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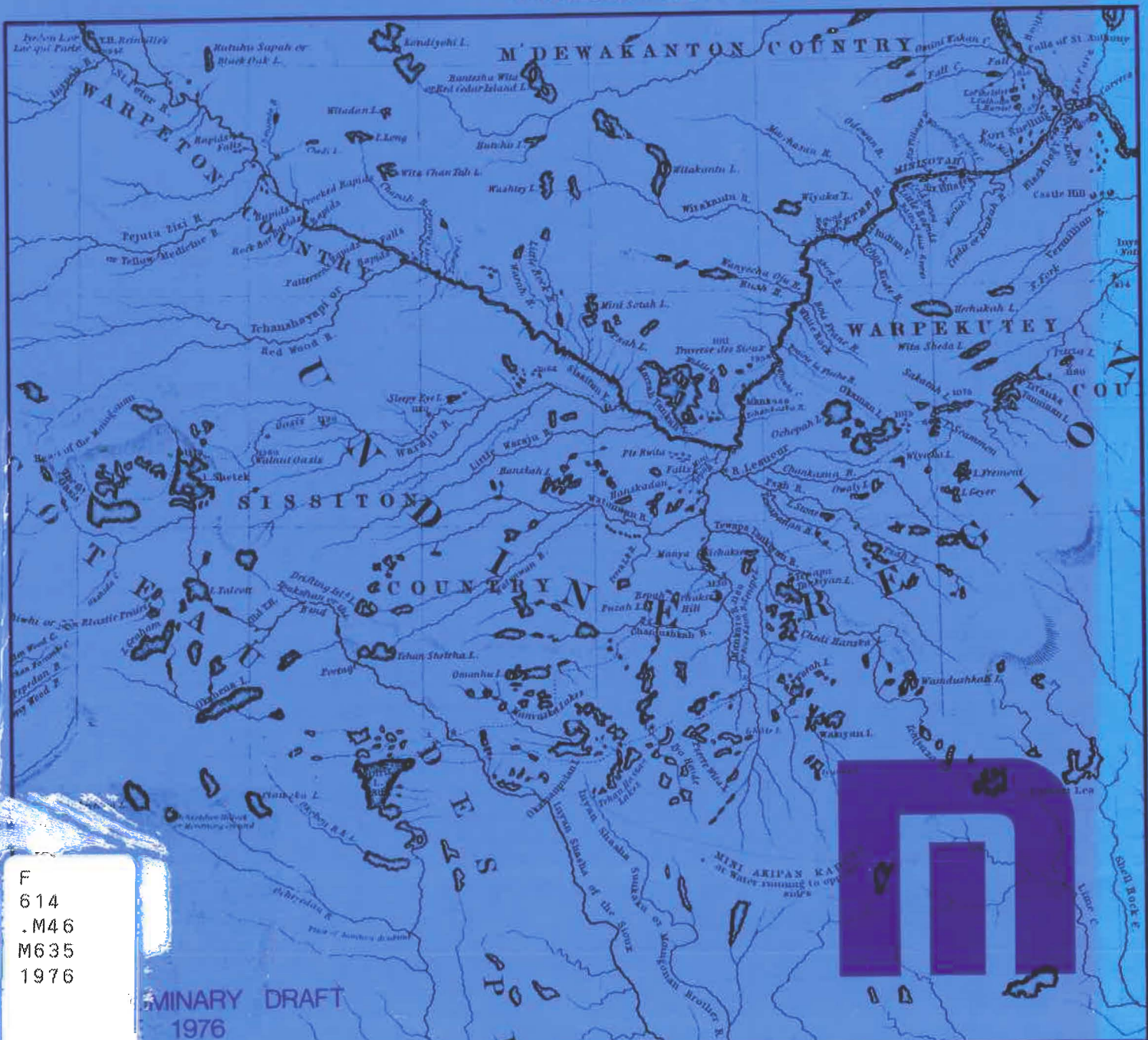
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A MANAGEMENT PLAN FOR THE MINNESOTA RIVER

LAC QUI PARLE TO FRANKLIN

MINNESOTA DEPARTMENT OF NATURAL RESOURCES



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the Rivers Section, Division of Parks and Recreation:

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SUMMARY

This management plan prepared by the Department of Natural Resources (DNR) recommends that the Minnesota River from the Lac Qui Parle dam to Franklin be included in the Minnesota Wild, Scenic and Recreational Rivers System.

The management plan also recommends specific management techniques to be used to preserve the Minnesota River and its adjacent lands.

The Minnesota Wild and Scenic Rivers Act (Minnesota Statutes 1974, Sections 104.31-104.40, Chapter 271) authorizes the commissioner of natural resources to include rivers or segments of rivers in a Wild, Scenic and Recreational Rivers System to "preserve and protect" their "outstanding scenic, recreational, natural, historical, scientific and similar values."

The appendix to this management plan includes an analysis of the natural environment, social characteristics and existing recreational features of the proposed management area. This analysis supports the DNR's recommendation that the Minnesota River from the Lac Qui Parle dam to Franklin be included in the Wild, Scenic and Recreational Rivers System. The section of the appendix entitled Management Techniques describes the various methods the DNR may use to preserve the river and its adjacent lands.

The management plan may be amended depending on the outcome of public informational meetings and the "findings of fact" arising from

public hearings to be conducted in the county seat of the counties in the proposed management area. If revisions are made, only the Management Plan section of this report-- not the Appendix-- will be reprinted. If the Minnesota River is included in the Wild, Scenic and Recreational Rivers System, the management plan will be filed as a public legal document and will be available from the Documents Section, 140 Centennial Building, St. Paul, MN 55155.

The Wild and Scenic Rivers Act as well as Minnesota Regulations NR 78-81, the statewide standards and criteria for Wild, Scenic and Recreational rivers, are found in the appendix of this report.

ACKNOWLEDGEMENT

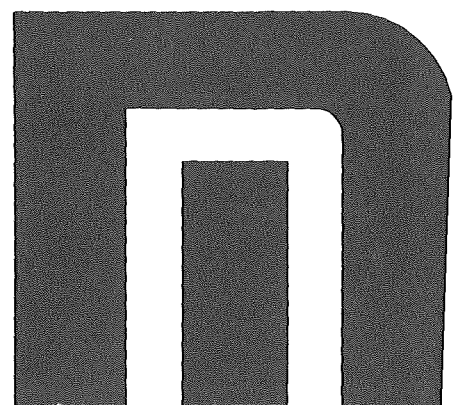
The DNR would like to express appreciation to Lee A. Halgren of Southwest Minnesota State University for permission to use portions of the report, "The Development of the Recreational and Environmental Resources of the Upper Minnesota River Valley," in the Analysis section of this report. Dr. Halgren's report was funded through the Legislative Commission on Minnesota's Resources.

CONTENTS

SUMMARY	ii
I. THE MANAGEMENT PLAN	1
Regulations	2
Land Management Maps	7
Land Use District Descriptions and Acreages	32
Scenic Easement Descriptions and Acreages	50
Fee Title Descriptions and Acreages	58
Recreational Site Typicals	60
II. APPENDIX	67
<u>Analysis</u>	70
Study Conclusions	70
Physical Characteristics	76
Route Description	76
Watershed	79
Geology	82
Soils	85
Vegetation	85
Wildlife	86
Fisheries	88
Water Quality	90
Social Characteristics	92
History	92
Land Use	99

Water Use	100
Population	100
Recreational Features	101
Bibliography	106
<u>Management Techniques</u>	110
The Land Use Districts	110
Land Management Totals	111
Acreage Per River Mile	112
Land Use Provisions	114
Zoning	114
Vegetative Cutting	116
Grading and Filling	117
Utility Crossings	118
Public Roads	118
Land Acquisition	119
Fee Title	119
Scenic Easements	120
Use Easements	122
Land Exchange	122
Recreation Management	122
Proposed Recreational Development	123
Maintenance	126
<u>The Wild and Scenic Rivers Act</u>	127
<u>Minnesota Regulations NR 78-81</u>	131

THE MANAGEMENT PLAN



STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES
Regulations

CHAPTER TWENTY - SIX: NR 2600

DESIGNATION , CLASSIFICATION AND MANAGEMENT OF THE MINNESOTA RIVER IN LAC QUI PARLE, YELLOW MEDICINE, CHIPPEWA, RENVILLE AND REDWOOD COUNTIES.

NR 2600 DESIGNATION

(a) THE RIVER

That portion of the Minnesota River from the Lac Qui Parle dam to the Redwood County State Aid Highway 11 bridge near Franklin is designated a component of the Minnesota Wild and Scenic Rivers System.

(b) AUTHORITY

This designation is made by the commissioner of natural resources pursuant to the authority of the Minnesota Wild and Scenic Rivers Act, Minnesota Statutes 1974, Sections 104.31 to 104.40.

(c) SHORELAND INCLUDED

The designation and these rules apply to the river and the adjacent lands indicated on the Land Management Maps and the Land Use District Descriptions. The land use district boundaries were delineated in accordance with Minnesota Regulations NR 78 (g) (2) (bb).

(d) SEVERABILITY

The provisions of these regulations shall be severable, and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision or any other part.

NR 2610 CLASSIFICATION

That portion of the Minnesota River and adjacent lands from the Lac Qui Parle dam to the U.S. Highway 212 bridge in the corporate limits of Montevideo is classified as Scenic.

That portion of the Minnesota River and adjacent lands from the U.S. Highway 212 bridge in the corporate limits of Montevideo to the Minnesota Falls dam is classified as Recreational.

That portion of the Minnesota River and adjacent lands from

the Minnesota Falls dam to the Redwood County State Aid Highway 11 bridge is classified as Scenic.

These classifications are made in accordance with the provisions of Minnesota Statutes 1974, Section 104.33, Subdivision 2; and Minnesota Regulations NR 78(f).

NR 2620 LAND MANAGEMENT

(a) ZONING

(1) The counties of Lac Qui Parle, Chippewa, Yellow Medicine, Renville and Redwood shall each enact or amend such ordinances and maps as necessary to:

(aa) Establish Scenic and Recreational river land use districts as applicable according to Minnesota Regulations NR 2610, to include the lands identified by the Land Management Maps and the Land Use District Descriptions.

(bb) Conform to the provisions of Minnesota Regulations NR 78-81.

(2) The municipalities of Montevideo, Granite Falls, North Redwood and Morton shall enact or amend such ordinances and maps as necessary to:

(aa) Establish Scenic and Recreational river land use districts as applicable according to Minnesota Regulations NR 2610 to include the lands identified by the Land Management Maps and the Land Use District Descriptions.

(bb) Conform to the use, dimensional and sanitary provisions of the Recreational Development classification of Minnesota Regulations NR 83, and the provisions of Minnesota Regulations NR 79 (e-j), 80 and 81.

(cc) The vegetative cutting provisions of Minnesota Regulations NR 79 (g) shall conform to the structural setback pattern specified in Minnesota Regulations NR 83.

(3) The zoning provisions specified above shall not be changed by annexations or incorporations occurring after the date of designation.

(4) All local ordinances and regulations which are more protective than those required to be adopted by this management plan shall be continued.

(b) LAND ACQUISITION

(1) The lands or interests in land recommended to be acquired in this plan will be acquired when funds are available for such purchases from willing sellers, as provided for in Minnesota Statutes 1974, Section 104.37.

(aa) Fee title acquisition is recommended in those areas where recreational sites are needed as identified on the Land Management Maps and in the Fee Title Descriptions.

(bb) Scenic easement acquisition is recommended in those areas having outstanding scenic or natural characteristics as identified on the Land Management Maps and in the Scenic Easement Descriptions.

(cc) Because fee title acquisition or scenic easement acquisition is from willing sellers at the appraised market value, some lands recommended for scenic easement acquisition may be purchased in fee title. Some lands recommended for fee title acquisition may be purchased in scenic easement. This change from the recommended acquisition would be based on the mutual agreement by and between the state of Minnesota and the landowner(s).

(2) Other forms of acquisition, such as use easements or leases, may be used to acquire interests in lands within the land use districts.

(3) Land will be exchanged, whenever feasible, to acquire lands within the land use districts. These exchanges will be done in the manner prescribed by state law. However, land exchanges will not be recommended if such exchanges would adversely affect this or any other Department of Natural Resources management program.

(4) Additional lands or interests in land may be purchased within the land use districts to further the policies established in Minnesota Statutes 1974, Section 104.32 and this management plan.

NR 2630 RECREATION MANAGEMENT

(1) Recreation management in the Scenic and Recreational river land use districts shall conform to the policies and provisions of Minnesota Regulations NR 80.

(2) As provided for in Minnesota Regulations NR 79 (b) and the management plan, the development of public or private recreational facilities within the Scenic and Recreational river land use districts shall conform to the design specification guidelines as shown on the Recreational Site Typical.

(3) No Department of Natural Resources river-oriented camping facilities will be provided close to private river-oriented camping facilities which are designed to serve the same needs.

(4) The recreational use of the Minnesota Scenic and Recreational River and adjacent public lands will be regulated where necessary to insure that the use does not adversely affect the values which qualified the river for designation.

(5) Snowmobiling in the land use district will be allowed:

(aa) On private lands only with permission from appropriate landowners.

(bb) On trails specifically designated for snowmobiling.

(6) The Land Management Maps show priority areas for recreational development. On areas which are not presently publicly owned, some type of land interest must be purchased before lands are available for public use.

(7) The Division of Parks and Recreation shall allocate funds for the maintenance of Department of Natural Resources recreational facilities within the Minnesota River land use districts from the department's river development and maintenance account.

(8) The department's Enforcement Division shall enter into discussions with the local units of government concerning the delineation of responsibilities for the enforcement of applicable Wild, Scenic and Recreational river regulations.

NR 2640 RECOMMENDATIONS

(a) Federal-State relations

Since the Department of Natural Resources is responsible for administering the Minnesota River as a Scenic and Recreational river, it is recommended that the State of Minnesota, through the appropriate application process, apply for those islands presently administered by the Bureau of Land Management to be transferred to the Department of Natural Resources under the authority granted the commissioner of natural resources in Minnesota Statutes 1974, Section 104.35.

(b) Other Governmental Units

(1) To further the purposes of the Minnesota Wild and Scenic Rivers Act, it is recommended that all State Highway Department lands within the Scenic and Recreational river land use districts be administered in accordance with the provisions of Minnesota Regulations NR 78-81 and this

management plan. In particular, it is stated in Minnesota Regulations NR 79 (j) (2) (bb) (v) that:

(aa) Highway waysides shall be designed in such a manner so as to harmonize with the surroundings.

(bb) Such development plans shall be reviewed and approved by the commissioner of natural resources.

(2) It is recommended that the Minnesota Pollution Control Agency be appropriated sufficient funds to conduct an ongoing analysis and monitoring of water quality information, and to allow for appropriate measures to insure that water quality regulations and standards are maintained for the Minnesota River.

(3) To help insure that the outstanding heritage of the Minnesota River is protected for future generations, it is recommended that the Minnesota Historical Society conduct an inventory of all historical and archeological sites within the proposed Scenic and Recreational river land use districts and recommend appropriate methods for preservation of those sites having outstanding historical significance.

(4) To further enhance the recreational potential of the Minnesota River and to complement the existing Lower Minnesota River Valley Trail, it is recommended that a corridor trail system from LeSueur to Ortonville be established through state legislation and developed by the Department of Natural Resources and local units of government.

(5) It is recommended that the counties which border the river adopt zoning ordinances to protect blufflines which lay beyond the land use district boundaries.






(6) To further the purposes of the Minnesota Wild and Scenic Rivers Act, it is recommended that the Indian reservation lands of the Upper Sioux Agency and Lower Sioux Agency be managed in a way consistent with this act.






(7) It is recommended that agencies in charge of public outdoor recreation on the Minnesota River work with the Department of Natural Resources in improving and developing recreational facilities.



(8) It is recommended that those lakes in the Minnesota River valley between Lac Qui Parle and Franklin, which are delineated as "intended for acquisition" on the preliminary Public Waters Inventory maps, be given priority status for acquisition.

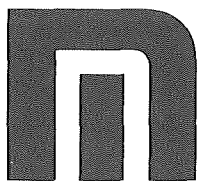
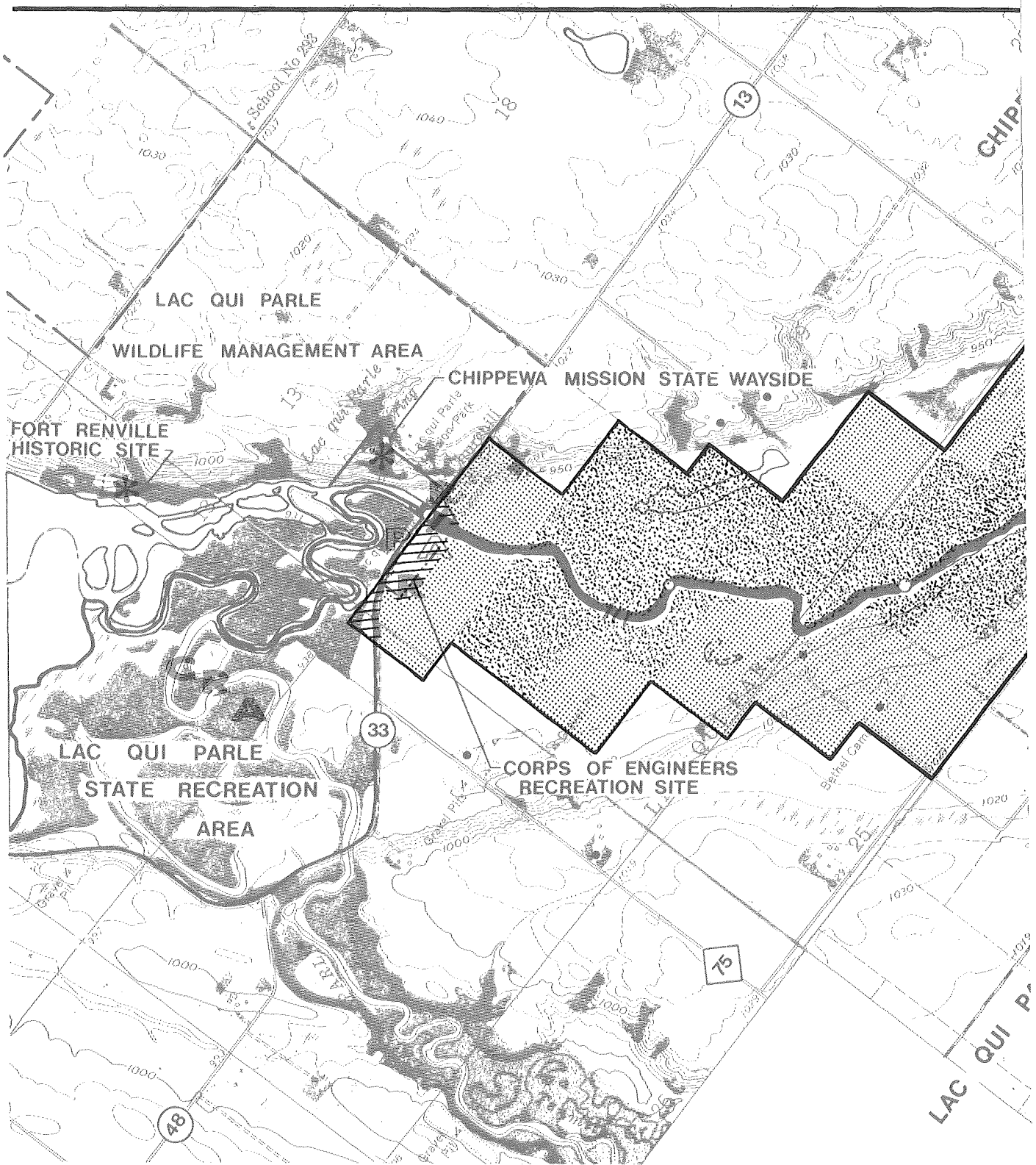
LAND MANAGEMENT MAPS

LEGEND

	FEDERAL HIGHWAY
	STATE HIGHWAY
	C.S.A.H. HIGHWAY
	COUNTY ROAD
	RAILROAD

	PARK BOUNDARY
	INDIAN RESERVATION
	STATE WILDLIFE MANAGEMENT AREA
	HISTORIC SITE BOUNDARY
	FEDERAL UNIT

	RIVER MILE
	RESIDENCE



A MANAGEMENT PLAN FOR THE
MINNESOTA RIVER

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



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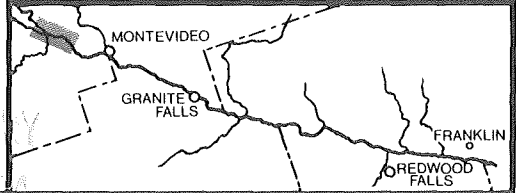
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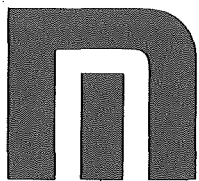
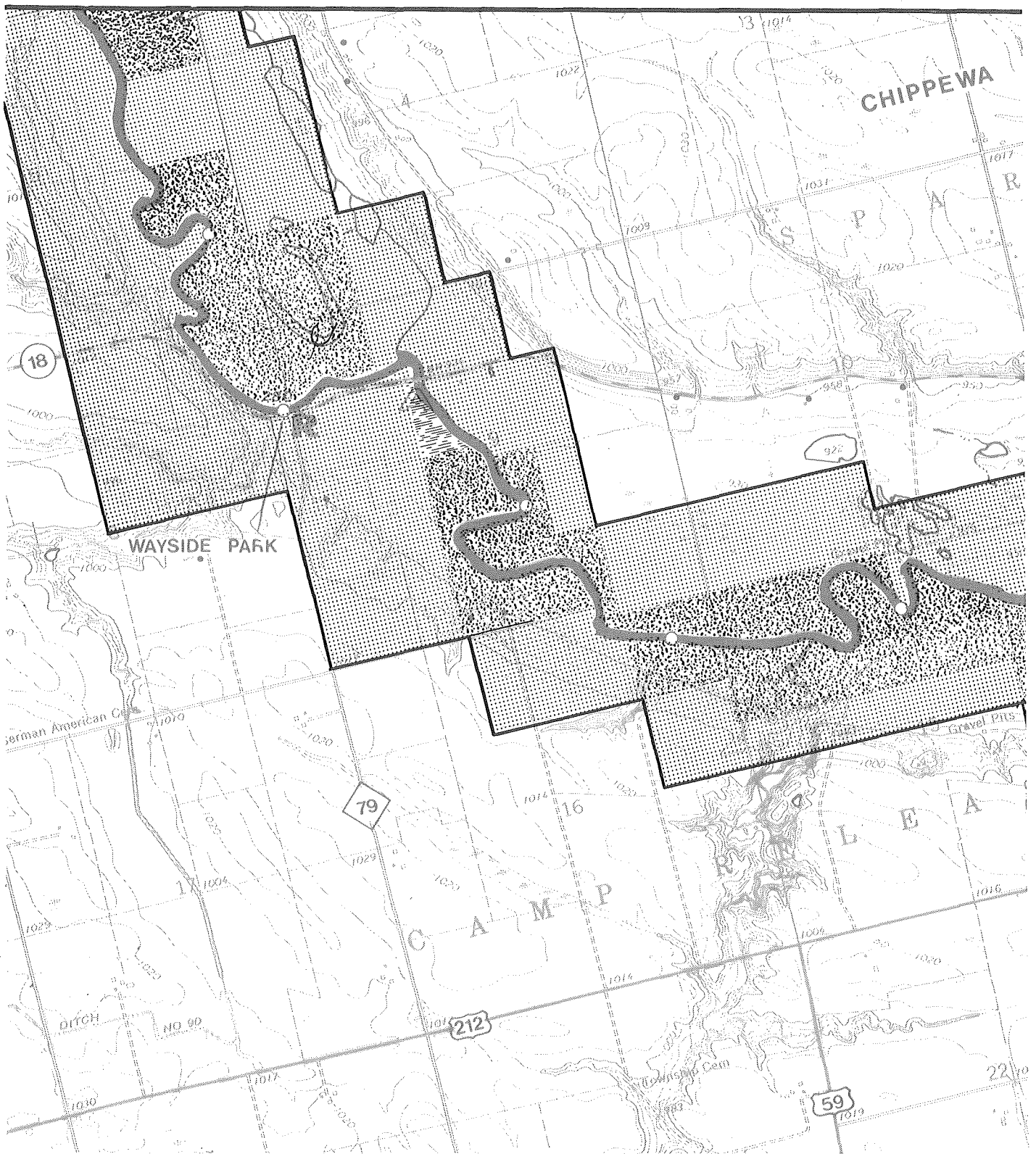
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-  ZONING



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A MANAGEMENT PLAN FOR THE
MINNESOTA RIVER

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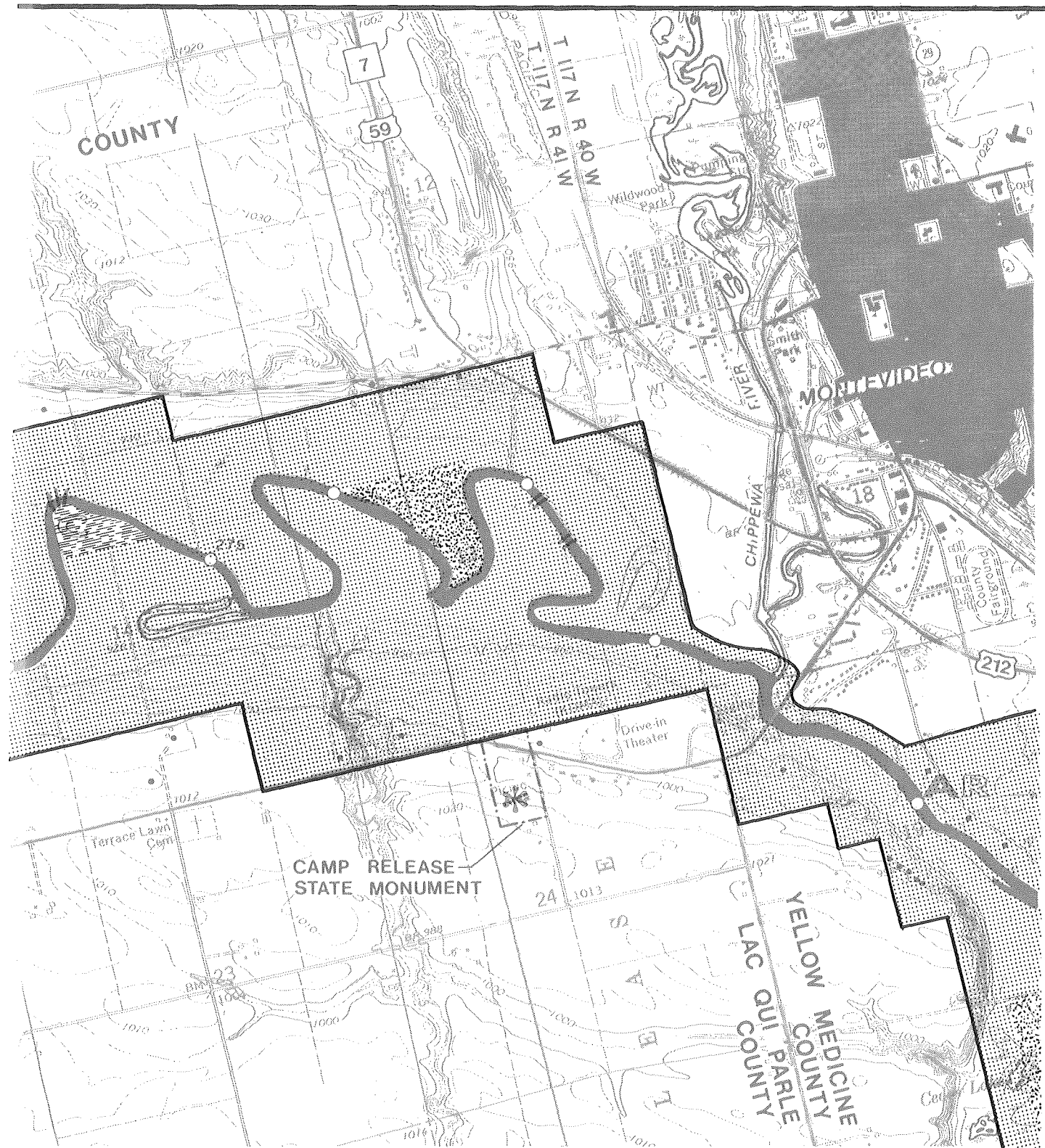
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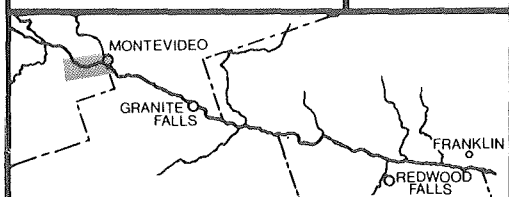
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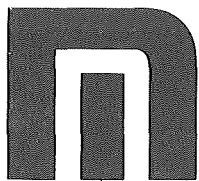
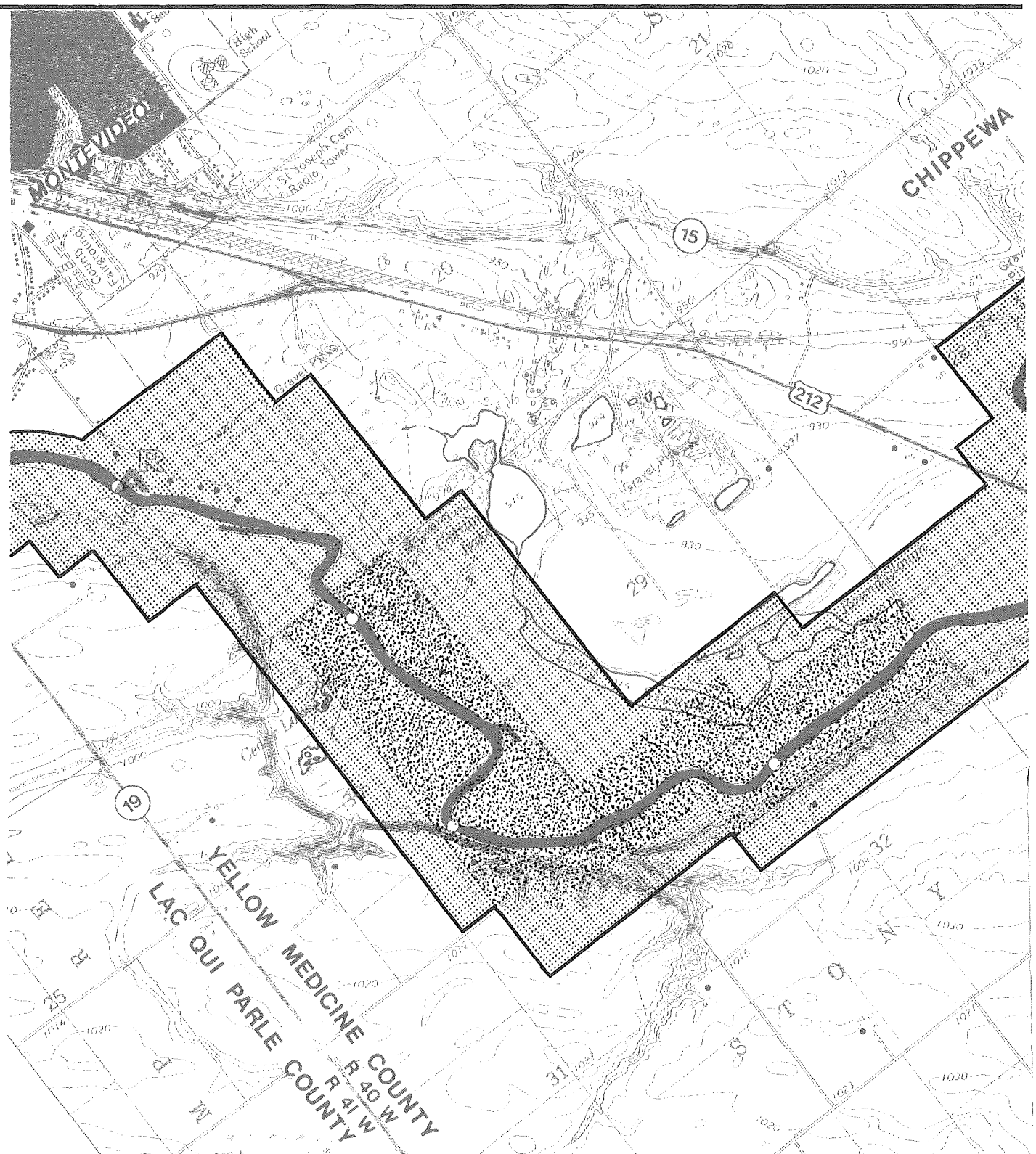


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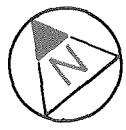





