can be conducted. Adequate wetland protection would not be accomplished.

Alternative 4 presents the preferred property boundary. It includes the entire stream course and adjacent wetland and wildland habitat. It would provide 750 days of trout angling, 1600 man days hunting, 200 trapper days and 2200 user days of non-consumptive recreation. Expansion of the boundary will most importantly eliminate the potential for degradation of adjacent wetlands and the water quality of Hinkson Creek. It will also preserve adjacent wildlands from being converted to other land uses. Aesthetics of the entire Hinkson Creek area will be maintained. Stream improvement work could be conducted including removal of the impoundment on the headwaters of the south branch and sediment scouring or removal on the lower sector of the stream.

None of these alternatives significantly conflicts with existing land uses. This is because very little agricultural land is included within any of the property boundary alternatives. Most of the land is presently used for forestry, wildlife and recreation. State acquisition would negatively impact private usage with such impact directly related to the acreage involved.

(continued on attached sheet 2)

EVALUATION (Discuss each category. Attach additional sheets and other pertinent information if necessary.)

- 1) As a result of this action, is it likely that other events or actions will happen that may significantly affect the environment? If so, list and discuss. (Secondary effects)

As a result of this action impact of additional private development (i.e. erosion, aesthetics) within the project area will be inhibited. Public use of the area will increase, however, public ownership of the entire project will decrease this impact..

- 2) Does the action alter the environment so a new physical, biological or socio-economic environment would exist? (New environmental effect)

Acquisition of this property will prevent any detrimental alterations of the environment. Major use of this property is presently for outdoor recreational purposes. Project objectives are to provide for increased recreational opportunities.

- 3) Are the existing environmental features that would be affected by the proposed action scarce, either locally or statewide? If so, list and describe. (Geographically scarce)

Brook trout streams are not common in the southern portion of Wisconsin. Trout streams in general are not abundant in the immediate area. The wildlands adjacent to the stream exist within an area which is predominated by agricultural lands.

- 4) Does the action and its effect(s) require a decision which would result in influencing future decisions? Describe. (Precedent setting)

The master plan on this project outlines future actions on this property.

- 5) Discuss and describe concerns which indicate a serious controversy? (Highly controversial)

None known

- 6) Does the action conflict with official agency plans or with any local, state or national policy? If so, how? (Inconsistent with long-range plans or policies)

No

- 7) While the action by itself may be limited in scope, would repeated actions of this type result in major or significant impacts to the environment? (Cumulative impacts)

The master plan for this project defines the total impact to this area.

- 8) Will the action modify or destroy any historical, scientific or archaeological site?

No

- 9) Is the action irreversible? Will it commit a resource for the foreseeable future? (Foreclose future options)

No. Object of this plan is to preserve and enhance the existing natural resource.

- 10) Will action result in direct or indirect impacts on ethnic or cultural groups or alter social patterns? (Socio-cultural impacts)

No major changes

- 11) Other

Hinkson Creek Fishery Area
Columbia Co.

Number of responses to public notice 9 (joint notice)

Public response log attached?..... Available from Tim Larson
and Control Office

CERTIFIED TO BE IN COMPLIANCE WITH WEP
DISTRICT DIRECTOR OR DIRECTOR OF BEI (OR DESIGNEE)

DATE
Oct 3, 1985

This decision is not final until certified by the appropriate District Director or the Director of BEI. If you believe you have a right to challenge this decision, you should know that Wisconsin Statutes and Administrative Codes establish time periods within which requests to review Department decisions must be filed. For judicial review of a decision pursuant to ss. 227.15 and 227.16, Stats., you have 30 days after service of the decision to file your petition for review. The respondent in an action for judicial review is the Department of Natural Resources. You may wish to seek legal counsel to determine your specific legal rights to challenge a decision. This notice is provided pursuant to s. 227.11(2), Stats.

LIST OF AGENCIES, GROUPS AND INDIVIDUALS CONTACTED REGARDING THE PROJECT
 include DNR Personnel and Title

Date	Contact	Comments
		Master plan process requires a 45 day comment period.

RECOMMENDATION

- EIS Not Required
- Analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion therefore, an environmental impact statement is not required before the Department undertakes this action.
- Refer to Office of the Secretary
- Major and Significant Action: Prepare EIS

Additional factors, if any, affecting the evaluator's recommendation:

Evaluator authored the master plan.