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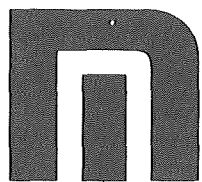
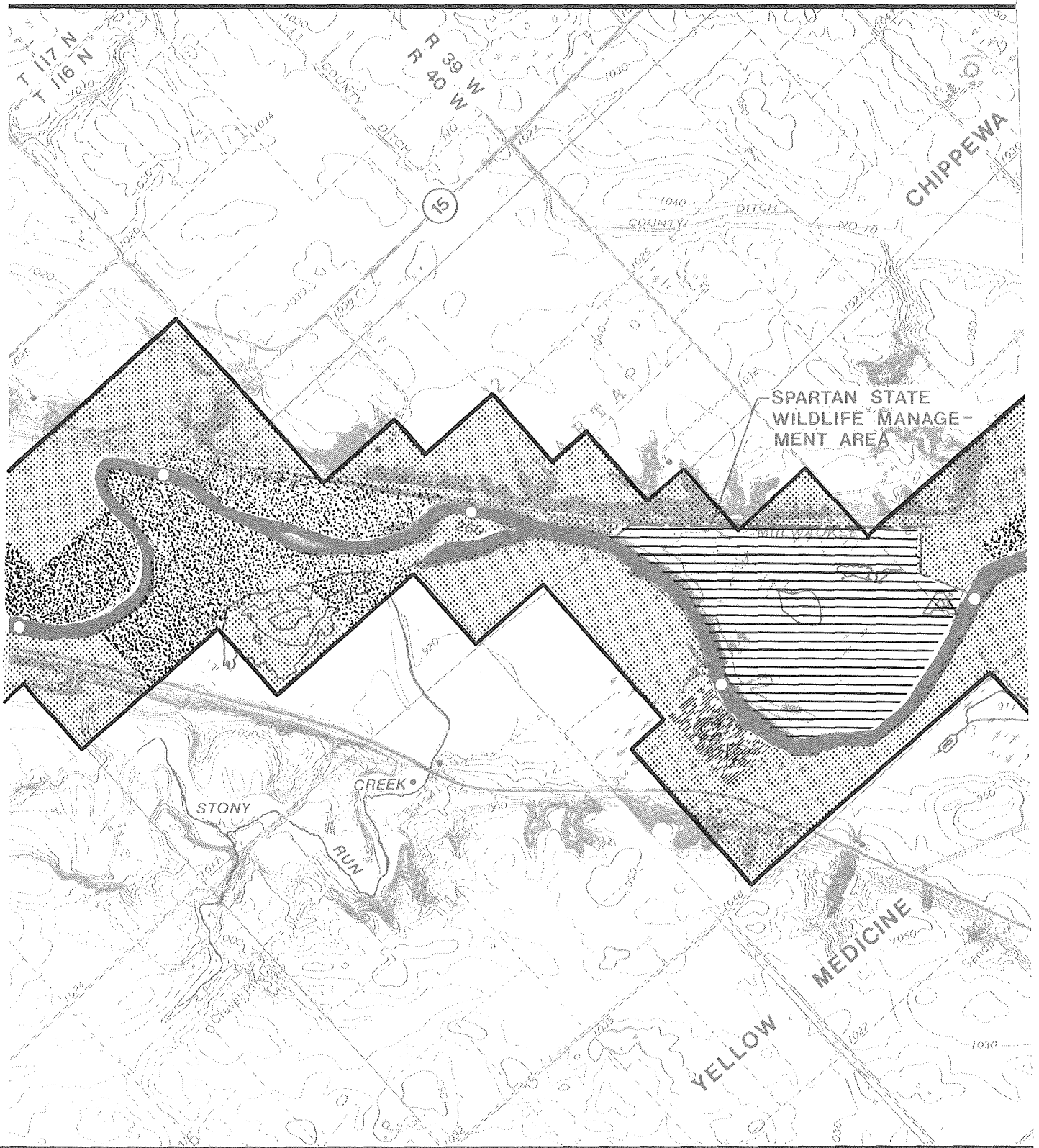
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A MANAGEMENT PLAN FOR THE
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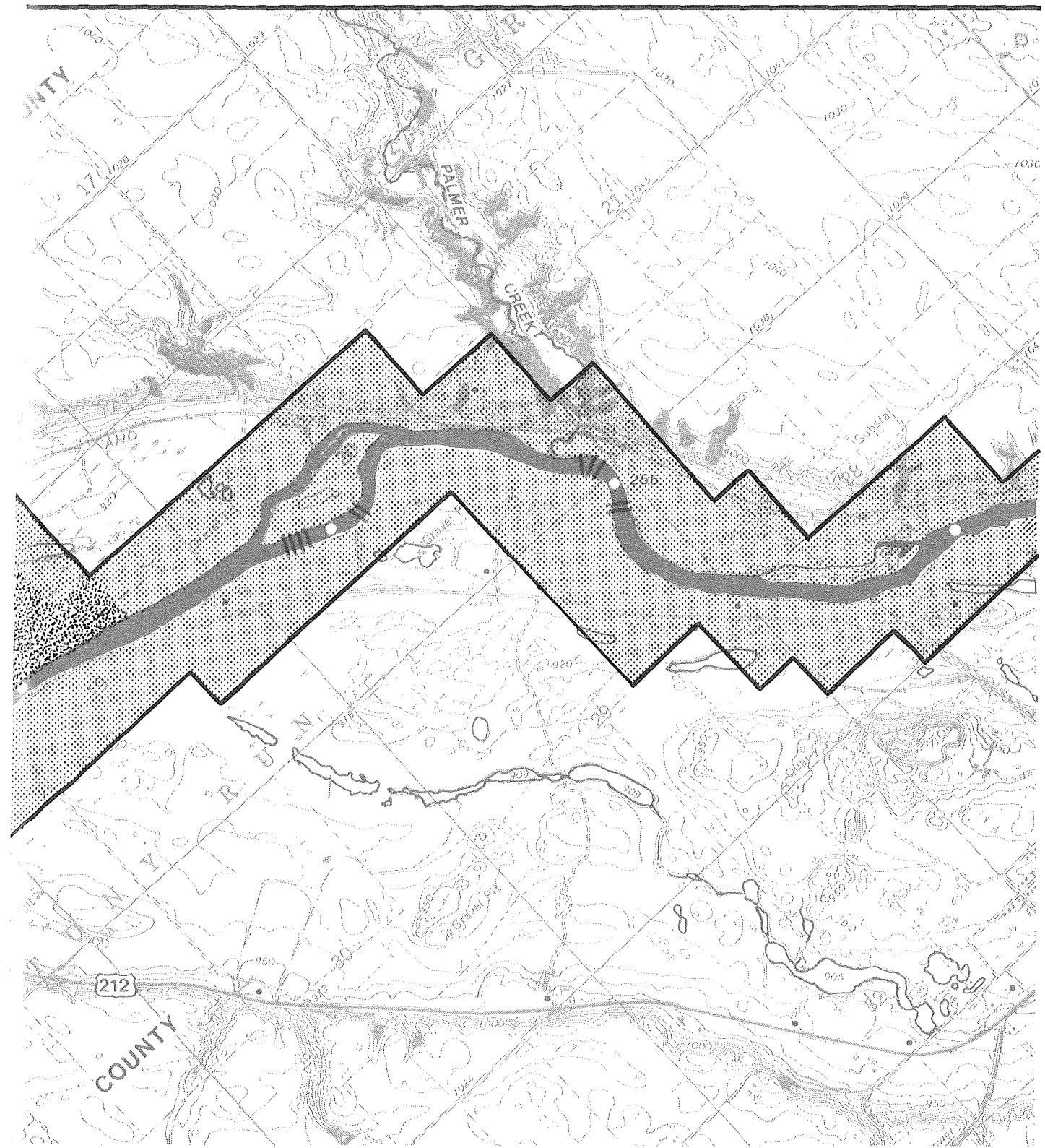
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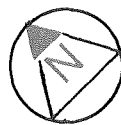
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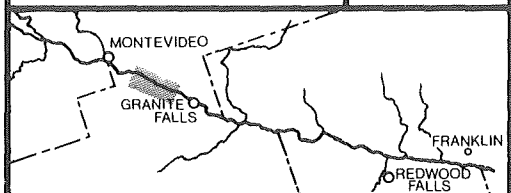
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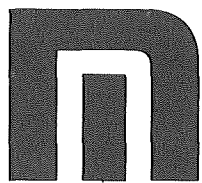
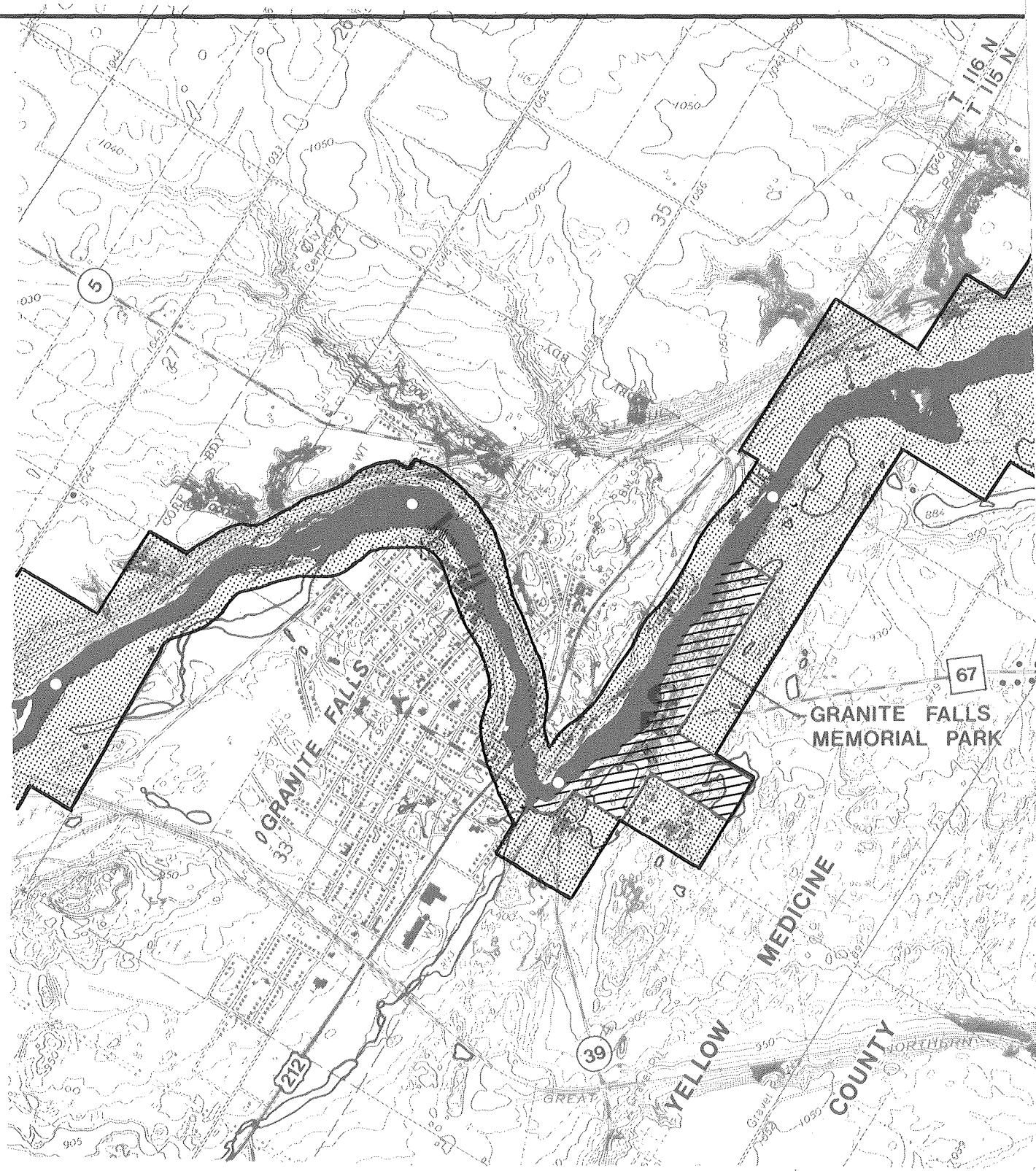


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A MANAGEMENT PLAN FOR THE
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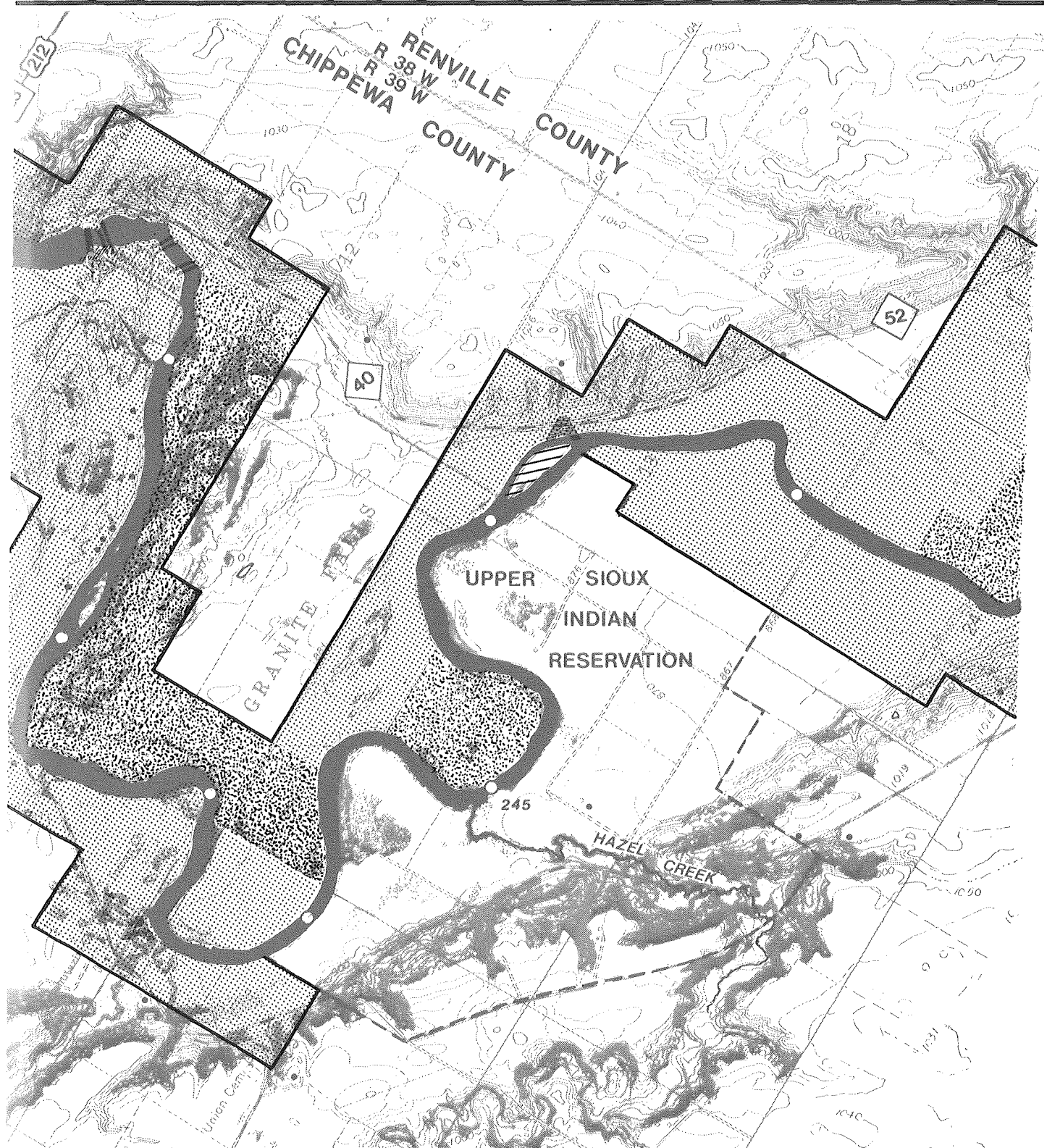
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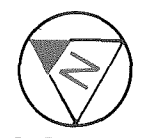
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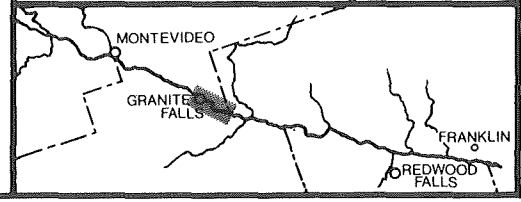
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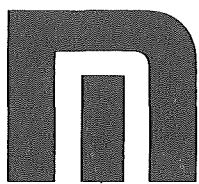
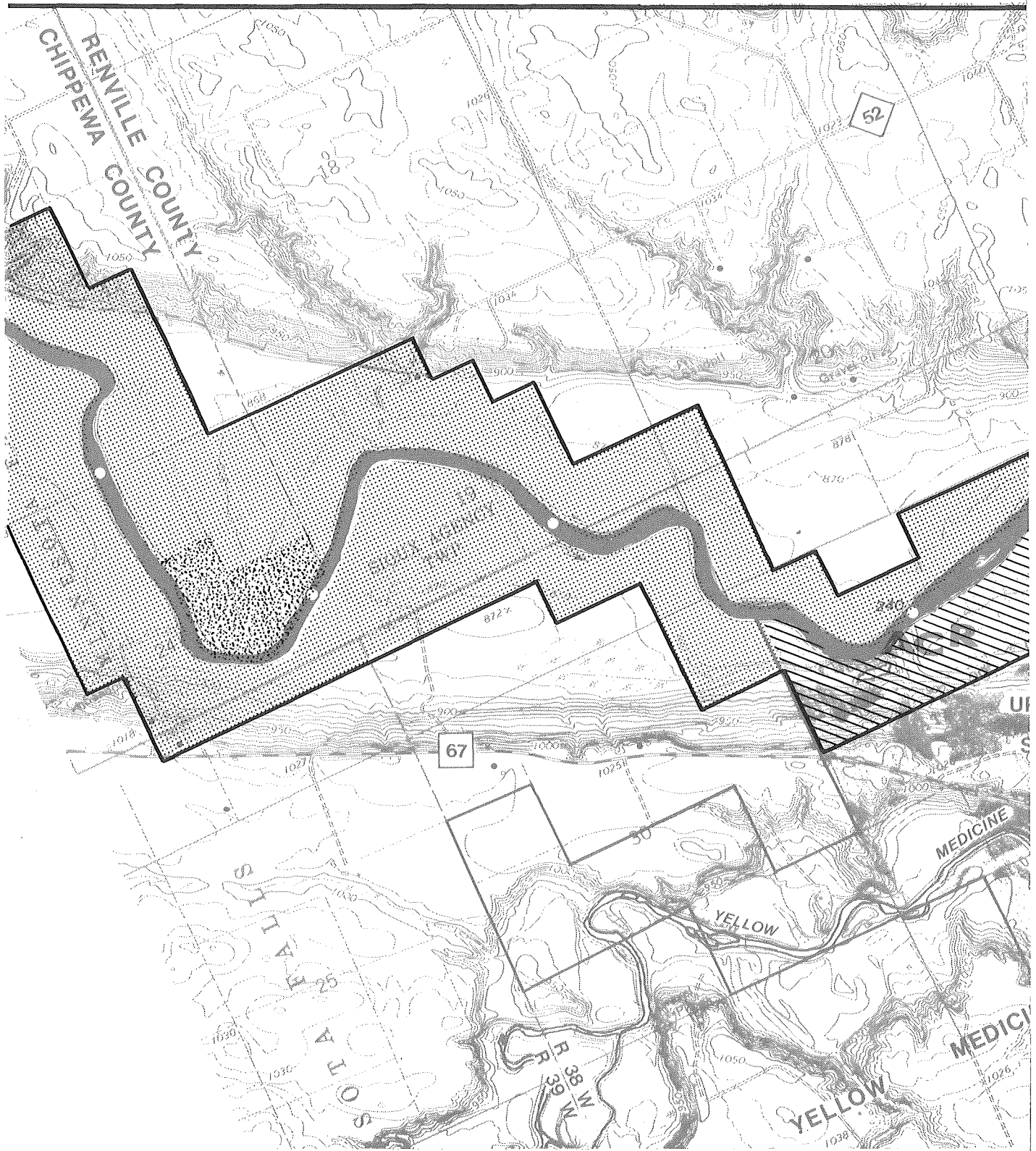
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A MANAGEMENT PLAN FOR THE
MINNESOTA RIVER

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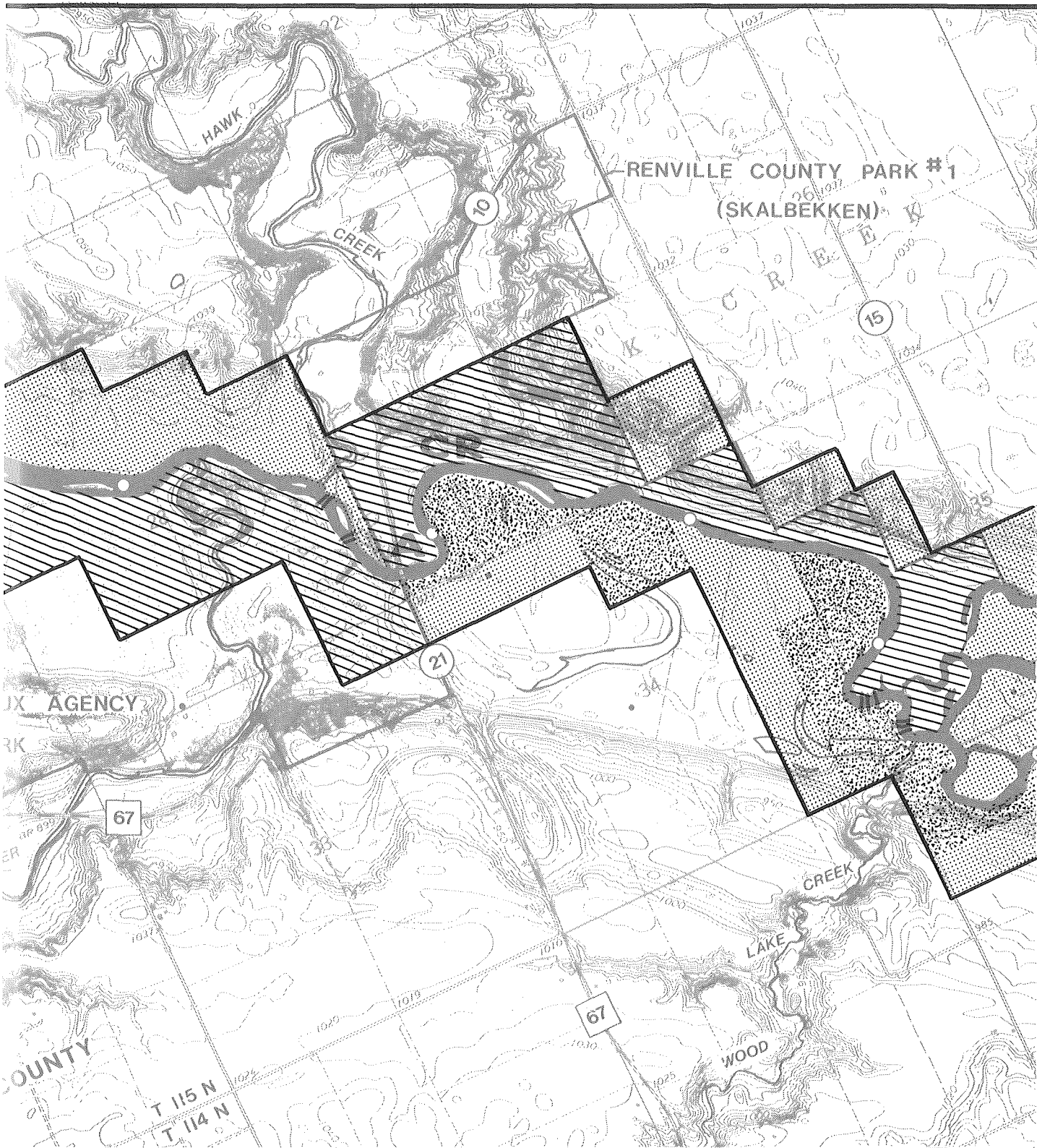
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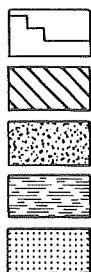
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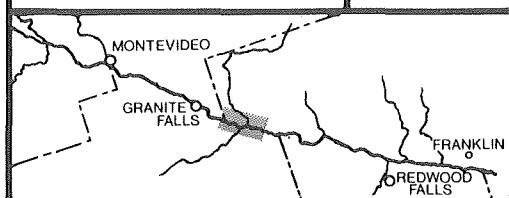
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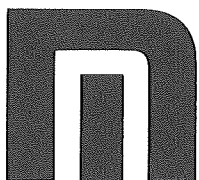
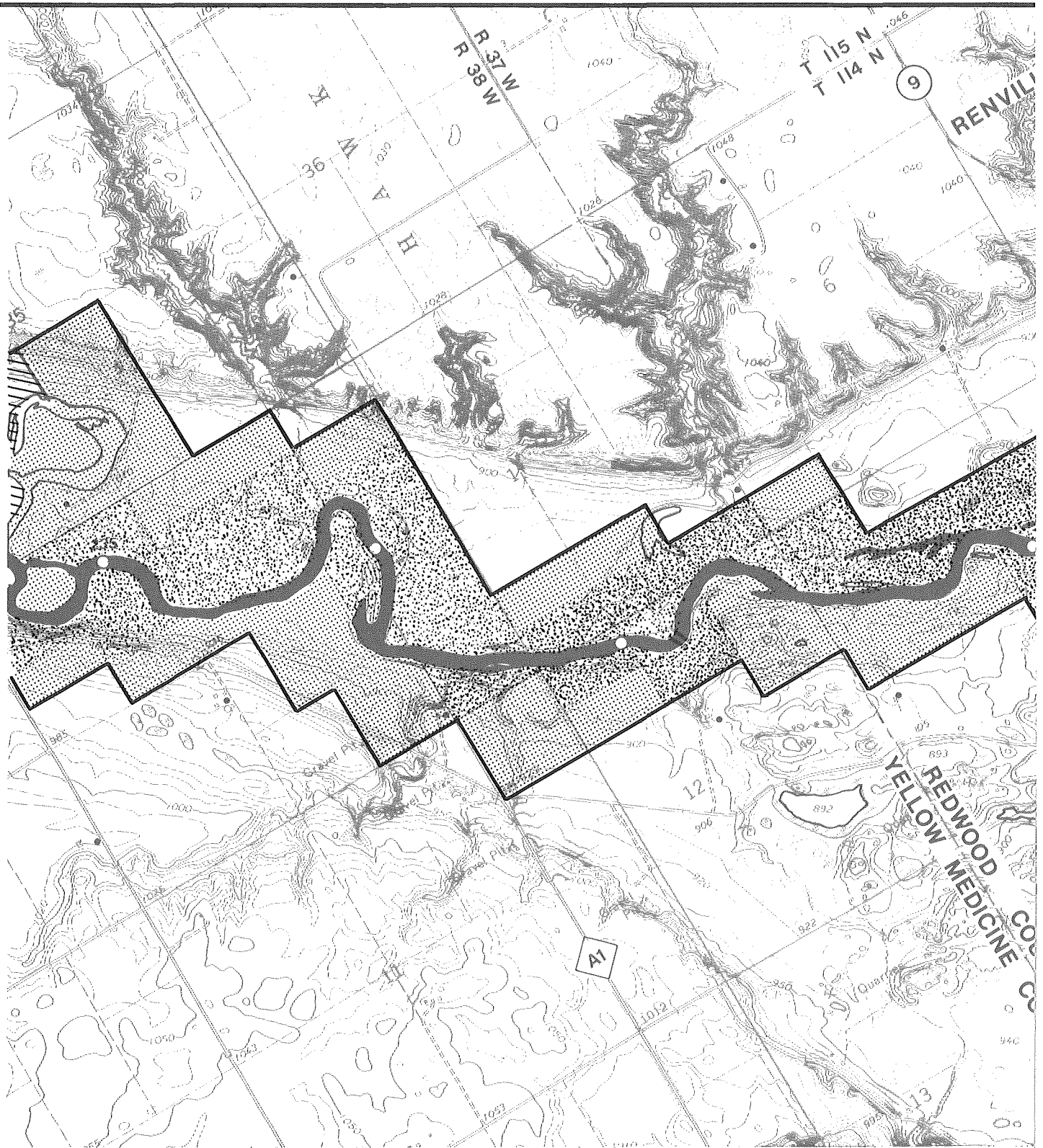


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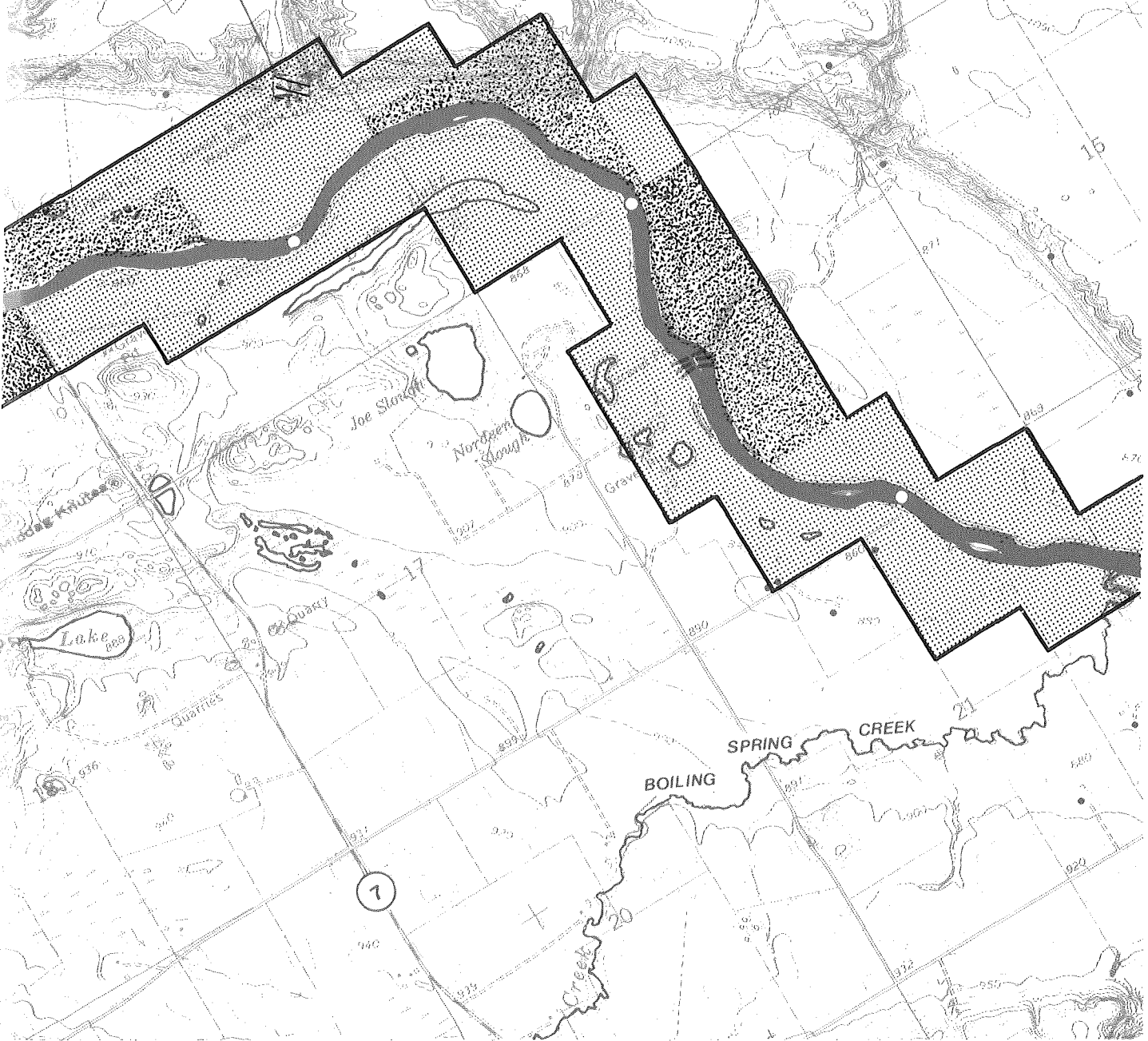
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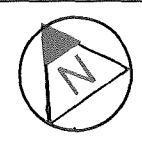
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STATE HISTORIC WAYSIDE