SIGNATURE OF EVALUATOR <i>Jim Larson</i>	DATE <i>7/15/81</i>
---	------------------------

CERTIFIED TO BE IN COMPLIANCE WITH WEPA	
DISTRICT OR BUREAU DIRECTOR (OR DESIGNEE) <i>H E Meier</i>	DATE <i>7/15/81</i>

Gary J. Borcht *Oct 3, 1985*

APPROVED (if required by Manual Code)	
DIRECTOR, BEI	DATE

This decision is not final until approved by the appropriate Director and/or Director, BEI.

2) Purpose and Need

impact on water quality and aesthetics. Increased public ownership will prevent such development, provide better access and allow further stream improvement work, thereby increasing productivity and fishing opportunities.

The wild lands adjacent to Hinkson Creek provide excellent habitat for wildlife. This is especially important because a good portion of the surrounding lands are used for agriculture. The diversity of animal and bird life would provide for many hours of nature study, hiking and hunting. Preservation of such lands outside the recommended fishery area boundary should be encouraged.

The Hinkson Creek Area is located close to major population centers and has excellent highway access. According to King (1975) this project would be accessible to 200,000 people within one-half hour driving time and 6,000,000 within three hours. The immediate vicinity has many tourist-resort type attractions (i.e. Devils Lake, Lake Wisconsin, Wisconsin Dells) which bring thousands of people through the area.

It is anticipated that recreational demand will increase significantly in the next ten years. To meet this recreational demand and provide quality recreational opportunities, increased acreages of public lands will be needed. As energy sources become an increasing problem, recreational lands in southern Wisconsin will become much more important.

2) Biological

- a) Flora - as islands throughout the wetlands and contiguous with higher ground support low quality timber (oak, poplar), farmland, pasture or idle fields. The sandy soil provides an infertile environment.
- b) Fauna - Beaver are known to inhabit the stream. Intensive trapping or more stri removal measures along with removal of dams should be done as beaver activities are not compatible with trout stream management.

The presence of 153 bird species have been documented in the area. Those of interest for hunting purposes include waterfowl species, ringneck pheasant, woodcock and ruffed grouse. It is highly likely such endangered species as the bald eagle and osprey, along with the threatened red-shouldered hawk and loggerhead shrike, pass through the area. Sandhill cranes have been sighted along Hinkson Creek. Nesting likely occurs within the project area.

Ten species of amphibians and ten species of reptiles have been documented in the area. Presence of the ornate box turtle (endangered) and the blanding's turtle and glass lizard (threatened) are noted.

East DNR surveys of Hinkson Creek have recorded 14 fish species. It is one of the few brook trout streams in southern Wisconsin. Natural reproduction occurs in the headwater area; however, stocking is necessary to provide a fishery by the time the stream gains sufficient flow to allow fishing. Growth is excellent and survival is sufficient to allow the presence of 14" brookies. Management to enhance the brook trout fishery of this stream should be done.

5) Other (include archaeological, historical, etc.)

These sites and any others of significant importance discovered on the property will be considered in management practices and development plans with appropriate measures taken. Coordination will be made with the State Historical Society.