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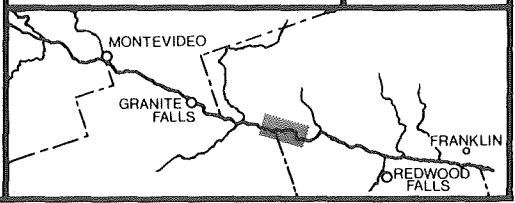
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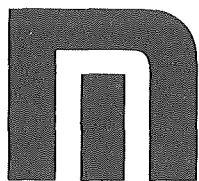
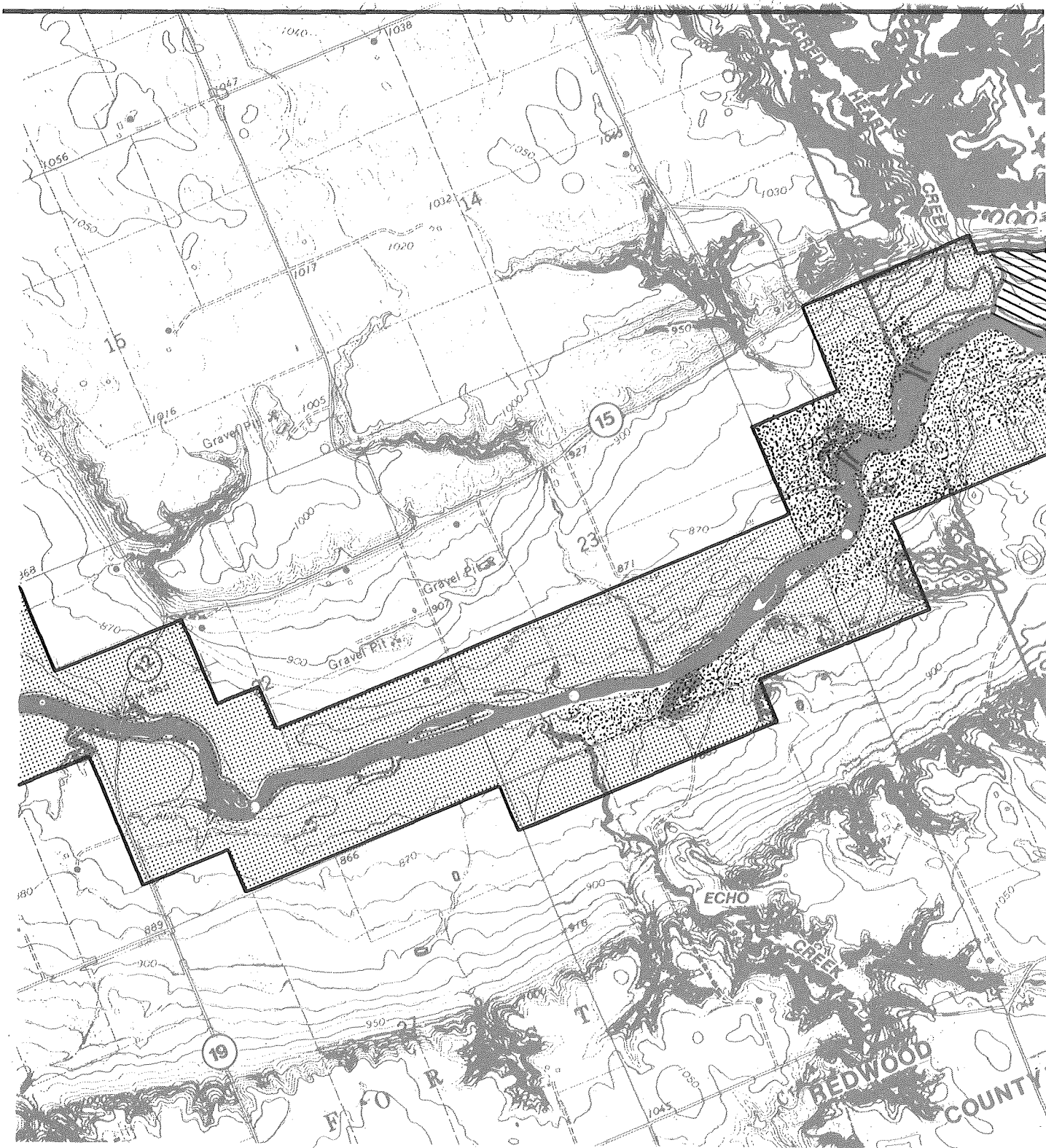


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A MANAGEMENT PLAN FOR THE
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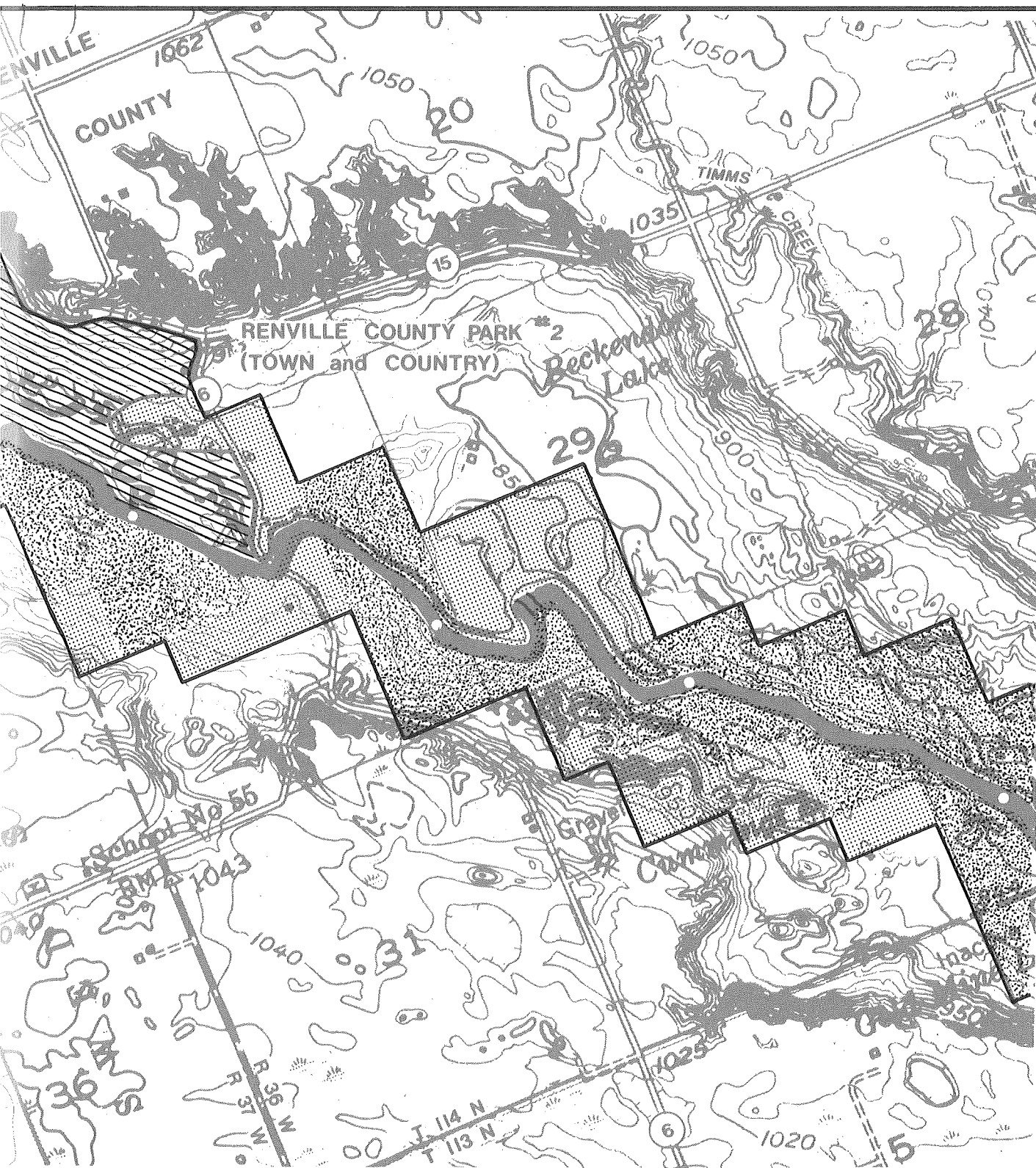
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

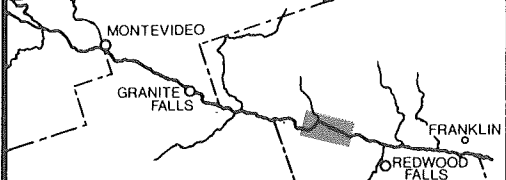



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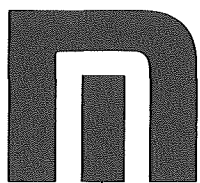
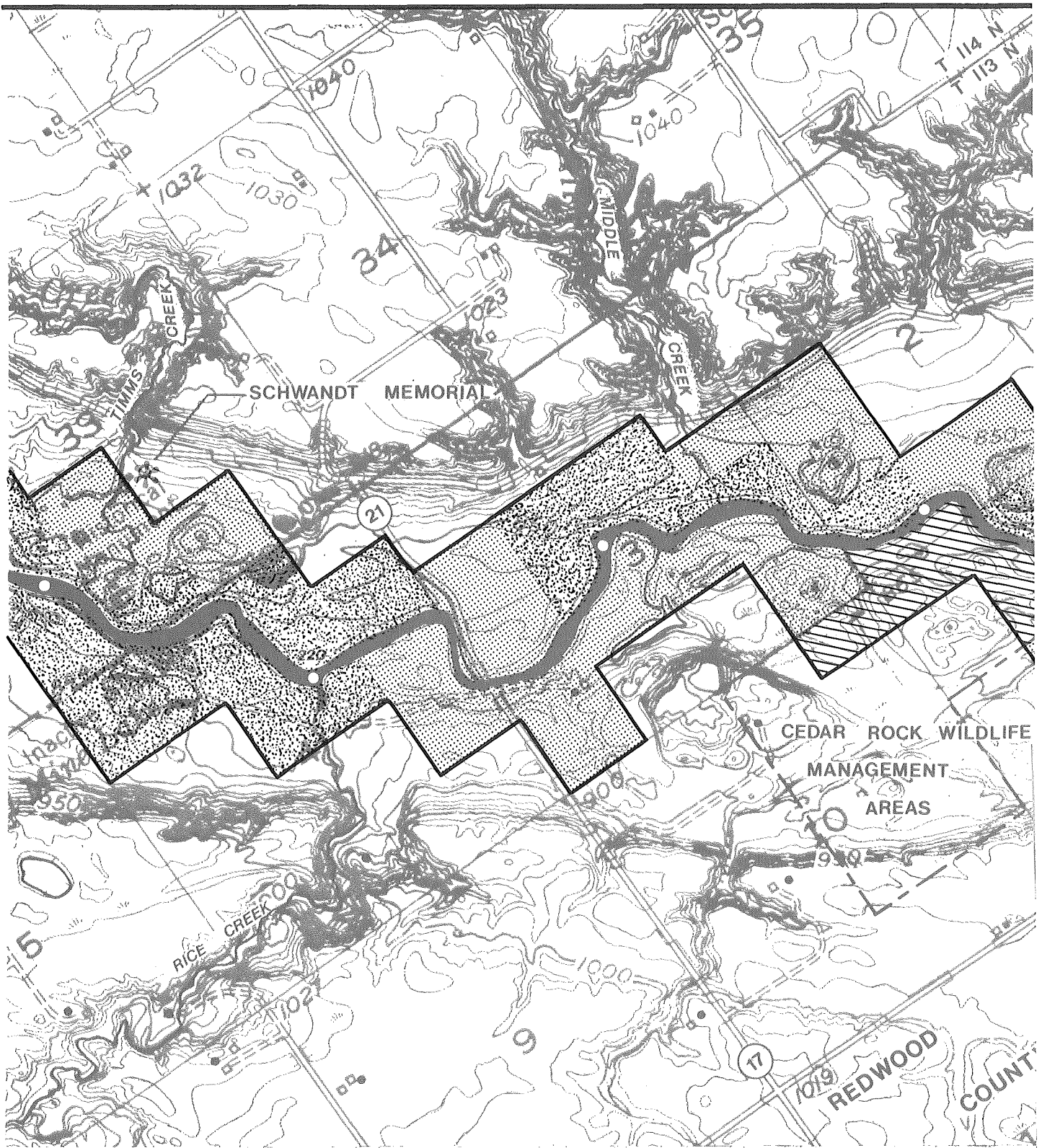
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A MANAGEMENT PLAN FOR THE
MINNESOTA RIVER

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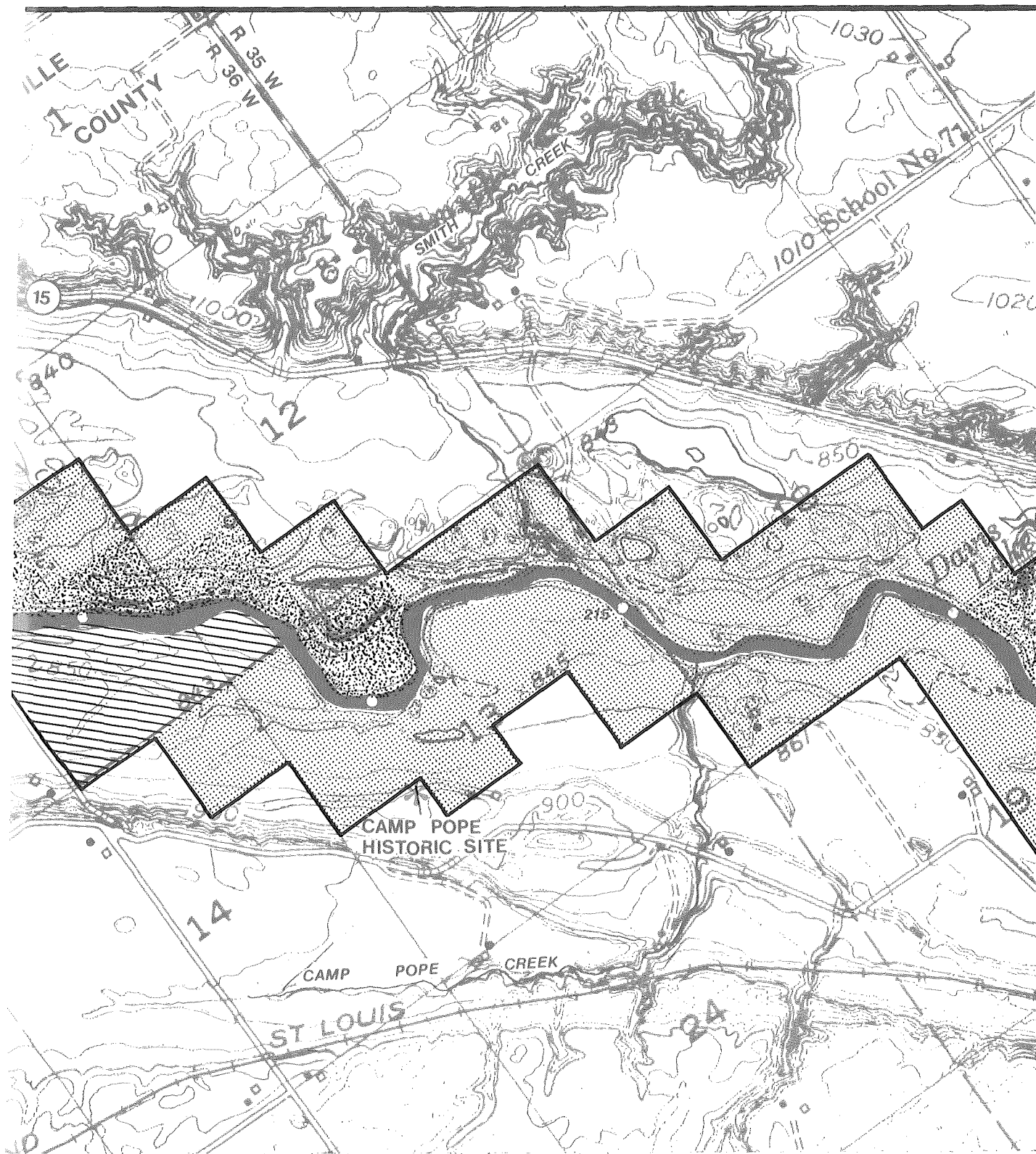
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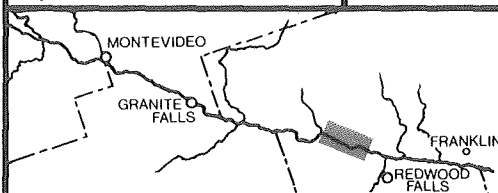
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	ZONING

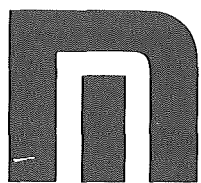
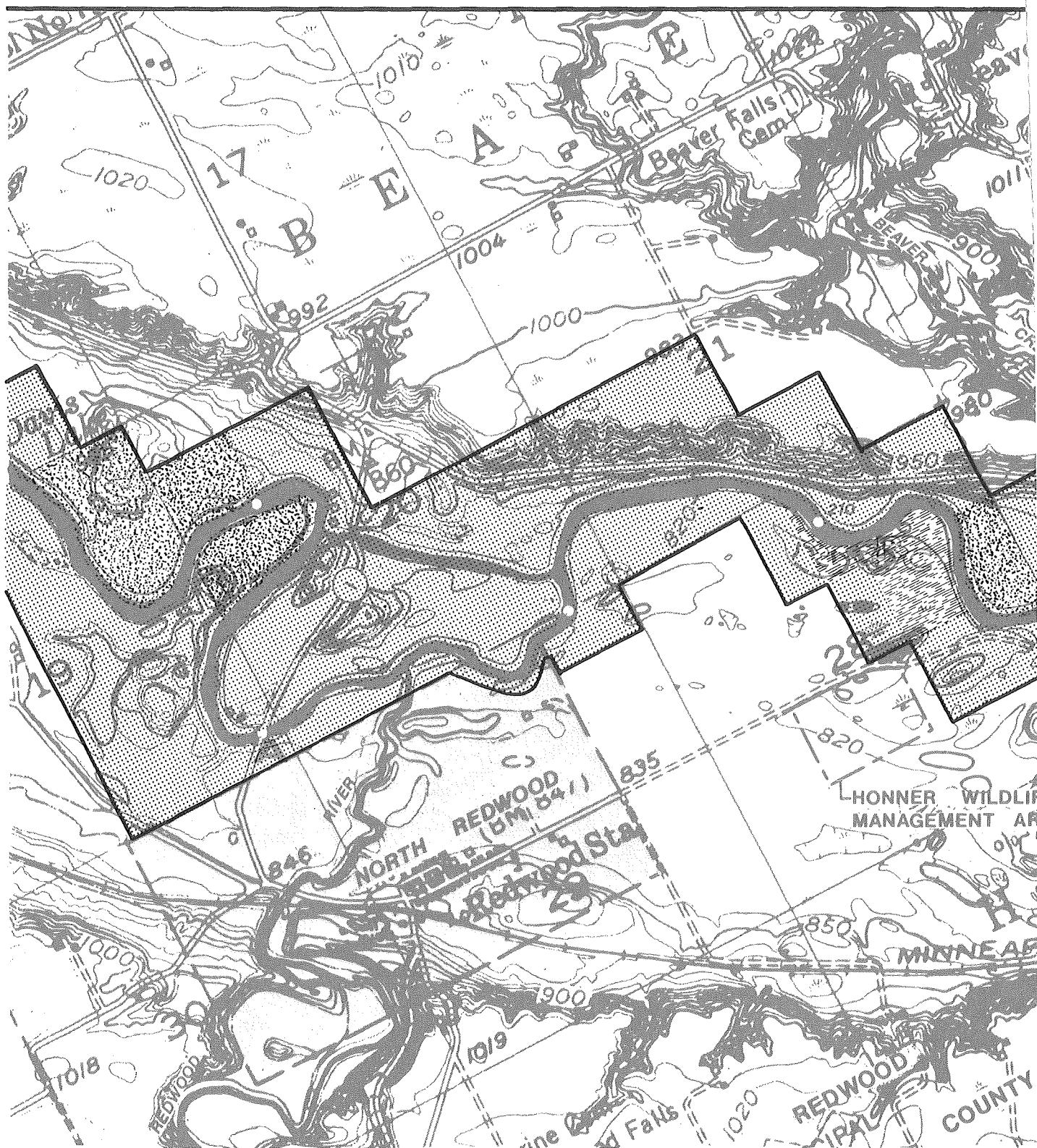


SCALE: 1"=2000'

9

PLATE





A MANAGEMENT PLAN FOR THE MINNESOTA RIVER

EXISTING

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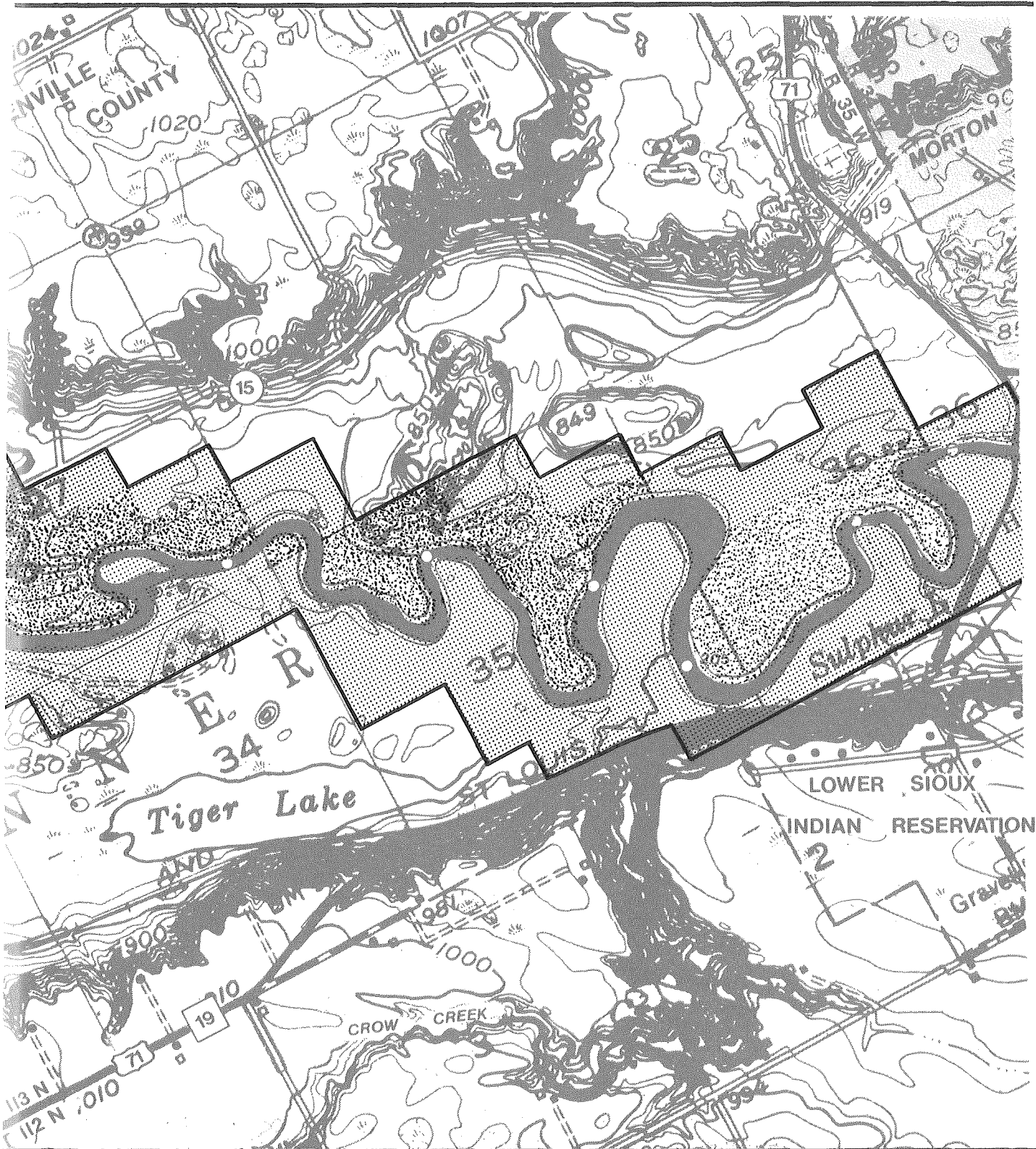
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ACRP

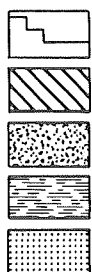
LAND

FACILITY

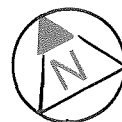
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REST AREA
PORTAGE
DAM
RAPIDS
HISTORIC SITE



MANAGEMENT

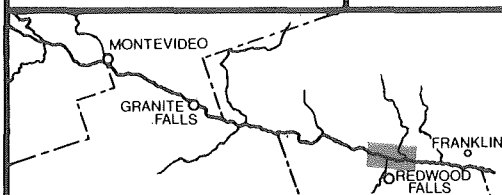


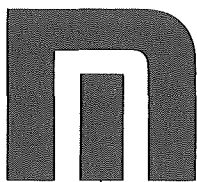
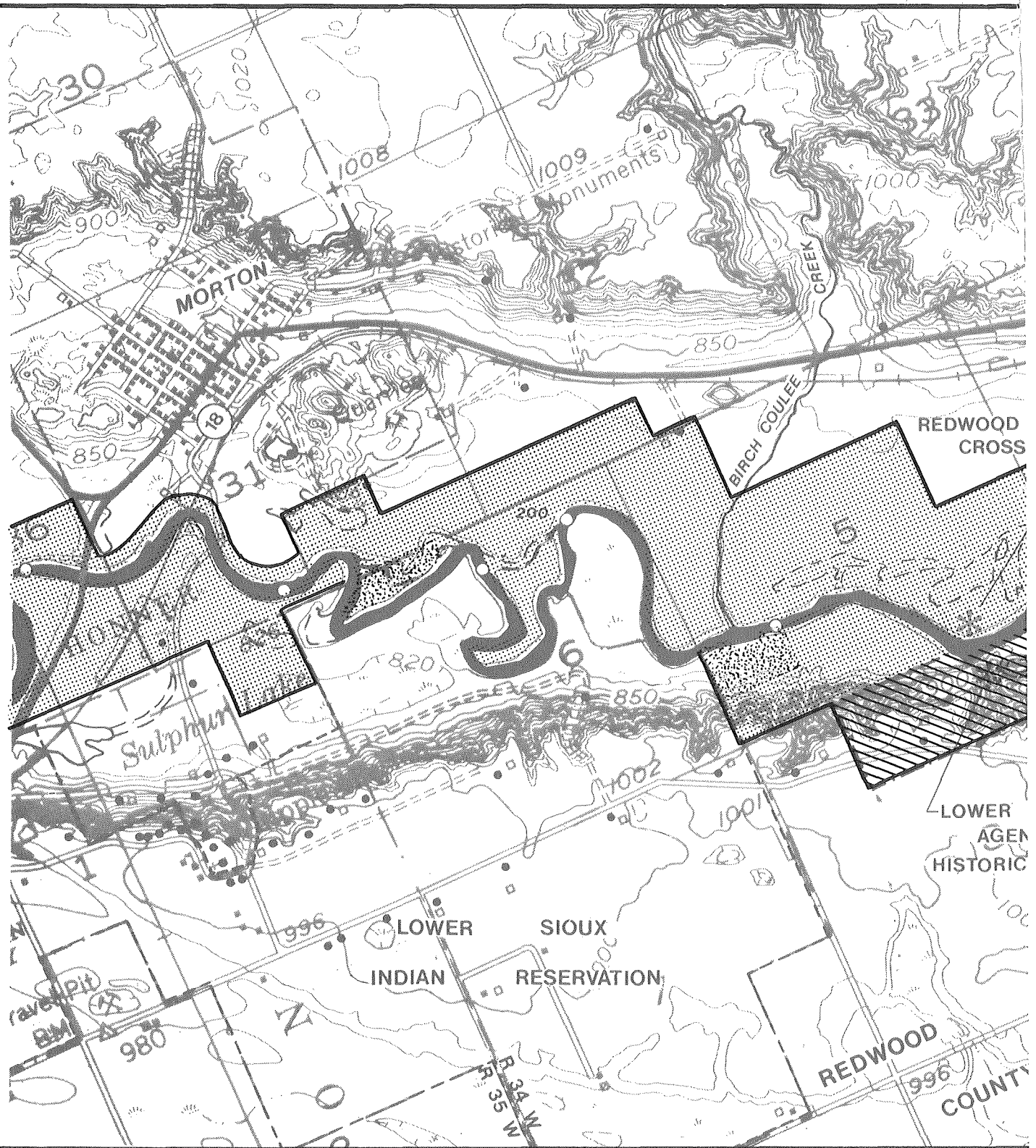
LAND USE DISTRICT
PUBLIC OWNERSHIP
SCENIC EASEMENT
FEE TITLE
ZONING



SCALE: 1"=2000'

10
PLATE





A MANAGEMENT PLAN FOR THE
MINNESOTA RIVER

LAND

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PROPOSED






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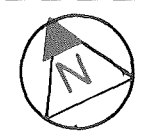
FACILITY

ACCESS
CAMPSITE
REST AREA
PORTAGE
DAM
RAPIDS
HISTORIC SITE



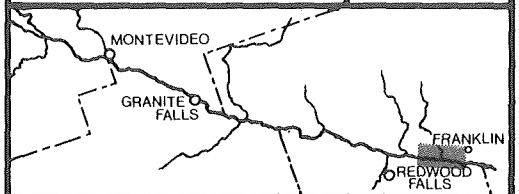
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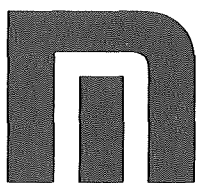
-  LAND USE DISTRICT
-  PUBLIC OWNERSHIP
-  SCENIC EASEMENT
-  FEE TITLE
-  ZONING



SCALE: 1"=2000'

11
PLATE





A MANAGEMENT PLAN FOR THE
MINNESOTA RIVER

LAND

EXISTING

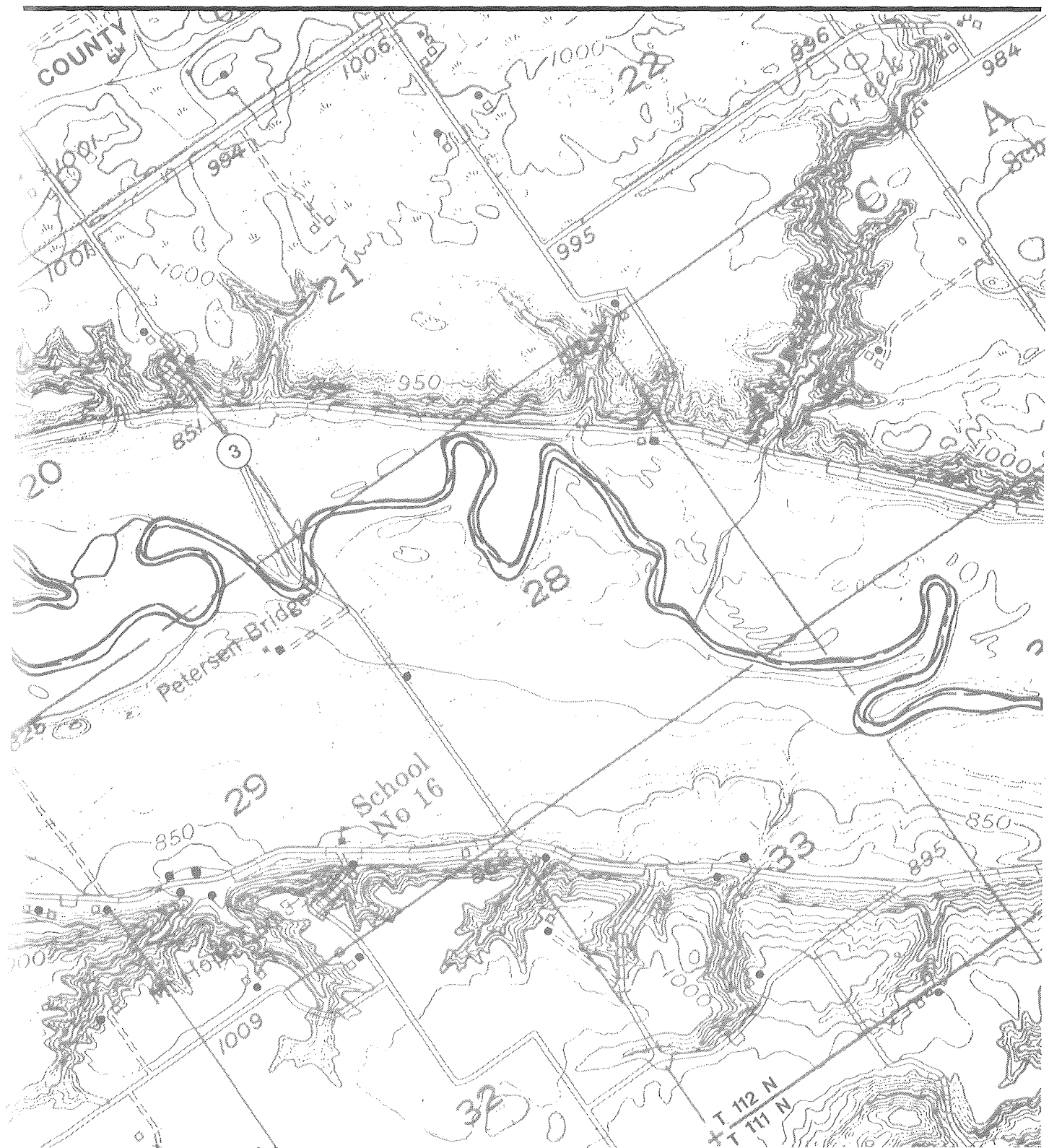
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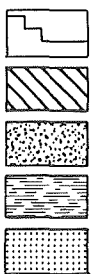
ACRP

FACILITY

ACCESS
CAMPSITE
REST AREA
PORTAGE
DAM
RAPIDS
HISTORIC SITE



MANAGEMENT



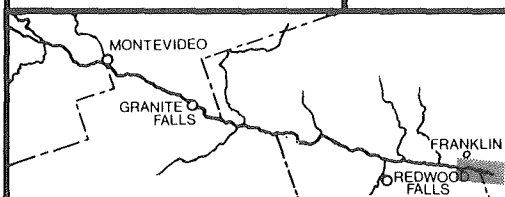
LAND USE DISTRICT
PUBLIC OWNERSHIP
SCENIC EASEMENT
FEE TITLE
ZONING



SCALE: 1"=2000'

12

PLATE



LAND USE DISTRICT DESCRIPTIONS AND ACREAGES

All acreages shown in the Land Use District section are from the original government survey. Because of certain apparent deficiencies in the survey, a grid system was used to insure that no river mile exceeds 320 acres. The land use district is shown on the Land Management Maps.