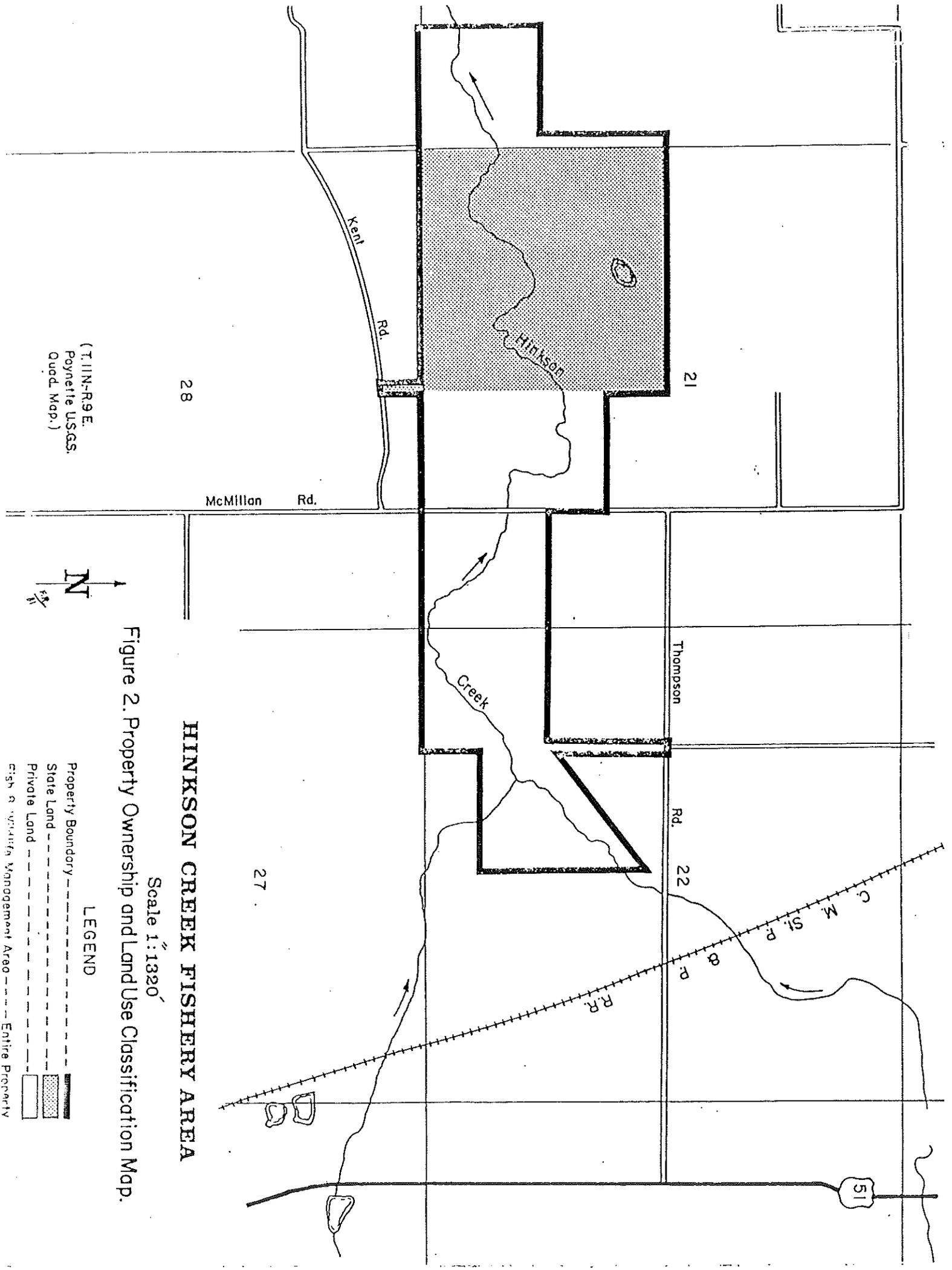
Alternatives

Property Development Alternatives

The recommended development plan for this property is designed primarily to improve public access to the stream and allow for increased management of the trout resource. The three parking areas are small and confined to the perimeter of the property. Existing game trails provide sufficient user access. Recommended stream improvement measures are not considered intensive. Wildlife habitat will be maintained and a small acreage of open fields converted to nesting cover and food plots. The existing forestry resource is limited and will be managed primarily for aesthetics. Selective cutting, primarily for sanitation and firewood, will be done.

Reduction of development activities would result in less than adequate public access. Restriction of fish and wildlife management activities will result in less than optimal user opportunities.

Expansion of access development activities would encourage overuse of the resource, decreasing the quality of the user experience. More intense fish habitat improvements (i.e. boom cover, rip rapping) would involve heavy equipment, which would not be possible due to the wet soil along the streambanks. Neither are such activities felt necessary. To expand game management activities would involve the purchase of additional uplands, which is not compatible with the acreage available for this fishery area. Expansion of forest management activities would involve economic forestry practices such as converting open fields to pine plantations rather than wildlife habitat. Intense cropping of existing timber stands would conflict with management for aesthetics.