Chippewa County (C)
 Yellow Medicine County (YM)
 Redwood County (RED)
 Renville County (REN)
 Lac Qui Parle County (LQP)

Description	Acreage
T 118 N - R 42 W	
Section 24	
Government Lot 1 (LQP) all but W 20	12.50
" Lot 2 (LQP)	37.25
" Lot 3 (LQP)	28.70
" Lot 4 (LQP)	47.90
" Lot 1 (C)	33.25
" Lot 2 (C)	22.80
" Lot 3 (C)	6.90
" Lot 4 (C)	36.40
" Lot 5 (C)	17.75
NE $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
SE $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
Section 25	
Government Lot 1 (LQP)	38.75
" Lot 1 (C)	1.00
E $\frac{1}{2}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
SE $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
T 118 N - R 41 W	
Section 19	
SW $\frac{1}{4}$ of SW $\frac{1}{4}$	34.19
SE $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
W $\frac{1}{2}$ of NW $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
Section 30	
Government Lot 1 (C)	14.85
" Lot 2 (C)	36.00
" Lot 3 (C)	60.00
" Lot 4 (C)	59.25
" Lot 6 (LQP)	20.35
" Lot 5 (LQP)	38.75
" Lot 4 (LQP)	49.50
" Lot 3 (LQP)	53.90
SW $\frac{1}{4}$ of NW $\frac{1}{4}$	40.00

Description			Acreage
		W $\frac{1}{2}$ of NE $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
		E $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
Section 29			
	Government	Lot 1 (C)	31.25
	"	Lot 2 (C)	36.05
	"	Lot 3 (C)	37.75
	"	Lot 1 (LQP)	13.20
		W $\frac{1}{2}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
		SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 32			
	Government	Lot 1 (LQP)	39.45
	"	Lot 2 (LQP)	48.00
	"	Lot 3 (LQP)	28.80
	"	Lot 4 (LQP)	31.00
	"	Lot 5 (LQP)	32.00
	"	Lot 2 (C)	43.35
	"	Lot 3 (C)	43.50
	"	Lot 4 (C)	45.75
		SE $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
	Government	Lot 1 (C)	15.00
T 117 N - R 41 W			
Section 5			
	Government	Lot 1 (LQP)	41.56
	"	Lot 2 (LQP)	45.60
	"	Lot 3 (LQP)	48.25
	"	Lot 4 (LQP)	52.50
	"	Lot 1 (C)	41.25
	"	Lot 2 (C)	41.60
	"	Lot 3 (C)	30.50
	"	Lot 4 (C)	30.60
Section 4			
		W $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
		SW $\frac{1}{4}$ of NW $\frac{1}{4}$	40.00
		NW $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
		SW $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
		SE $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
Section 8			
	Government	Lot 1 (LQP)	18.75
	"	Lot 2 (LQP)	39.55
	"	Lot 1 (C)	18.20
		NW $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
		SW $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
Section 9			
	Government	Lot 1 (C)	30.30
	"	Lot 2 (C)	42.25
	"	Lot 3 (C)	39.99
	"	Lot 4 (C)	41.05
	"	Lot 4 (LQP)	36.80
	"	Lot 3 (LQP)	32.25
	"	Lot 2 (LQP)	35.75
	"	Lot 1 (LQP)	41.60
		NW $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
		W $\frac{1}{2}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
	Government	Lot 5 (C)	58.10
		SW $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00

Description				Acreage
Section 16				
Government	Lot 2	(LQP)		39.99
"	Lot 1	(LQP)		31.25
"	Lot 1	(C)		12.60
NE $\frac{1}{4}$ of NW $\frac{1}{4}$				40.00
SE $\frac{1}{4}$ of NE $\frac{1}{4}$				40.00
Section 10				
SW $\frac{1}{4}$ of SW $\frac{1}{4}$				40.00
SE $\frac{1}{4}$ of SW $\frac{1}{4}$				40.00
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$				20.00
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$				20.00
Section 15				
Government	Lot 7	(LQP)		45.95
"	Lot 8	(LQP)		16.60
"	Lot 3	(LQP)		39.99
"	Lot 2	(LQP)		17.50
"	Lot 1	(LQP)		26.40
"	Lot 1	(C)		34.75
"	Lot 2	(C)		15.00
"	Lot 3	(C)		40.00
Section 11				
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$				20.00
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$				20.00
Section 14				
Government	Lot 4	(LQP)		23.75
"	Lot 3	(LQP)	all but S 40	19.50
"	Lot 2	(LQP)		47.20
"	Lot 1	(LQP)		50.25
"	Lot 1	(C)		49.25
"	Lot 2	(C)		26.55
"	Lot 3	(C)		35.00
"	Lot 4	(C)		41.15
"	Lot 5	(C)		36.60
S $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$				20.00
SE $\frac{1}{4}$ of SE $\frac{1}{4}$				40.00
Section 13				
Government	Lot 1	(C)		7.50
"	Lot 4	(LQP)		49.00
"	Lot 3	(LQP)		45.15
"	Lot 2	(LQP)		26.20
"	Lot 1	(LQP)		22.50
"	Lot 2	(C)		35.10
"	Lot 3	(C)		33.65
"	Lot 4	(C)		17.20
"	Lot 5	(C)		58.10
NE $\frac{1}{4}$ of NW $\frac{1}{4}$				40.00
NW $\frac{1}{4}$ of NE $\frac{1}{4}$				40.00
SE $\frac{1}{4}$ of NE $\frac{1}{4}$				40.00
T 117 N - R 40 W				
Section 18				
Government	Lot 4	(C)	a line 300 ft. from normal high-water mark	7.00
"	Lot 1	(YM)		1.75

Description				Acreage
Section 19				
Government	Lot 1	(YM)		38.35
"	Lot 3	(YM)		37.95
"	Lot 4	(YM)		22.40
"	Lot 5	(YM)		44.75
"	Lot 1	(C)	a line 300 ft. from the normal high-water mark	11.00
"	Lot 2	(C)		33.75
N $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$				20.00
Government	Lot 3	(C)		50.00
"	Lot 4	(C)		24.80
SE $\frac{1}{4}$ of NE $\frac{1}{4}$				40.00
E $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$				20.00
Section 20				
W $\frac{1}{2}$ of NW $\frac{1}{4}$ of SW $\frac{1}{4}$				20.00
W $\frac{1}{2}$ of SW $\frac{1}{4}$ of SW $\frac{1}{4}$				20.00
Section 30				
Government	Lot 3	(YM)		35.90
"	Lot 4	(YM)		35.40
"	Lot 5	(YM)		27.40
"	Lot 1	(C)		27.70
"	Lot 2	(C)		20.40
"	Lot 3	(C)		49.00
"	Lot 6	(YM)		37.43
Section 29				
NW $\frac{1}{4}$ of SW $\frac{1}{4}$				40.00
NW $\frac{1}{4}$ of NW $\frac{1}{4}$				40.00
SW $\frac{1}{4}$ of NW $\frac{1}{4}$				40.00
Government	Lot 1	(C)		31.80
"	Lot 2	(C)		39.75
SW $\frac{1}{4}$ of SE $\frac{1}{4}$				40.00
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$				20.00
Section 31				
Government	Lot 3	(YM)		39.40
E $\frac{1}{2}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$				20.00
Section 32				
Government	Lot 1	(C)		26.40
"	Lot 2	(C)		12.70
"	Lot 2	(YM)	all but S 20	34.40
"	Lot 3	(YM)	all but S 20	31.90
"	Lot 4	(YM)	all but S 20	34.95
"	Lot 1	(YM)		34.25
Section 33				
Government	Lot 1	(C)		19.70
"	Lot 2	(C)		38.75
"	Lot 1	(YM)	all but S 20	26.75
"	Lot 2	(YM)		39.73
"	Lot 3	(YM)		26.20
"	Lot 4	(YM)		19.10
W $\frac{1}{2}$ of NE $\frac{1}{4}$ of SE $\frac{1}{4}$				20.00

Description				Acreage
Section 28				
	S $\frac{1}{2}$ of SW $\frac{1}{4}$ of SW $\frac{1}{4}$			20.00
	SE $\frac{1}{4}$ of SW $\frac{1}{4}$		all but NW $\frac{1}{4}$	30.00
	Government	Lot 1	(C)	30.00
	"	Lot 2	(C)	35.75
	"	Lot 3	(C)	39.50
	"	Lot 1	(YM)	5.43
Section 27				
	Government	Lot 1	(C)	38.35
Section 34				
	Government	Lot 1	(C)	48.75
	"	Lot 2	(C)	42.60
	"	Lot 3	(C)	39.80
	"	Lot 4	(C)	39.80
	"	Lot 5	(C)	58.75
	"	Lot 1	(YM)	33.30
	"	Lot 2	(YM)	21.55
	"	Lot 3	(YM)	59.57
	N $\frac{1}{2}$ of SW $\frac{1}{4}$ of SW $\frac{1}{4}$			20.00
Section 35				
	Government	Lot 1	(YM)	39.50
	"	Lot 2	(YM)	39.95
T 116 N – R 40 W				
Section 3				
	Government	Lot 3	(YM)	27.61
	"	Lot 2	(YM)	51.00
	"	Lot 1	(YM)	32.45
	"	Lot 1	(C)	21.65
	"	Lot 2	(C)	25.19
	"	Lot 3	(C)	50.40
	"	Lot 4	(C)	43.05
	"	Lot 4	(YM)	20.25
	"	Lot 5	(YM)	22.85
	E $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$			20.00
	E $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$			20.00
Section 10				
	Government	Lot 1	(YM)	39.30
Section 2				
	Government	Lot 5	(C)	36.75
	"	Lot 6	(C)	30.00
	SE $\frac{1}{4}$ of SW $\frac{1}{4}$			40.00
	SE $\frac{1}{4}$ of SE $\frac{1}{4}$			40.00
Section 11				
	Government	Lot 1	(C)	34.70
	"	Lot 2	(C)	40.10
	"	Lot 3	(C)	23.00
	"	Lot 1	(YM)	10.25
	"	Lot 2	(YM)	39.45
	"	Lot 3	(YM)	25.80
	"	Lot 4	(YM)	22.00
	"	Lot 5	(YM)	34.00
	"	Lot 6	(YM)	49.20

Description	Acreage
T 116 N - R 40 W	
Section 12	
Government Lot 1 (YM)	35.00
" Lot 1 (C)	14.00
" Lot 2 (C)	38.00
" Lot 3 (C)	17.15
W $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 13	
Government Lot 1 (C)	38.75
" Lot 2 (C)	41.50
" Lot 1 (YM)	27.55
" Lot 2 (YM)	29.90
SE $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
Government Lot 3 (YM)	24.10
" Lot 4 (YM)	37.90
" Lot 5 (YM)	17.30
" Lot 6 (YM)	19.75
" Lot 3 (C)	62.15
" Lot 4 (C)	54.15
E $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
E $\frac{1}{2}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
T 116 N - R 39 W	
Section 18	
Government Lot 3 (C)	27.00
" Lot 4 (C)	14.00
" Lot 1 (YM)	36.88
NE $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
W $\frac{1}{2}$ of NW $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
Section 19	
Government Lot 1 (C)	55.25
" Lot 2 (C)	40.50
" Lot 3 (C)	32.40
" Lot 1 (YM)	30.75
" Lot 2 (YM)	37.00
" Lot 3 (YM) all but S 10	22.70
" Lot 5 (YM) all but S 20	30.50
" Lot 6 (YM) all but S 20	23.65
" Lot 7 (YM)	36.15
T 116 N - R 39 W	
Section 20	
Government Lot 1 (C)	33.80
" Lot 2 (C)	27.00
" Lot 3 (C)	34.60
" Lot 4 (C)	49.55
" Lot 5 (C)	24.00
" Lot 1 (YM)	40.50
" Lot 2 (YM) all but SW 20	27.74

Description					Acreage
Section 21					
Government	Lot 1	(C)	all but E 20		19.60
Section 28					
Government	Lot 1	(C)	all but E 20		18.60
"	Lot 2	(C)			37.00
"	Lot 3	(C)			30.00
"	Lot 4	(C)			42.00
"	Lot 5	(C)			21.75
"	Lot 1	(YM)	all but S 30		23.10
"	Lot 2	(YM)			26.35
"	Lot 3	(YM)			16.70
Section 27					
Government	Lot 1	(C)	a line 300 ft. from the normal high-water mark		13.10
Section 29					
Government	Lot 1	(C)			27.45
"	Lot 1	(YM)	all but W 20		19.60
"	Lot 2	(YM)	all but W 20		18.25
"	Lot 3	(YM)	all but SW 20		24.25
Section 34					
Government	Lot 1	(C)	a line 300 ft. from the normal high-water mark		13.25
"	Lot 2	(C)	" "		11.00
"	Lot 3	(C)	" "		12.80
"	Lot 4	(C)	" "		4.00
"	Lot 5	(C)	" "		9.00
"	Lot 1	(YM)	" "		3.00
"	Lot 2	(YM)	" "		15.00
"	Lot 3	(YM)	" "		8.00
Section 33					
Government	Lot 1	(YM)	a line 300 ft. from the normal high-water mark		7.00
"	Lot 3	(YM)	" "		9.00
T 115 N – R 39 W					
Section 4					
Government	Lot 3	(YM)			38.79
Section 3					
Government	Lot 4	(C)			8.60
"	Lot 3	(C)	a line 300 ft. from the normal high-water mark		9.00
"	Lot 2	(C)	" "		9.00
"	Lot 1	(C)	" "		10.00
N $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$					20.00
N $\frac{1}{2}$ of SW $\frac{1}{4}$ of NE $\frac{1}{4}$					20.00
Government	Lot 2	(YM)			37.12
"	Lot 3	(YM)			38.32
"	Lot 4	(YM)			34.00

Description	Acreage
Government Lot 5 (YM) all but S 20	38.00
SW $\frac{1}{4}$ of NW $\frac{1}{4}$	40.00
Section 2	
Government Lot 4 (C)	17.15
" Lot 3 (C)	41.25
" Lot 2 (C)	29.70
" Lot 1 (C) all but N 20	32.00
" Lot 1 (YM) all but S 20	27.25
" Lot 2 (YM)	26.00
" Lot 3 (YM)	25.40
" Lot 4 (YM)	37.50
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
SE $\frac{1}{4}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$	10.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 1	
Government Lot 5 (C)	37.25
" Lot 6 (C)	35.25
" Lot 1 (YM)	16.10
Section 12	
Government Lot 1 (C)	35.50
" Lot 2 (C)	46.25
" Lot 1 (YM)	22.96
W $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 11	
S $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
S $\frac{1}{2}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
NW $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
Government Lot 1 (C)	35.30
" Lot 2 (C)	18.75
" Lot 3 (C)	33.30
" Lot 4 (C)	52.25
" Lot 5 (C)	30.15
" Lot 1 (YM)	50.57
" Lot 2 (YM)	25.07
" Lot 3 (YM)	22.65
" Lot 4 (YM)	21.42
Section 10	
Government Lot 3 (C)	.60
" Lot 1 (C)	9.60
" Lot 2 (C)	1.20
" Lot 1 (YM)	34.00
" Lot 2 (YM)	30.15
" Lot 3 (YM)	59.15
Section 15	
Government Lot 1 (C)	55.30
" Lot 1 (YM)	49.85
SW $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00

Description				Acreage
Section 14				
Government	Lot 4	(C)		37.70
"	Lot 3	(C)		29.30
"	Lot 2	(C)		39.10
"	Lot 5	(C)		57.75
"	Lot 1	(C)		18.70
Section 13				
Government	Lot 2	(C)		43.10
"	Lot 3	(C)		39.55
"	Lot 4	(C)	all but E 20	41.25
"	Lot 5	(C)	all but E 20	40.25
"	Lot 1	(C)		26.25
"	Lot 1	(YM)	all but portion in Indian reservation	7.00
"	Lot 2	(YM)	all but W 10	13.82
"	Lot 3	(YM)	all but W 10	25.35
Section 24				
Government	Lot 1	(C)		25.25
"	Lot 2	(C)		28.25
"	Lot 3	(C)		46.50
"	Lot 1	(YM)		43.85
"	Lot 2	(YM)		48.75
"	Lot 3	(YM)		21.43
"	Lot 4	(YM)		21.60
	NE $\frac{1}{4}$ of NE $\frac{1}{4}$			40.00
	E $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$			20.00
T 115 N – R 38 W				
Section 20				
	W $\frac{1}{2}$ of NW $\frac{1}{4}$ of SW $\frac{1}{4}$			20.00
Government	Lot 1	(REN)	all but E 20	19.80
Section 19				
	SW $\frac{1}{4}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$			10.00
Government	Lot 4	(YM)		42.81
"	Lot 3	(YM)		56.43
"	Lot 2	(YM)		50.64
"	Lot 1	(YM)		31.73
"	Lot 1	(REN)		51.30
"	Lot 2	(REN)		41.35
"	Lot 3	(REN)		32.00
"	Lot 4	(REN)		44.10
"	Lot 5	(REN)		.85
	N $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$			20.00
Section 30				
Government	Lot 3	(YM)		34.75
"	Lot 1	(REN)		.05

Description	Acreage
Section 29	
Government Lot 1 (YM)	34.75
" Lot 2 (YM)	29.66
" Lot 3 (YM)	44.67
" Lot 4 (YM)	51.85
" Lot 4 (REN)	18.85
" Lot 3 (REN) all but N 20	20.75
" Lot 2 (REN)	30.50
" Lot 1 (REN)	17.00
Section 28	
Government Lot 1 (YM)	31.68
" Lot 2 (YM)	47.94
" Lot 3 (YM)	51.06
" Lot 4 (YM)	24.46
" Lot 5 (REN)	20.40
" Lot 4 (REN)	47.85
" Lot 3 (REN) all but N 20	41.20
" Lot 2 (REN)	39.00
" Lot 1 (REN)	14.00
Section 27	
Government Lot 1 (YM)	40.69
" Lot 2 (YM)	63.81
" Lot 3 (REN)	51.40
" Lot 2 (REN)	44.10
" Lot 1 (REN)	29.75
SE $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 33	
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
Section 34	
Government Lot 1 (YM)	26.93
" Lot 3 (YM)	32.63
" Lot 1 (REN)	32.70
N $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
NE $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
SE $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 35	
Government Lot 1 (YM)	16.55
" Lot 2 (YM)	22.64
" Lot 1 (REN)	24.00
" Lot 2 (REN)	56.50
" Lot 3 (REN)	38.65
" Lot 4 (REN)	25.60
" Lot 5 (REN)	19.50
" Lot 6 (REN)	22.05
S $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
W $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00

Description	Acreage
T 114 N – R 38 W	
Section 2	
Government Lot 1 (YM)	32.46
" Lot 2 (YM)	51.15
" Lot 3 (YM)	12.37
" Lot 4 (YM) all but W 20	10.40
" Lot 6 (YM)	29.75
" Lot 4 (REN)	31.25
" Lot 3 (REN)	59.20
" Lot 2 (REN)	56.50
" Lot 1 (REN)	5.00
N $\frac{1}{2}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 1	
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
Government Lot 1 (YM)	12.34
" Lot 5 (REN)	35.00
" Lot 6 (REN)	52.50
" Lot 7 (REN)	35.50
S $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 12	
Government Lot 1 (YM)	32.60
" Lot 2 (YM)	23.92
" Lot 3 (YM) all but S 20	36.28
" Lot 2 (REN)	12.00
" Lot 1 (REN)	11.55
NW $\frac{1}{4}$ of NW $\frac{1}{4}$	40.00
T 114 N – R 37 W	
Section 7	
Government Lot 3 (RED)	32.93
" Lot 4 (RED)	25.86
" Lot 5 (RED) all but S 20	31.16
" Lot 6 (RED) all but S 20	30.50
" Lot 4 (REN)	30.46
" Lot 3 (REN) all but N 20	24.70
" Lot 2 (REN) all but N 20	33.90
" Lot 1 (REN) all but N 20	37.50
Section 6	
Government Lot 7 (REN) only the S	17.29
Section 8	
Government Lot 1 (RED)	27.72
" Lot 2 (RED)	32.18
" Lot 3 (RED)	41.10
" Lot 4 (REN)	25.30
" Lot 3 (REN)	39.75
" Lot 2 (REN)	51.00
" Lot 1 (REN)	47.60

Description	Acreage
Section 9	
Government Lot 1 (RED)	69.12
" Lot 2 (REN)	10.25
" Lot 1 (REN)	45.00
W $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 16	
Government Lot 1 (RED)	21.45
" Lot 2 (RED) all but W 20	31.40
" Lot 3 (RED) all but W 20	33.16
" Lot 4 (RED)	34.44
" Lot 1 (REN) all but E 20	28.55
" Lot 2 (REN) all but E 20	34.55
" Lot 3 (REN) all but E 20	30.75
" Lot 4 (REN)	31.70
Section 21	
Government Lot 1 (RED)	27.31
" Lot 2 (RED)	27.22
" Lot 1 (REN)	39.20
N $\frac{1}{2}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 22	
Government Lot 4 (REN)	29.35
" Lot 3 (REN)	37.50
" Lot 2 (REN) all but N 20	22.00
" Lot 1 (REN) all but N 20	23.95
" Lot 1 (RED)	40.02
" Lot 2 (RED)	44.36
" Lot 3 (RED)	31.53
" Lot 4 (RED)	20.52
W $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
N $\frac{1}{2}$ of SW $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
Section 23	
Government Lot 4 (REN) all but N 20	24.53
" Lot 3 (REN) all but N 20	28.25
" Lot 2 (REN) all but N 20	28.35
" Lot 1 (REN) all but N 20	25.60
" Lot 1 (RED)	28.15
" Lot 2 (RED)	22.64
" Lot 3 (RED)	28.43
" Lot 4 (RED)	27.16
Section 26	
N $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
N $\frac{1}{2}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
Section 24	
Government Lot 4 (RED)	46.35

Description			Acreage
Government	Lot 3 (RED)		33.62
"	Lot 2 (RED)		38.27
"	Lot 1 (RED)		54.06
"	Lot 6 (REN)		18.15
"	Lot 5 (REN)	all but N 20	18.70
"	Lot 4 (REN)		32.75
"	Lot 3 (REN)		17.75
"	Lot 2 (REN)		35.75
"	Lot 1 (REN)		19.00
S $\frac{1}{2}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$			20.00
S $\frac{1}{2}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$			20.00
NE $\frac{1}{4}$ of NE $\frac{1}{4}$			
	everything S of		
	CSAH 15		1.00
T 114 N – R 36 W			
Section 30			
N $\frac{1}{2}$ of NW $\frac{1}{4}$ of SW $\frac{1}{4}$			20.00
Government	Lot 1 (REN)		37.75
"	Lot 2 (REN)		31.70
"	Lot 3 (REN)		53.85
"	Lot 4 (REN)		32.85
"	Lot 5 (REN)		38.75
"	Lot 6 (REN)		34.75
"	Lot 7 (REN)	all but S 20	37.90
"	Lot 8 (REN)		35.60
SW $\frac{1}{4}$ of NW $\frac{1}{4}$			39.21
Section 19			
SE $\frac{1}{4}$ of NW $\frac{1}{4}$			40.00
Government	Lot 1 (REN)		20.02
"	Lot 2 (REN)		13.60
"	Lot 3 (REN)		30.65
NW $\frac{1}{4}$ of SW $\frac{1}{4}$			39.09
NW $\frac{1}{4}$ of NW $\frac{1}{4}$			1.00
NE $\frac{1}{4}$ of SW $\frac{1}{4}$			
	everything SW of		
	CSAH 15		20.00
NW $\frac{1}{4}$ of SE $\frac{1}{4}$			
	" "		2.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$			
	everything S of		
	CSAH 15 and W of		
	CSAH 6		20.00
Section 29			
Government	Lot 1 (REN)		48.90
"	Lot 2 (REN)		39.85
"	Lot 3 (REN)		28.65
"	Lot 4 (REN)		27.35
Section 32			
SE $\frac{1}{4}$ of NE $\frac{1}{4}$			40.00
Government	Lot 1 (REN)		27.50
"	Lot 2 (REN)		34.20
"	Lot 3 (REN)	all but N 20	19.98

Description	Acreage
Government Lot 4 (REN)	23.82
" Lot 5 (REN)	44.65
" Lot 6 (REN)	44.95
N $\frac{1}{2}$ of NW $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
E $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 33	
Government Lot 1 (REN)	30.00
" Lot 2 (REN)	38.25
" Lot 3 (REN)	39.10
SW $\frac{1}{4}$ of NW $\frac{1}{4}$	40.00
NE $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
T 113 N – R 36 W	
Section 4	
NW $\frac{1}{4}$ of NW $\frac{1}{4}$	40.36
Government Lot 1	34.90
" Lot 2	39.25
" Lot 3	38.95
" Lot 4	52.35
" Lot 5	32.90
E $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 3	
Government Lot 1	57.42
" Lot 2	39.72
" Lot 3	36.20
" Lot 4	20.60
" Lot 5	48.00
" Lot 6	35.50
" Lot 7	30.10
" Lot 8	55.20
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
Section 2	
W $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
NW $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
Government Lot 1	21.56
" Lot 2	34.10
" Lot 3	16.10
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 10	
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
Section 11	
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
SE $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
Government Lot 1	20.55
" Lot 2	36.50
" Lot 3	36.95
" Lot 4	41.75

Description	Acreage
Government Lot 5	29.15
" Lot 6	39.52
" Lot 7	15.20
N $\frac{1}{2}$ of NW $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
NW $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 12	
Government Lot 1	17.10
" Lot 2	56.45
SE $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
Section 13	
Government Lot 1	47.40
" Lot 2	22.90
" Lot 3	49.18
" Lot 4	38.28
" Lot 5	22.72
" Lot 6	51.25
" Lot 7	31.00
" Lot 8	39.58
" Lot 9	28.92
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of SW $\frac{1}{4}$	20.00
Section 14	
NE $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
T 113 N – R 35 W	
Section 18	
Government Lot 1	39.82
" Lot 2	24.83
" Lot 3	53.48
" Lot 4	21.26
" Lot 5	31.23
" Lot 6	45.72
NW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
W $\frac{1}{2}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
Section 19	
Government Lot 1	58.72
" Lot 2	36.31
" Lot 3	39.71
" Lot 4	41.03
" Lot 5	9.50
" Lot 6	29.75
NW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 20	
NE $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Government Lot 11	21.31
" Lot 1	31.55
" Lot 2	26.90
all but N 20	

Description	Acreage
Government Lot 3	38.05
" Lot 4	26.79
" Lot 5	36.35
" Lot 6	23.51
" Lot 7	24.45
" Lot 8	35.00
" Lot 9	23.34
" Lot 10	10.73
S $\frac{1}{2}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
NW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
Section 29	
Government Lot 1	11.75
" Lot 2	12.00
" Lot 3	16.70
" Lot 4	7.98
	all but S 20
Section 21	
Government Lot 1	44.86
" Lot 2	56.20
" Lot 3	38.80
" Lot 4	46.93
Section 28	
Government Lot 1	47.16
" Lot 2	23.30
" Lot 3	34.70
" Lot 4	53.10
" Lot 5	24.97
E $\frac{1}{2}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
E $\frac{1}{2}$ of NW $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
Section 27	
Government Lot 1	47.50
" Lot 2	53.10
" Lot 3	46.35
" Lot 4	36.92
" Lot 5	43.64
" Lot 6	18.60
" Lot 7	39.35
" Lot 8	23.16
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
Section 26	
Government Lot 1	6.50
" Lot 2	33.42
Section 34	
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
N $\frac{1}{2}$ of NE $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
N $\frac{1}{2}$ of NW $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
Section 35	
Government Lot 1	46.33
	all but N 20

Description		Acreage
Government	Lot 2	39.43
"	Lot 3	40.35
"	Lot 4	34.31
"	Lot 5	41.19
"	Lot 6	29.10
"	Lot 7	20.25
"	Lot 8	40.17
"	Lot 9	44.46
"	Lot 10	55.65
"	Lot 11	15.89
N $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$		20.00
NE $\frac{1}{4}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$		10.00
Section 36		
Government	Lot 1	3.90
"	Lot 2	31.22
"	Lot 3	49.61
"	Lot 4	32.28
"	Lot 5	28.05
"	Lot 6	20.61
"	Lot 7	54.05
"	Lot 8	42.48
"	Lot 9	41.35
"	Lot 10	22.71
SE $\frac{1}{4}$ of NE $\frac{1}{4}$		40.00
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$		20.00
T 113 N – R 34 W		
Section 31		
Government	Lot 1	a line 300 ft. from the normal high-water mark 7.00
"	Lot 2	51.60
"	Lot 3	a line 300 ft. from the normal high-water mark 12.00
"	Lot 4	25.10
"	Lot 5	37.15
"	Lot 6	all but N 20 18.60
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of SW $\frac{1}{4}$		20.00
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$		20.00
T 112 N – R 35 W		
Section 1		
NE $\frac{1}{4}$ of NE $\frac{1}{4}$		40.00
T 112 N – R 34 W		
Section 6		
Government	Lot 1	12.89
"	Lot 2	39.42
"	Lot 3	42.26

Description	Acreage
Section 5	
Government Lot 1	33.15
" Lot 2	41.76
" Lot 3	33.39
" Lot 4	39.80
" Lot 5	36.35
" Lot 6	41.90
NW $\frac{1}{4}$ of NW $\frac{1}{4}$	40.00
SW $\frac{1}{4}$ of NE $\frac{1}{4}$	40.00
Section 8	
Government Lot 1	4.62
" Lot 2	35.08
" Lot 3	33.02
" Lot 4	1.50
NE $\frac{1}{4}$ of NW $\frac{1}{4}$	40.00
N $\frac{1}{2}$ of SE $\frac{1}{4}$ of NE $\frac{1}{4}$	20.00
Section 9	
Government Lot 1	31.74
" Lot 2	50.27
" Lot 3	55.74
" Lot 4	19.52
" Lot 5	26.76
" Lot 6	57.21
" Lot 7	46.76
E $\frac{1}{2}$ of NE $\frac{1}{4}$ of SE $\frac{1}{4}$	20.00
Section 4	
Government Lot 1	33.30
" Lot 2	2.81
SW $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
SW $\frac{1}{4}$ of SE $\frac{1}{4}$	40.00
NE $\frac{1}{4}$ of SW $\frac{1}{4}$	40.00
Section 10	
Government Lot 1	58.28
" Lot 2	49.78
" Lot 3	53.30
" Lot 4	43.85
" Lot 5	32.22
" Lot 6	23.06
" Lot 7	26.50
" Lot 8	51.14
Section 11	
Government Lot 1	30.80
" Lot 2	52.46
" Lot 3	52.52
" Lot 4	34.31
" Lot 5	3.28
" Lot 6	19.82

Description		Acreage
Government	Lot 7	22.00
"	Lot 8	36.80
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of NW $\frac{1}{4}$		20.00
NE $\frac{1}{4}$ of SE $\frac{1}{4}$		40.00
N $\frac{1}{2}$ of SE $\frac{1}{4}$ of SW $\frac{1}{4}$		20.00
Section 14		
Government	Lot 1	12.31
"	Lot 2	29.10
"	Lot 3	30.28
Section 12		
Government	Lot 1	44.11
"	Lot 2	everything W of CSAH 11 and S of CSAH 5
		4.00
Section 13		
Government	Lot 1	everything W of CSAH 11
		37.00
TOTAL		22,655.36

SCENIC EASEMENT DESCRIPTIONS AND ACREAGES

Scenic easement acreages are based on the original Government Land Office survey. Certain acreages, however, have been estimated because of an apparent conflict with the survey. These estimates are denoted by an asterisk (*). Areas recommended for scenic easement acquisition are shown on the Land Management Maps.