HINKSON CREEK FISHERY AREA

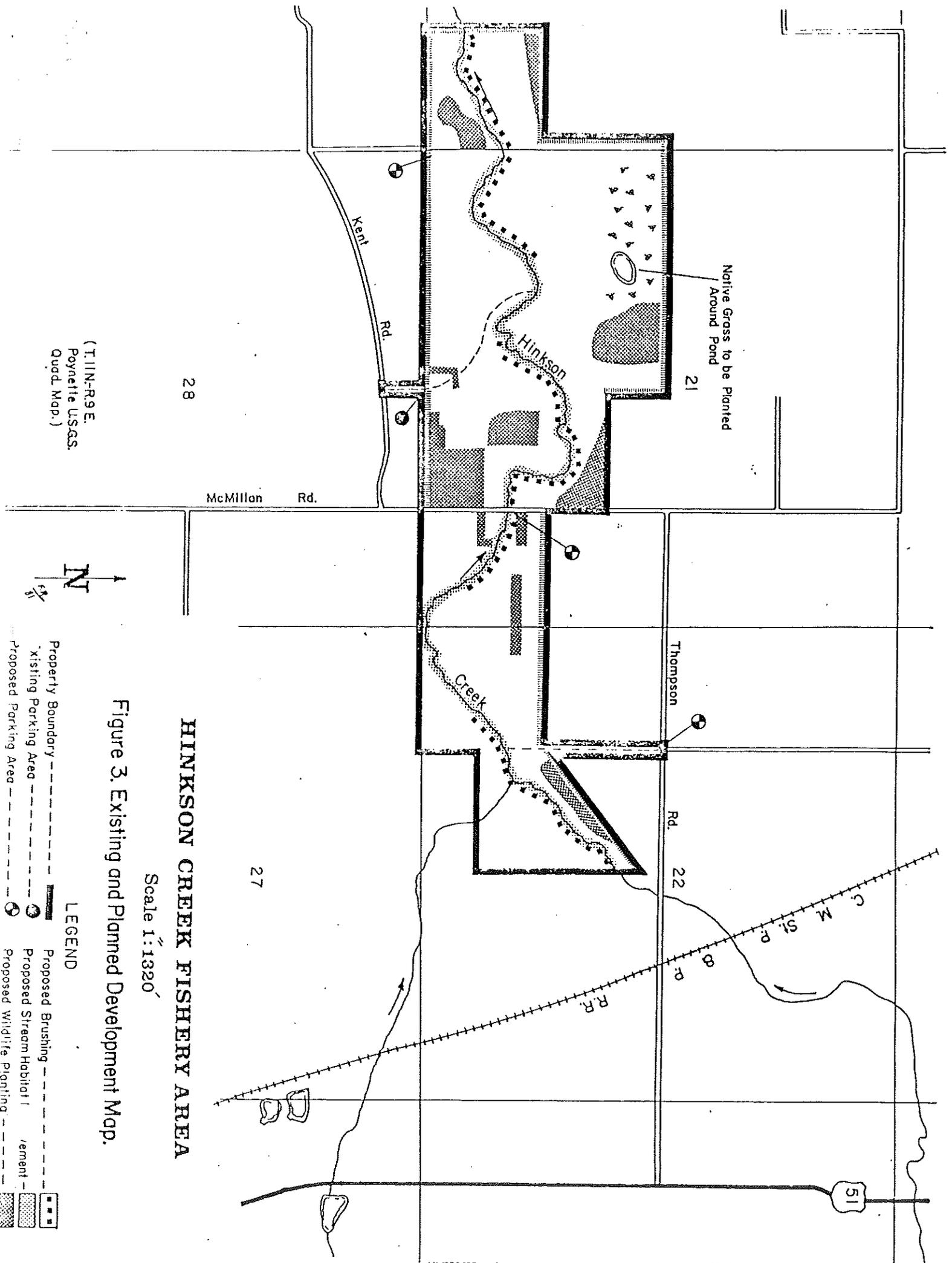
Scale 1" = 1320'

Figure 2. Property Ownership and Land Use Classification Map.

LEGEND

- Property Boundary - - - - -
- State Land - [stippled box]
- Private Land - [white box]
- Fish & Wildlife Management Area - [hatched box]
- Entire Property - [thick solid line]

(T.11N-R9E,
Poyette USGS,
Quad. Map.)