LAC QUI PARLE COUNTY

Description		Acreage
T 118 N - R 42 W		
Section 24		
Government	Lot 2	all
		37.25
"	Lot 3	all
		28.70
T 118 N - R 41 W		
Section 30		
* Government	Lot 6	all but SW 10
		24.00
"	Lot 5	all but S 20
		18.75
"	Lot 4	all but S 20
		29.50
* "	Lot 5	all but S 40
		22.00

Description				Acreage
Section 32				
	Government	Lot 3	all	28.80
	"	Lot 4	all but W 20	11.00
	"	Lot 5	all but W 20	12.00
T 117 N - R 41 W				
Section 9				
	Government	Lot 2	all but W 20	15.75
*	"	Lot 1	all but W 20	37.00
Section 16				
	Government	Lot 1	all	31.25
Section 15				
*	Government	Lot 7	all but S 20	30.00
*	"	Lot 8	all but S 20	36.00
*	"	Lot 2	all but S 20	32.00
	"	Lot 1	all	26.40
Lac Qui Parle County Total				420.40

YELLOW MEDICINE COUNTY

Description				Acreage
T 117 N - R 40				
Section 30				
	Government	Lot 3	all but W 20	15.90
	"	Lot 4	all but W 20	15.40
*	"	Lot 5	all but W 20	30.00
	"	Lot 6	all but W 20	17.43
Section 31				
	Government	Lot 3	all but S 20	19.40
Section 32				
	Government	Lot 1	all but S 20	14.25
	"	Lot 2	all but S 40	14.40
	"	Lot 3	all but S 40	11.90
	"	Lot 4	all but S 40	14.95
Section 34				
*	Government	Lot 1	all	50.00
T 116 N - R 40 W				
Section 3				
	Government	Lot 1	all	32.45
Section 11				
	Government	Lot 5	all	34.00
	"	Lot 4	all	22.00
*	"	Lot 3	all	40.00
	"	Lot 1	all but S 40	10.25

Description				Acreage
T 115 N - R 38 W				
Section 27				
Government	Lot 1	all		40.69
"	Lot 2	all		63.81
Section 34				
* Government	Lot 1	all		35.00
E $\frac{1}{2}$ of NE $\frac{1}{4}$ of SE $\frac{1}{4}$				20.00
E $\frac{1}{2}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$				20.00
Section 35				
* Government	Lot 1	all		32.00
"	Lot 2	all		22.64
T 114 N - R 38 W				
Section 2				
Government	Lot 1	all		32.46
"	Lot 2	all but S 20		31.15
* "	Lot 4	the E		20.00
Section 1				
Government	Lot 1	all		12.34
Section 12				
Government	Lot 1	all but S 20		12.60
"	Lot 2	all		23.92
Yellow Medicine County Total				708.94

CHIPPEWA COUNTY

Description				Acreage
T 118 N - R 42 W				
Section 24				
Government	Lot 2	all		22.80
SE $\frac{1}{4}$ of NE $\frac{1}{4}$				40.00
Government	Lot 3	all		6.90
"	Lot 4	all		36.40
"	Lot 5	all		17.75
Section 25				
Government	Lot 1	all		1.00
T 118 N - R 41 W				
Section 19				
W $\frac{1}{2}$ of NW $\frac{1}{4}$ of SW $\frac{1}{4}$				20.00
SW $\frac{1}{4}$ of SW $\frac{1}{4}$				34.19
Section 30				
Government	Lot 1	all		14.85
"	Lot 2	all		36.00
"	Lot 3	all but N 20		40.00
"	Lot 4	all		59.25

Description				Acreage
Section 29				
Government	Lot 1	all		31.25
"	Lot 2	all		36.05
"	Lot 3	all		37.75
Section 32				
Government	Lot 1	all		15.00
"	Lot 2	all		43.35
SE $\frac{1}{4}$ of NE $\frac{1}{4}$				40.00
Government	Lot 3	all		43.50
Section 32				
Government	Lot 4	all		45.75
T 117 N - R 41 W				
Section 5				
Government	Lot 1	all		41.25
"	Lot 3	all		30.50
"	Lot 4	all		30.60
Section 4				
SW $\frac{1}{4}$ of SW $\frac{1}{4}$				40.00
Section 8				
Government	Lot 1	all		18.20
Section 9				
Government	Lot 4	all but E 20		21.05
"	Lot 5	all but E 40		18.10
Section 16				
Government	Lot 1	all		12.60
Section 15				
Government	Lot 1	all		34.75
Section 13				
Government	Lot 3	all		33.65
T 117 N - R 40 W				
Section 30				
Government	Lot 1	all		27.70
"	Lot 2	all		20.40
"	Lot 3	all		49.00
Section 29				
Government	Lot 1	all but N 20		11.80
"	Lot 2	all but N 20		19.75
Section 32				
Government	Lot 1	all		26.40
"	Lot 2	all		12.70
Section 27				
Government	Lot 1	all but N 20		18.35
Section 34				
Government	Lot 1	all but E 40		8.75
T 116 N - R 40 W				
Section 3				
Government	Lot 4	all		43.05
Section 2				
Government	Lot 5	all but N 20		16.75

Description				Acreage
Section 11				
	Government	Lot 1	all	34.70
*	"	Lot 2	S W of railroad	20.00
	"	Lot 3		23.00
Section 12				
	* SW $\frac{1}{4}$ of SW $\frac{1}{4}$ of SW $\frac{1}{4}$		S W of railroad	7.00
	* Government	Lot 1	S W of railroad	12.00
T 116 N - R 39 W				
Section 18				
	Government	Lot 4	all	14.00
	W $\frac{1}{2}$ of SW $\frac{1}{4}$ of NE $\frac{1}{4}$			20.00
Section 19				
	Government	Lot 1	all but E 20	35.25
	"	Lot 2	all	40.50
T 115 N - R 39 W				
Section 12				
	Government	Lot 2	all	46.25
Section 11				
	Government	Lot 1	all	35.30
	"	Lot 2	all	18.75
	"	Lot 3	all but S 20	33.00
	"	Lot 4	all	52.50
	"	Lot 5	all	30.15
Section 10				
	Government	Lot 1	all	9.60
Section 14				
	Government	Lot 4	all	37.70
	"	Lot 5	all	57.75
Section 24				
	Government	Lot 2	all	28.25
	"	Lot 3	all but N 20	26.50
Chippewa County Total				1,739.34

RENVILLE COUNTY

Description				Acreage
T 114 N - R 39 W				
Section 2				
	Government	Lot 4	all	31.25
	"	Lot 3	all but N 20	39.20
	"	Lot 2	all but N 20	36.20
	"	Lot 1	all	5.00

Description			Acreage
Section 1			
Government	Lot 5	all	35.00
"	Lot 6	all	52.50
"	Lot 7	all but N 20	15.50
S $\frac{1}{2}$ of SW $\frac{1}{4}$ of SE $\frac{1}{4}$			20.00
S $\frac{1}{2}$ of SE $\frac{1}{4}$ of SE $\frac{1}{4}$			20.00
Section 12			
Government	Lot 2	all	12.00
"	Lot 1	all	11.55
T 114 N - R 37 W			
Section 7			
Government	Lot 4	all	30.46
"	Lot 3	all but N 20	24.70
"	Lot 2	all but N 20	33.90
"	Lot 1	all but N 40	17.50
Section 8			
Government	Lot 4	all	25.30
"	Lot 3	all but N 20	19.75
Section 9			
Government	Lot 2	all	10.25
"	Lot 1	all	45.00
Section 16			
Government	Lot 1	all but E 20	28.55
"	Lot 2	all but E 20	34.55
"	Lot 3	all but E 20	30.75
Section 24			
Government	Lot 6	all	18.15
"	Lot 5	all but N 20	18.70
"	Lot 4	all but N 20	32.75
T 114 N - R 36 W			
Section 30			
Government	Lot 4	all	32.85
Section 32			
Government	Lot 2	all	34.20
"	Lot 3	all but N 20	19.98
"	Lot 4	all	23.82
Section 33			
SW $\frac{1}{4}$ of NW $\frac{1}{4}$		all	40.00
Government	Lot 1	all	30.00
"	Lot 3	all but N 20	19.10
T 113 N - R 36 W			
Section 4			
Government	Lot 2	all	39.25
"	Lot 3	all but N 20	38.95
Section 3			
Government	Lot 2	all	39.72
"	Lot 3	all	36.20
"	Lot 4	all	20.60
Section 2			
Government	Lot 1	all	21.56

Description				Acreage
Section 11				
Government	Lot 7	all		15.20
"	Lot 6	all		39.52
"	Lot 5	all		29.15
Section 12				
Government	Lot 2	all but N 20		36.45
Section 13				
Government	Lot 1	all		47.40
T 113 N - R 35W				
Section 19				
Government	Lot 4	all		58.72
Section 20				
Government	Lot 1	all but N 20		31.55
Section 28				
Government	Lot 2	all		23.30
Section 27				
Government	Lot 2	all		53.10
"	Lot 3	all but N 20		26.35
"	Lot 4	all but N 40		16.92
Section 35				
Government	Lot 1	all		46.33
"	Lot 2	all but N 20		19.43
"	Lot 3	all		40.35
"	Lot 4	all but N 40		14.31
Section 35				
Government	Lot 11	all		15.89
Section 36				
Government	Lot 3	all		49.61
"	Lot 4	all		32.28
"	Lot 5	all		28.05
T 112 N - R 34 W				
Section 6				
Government	Lot 1	all		12.89
Section 9				
Government	Lot 1	all		31.74
Renville County Total				1,713.28

REDWOOD COUNTY

Description				Acreage
T 114 N - R 37 W				
Section 7				
Government	Lot 5	all but S 20		31.16
"	Lot 6	all but S 20		30.50

Description	Acreage
Section 23	
Government Lot 2	all 22.64
" Lot 3	all 28.43
Section 24	
Government Lot 1	all but S 20 34.06
" Lot 2	all 38.27
* " Lot 3	all but S 20 36.00
" Lot 4	all 46.35
T 114 N - R 36 W	
Section 19	
Government Lot 2	all 13.60
Section 30	
E $\frac{1}{2}$ of SE $\frac{1}{4}$ of NE $\frac{1}{4}$	19.21
Government Lot 1	all 37.75
" Lot 8	all 35.60
" Lot 6	all 34.75
" Lot 5	all 38.75
Section 29	
Government Lot 4	all 27.35
Section 32	
Government Lot 1	all 27.50
" Lot 6	all but S 20 24.95
" Lot 5	all but S 20 24.65
Section 33	
Government Lot 2	all 38.25
Section 4	
NW $\frac{1}{4}$ of NW $\frac{1}{4}$	all 40.36
Government Lot 1	all 34.90
" Lot 5	all 32.90
E $\frac{1}{2}$ of SE $\frac{1}{4}$ of NW $\frac{1}{4}$	20.00
T 113 N - R 35 W	
Section 20	
Government Lot 5	all 36.35
Section 26	
Government Lot 1	all 6.50
T 112 N - R 34 W	
Section 5	
Government Lot 6	all but S 20 21.90
Section 11	
* Government Lot 6	all 52.00
Redwood County Total	834.68

TOTAL 5,416.64

FEE TITLE DESCRIPTIONS AND ACREAGES

Fee title acreages are based on the original Government Land Office survey. Certain acreages, however, have been estimated because of an apparent conflict with the survey. These estimates are denoted by an asterisk(*). Areas recommended for purchase in fee title are shown on the Land Management Maps.

LAC QUI PARLE COUNTY

Description	Acreage
T 117 N - R 41 W	
Section 9	
Government Lot 3 all but W 20	12.25
Section 14	
*Government Lot 3 the N	10.00
Government Lot 2 the N	5.00
Lac Qui Parle Total	27.25

YELLOW MEDICINE COUNTY

Description	Acreage
T 116 N - R 40 W	
Section 13	
Government Lot 3 all	24.10
T 116 N - R 39 W	
Section 34 portage around Granite Falls dam	2.00
T 115 N - R 39 W	
Section 1 portage around Minnesota Falls dam	2.00
Yellow Medicine Total	28.10

REDWOOD COUNTY

Description	Acreage
T 113 N - R 35 W	
Section 28	
Government Lot 5	24.97

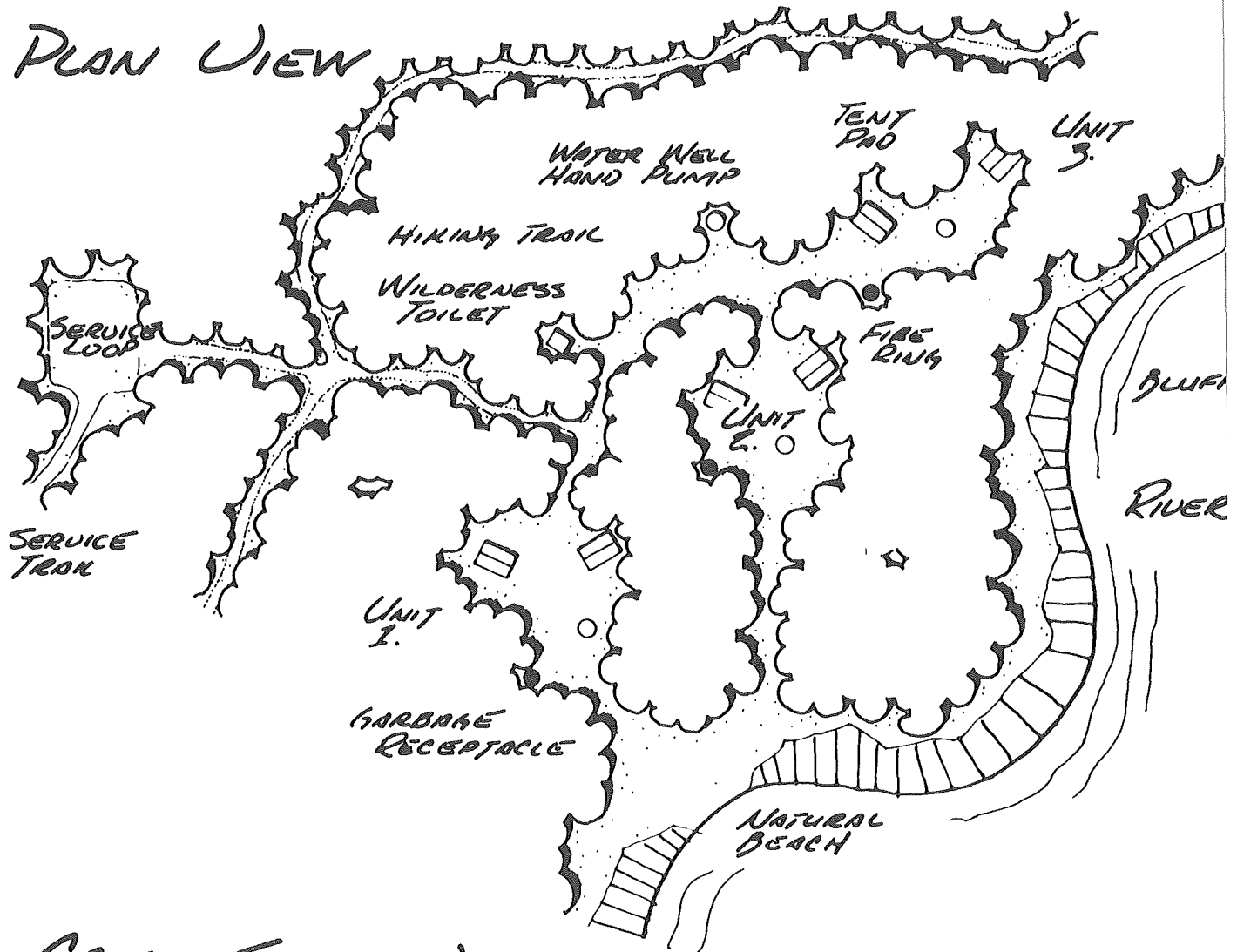
Description	Acreage
Government Lot 4 all but W 20	33.10
Redwood Total	58.07

RENVILLE COUNTY

T 114 N - R 37 W Section 24 Government Lots 6, 5 and 4 portage around Patterson Rapids	2.90
Renville Total	2.00
TOTAL	115.42

PRIMITIVE CAMPSITE

PLAN VIEW

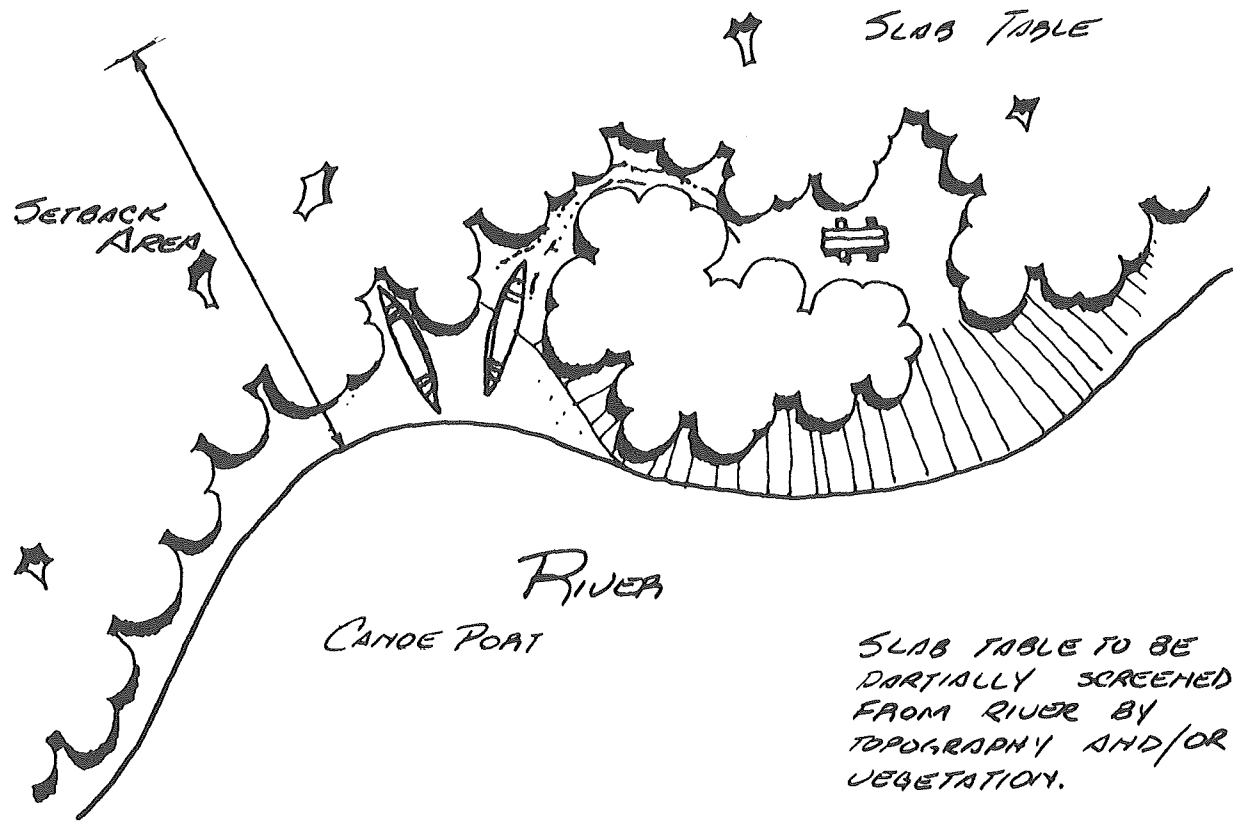


CROSS SECTION



SITE TYPICAL

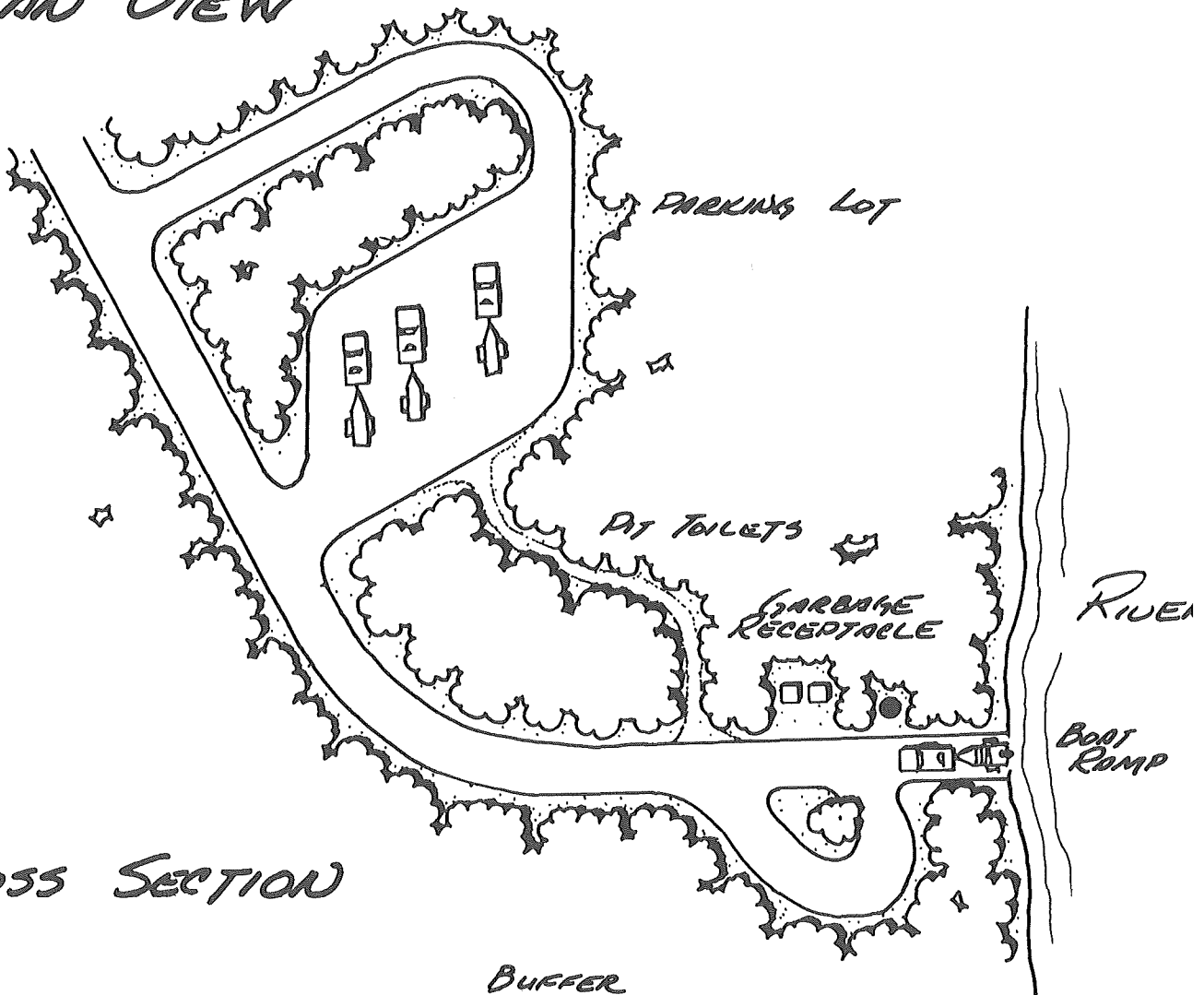
REST AREA



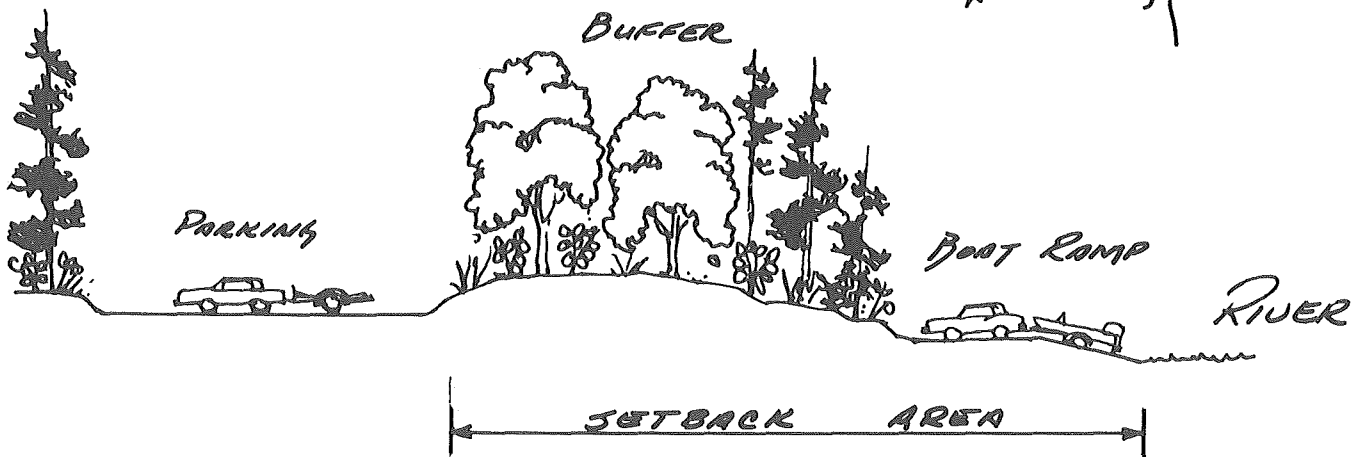
SITE TYPICAL

BOAT ACCESS

PLAN VIEW



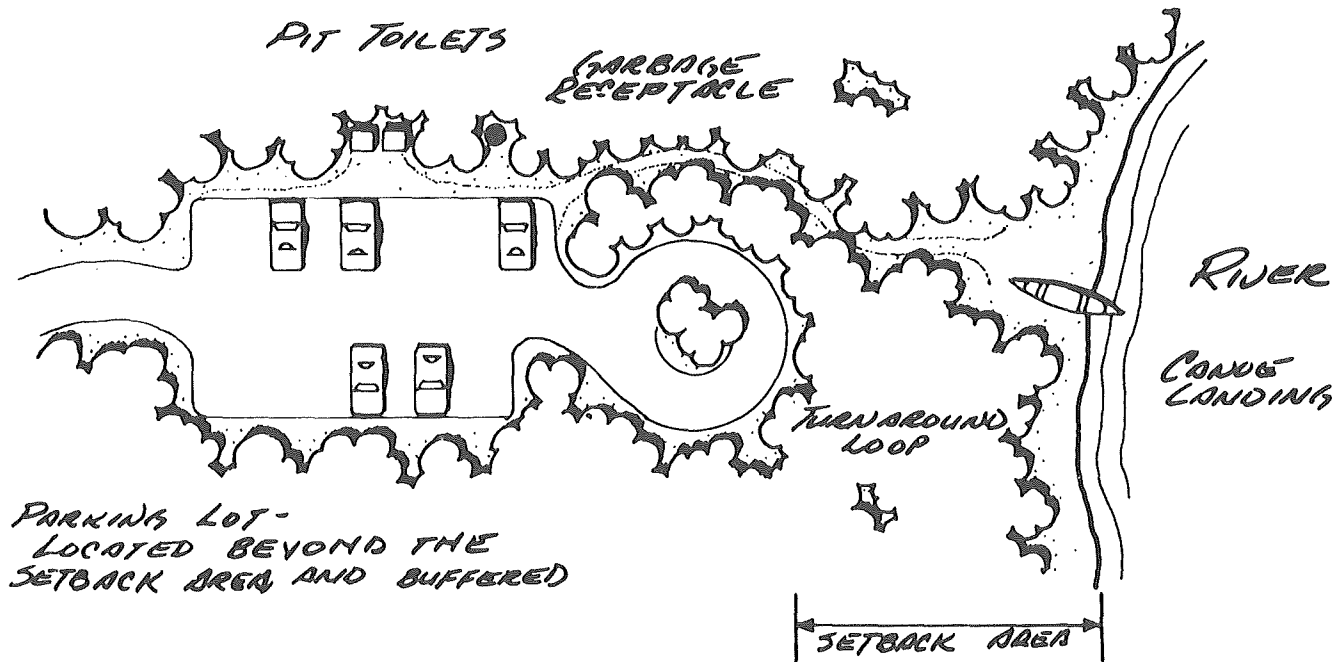
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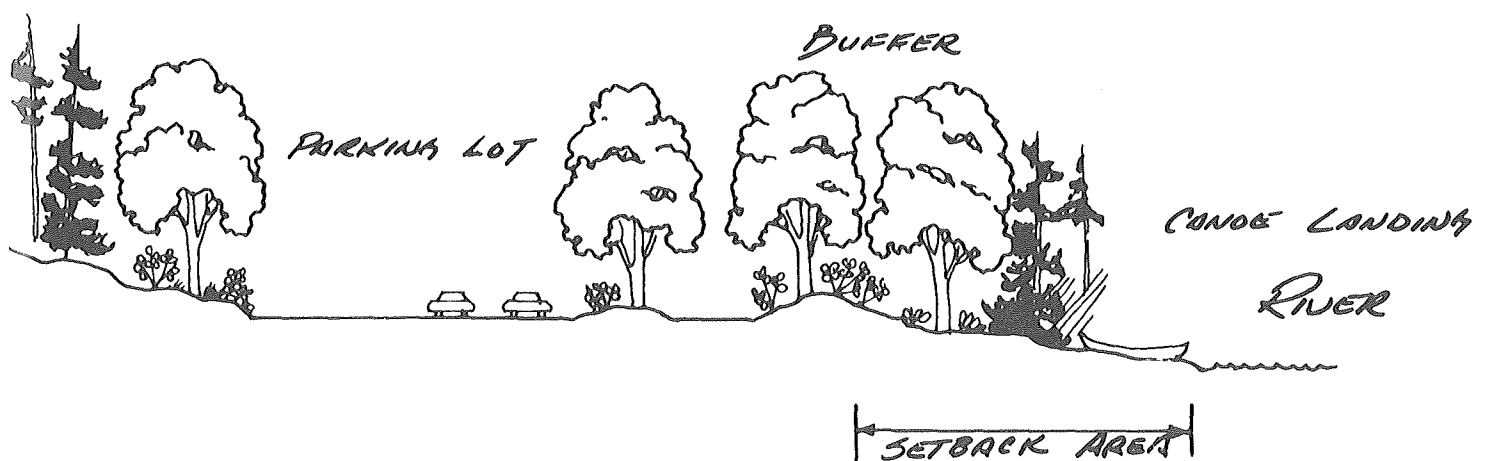
SITE TYPICAL