HINKSON CREEK FISHERY AREA

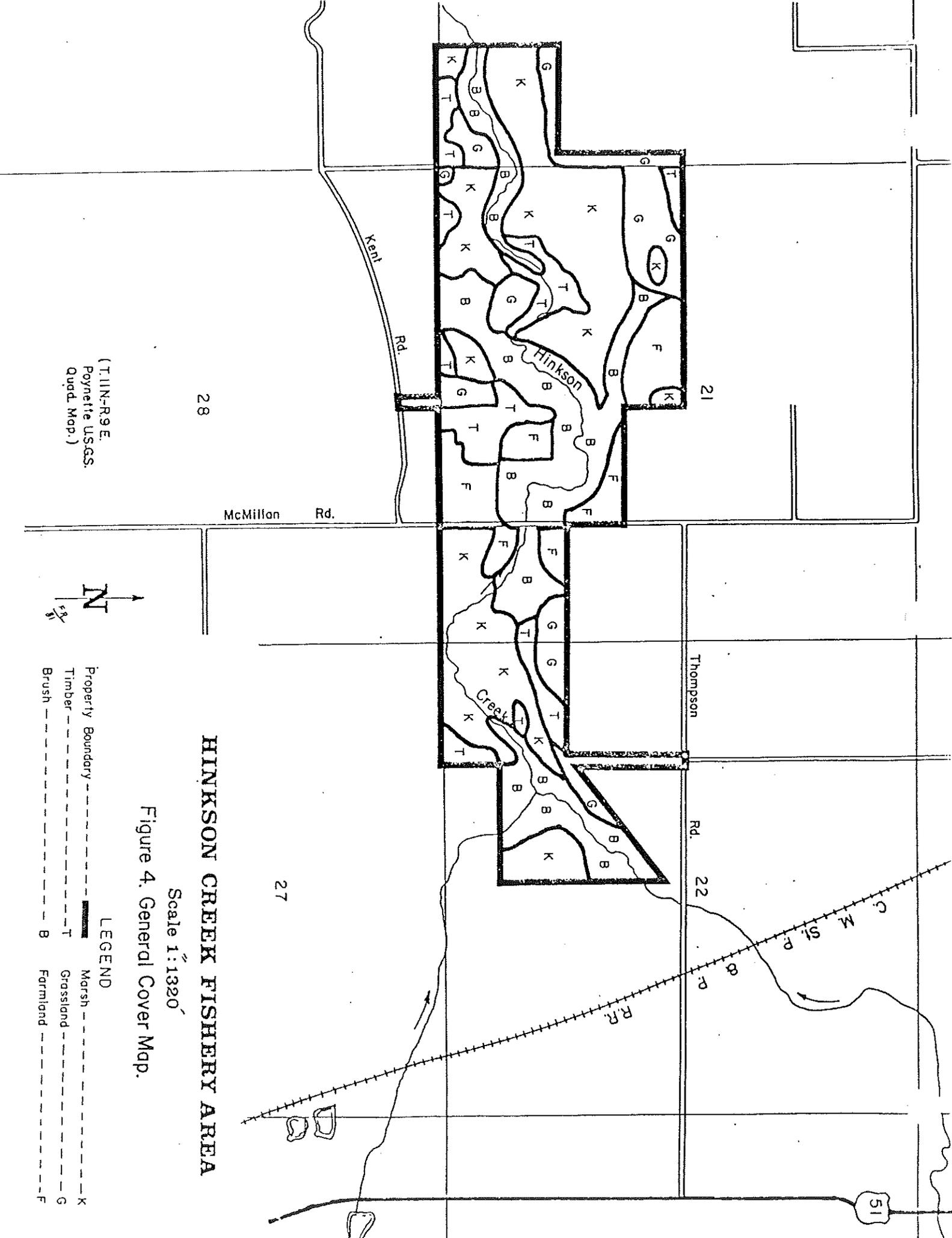
Scale 1" = 1320'

Figure 3. Existing and Planned Development Map.

LEGEND

- Property Boundary ————
- Existing Parking Area ————
- Proposed Parking Area ————
- Proposed Brushing ————
- Proposed Stream Habitat ————
- Proposed Wildlife Planting ————

(T11N-R9E,
Poynette USGS,
Quad. Map.)



HINKSON CREEK FISHERY AREA

Scale 1" = 1320'

Figure 4. General Cover Map.

LEGEND

- Property Boundary - - - - -
- Marsh - - - - -
- Timber - - - - -
- Grassland - - - - -
- Brush - - - - -
- Farmland - - - - -

(T.11N-R9E,
Poyette USGS,
Quad. Map.)