CANOE ACCESS

PLAN VIEW

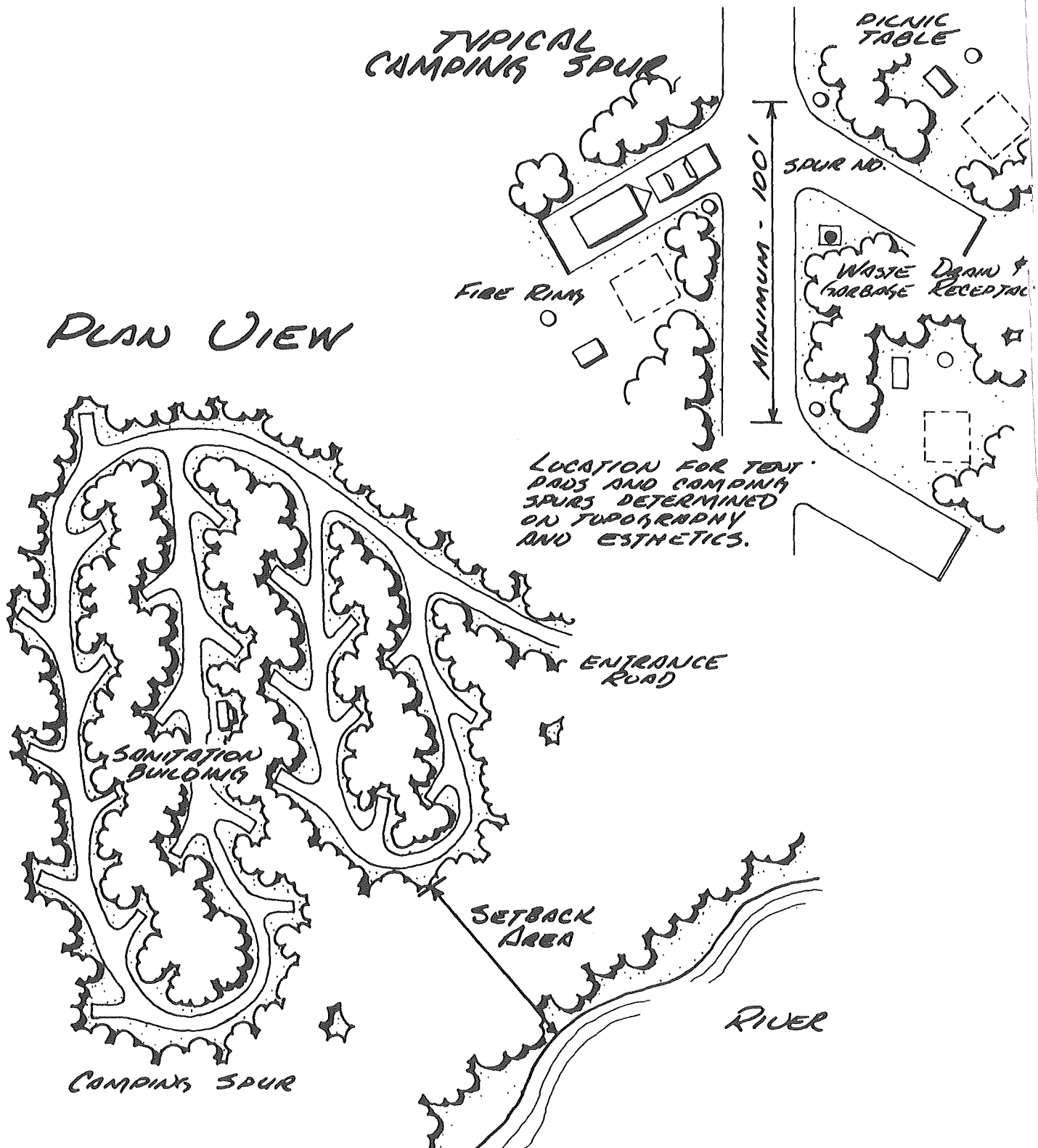


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SITE TYPICAL

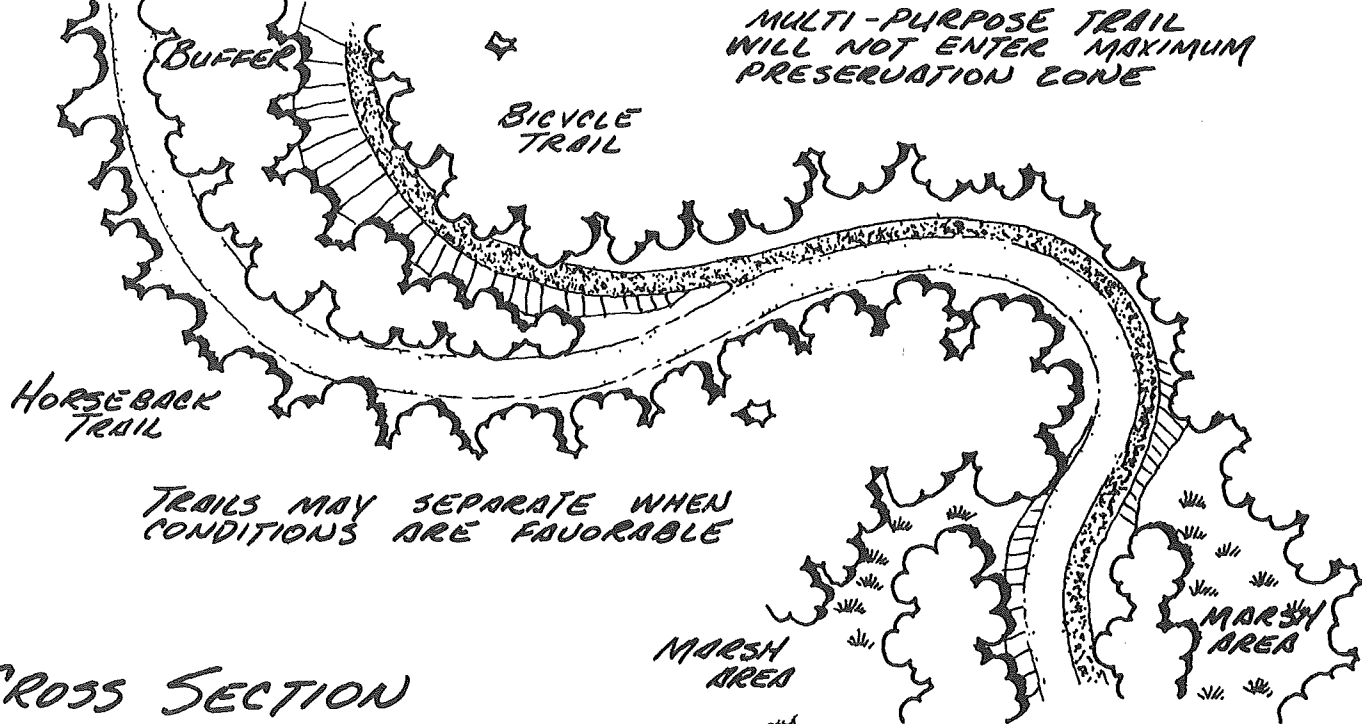
CAMPGROUND



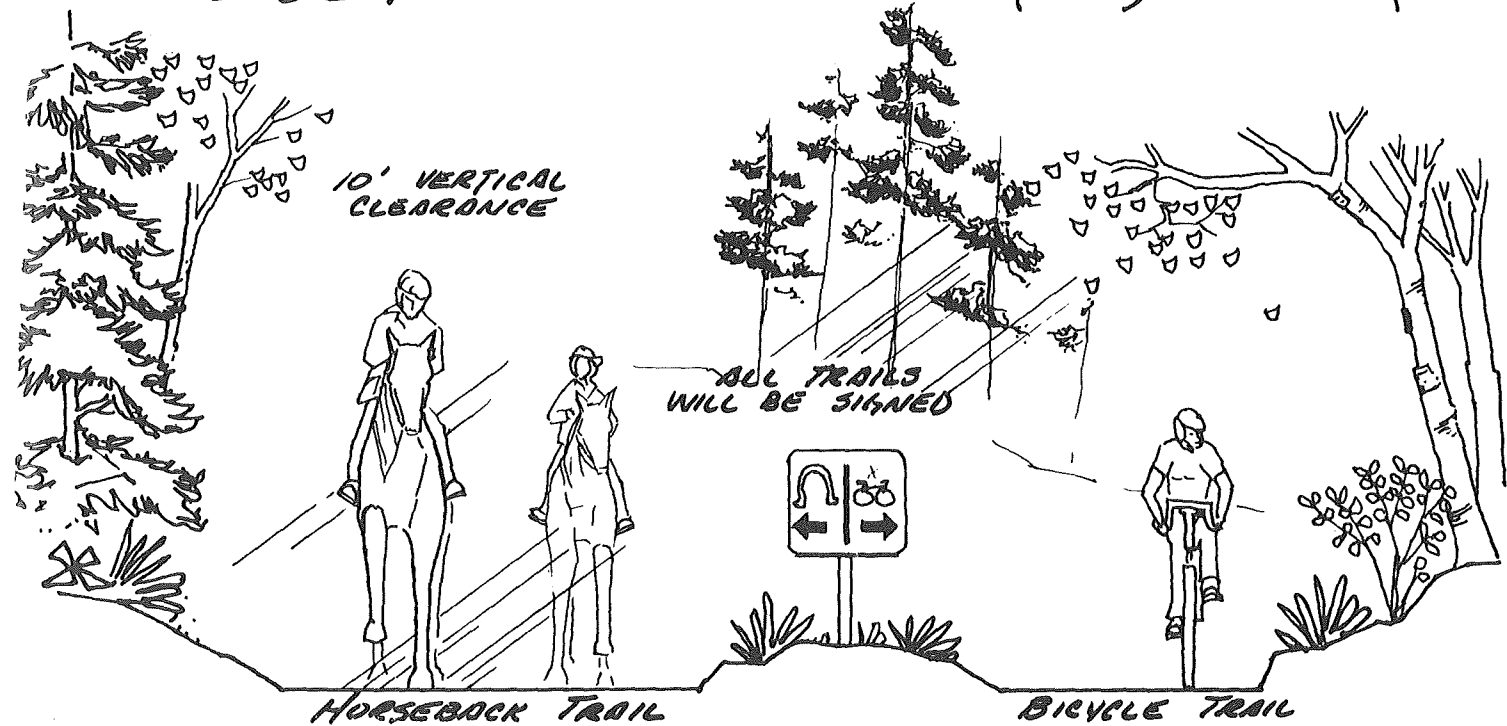
SITE TYPICAL

TRAIL DESIGN TYPICAL

PLAN VIEW

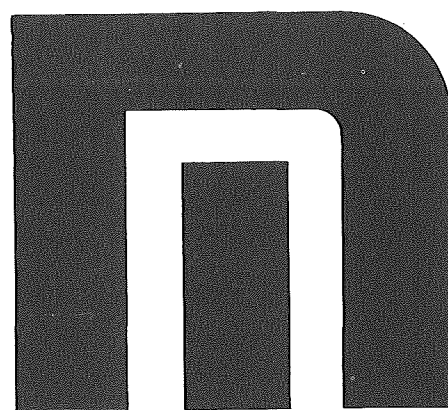


CROSS SECTION



WIDTH OF EACH TRAIL WILL DEPEND
ON THE ENVIRONMENTAL CHARACTERISTICS
OF EACH SITE.

APPENDIX



INTRODUCTION

The 95.5-mile stretch of the Minnesota River from the Lac Qui Parle dam to Franklin has been recommended for Scenic and Recreational designations under the provisions of the Minnesota Wild and Scenic Rivers Act.

The intent of the act, passed by the legislature and signed by the governor in 1973, is to "preserve and protect" the state's rivers and their adjacent lands that "possess outstanding scenic, recreational, natural, historical, scientific and similar values."

More specifically, the provisions of the act insure that new development is done carefully, with minimum adverse effect on the river.

After a thorough study of the Minnesota River, the DNR has determined that the river does meet the criteria necessary for inclusion in the system and that it should be protected under the provisions of the Wild and Scenic Rivers Act.

At this stage, this proposal is just that – a proposal. Informational meetings and public hearings will be conducted in each county bordering the part of the Minnesota River the DNR has studied. Then, the commissioner of natural resources will consider designating the river Scenic and Recreational.

If this management plan for the Minnesota River is approved by the commissioner of natural resources, the following steps would be

taken:

* Scenic and Recreational "land use districts" would be designated along the river. As they are now proposed, these districts comprise 22,670.48 acres along 95.5 miles of the river. They would constitute the management area. (The Land Management Maps and Land Use District Descriptions sections of the management plan describe these areas more fully.)

* Counties bordering the river would be required to adopt zoning ordinances for these new districts. These ordinances would be based on the regulations presented in the management plan and Minnesota Regulations NR 78-81.

* The DNR would want to buy some riverside land and would negotiate for "scenic easements" on other private property in the land use districts. (The Land Management Maps and the sections of the management plan entitled Fee Title Descriptions and Scenic Easement Descriptions indicate what lands the DNR would like to acquire in title and through scenic easements.) The Wild and Scenic Rivers Act does not give the DNR the power of eminent domain (condemnation). The DNR can neither force a landowner to sell his land nor acquire scenic easements without the landowner's consent.

* The DNR would develop or upgrade some recreational facilities such as primitive campsites, accesses and rest areas on state land along the river.

If the Minnesota River is designated a Scenic and Recreational river, the management plan would constitute the policy of the DNR in managing the river and its adjacent lands. The appendix to this plan provides the information the DNR used in developing the management plan.

This proposal does not preclude the possibility that the DNR may recommend other stretches of the Minnesota River for designation under the Wild and Scenic Rivers Act.

ANALYSIS

This analysis of the Minnesota River and the proposed management areas supports the DNR's recommendation that the river be included in the Wild, Scenic and Recreational Rivers System.

The analysis also provided the information the DNR used in developing a management plan for the Minnesota River. Management recommendations arising from this analysis appear in the Regulations section of the management plan.

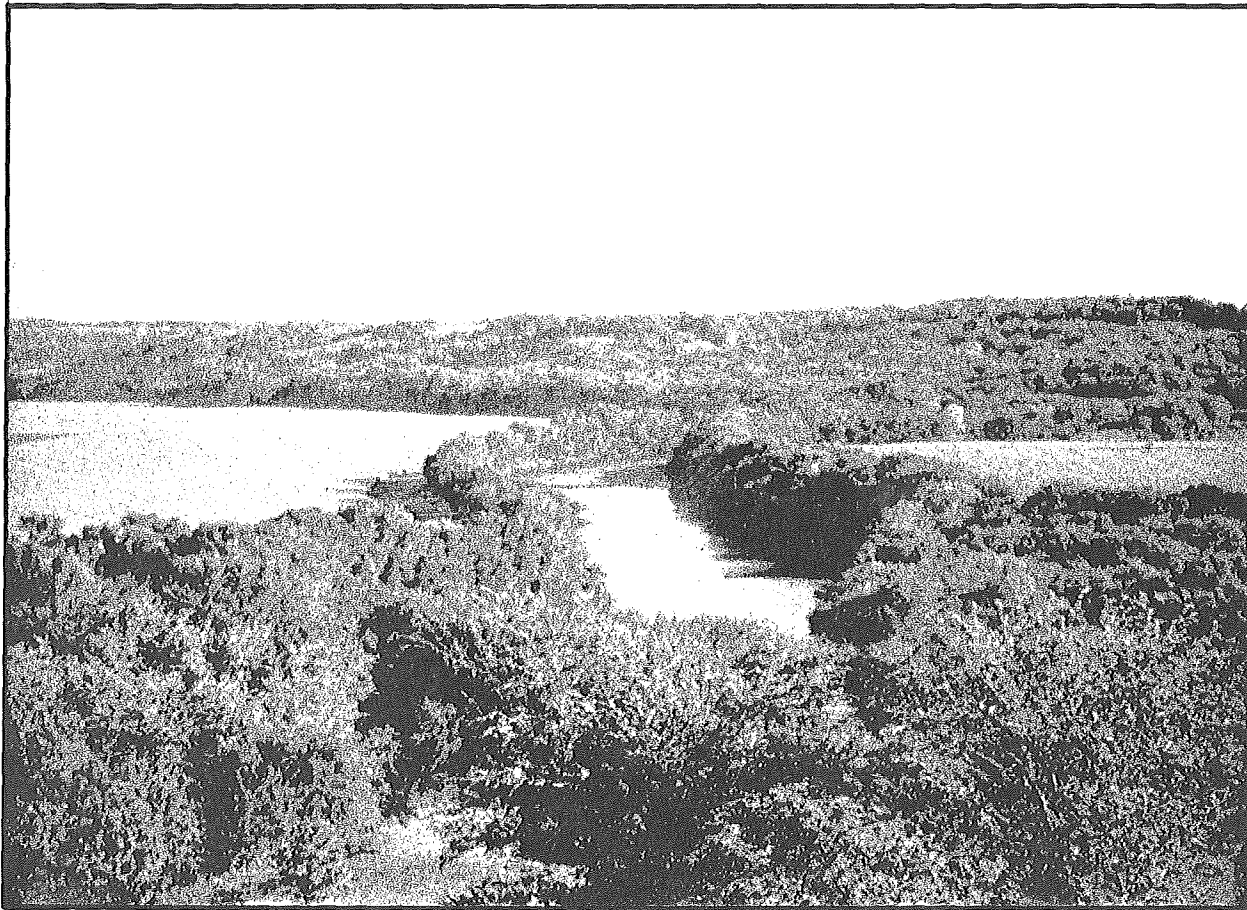
STUDY CONCLUSIONS

It is the DNR's finding that the following "outstanding scenic, recreational, natural, historical, scientific and similar values" qualify the Minnesota River from the Lac Qui Parle dam to Franklin for protection under the Wild and Scenic Rivers Act.

Scenic

The Minnesota River valley between the Lac Qui Parle dam and Franklin is one of the most impressive landscapes in southwestern Minnesota. Wooded slopes next to the river are bounded on the north and south by extensive plains. The vegetation found along the floodplain-- willow, cottonwood, American elm and ash-- is a pleasing contrast to the upland bluffs of red cedar and pockets of prairie grasses.

Although the Minnesota valley can be viewed from several points along the river banks, the most beautiful view is from the river itself.



Many riverside areas appear virtually unchanged from their original condition. Without proper management of this unique natural resource, however, the scenic qualities of the valley will be jeopardized.

Historical

The Minnesota River has been an important landmark in the state's history of the American Indian, particularly the Dakota (Sioux).

Archaeological evidence indicates that the area's first residents were closely related to the Eskimo. Later, the Dakota rose to prominence.

The river was the site of many battles between the Dakota and early settlers, including many skirmishes during the Sioux Uprising of 1862.

The Minnesota River valley, originally included in the area claimed for France by Robert Cavelier La Salle in 1662, later was explored by both the French and the British. Pierre Charles Le Sueur and Jonathan Carver were among notable explorers who surveyed the area.

Following the Louisiana Purchase by the United States in 1803, the area was opened to U.S. explorers and finally, settlers. As the area was settled, Indian land was purchased and Indians were moved to reservations.

The Minnesota River later played an important role in guiding development of southwestern Minnesota by providing transportation, commercial fishing and power to drive sawmills.

Recreational

The Minnesota River valley provides areas for hunting, fishing and many other recreational activities.

Game species living on or near the river include white-tailed deer, pheasant, Hungarian partridge, mallard, wood duck, Canada goose and blue-winged teal.

The river supports walleye, sauger and channel catfish. The DNR recently stocked the river with northern pike and smallmouth bass.

In addition to abundant fish and wildlife, the Minnesota River has many parks and accesses along its banks. Included are two state parks, two county parks, the Camp Release historic wayside, Fort Renville and the Lac Qui Parle Mission, the Joseph R. Brown historic wayside, the Redwood ferry crossing and the Lower Sioux Agency historic site.

The Minnesota, a gentle river interrupted by few rapids, is one of the few canoeable rivers in southwestern Minnesota. That there are few canoeable waters of any kind in that part of the state, underscores

the river's value as a recreational resource.

Natural and Scientific

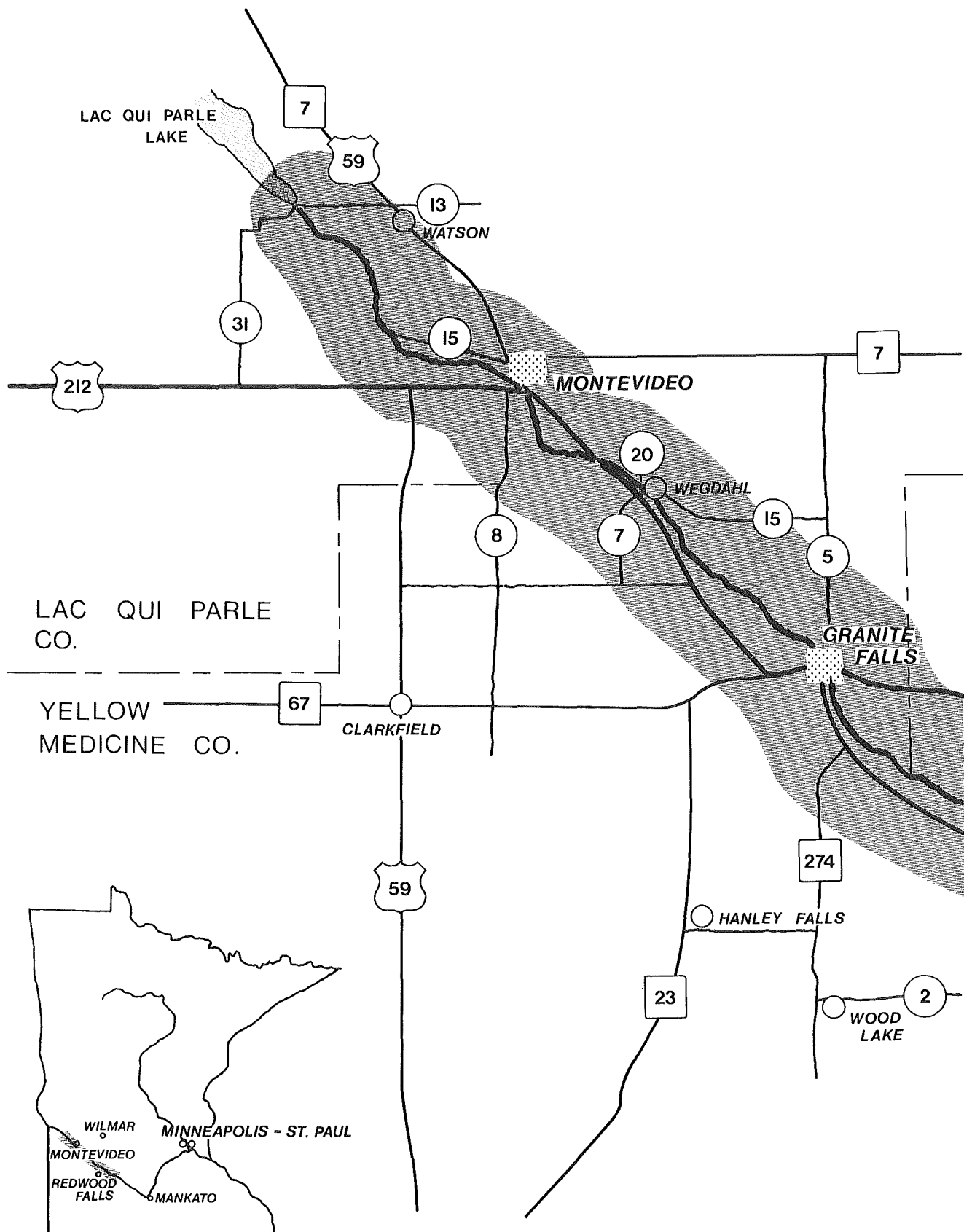
River lands possess a wide variety of natural amenities that make this portion of the river a valuable natural and scientific area. Perhaps the most important features of scientific interest in this shoreland area are the unique geologic formations, specifically, the outcrops of granitic rock. Some outcrops, more than three billion years old, are the oldest rocks found in North America. Many exposures of metamorphic rocks, kaolin clay deposits, shale and sandstone also make the valley an important geologic study area.

The natural vegetation, unique because of the wide variety of environments, also is an important resource for scientific study. Glades of red cedar grow where steep hillsides are covered with quartzite bedrock or a gravelly glacial moraine and a thin loess. The understory includes cactus such as prickly pear. This species is scarce because of its growing requirements. It is imperative to preserve the river valley if these species are to be maintained.

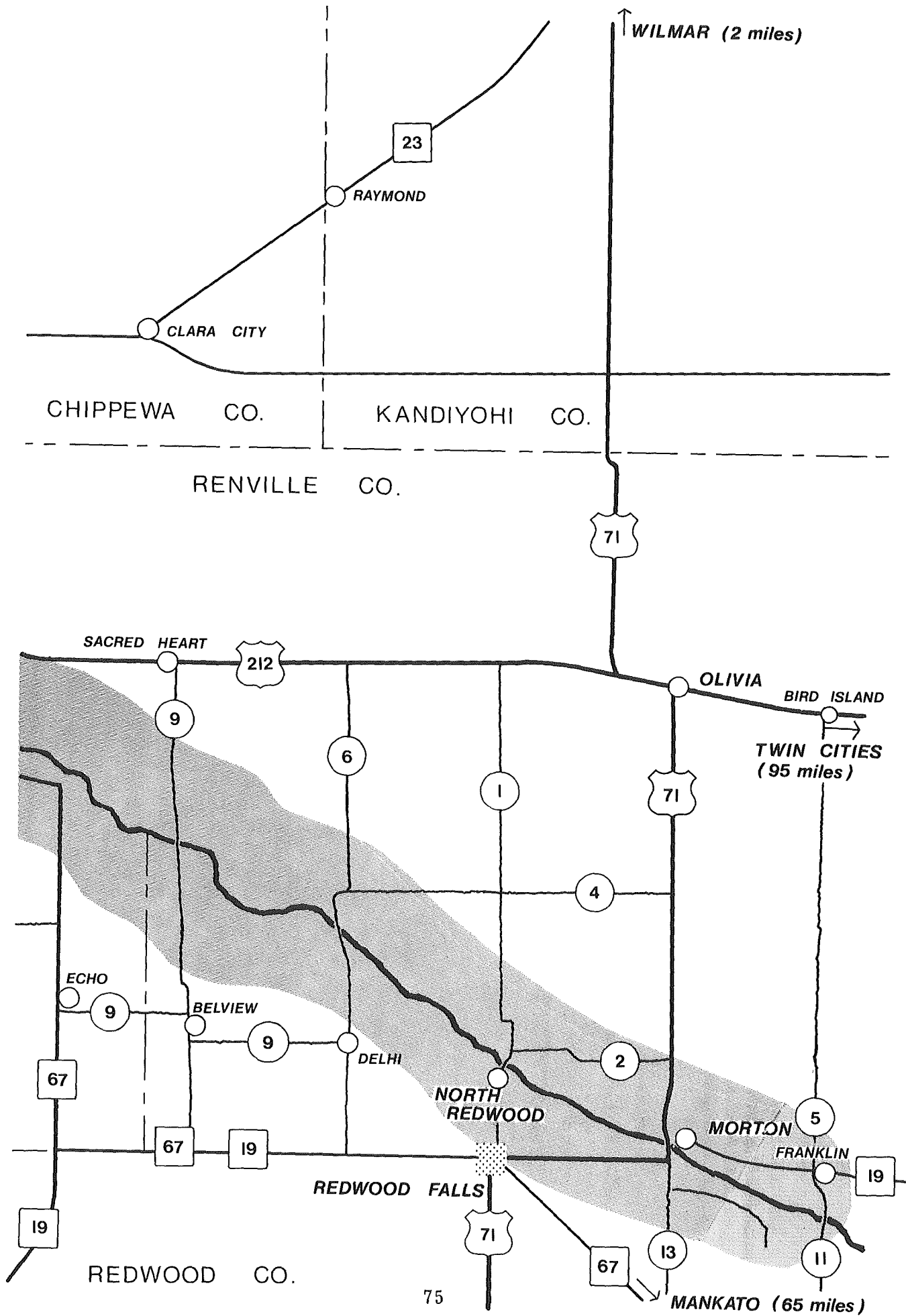
Diverse and numerous wildlife is another important natural resource of the Minnesota River valley. Waterfowl present include wood ducks, Canada geese, blue-wing teal and mallards. Mammal species living near the river include beaver, white-tailed deer, otter, mink, muskrat and many smaller animals.

In conclusion, the Minnesota River's historical, scenic, recreational, natural and scientific values qualify it for inclusion in the Minnesota Wild, Scenic and Recreational Rivers System.

The following analysis more fully describes the physical characteristics, social characteristics and existing recreational facilities of the proposed management area.



MINNESOTA RIVER LOCATION MAP - STUDY AREA



PHYSICAL CHARACTERISTICS

Route Description

River mile (indicated on Land Management Maps)

- 288 Beginning of study area. Lac Qui Parle dam. Chippewa County State Aid Highway (CSAH) 13 and Lac Qui Parle CSAH 33 bridge. Lac Qui Parle State Park lies above dam. Corps of Engineers wayside park below on right. Corps of Engineers parking lot on left.
- 286.4 Private campsite and access on right.
- 284 Lac Qui Parle CSAH 20 and Chippewa CSAH 14 bridge.
- 280.4 Wayside park across highway on right.
- 279.7 Lac Qui Parle CSAH 18 and Chippewa CSAH 15 bridge.
- 271.8 On right, Lac Qui Parle – Yellow Medicine county line.
- 271.6 Chippewa River enters from left.
- 271.5 U.S. Highway 212 and 59 bridge at Montevideo.
- 271 DNR access on left.
- 269.4 Rock outcropping, remains of ancient mountains.
- 269 Old Indian camp on right.
- 267.4 Remains of Stony Run township bridge.
- 266.7 U.S. Highway 212 bridge.
- 263.7 Braffees Creek enters from left.
- 263.6 Yellow Medicine CSAH 7 and Chippewa County CSAH 20 bridge, Wegdahl one-quarter mile on left.
- 259.8 Stony Run Creek enters from right.
- 259.5–258 Spartan State Wildlife Management Area.
- 255.1 Palmer Creek enters from left.
- 254.3 Railroad bridge.
- 252.9 Dam at Granite Falls. Yellow Medicine CSAH 22 and Chippewa County Road 38 bridge. Best portage to right, 100 yards.
- 252.1 U.S. Highway 212 and State Highway 23 bridge.

River Mile

- 251.8 Granite Falls Memorial Park on right: access, camping and picnicking.
- 251 Power plant.
- 250.7 Cable crosses river.
- 249.7 Minnesota Falls dam. Best portage to right.
Private resort and access.
- 249.1 Minnesota Falls ghost town.
- 246.6 DNR access on right.
- 246.2–243.7 Upper Sioux Indian community on right.
- 245 Hazel Creek enters from right.
- 243.8 DNR access on left.
- 241.9 Chippewa – Renville county line on left.
- 240.5–238.2 Upper Sioux Agency State Park on right: access, camping and picnicking.
- 238.8 Yellow Medicine River enters from right.
- 238.7–235.4 Renville County Park No. 1 on left: access, camping and picnicking.
- 238.4 Hawk Creek enters on left. Campsite on right.
- 238.2 Yellow Medicine CSAH 21 and Renville CSAH 10 bridge.
Access on left.
- 237.8 Campsite in Renville County Park.
- 235.7 Wood Lake Creek on right.
- 232.6 Yellow Medicine – Redwood county line on right.
- 231.5 Redwood CSAH 7 and Renville CSAH 9 bridge.
- 230.9 Joseph R. Brown wayside lies one-quarter mile off river to right.
- 228.6 Boiling Spring Creek enters from right.
- 228.5 Redwood CSAH 19 and Renville CSAH 12 bridge.
- 227.1 Echo Creek enters on right.
- 225.9 Patterson Rapids.
- 225.2 Sacred Heart Creek enters from left.
- 225.2–224.6 Renville County Park No. 2: campsites and picnic area.

River Mile

- 223.6 CSAH 6 bridge. Site of Vicksburg ghost town. Access on left.
- 220.8 Timms Creek enters from left.
- 220.7 Old gold mine shaft.
- 220 Rice Creek enters from right.
- 219.5 Renville CSAH 21 and Redwood CSAH 17 bridge.
- 218.7 Middle Creek enters on left.
- 218.1–216.3 Cedar Rock Wildlife Management Area.
- 216.3–215.1 Camp Pope historic site.
- 215.2 Smith Creek enters from left.
- 214.7 Camp Pope Creek enters on right.
- 212 Renville CSAH 1 and Redwood CSAH 101 bridge.
North Redwood and Redwood Falls lie to the right.
DNR access on right.
- 211.5 Redwood River enters on right.
- 210.9 Riverside ghost town.
- 208.6 Beaver Creek enters on left.
- 207 Ochs clay pit.
- 205.1 Crow Creek enters on right.
- 202.9 U.S. Highway 71 and State Highway 19 bridge at Morton.
Morton on left.
- 202.5 Railroad bridge.
- 202.4 Renville CSAH 18 bridge at Morton; bridge out.
- 201.7–199.3 Lower Sioux Indian community on right.
- 199.1 Birch Coulee Creek enters from left.
- 199–197.4 Lower Sioux Agency and interpretive center. Redwood ferry crossed here.
- 192.5 Redwood CSAH 11 bridge. Renville County access on left. Franklin one-quarter mile on left. End of study area.

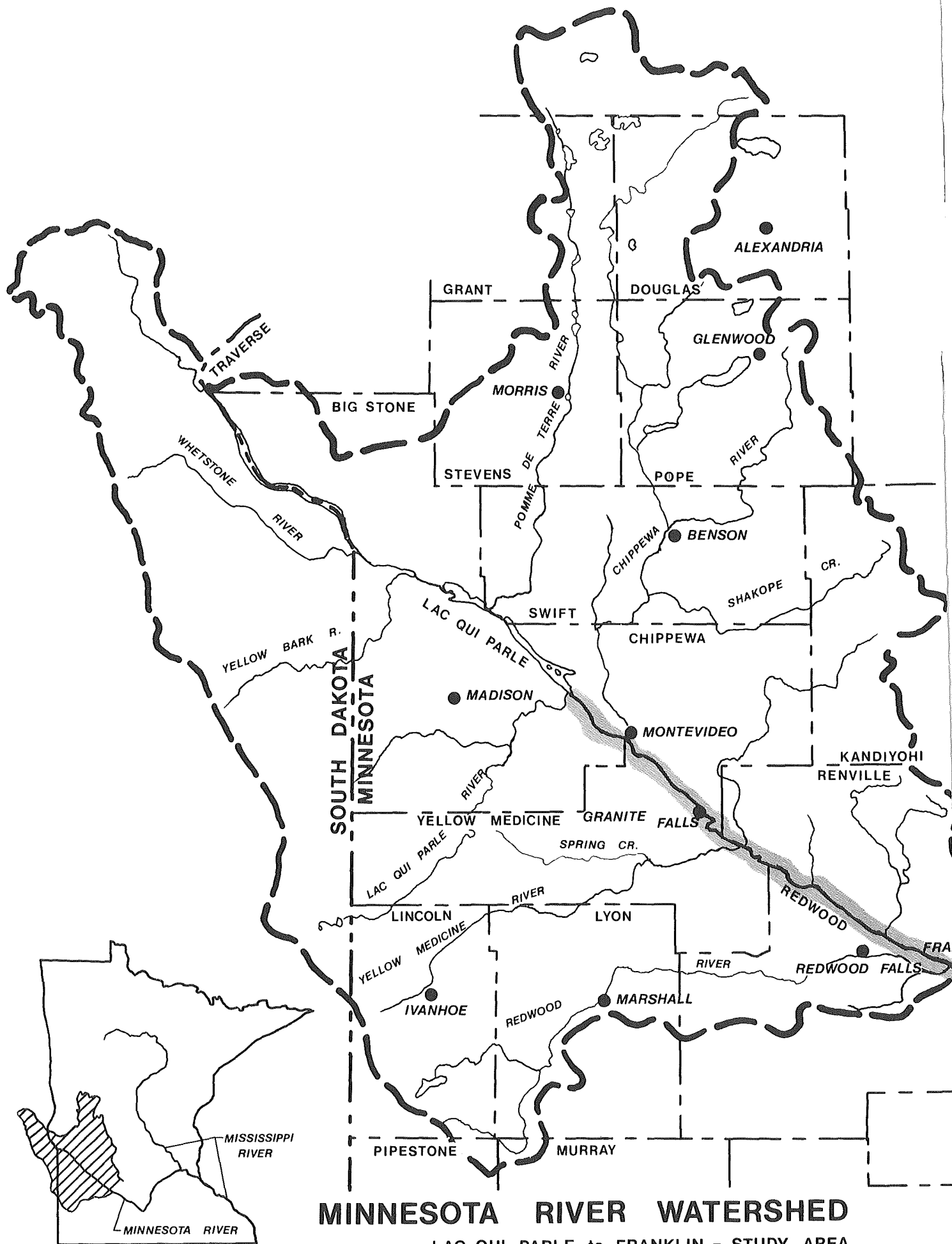
Watershed

The Minnesota River rises in northeastern Marshall County, South Dakota, approximately 30 miles west of Lake Traverse (see watershed map). From here the river starts its 379-mile journey to its confluence with the Mississippi River at Fort Snelling. In the course of this flow, water is accumulated from a drainage area of 16,600 square miles, making the Minnesota River second only to the Mississippi in area drained within the state.

The Minnesota River valley varies from one to five miles in width and is from 75 to 200 feet deep. It extends from Browns Valley southeast to Mankato, a distance of about 180 miles. Here it turns sharply to the northeast and continues for 105 miles to its junction with the Mississippi River. The river from Lac Qui Parle dam to Franklin is fed by water from the whole of three major drainage basins and portions of two more, as delineated by the United States Geological Survey. These watershed units drain approximately 5,000 square miles of southwestern and south-central Minnesota.

The Yellow Medicine River watershed unit drains 1,057 square miles of land northward into the Minnesota. Included are parts of Lac Qui Parle, Lincoln, Lyon, Redwood and Yellow Medicine counties. The major component of this basin is the 81-mile Yellow Medicine River which drains 670 square miles. Several short streams drain the remaining 387 square miles of this watershed. The most important of these streams are Stony Run, Wood Lake, Boiling Spring and Echo creeks.

The Chippewa River watershed unit drains 2,072 square miles of land southward, including parts of Swift, Chippewa, Stevens, Kandiyohi, Pope, Douglas, Grant and Otter Tail counties. The major feature of this watershed is the 132-mile Chippewa River. The Chippewa River is partly diverted through a flood control channel into the Lac Qui Parle reservoir. This flood control diversion channel was constructed through an exposed glacial river channel called the Watson Sag or, locally, the "Big Slough" for purposes of flood control, water supply,



pollution abatement and improvement of lake levels for recreation and game preservation.

The Redwood River watershed unit drains 739 square miles in parts of Redwood, Lyon, Lincoln, Yellow Medicine, Pipestone and Murray counties northward into the Minnesota River.

The Minnesota River – Hawk Creek watershed unit drains 1,479 square miles of Renville, Chippewa, Kandiyohi, Nicollet and Sibley counties. This watershed is composed of a number of small streams which drain southward into the Minnesota River. Some of these streams enter the Minnesota below Franklin. Hawk Creek, the largest of these streams, flows 65 miles and drains 510 square miles. Other streams in this watershed draining into the Minnesota include Palmer, Sacred Heart, Middle and Birch Coulee creeks.

A small portion of the Cottonwood River watershed unit drains into the Minnesota. This watershed unit drains 1,878 square miles including parts of Blue Earth, Brown, Cottonwood, Redwood, Murray and Lyon counties. The main component of this basin is the Cottonwood River which flows into the Minnesota at New Ulm, below the study area. Wabasha Creek drains the portion of this watershed which lies above Franklin and within the study area.

Elevation of the Minnesota River immediately below the Lac Qui Parle dam is 933 feet above sea level. It drops 117 feet in its 95-mile flow to Franklin, an average drop of 1.2 feet per mile. This figure is somewhat misleading; dams at Granite Falls and Minnesota Falls drop the level of the river approximately 30 feet in four miles. The major portion of the river is a relatively flat body of water interrupted occasionally by light rapids.

River water levels and flowage rates are related directly to seasonal weather changes. Water levels are high during April, May and June. Low water levels occur during late summer, fall and winter.

A combination of geological and climatological factors cause the

Minnesota River valley to be highly susceptible to flooding. Tributaries of the river are steep-gradient streams which rapidly drain surrounding land . The bed of the Minnesota River is relatively flat. During the spring thaw or after heavy rains, water accumulates within the river valley faster than it drains and flooding occurs.

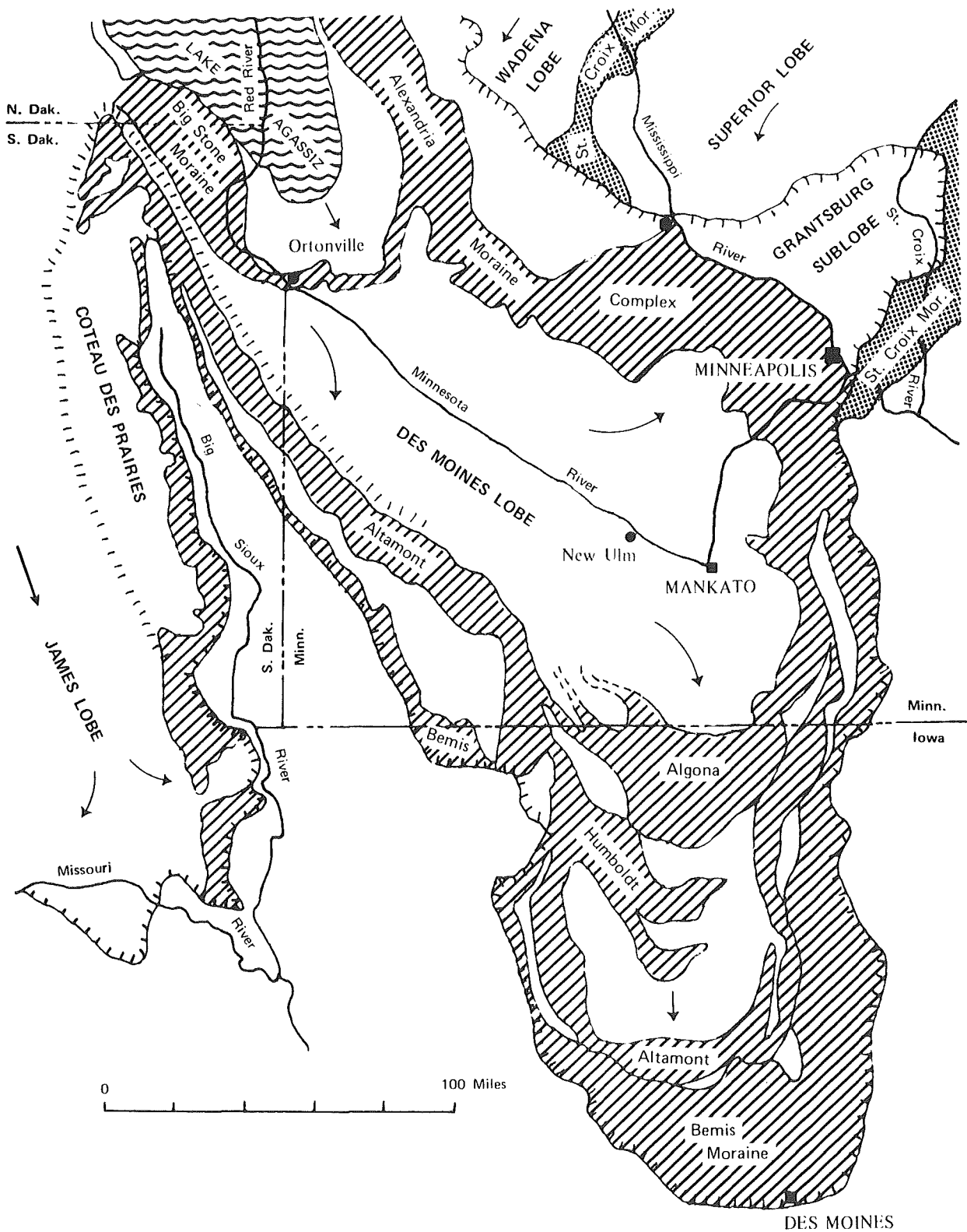
Geology

During the close of the Ice Age, 12,000 to 13,000 years ago, the last advance of glacial ice had extended as far south as central Iowa and had melted back to a position just north of Ortonville (see glacial map). Here, where the ice margin became stationary, it began to deposit a broad ridge several miles wide, composed of small hills and depressions. This now is called the Big Stone Moraine.

The subsequent northward glacial retreat exposed the surface of the Red River Lowland which sloped northward from the Big Stone Moraine. Continuous melting of glacial ice began to fill the lowland between the ice margin and the Big Stone Moraine with water. This was the start of what was to become one of the largest glacial lakes ever to exist -- Glacial Lake Agassiz. With continued retreat of the ice, Glacial Lake Agassiz extended northward to reach a maximum size of 80,000 square miles. Most of the lake existed in Manitoba, Ontario, and Saskatchewan, with only minor parts in Minnesota and North Dakota .

As the level of Glacial Lake Agassiz rose, it eventually became high enough to flow over the Big Stone Moraine and drain southward. The outlet is located about two miles north of Browns Valley, Minnesota. The southward drainage of Glacial Lake Agassiz added a large, new supply of water to a shallow stream south of the Big Stone Moraine. The increasing supply of water eventually formed one of the largest glacial rivers in the midwest -- Glacial River Warren.

The volume of water that flowed in Glacial River Warren was tremendous. It quickly removed the loose surface glacial deposits and the underlying thin layers of sedimentary rock (shale, sandstone, and



Glacial Map of Southern Minnesota, Adjacent South Dakota and Iowa (Modified from Matsch, 1972).

conglomerates), exposing the more durable granitic rocks below. The river continued to carve its channel, cutting through as much as a hundred feet of granitic rock at the site of Renville County Park No. 2 and other localities. Numerous exposures of granitic rock exist along the river valley between Browns Valley and New Ulm. Downstream from New Ulm, the river flows in younger sedimentary rocks, mostly limestones.

The exact duration of Glacial River Warren is not known, but it probably lasted for several thousands of years. As the glacier continued to retreat northward, however, Glacial Lake Agassiz eventually found lower outlets to the northeast and finally drained into Hudson Bay. With the large supply of water from Glacial Lake Agassiz eliminated, Glacial River Warren subsided and the stream took on a different character. This river became the Minnesota. As the river's size and velocity greatly decreased, it no longer had the energy to carry the large quantities of sediment supplied by its tributaries. Large delta deposits developed at the mouth of the Little Minnesota River forming Lake Traverse. The delta of the Whetstone River formed Big Stone Lake, the delta of the Pomme de Terre River formed Marsh Lake and the delta of the Lac Qui Parle River formed Lac Qui Parle Lake.

Within the river bed itself, increased deposits of sand, gravel and mud accumulated and the stream began to meander across the valley floor. Sometimes whole stretches of the river were abandoned. If they were deep enough to retain water they became lakes or ponds, otherwise, they became dried-up meander scars. Periodic flooding covered the valley floor with rich deposits of silt and clay, giving trees and shrubs a firm foothold. As the climate continued to become drier, the size of the river decreased until it reached its present size.

The erosion by Glacial River Warren during the last Ice Age has provided an excellent view of the early geologic history of southwestern Minnesota. The dominant rocks in the upper part of the valley, granite and gneiss (pronounced "nice"), have been dated by various radiometric dating methods. Some have been found to be

greater than three billion years old, the oldest rocks known on the continent. They are the eroded remnants or "roots" of the oldest mountains known in North America. These rocks in the Minnesota River valley are among the evidence of a sequence of geologic events that spans more than three billion years.

Soils

Soils influence other natural resources such as vegetation and wildlife. They also are an important factor in determining land use. Soil information, therefore, is an important and useful tool in river planning. The major soil associations in the study area are:

- * The Nicollet-Storden-Canisteo Association. This association, found on the uplands of the study area, is composed of deep, moderately well-drained soils that have developed in calcareous loam glacial till. These soils have high natural fertility, organic matter content and water retention capacity. They are suitable for agriculture if managed in a way to maintain a high level of organic matter and plant nutrients, and protected against wind erosion.

- * Chaska-Dorchester-Oshawa Association. This soil association is found on the floodplain and is composed of silty alluvial deposits. These soils have moderate to high natural fertility, high organic matter content, slow to moderate permeability and high moisture storage capacity. In areas of old stream channels and oxbow lakes, these soils provide good wildlife habitat. Agricultural use is limited to areas that are artificially drained and protected from frequent flooding. Structures such as roads, septic tank filter fields and buildings should only be built on sites that have a relatively stable ground water table and are protected from flooding.

Vegetation

Before settlement of the study area, the vegetation consisted of two

plant communities: the northern flood plains forest, found in the river valley, and the bluestem prairie, located in the uplands on both sides of the valley.

The northern flood plains forest contained willows and cottonwoods in areas bordering the river which were most susceptible to flooding. Common species on slightly higher ground included silver maple, American elm, green ash and box elder. The understory consisted of shrubs such as prickly ash and various species of currants and gooseberries. Also common were vines such as wild grape and Virginia creeper.

Cedar glades grew where steep hillsides were covered with thin loess over quartzite bedrock. Red cedar, a species of juniper, predominated. There also were species of cactus such as prickly pear. These cedar glades and cactus still exist today, particularly below Granite Falls.

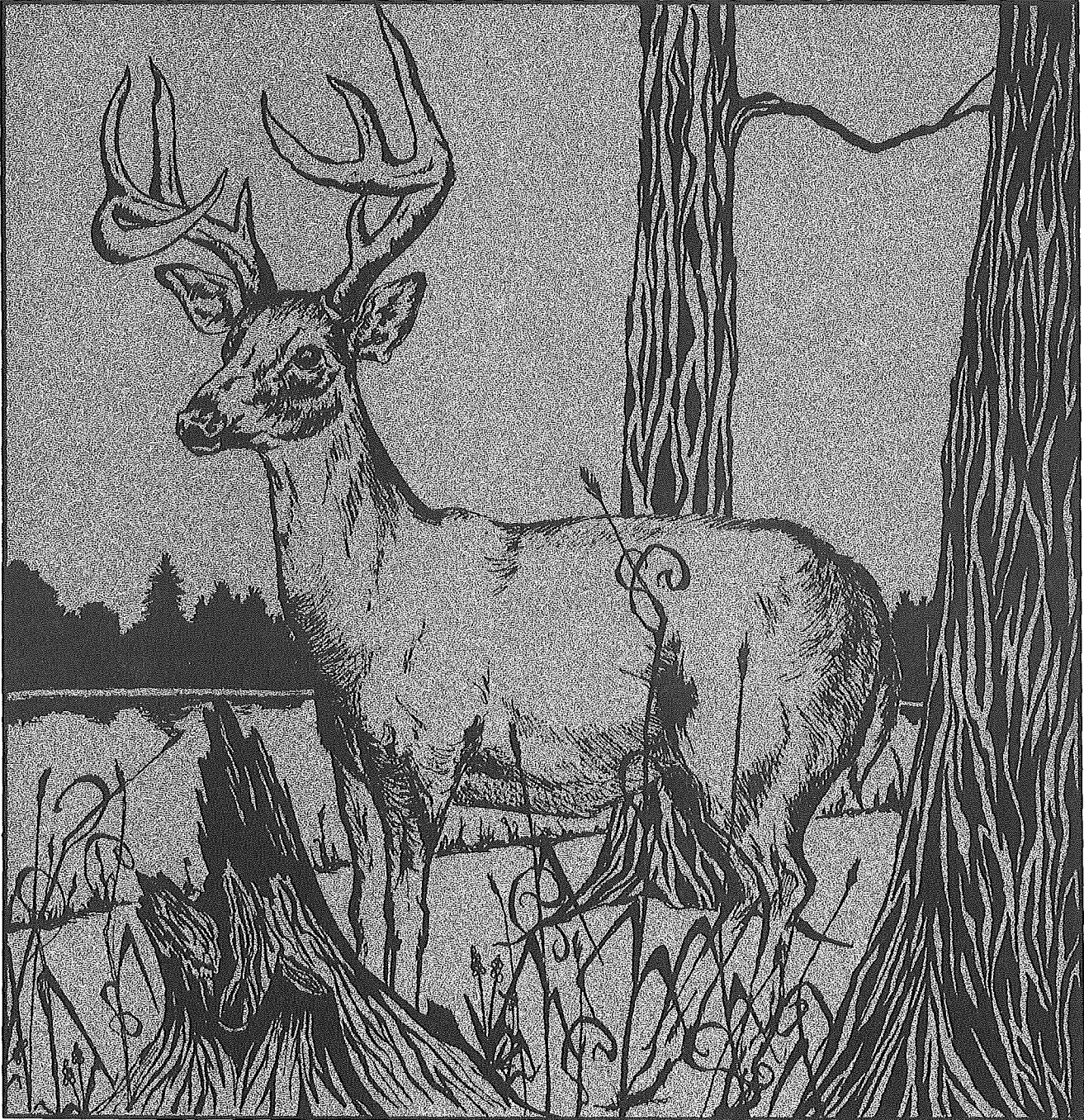
The bluestem prairie plant community, found on the uplands, comprised a wide variety of grasses, herbaceous plants and small shrubs, such as big bluestem, little bluestem, blue joint, switchgrass and lead plant. These prairies were quite large, interrupted only by streams and lakes. The original prairie grasses supplied organic matter to the soil, making this a highly productive agricultural area.

The northern flood plains forest still exists in the study area, although in places the forest has been cleared for agricultural use. Much of the original bluestem prairie has been cultivated. Small remnants of bluestem prairie are found in cemeteries and along railroad beds.

The northern flood plains forest plant community is significant because it is relatively scarce in this area of the state.

Wildlife

The Minnesota River valley provides a habitat capable of supporting a



wide variety of wildlife. The river and its corridor are among the few areas in southwestern Minnesota with such abundant and varied fish and wildlife populations.

Many birds use the river corridor for nesting, breeding, and resting during migrations. Many species of waterfowl are present. Wood

ducks are especially prevalent because of the available woodland cover and food supply which includes extensive areas of oak. Mallards and blue-wing teal also are present. The most impressive waterfowl found along the river is the Canada goose. Large numbers can be found at Lac Qui Parle Lake, just upstream from the management area. Many wetland-oriented birds make their summer home along the river. Included are various species of herons, bitterns and shorebirds. The osprey (fish hawk) can be seen along the river. Song birds, hawks and owls also make their home near the river. Pheasants and Hungarian partridge find thick cover in the river valley for nesting and for protection from harsh winter storms.

Mammals living in or near the river include beaver, muskrat, otter, mink, raccoon, white-tailed deer, squirrels (red, grey and fox), woodchucks, skunks, red and grey fox, and jack and cottontail rabbits. Smaller mammals include chipmunks, 13-lined ground squirrels, weasels, bats, pocket gophers and many species of mice, moles and shrews.

Major game species are the white-tailed deer, Hungarian partridge, pheasant, and various waterfowl, rabbit and squirrels.

Fisheries

During the summer of 1965, an electro-fishing survey of the Minnesota River between Lac Qui Parle and Mankato was completed by the Department of Conservation, now the DNR. This study, although not a complete analysis because of the technological deficiencies of electro-fishing, is a good indicator of those species in the river.

These are the species taken by the electro-fishing process in 1965:

walleye

sauger

northern pike

smallmouth bass

channel catfish

silver redhorse

golden redhorse

northern redhorse

bigmouth buffalo

carp

quillback

sheepshead

white bass

gizzard shad

mooneye

goldeye

northern hogsucker

white sucker

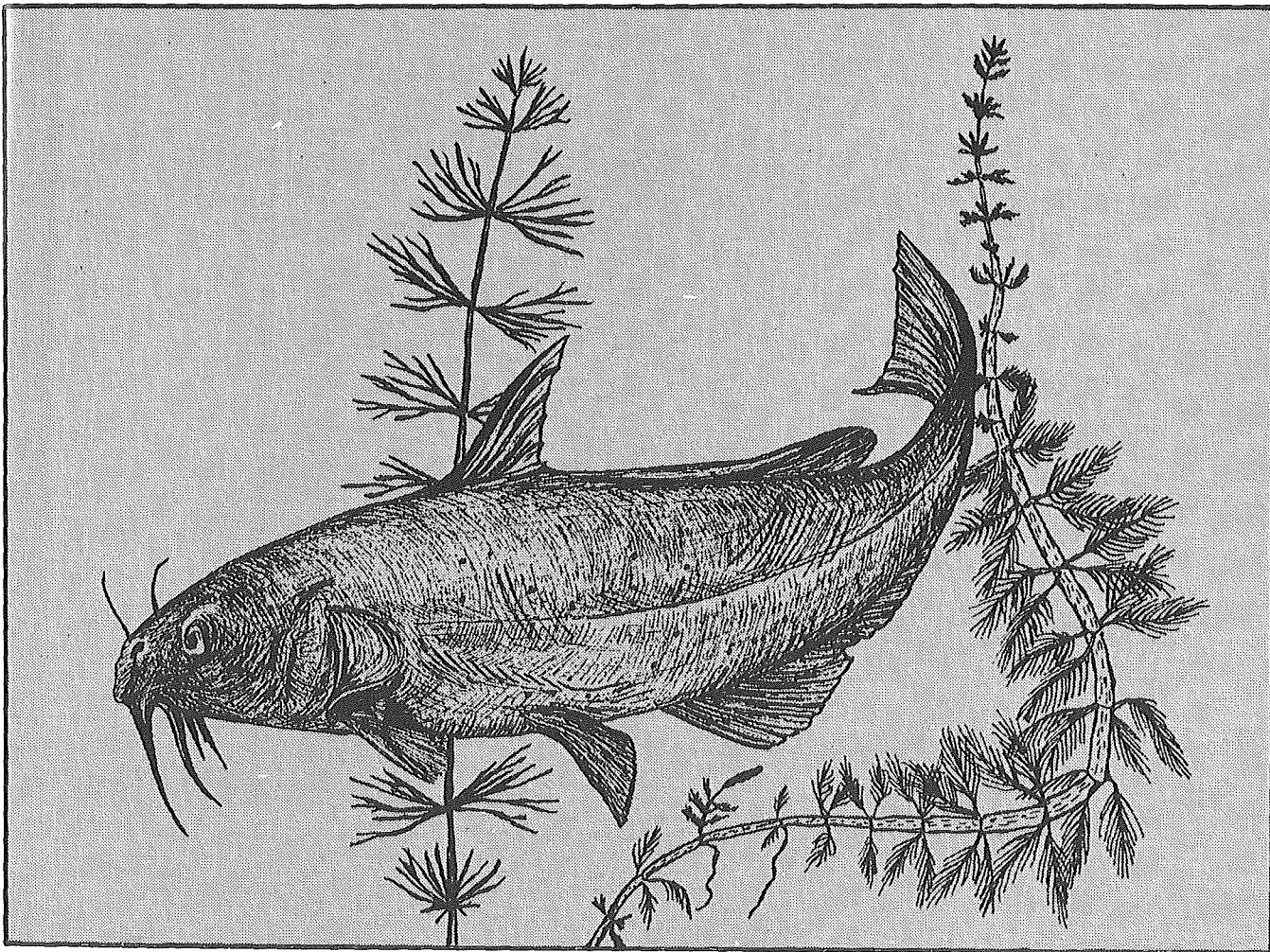
shortnose gar

black bullhead

yellow bullhead

American eel*

*One eel was observed during electro-fishing operations.



The Minnesota River supports a large fish population. Carp and other rough fish predominate.

The game fish species most often sought by anglers are walleye and catfish. Walleye fishing usually is best during late fall when the water is low, in deep pools immediately below rapids, riffles or dams. Northern pike and smallmouth bass also are present in these areas. These two species were stocked recently by the DNR, Division of Fish and Wildlife.

Water Quality

The Minnesota Pollution Control Agency (MPCA) classifies the state's rivers according to water quality standards which should be maintained in various sections of these rivers.

The MPCA classifications for the Minnesota River from Big Stone Lake to Granite Falls are 1C, 2B and 3B. Downstream from Granite Falls, the river is classified 2B and 3B. Classification 1C refers to treatment and standards for consumption; 2B refers to standards for fisheries and recreation; and 3B refers to standards for industrial use.

The MPCA also monitors the water quality of the river. Water samples, taken at various points along the river, are analyzed and the results recorded.

Analysis of this data shows that the major water quality problems in the Minnesota River are: extensive algal growth, large amounts of suspended sediments, low levels of dissolved oxygen, and bacterial contamination. With proper action, however, water quality could be improved.

MPCA water quality standards (1973):

Domestic Consumption

Class 1C The quality of this class of the interstate waters of the state shall be such that with treatment consisting of

coagulation, sedimentation, filtration, storage and chlorination, or other equivalent treatment processes, the treated water will meet in all respects both the mandatory and recommended requirements of the Public Health Service Drinking Water Standards 1962 for drinking water as specified in Publication No. 956 published by the Public Health Service of the U.S. Department of Health, Education, and Welfare, and any revisions, amendments, or supplements thereto. This standard will ordinarily be restricted to surface waters, and groundwaters in aquifers not considered to afford adequate protection against contamination from surface or other sources of pollution. Such aquifers normally would include fractured and channelled limestone, unprotected impervious hard rock where interstate water is obtained from mechanical fractures, joints, etc., with surface connections, and coarse gravels subjected to surface infiltration.

Fisheries and Recreation

Class 2B The quality of this class of the interstate waters of the state shall be such as to permit the propagation and maintenance of sport or commercial fishes and be suitable for aquatic recreation of all kinds, including bathing, for which the waters may be usable. Discharge of sewage, industrial waste or other waste effluents shall be controlled so that the standards will be maintained at all stream flows which are equal to or exceeded by 90 percent of the seven consecutive daily average flows of record (the lowest weekly flow with a once in ten year recurrence interval) for the critical month.

Industrial Consumption

Class 3B The quality of this class of the interstate waters of the state shall be such as to permit their use for general

industrial purposes, except food processing, with only a moderate degree of treatment.

SOCIAL CHARACTERISTICS

History

Archaeologists believe that the first people to live near the Minnesota River came after the final glacial retreats. Excavated bones of these ancient people suggest that they were closely related to the Eskimos. Essentially a nomadic people, their homes were simple, their culture primitive.

The next inhabitants of this area lived in southwestern Minnesota until driven out by the Algonquins approximately 500 years ago. The mounds in Redwood county probably were built by these tribes.

Unearthed tomahawks, battle clubs, spearheads and arrows indicate they had a culture influenced by war. Archaeological evidence also indicates they used the most primitive farming methods. The buffalo of the prairie were their primary source of food, clothing and shelter. Their "art" was limited to a few domestic utensils and necessary weapons of war. There is limited evidence that these people made pottery.

They left no literature. The information regarding these once powerful people has come from the few mounds of earth they formed.

Evidence suggests that during the 1400s the Dakota, a Sioux tribe, reached St. Anthony Falls and began exploring northward. Some bands of the Dakota discovered the Upper Minnesota and settled in that region. The word Dakota means "joined together in a friendly compact."

These people were poor; they firmly believed that they should take no more of their god's abundant riches than was necessary for their

immediate needs. No individual was richer than another. All food was shared. But all of their inherent customs and beliefs were to become profoundly changed with the arrival of the white man.

Even before the white man arrived in southwestern Minnesota, European nations had issued claims of ownership on the region. Robert Cavelier La Salle, in 1662, claimed for France the Mississippi watershed and called the area Louisiana. Later, Spain also would claim the area explored by La Salle.

In 1762, by a secret treaty, France gave the Louisiana territory to Spain. But in 1880, another secret treaty was negotiated between France and Spain. By this treaty, Spain returned a great deal of land back to the French. Finally, in 1803, Napoleon sold French land holdings to the new United States government. The Minnesota River was included in this purchase.

The first recorded exploration of the Minnesota River was made in 1700 by Pierre Charles Le Sueur. (However, the earliest French explorers to reach Redwood and Yellow Medicine counties may have been Medard Chouart Groseilliers and Pierre d'Esprit Radisson in 1600.) Le Sueur searched for copper and believed that he had found valuable ore in the "blue earth" near the site of Mankato. Unfortunately for Le Sueur, his copper was nothing more than blue and green shale. It is from Le Sueur that the Minnesota River received its first name—St. Pierre.

There is no record of further exploration by white men in southwestern Minnesota until November 1766 when Jonathan Carver ascended the Minnesota River. Carver, from Connecticut, explored the upper Mississippi area for the British government. He wrote in 1767:

The river St. Pierre, which runs through the territory of the Nadowossies (Sioux), flows through a most delighted country, abounding with all the necessities of life that grow spontaneously, and with a little cultivation it might be made to produce even the luxuries of life. At a little distance from

the sides of the river are eminences from which you have views that cannot be exceeded by the most beautiful of those that I have already described.

During the fall of 1773, Peter Pond, also from Connecticut, and two other traders travelled the Mississippi from Prairie du Chien upstream to the mouth of the Minnesota. A short distance up the Minnesota, they established a trading post for the winter. During the following winter, Pond traded with the Yankton band of Dakotas camped about 200 miles up the river.

In 1783, shortly after the Revolutionary War had ended in the east, another Yankee, Charles Patterson, built a trading cabin on the Minnesota River upstream from where the Redwood River enters. A rocky ripple near that site now is called Patterson Rapids.

Major Stephen H. Long, in charge of a corps of scientists, entered the Minnesota valley in 1823. The guide and interpreter for this expedition was Joseph Renville. Renville, the son of a French father and a Dakota mother, had established a trading post in 1822 on Lake Traverse. In 1826, he purchased furs for John Jacob Astor's American Fur Company at a new trading post on the Lac Qui Parle River. Renville became a well-known guide. In 1838, he gave his services to cartographers Joseph N. Nicollet and Lt. John C. Fremont. Renville County is named in his honor.

In the 1830s missionaries came to the region. Dr. Thomas S. Williamson and his wife came from Ohio in 1835 and with Renville's assistance, they established the area's first mission at Lac Qui Parle. The first school on the upper river was set up by Williamson and his sister, Sarah Poage, in 1837.

During the 1840s the United States government put increasing pressure on the Indians to sell some of their lands. Land speculators wanted to invest in the Indian lands, settlers wanted to establish farms, and traders desired the money that a treaty would bring the Indians. Recognizing that to refuse would only forestall the



inevitable, the tribes living along the upper Minnesota met in 1851 with a treaty commission at Traverse de Sioux, near the town of St. Peter. An agreement reached in July created a reservation known as the Upper Sioux Agency. In August, tribes along the lower Minnesota signed a treaty creating the Lower Sioux Agency.

Unfortunately for the Dakotas, the treaties were most favorable to the land speculators, traders and settlers. Because of special rights granted to the traders by the commission, the Indians received little of the \$1.5 million to which they were entitled. Those who administered the reservations were assigned the task of forcing the Dakotas to accept the ways of the whites. Feelings of ill will developed on both sides.

In 1857 Joseph R. Brown was appointed agent for the two agencies. Brown was an extremely powerful and forceful individual who

immediately instituted a number of "reforms." Indians were forced to have their hair cut short. Their beads and body adornments were thrown away and they were directed to use white farming methods. Reluctantly, they did as they were told.

To make matters worse, the Indians were forced to sell more of their property. By 1858, another 25 million acres had been transferred to white ownership.

By 1862, conditions and events had brought the tensions between the Dakota and settlers to a breaking point. The federal government had agreed to grant money to the Indians for the loss of their lands and for expenses which they incurred at the reservation. The government often delayed payments, shortchanged the Indians, and spent the money in ways the Indians did not fully endorse.

In the summer of 1862, government payments were late, food supplies were dangerously low, and crops were failing. The Dakota finally lost patience.

On August 17, 1862, a band of four Dakota hunters attacked a small family farm north of the Lower Sioux Agency in Meeker County, killing five white settlers. This event ignited the Sioux Uprising of 1862.

The next morning, after discussion among the tribal chiefs, members of the Lower Sioux tribes attacked the agency, killing 20 people. About 45 whites escaped by way of the Redwood ferry to Fort Ridgely.

Between August and October of 1862, many famous battles were fought near the Minnesota. On September 3, white soldiers and Dakotas engaged in the Battle of Birch Coulee. On September 23, these forces again collided in the Battle of Wood Lake.

The Battle of Wood Lake was the last major battle along the Minnesota River. It was a decisive victory for the white soldiers led

by Colonel Henry Sibley. Three days later, on September 26, Sibley led his troops into the Indian camp and demanded that all white captives be released to him. The Dakotas immediately released 241 prisoners. Those released were brought to Sibley's camp which became known as Camp Release.

Two days later, on September 28, many Dakota were taken captive and charges were brought against them by the United States government. Soon afterward, about 1,700 Dakota men, women and children were transferred to a makeshift concentration camp below Fort Snelling. During the winter many Indians either froze or starved to death. More than 300 Indians were sentenced to hang. President Abraham Lincoln later ordered the execution of 39 Indians. Of these, 38 were publicly hanged in Mankato on December 26, 1862. Their bodies were buried in shallow mass graves. The same night, a group of doctors, including Dr. William Mayo, robbed these graves to get bodies for anatomical studies.

Those left behind at the Fort Snelling camp were eventually transferred to a camp at Crow Creek in South Dakota. There, hundreds of Dakota starved or died of exposure.

It was several years before the settlers regained confidence and settled in southwestern Minnesota. But in the late 1860s, the settlers returned and new communities and businesses were developed.

Before the railroad gained popularity, the Minnesota River was the lifeline for southwestern Minnesota. The river was the most important transportation route during the mid-1800s. The "Virginia," the first steamboat to enter the Minnesota, traveled upstream on May 10, 1823, bringing many passengers and goods to the growing towns and cities. The railroad eventually diminished the importance of the Minnesota River as a transportation route.

The Minnesota has been the site of commercial and recreational fishing throughout its history. During the depression years of the 1930s, clams became valuable as the button industry grew in

importance.

The Minnesota also has played an important role in the development of industry. The timber industry used the river to float logs and power sawmills for many years during the late 1800s. In 1891, a steam generating plant was built near Granite Falls. Even today, the plant is the city's major supplier of electricity.

Many thought the river would be more than the source of electricity. In 1894, gold was discovered in the river. But the boom which followed lasted only a short time. The gold vein was depleted and the boom town of Springville soon became a ghost town.

In 1938, the Works Progress Administration (WPA) constructed the Lac Qui Parle dam above Montevideo. The purpose of the dam is to control water levels and prevent flooding on the upper Minnesota River.

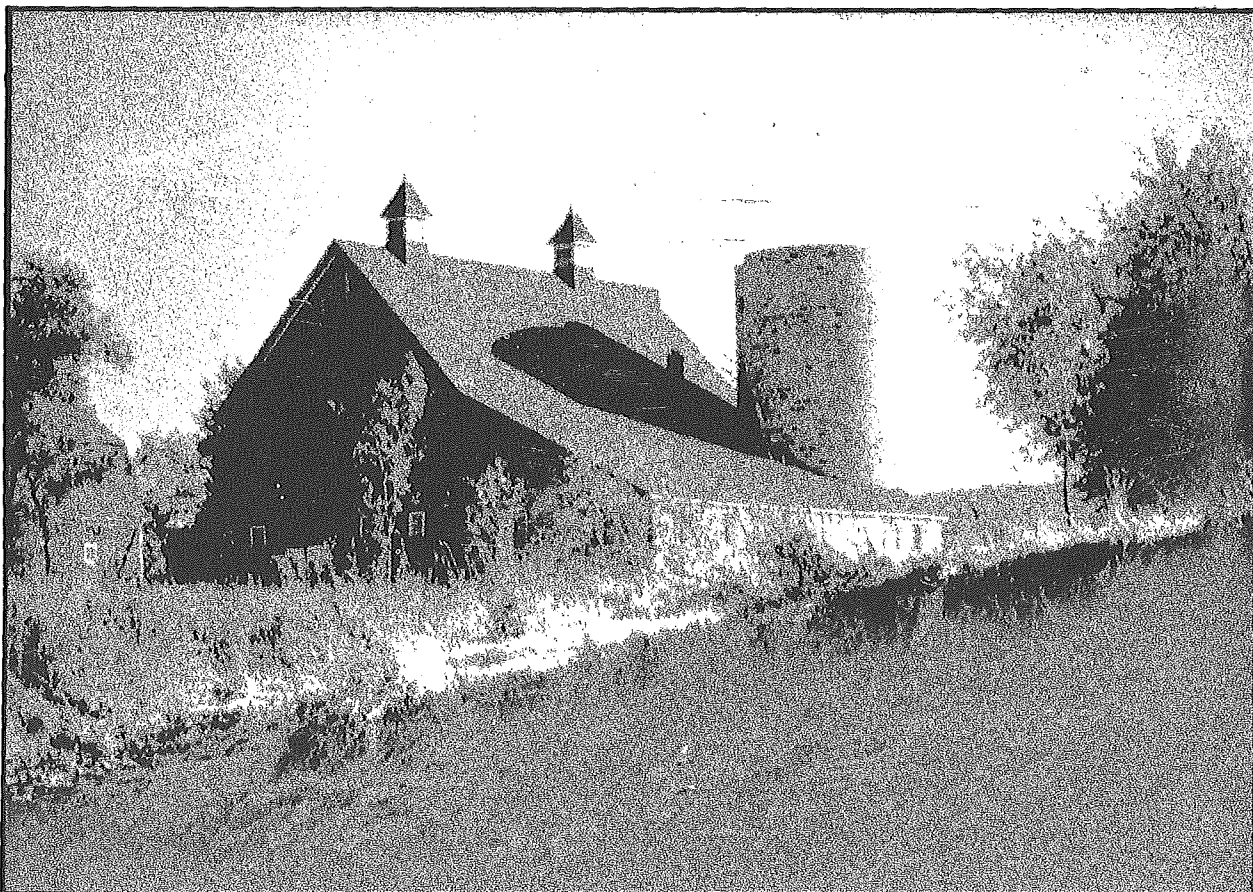


The development of southwestern Minnesota owes much to the Minnesota River. The river has affected the commercial, industrial and historical development of this region.

Land Use

The Minnesota River valley transects some of the richest agricultural land in the state. As much as 80 percent of the land in counties bordering the river is cultivated. Some land near the river is mined for sand, gravel, crushed rock and building stone. Nearby wood lots provide timber resources. Forested lands bordering the river are ideally suited for recreation.

Nearly half of the land within a quarter-mile of the river is forested. By comparison, the quarter-mile strip of land on either side of this river corridor is only 20-percent forested.



The land bordering the river contributes more than any other factor to the uniqueness of the river valley.

Water Use

The water resources of the Minnesota River are used in a variety of ways. Ground water generally is used for domestic, commercial and industrial consumption. Shallow sand and gravel aquifers are abundant in many areas. Near Granite Falls, however, glacial drift is thin and ground water scarce, forcing Granite Falls residents to obtain their water directly from the Minnesota River. Projections indicate that the demand for water will increase in the Minnesota River basin and the areas bordering it.

Erratic and low water levels have made the Minnesota River unsuitable for large-scale navigation and the generation of hydro-electric power. The only hydro-electric plant existing on the Minnesota River is found at Granite Falls. This plant is owned and operated by the city.

Downstream from Granite Falls, there is a steam electric plant, owned and operated by Northern States Power Company. A 19-foot-head dam at Minnesota Falls creates a reservoir that supplies the steam generating plant with cooling water.

Population

The 95-mile portion of the Minnesota River in the study area forms borders for Lac Qui Parle, Chippewa, Yellow Medicine, Renville and Redwood counties. The total population of these counties in 1970 was 81,854 and was estimated to be 81,300 in 1975. All five counties have a rural character with approximately 80 percent of the total population classified as "rural farm" or "rural non-farm."

The 1970 populations of the communities which border the river in the study area are: Montevideo, 5,745; Wegdahl, unincorporated; Granite Falls, 3,225; North Redwood, 155; and Franklin, 557.

Redwood Falls, with a 1970 population of 4,774, is located in Redwood County, approximately four miles from the river.

An estimated 238,000 people live within a 55-mile radius (approximately a one-hour drive) of Granite Falls, the geographic center of the study area. An estimated 1.5 million Minnesotans live within 110 miles of Granite Falls (this area includes part of the Twin Cities metropolitan area). Population projections indicate that the population within the 55-mile radius will decline to 233,000 by the year 2000. But the population within the 110-mile radius will increase dramatically to 2.35 million. These population projections indicate that the Minnesota River may become an even more significant recreational resource in the future.

RECREATIONAL FEATURES

The Minnesota River has been recognized as a valuable recreational resource. An overview of existing recreational sites along the river is provided below.

Lac Qui Parle County

Lac Qui Parle State Recreation Area: Lying immediately above the study area on the southwestern shore of Lac Qui Parle Lake, this state recreation area offers areas for camping, picnicking, swimming and historic interpretation. Boat launching facilities are located on Lac Qui Parle Lake and the Lac Qui Parle River.

Corps of Engineers recreational area: Located immediately below the Lac Qui Parle dam, this small picnic area includes picnic tables, fire grates, sanitary facilities and water. Fishing below the dam is said to be excellent.

Highway wayside: This wayside rest area lies on Lac Qui Parle CSAH 18 approximately seven-and-one-half miles below the Lac Qui Parle dam and is equipped with picnic tables, fire grates and sanitary facilities.



Camp Release historic wayside: Located approximately one-quarter mile from the river, this area is the site of a monument erected to commemorate the release of white settlers by the Indians after the 1862 uprising. Complete picnic and sanitary facilities are available.

Chippewa County

Fort Renville and the Lac Qui Parle Mission: These historic sites lie just above the Lac Qui Parle dam on the shore of Lac Qui Parle Lake. The fort was built by Joseph Renville, guide and influential fur trader. The Lac Qui Parle Mission was constructed inside the stockade to "christianize and civilize" the Dakota. It was here that the Dakota Indian language became a written as well as a spoken language. Picnic tables and litter receptacles are present.

Corps of Engineers parking lot: This parking lot, built below the Lac Qui Parle dam flood control structure, serves as a parking area for

dam observers, fishermen and other recreationists. Access to the river with canoes is possible. Access, however, is difficult because of high, rip-rapped banks.

DNR access: Located just south of Montevideo, this access includes a good boat launching facility.

Spartan State Wildlife Management Area: Owned and operated by the DNR, this 227-acre wildlife management area is open to hunters.

DNR access: This access is approximately eight miles downstream from Granite Falls, near Chippewa County Road 40 and 52.

Yellow Medicine County

Granite Falls Memorial Park: This park is owned and operated by Granite Falls. The park provides facilities for camping and picnicking. A boat launching ramp is at the site.

DNR access: Located approximately six miles below Granite Falls on Minnesota Trunk Highway 67, this access provides picnic and sanitary facilities, although no drinking water is available.

Upper Sioux Agency State Park: The 1,100-acre Upper Sioux Agency State Park lies at the junction of the Minnesota and Yellow Medicine rivers. Approximately one-third of the park consists of forested hillsides of oak and elm. The park contains areas and facilities for camping, picnicking, hiking and historical interpretation. An interpretive center has been constructed for park visitors. A boat launching ramp is also provided. It has been proposed that this state park be expanded.

Renville County

Renville County Park No. 1 (Skalbekken): This county park provides a large natural area, facilities for camping and picnicking, and a boat ramp.

Joseph R. Brown historical wayside: Located approximately one-quarter mile from the river on Renville CSAH 15, this wayside contains the ruins of the Joseph R. Brown home which was destroyed by the Dakota during the 1862 uprising. Complete picnic and sanitary facilities are present.

Renville County Park No. 2 (Town and County): Within this large natural area, facilities are provided for camping, picnicking and hiking. A boat launching area is proposed.

Schwandt Memorial: This monument, located approximately one-quarter mile from the river on Renville CSAH 15, was erected in memory of a family who died during the 1862 uprising.

Redwood ferry crossing: Monuments mark the site of the historic Redwood ferry crossing where many white settlers escaped across the river during the 1862 uprising.

Renville County access at Franklin: Boat launching facilities are present at this site.

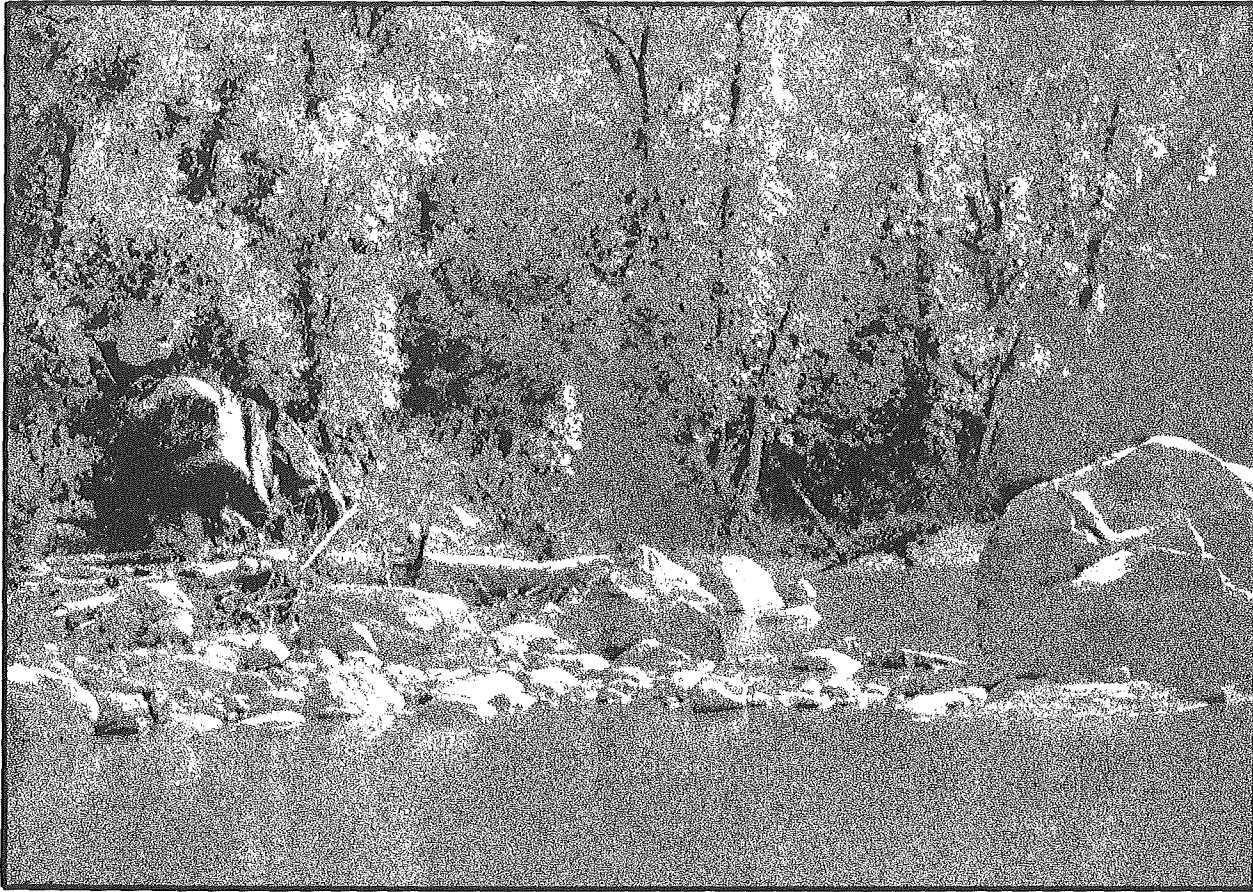
Redwood County

Cedar Rock Wildlife Management Area: Hunting is allowed in this wildlife management area, administered by the DNR. Picturesque Cedar Rock lies within the area's boundaries. It has been proposed that the wildlife management area and some surrounding land be designated a state park.

Camp Pope: A granite stone marks the location of a base camp used by soldiers who pursued the Indians who had fled to the Dakotas after the 1862 uprising.

DNR access: This access with a boat ramp lies just north of North Redwood.

Lower Sioux Agency historic site: Here the Minnesota Historical



Society operates an interpretive center which traces the history of the Indians of the area. Many sites of historical significance are located within the area's boundaries.

Islands

About sixteen islands are located in the study area. Twelve of these islands are owned by the federal government, which administers the islands through the Federal Bureau of Land Management. These islands have been relatively undisturbed by man and are a unique natural resource, providing excellent habitat for wildlife.

There is legal access to all of the federally owned islands. Although no facilities have been provided, some islands have been used for camping and picnicking.

BIBLIOGRAPHY

Physical Characteristics

Route Description

Itasca Enginnering, Inc., Recreational Trail System in the Minnesota River Valley, a preliminary report prepared for the Department of Natural Resources, March 1, 1971.

U. S. Army Corps of Engineers, Minnesota River, Minnesota, Water Surface Profiles, St. Paul District, Corps of Engineers Regulating Section, April 1968.

Watershed

Minnesota River - Water Surface Profiles, a map prepared by the St. Paul District Corp of Engineers Reservoir Regulating Section, St. Paul, MN, April 1968.

State Drainage Commission, Report of Water Resources Investigations of Minnesota 1909-1912, St. Paul, MN, Mc Gill - Warner Co., 1912.

State of Minnesota Bulletin 10, Hydrological Atlas of Minnesota, St. Paul, MN, April 1959.

Geology

Halgren, Lee, The Development of the Recreational and Environmental Resources of the Upper Minnesota River Valley, a report for the Minnesota Resources Commission, Southwest State College.

Matsch, C. L. et. al (Glacial Map of Southern Minnesota)

Field Trip Guidebook for Geomorphology and Quaternary Stratigraphy of Western Minnesota and Eastern South Dakota. Minnesota Geological Survey, Guidebook Series No. 7, 1972.

Soils

U.S. Department of Agriculture, General Soil Map and Geomorphic Surfaces of the Minnesota River Basin, August 21, 1972.

U.S. Department of Agriculture, Soil Survey Interpretations, 1972.

Vegetation

The Development of the Recreational and Environmental Resources of the Upper Minnesota River Valley.

Morley, Thomas, Spring Flora of Minnesota, Minneapolis, MN, The University of Minnesota Press, 1974.

Wildlife and Fisheries

Huber, Earl, A Fish and Wildlife Survey of the Minnesota River near New Ulm, St. Paul, MN, Minnesota Department of Natural Resources, Division of Game and Fish, Section of Technical Services, Special Publication No. 84, June 1971.

Schneider, James. A., A Biological Reconnaissance of the Minnesota River from Lac Qui Parle Dam to Mankato, St. Paul, MN, Minnesota Department of Conservation, Division of Game and Fish, Section of Technical Services, Special Publication No. 37, September 1966.

The Development of the Recreational and Environmental Resources of the Upper Minnesota River Valley.

Water Quality

The Development of the Recreational and Environmental
Resources of the Upper Minnesota Valley

The Minnesota Pollution Control Agency.

The Minnesota Pollution Control Agency, Minnesota State
Regulations -- Rules, Regulations, Classifications and
Water Standards, 1973 supplement WPC 15, Documents
Section, Department of Administration, Room 140, Centennial
Building, St. Paul., MN 55155.

Social Characteristics

History

Nervestad, Carl and Amy, A History of Yellow Medicine
County Minnesota 1872-1972, St. Paul, MN, North Central
Publishing Company, 1972.

Rose, Arthur P., An Illustrated History of Yellow Medicine
County Minnesota 1872-1972, St. Paul, MN, North Central
Publishing Company, 1972.

Wedge, Franklyn Curtiss, The History of Redwood County
Minnesota, Vol. 1, H.C. Cooper Jr. and Co., 1916.

The Development of the Recreational and Environmental
Resources of the Upper Minnesota River Valley.

Land Use

The Development of the Recreational and Environmental
Resources of the Upper Minnesota River Valley.

Water Use

The Development of the Recreational and Environmental
Resources of the Upper Minnesota River Valley.

Population

Nelson, Bruce R., "State Seen Growing in Midsection,"
St. Paul Pioneer Press, June 8, 1975.

Minnesota State Planning Agency, Minnesota Pocket Data
Book, St. Paul, MN, Development Planning Division,
December 1973.

Recreational Features

Lake State Project Office, Bureau of Land Management
Inventory Report, Duluth, MN, 1968.

MANAGEMENT TECHNIQUES

The Wild and Scenic Rivers Act authorizes the DNR to develop specific management techniques to "preserve and protect" outstanding state rivers.

These techniques are specified in Minnesota Regulations NR 78-81. The most common techniques that would be used in managing the Minnesota River are explained in the following section of this report.

THE LAND USE DISTRICTS

Three land use districts have been proposed for the Minnesota River. The two Scenic land use districts would extend from the Lac Qui Parle dam to the U.S. Highway 212 bridge in Montevideo, and from the Minnesota Falls dam to the Redwood CSAH 11 bridge. The Recreational land use district would extend from the U.S. Highway 212 bridge to the Minnesota Falls dam. (These land use districts are shown on the Land Management Maps and described by the Land Use District Descriptions in the management plan.)

A river may be classified Scenic if it exists in a natural condition without significant artificial modifications such as impoundment, diversion or straightening. (Low dams and other minor structures, however, do not necessarily preclude this designation.) Bordering lands may be used for agriculture or homes, but generally must have a natural character.

A river may be classified Recreational if it has undergone some impoundment or diversion and flows through lands that are considerably developed so long as it may be managed in a way to further the intent of the Wild and Scenic Rivers Act.

The Minnesota River land use districts were proposed on that basis. No substantial stretch of the Minnesota River qualifies for the more restrictive Wild classification.

The boundaries of the land use districts generally follow the line of sight from the river. They also were drawn to include areas that were "environmentally sensitive" in regard to the river.

The land use districts vary in width, but, in accordance with the Wild and Scenic Rivers Act, do not comprise more than 320 acres per river mile.

Land Management Totals

Land Use District Acreage	Acreage
Total	22,655.36
River Miles	95.50
Average Acreage Per River Mile	237.23
Scenic Easement Acreages	
Lac Qui Parle County	420.40
Yellow Medicine	708.94
Chippewa County	1,739.34
Renville County	1,713.28
Redwood County	<u>834.68</u>
Total	5,416.64

Fee Title Acreages

Lac Qui Parle County	27.25
Yellow Medicine County	28.10
Chippewa County	0.00
Renville County	2.00
Redwood County	<u>58.07</u>

Total	115.42
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Acreage Per River Mile

The General Land Office survey of 1866 was used as the basis for computing acreage per river mile. Map calibrations also were used to insure that the area per river mile does not exceed 320 acres.

<u>Mile</u>	<u>Acreage</u>	<u>Mile</u>	<u>Acreage</u>
288-287	214.70	271-270	285.85
287-286	276.69	270-269	261.90
286-285	310.95	269-268	267.43
285-284	256.15	268-267	254.00
284-283	267.35	267-266	269.46
283-282	225.81	266-265	215.00
282-281	277.70	265-264	302.23
281-280	297.55	264-263	162.99
280-279	299.89	263-262	233.20
279-278	296.74	262-261	144.70
278-277	219.15	261-260	281.80
277-276	240.89	260-259	252.85
276-275	199.25	259-258	278.60
275-274	212.60	258-257	264.38
274-273	215.35	257-256	286.20
273-272	130.95	256-255	178.74
272-271	156.30	255-254	241.60

<u>Mile</u>	<u>Acreage</u>	<u>Mile</u>	<u>Acreage</u>
254-253	101.80	223-222	264.00
253-252	71.80	222-221	276.85
252-251	271.83	221-220	257.36
251-250	267.75	220-219	296.89
250-249	313.56	219-218	306.96
249-248	223.59	218-217	307.82
248-247	222.87	217-216	304.95
247-246	173.10	216-215	304.73
246-245	65.00	215-214	282.34
245-244	111.55	214-213	254.29
244-243	194.97	213-212	216.57
243-242	298.23	212-211	198.92
242-241	303.89	211-210	255.76
241-240	265.27	210-209	258.69
240-239	275.55	209-208	306.96
239-238	266.72	208-207	212.80
238-237	289.68	207-206	192.66
237-236	207.88	206-205	140.62
236-235	278.65	205-204	161.94
235-234	244.42	204-203	150.53
234-233	231.29	203-202	165.26
233-232	310.49	202-201	103.74
232-231	266.11	201-200	55.42
231-230	257.57	200-199	159.31
230-229	240.50	199-198	311.02
229-228	257.60	198-197	248.73
228-227	218.04	197-196	195.62
227-226	240.43	196-195	205.46
226-225	263.30	195-194	262.53
225-224	293.21	194-193	279.21
224-223	286.86	193-192	124.98

Land use district = 22,655.36 acres

LAND USE PROVISIONS

The Minnesota Wild and Scenic Rivers Act authorizes the DNR to "promulgate statewide minimum standards . . . for the preservation and protection of shorelands within the boundaries of Wild, Scenic and Recreational rivers." These standards are specified in Minnesota Regulations NR 79.

If the Minnesota River is designated a Scenic and Recreational river, these land use standards will apply in the Minnesota River Scenic and Recreational land use districts.

Existing buildings and most present land uses would not be affected by the new provisions.

Zoning

If Scenic and Recreational land use districts are established along the Minnesota River, the following minimum standards will apply to new construction in the land use districts (If river land within the land use districts is already zoned, the most protective provisions would apply):

	<u>Land use district</u>	
	<u>Scenic</u>	<u>Recreational</u>
Lot area*+	4 acres (174,240 sq. ft.)	2 acres (87,120 sq. ft.)
Water frontage*	250 ft.	200 ft.
Lot width at building line*	250 ft.	200 ft.
Building setbacks from:		
normal high-water mark	150 ft.	100 ft.
designated tributaries	100 ft.	100 ft.
bluffline	30 ft.	20 ft.
Sewage system setbacks from:		
normal high-water mark	100 ft.	75 ft.
designated tributaries	75 ft.	75 ft.

*Applies only to newly platted lots.

+Smaller lot sizes may be permitted for planned cluster developments.

The following table from Minnesota Regulations NR 79 describes land uses that would be permitted in Scenic and Recreational land use districts. The table also shows conditional uses which would have to be approved by local units of government.

Some of the uses are subject to zoning dimension provisions and sanitary provisions. All of the listed uses would be subject to the vegetative cutting provisions and the grading and filling provisions.

P means permitted use
C means conditional use

	<u>Land use district</u>	
	<u>Scenic</u>	<u>Recreational</u>
Governmental campgrounds, subject to management plan specifications.	P	P
Private campgrounds, subject to management plan specifications.	C	C
Public accesses, road access type with boat launching facilities subject to management plan specifications.	P	P
Public accesses, trail access type, subject to management plan specifications.	P	P
Temporary docks.	C	P
Other governmental open space recreational uses, subject to management plan specifications.	P	P
Other private open space recreational uses, subject to management plan specifications.	C	C
Agricultural uses.	P	P
Single family residential uses.	P	P
Forestry uses.	P	P
Essential services.	P	P
Sewage disposal systems.	P	P

Private roads and minor public streets.	P	P
Signs approved by federal, state or local government which are necessary for public health and safety and signs indicating areas that are available, or not available, for public use.	P	P
Signs not visible from the river that are not specified above.	P	P
Governmental resource management for improving fish and wildlife habitat; wildlife management areas; nature areas; accessory roads.	P	P
Underground mining that does not involve surface excavation in the land use district.	C	C
Utility transmission power lines and pipelines, subject to the provisions of Minnesota Regulations NR 79 (i).	C	C
Public roads, subject to the provisions in Minnesota Regulations NR 79 (j).	C	C

All uses not listed as permitted or conditional uses would not be allowed within the applicable land use district.

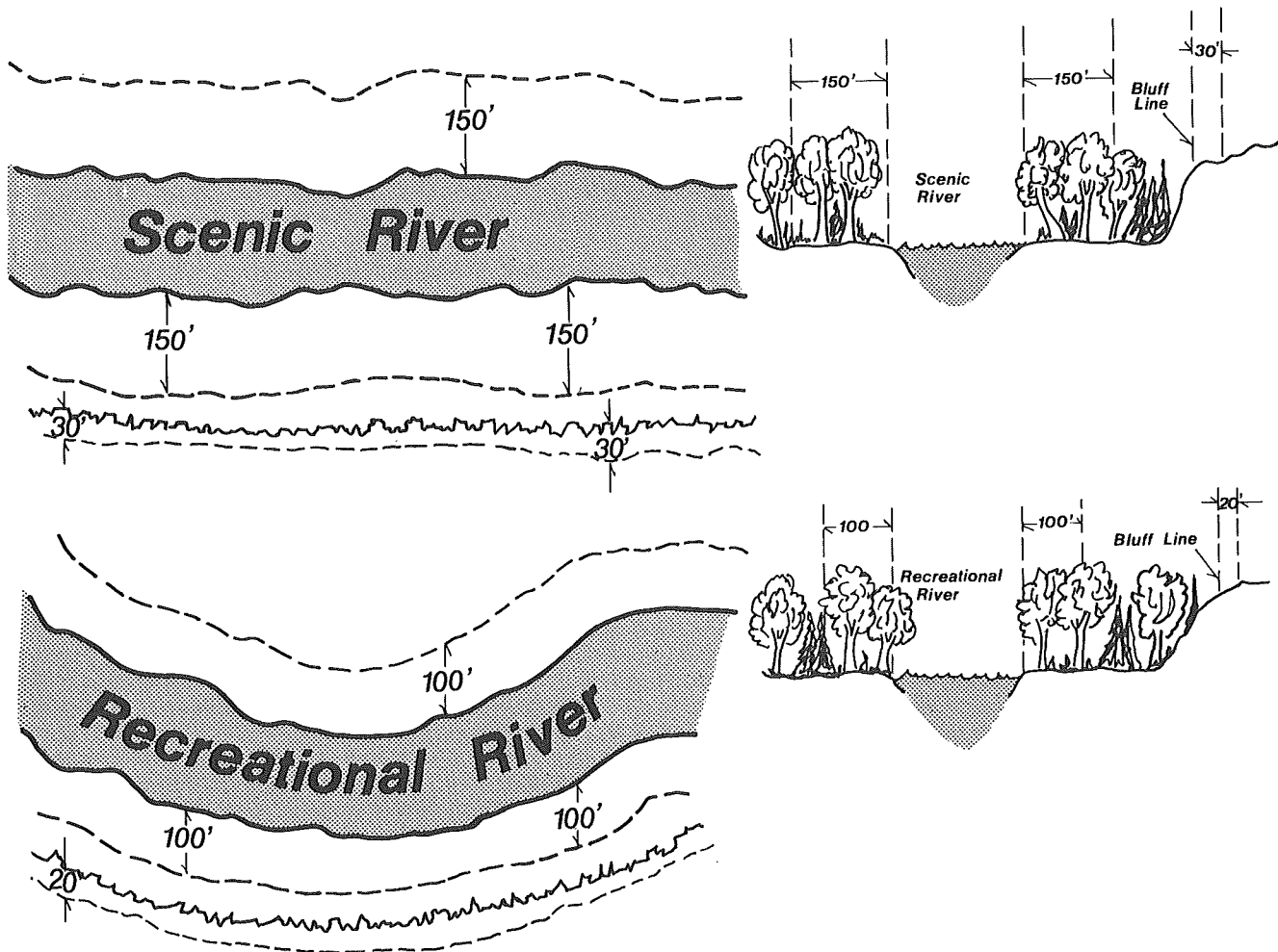
Vegetative Cutting

If the Minnesota River is designated, vegetative cutting provisions will be enforced in the land use districts (see illustration).

Within the building setback areas, clear-cutting is not permitted. Selective cutting of trees larger than four inches in diameter is permitted, however, so long as continuous tree cover is maintained. The removal of diseased, insect-infested, rotten or damaged trees; the pruning of understory vegetation, plants and grasses; and the harvesting of crops also is permitted.

Minnesota Regulations NR 79 further specify the vegetative cutting provisions.

REGULATED VEGETATION CUTTING AREAS



Grading and Filling

Grading and filling practices in Scenic and Recreational land use districts would be regulated by Minnesota Regulations NR 79 (h).

Briefly, the regulations prohibit grading or filling if it is not necessary for a permitted or conditional use. Wetlands in the land use district shall not be drained or filled. (A wetland is defined in Minnesota Regulations NR 78 as lands which are "subject to periodic or continual inundation by water and commonly referred to as bog, swamp or marsh.")

DNR authorization is necessary if material is to be excavated from the river or if the river is to be filled.

Utility Crossings

Minnesota Regulations NR 79 (i) regulate utility crossings of Scenic and Recreational land use districts.

All utility crossings of the river, or of the lands in the land use district that are under the jurisdiction of the DNR would require a permit from the DNR. Major utility crossings in the land use district of land under local jurisdiction would require a conditional use permit from the local authority.

Distribution crossings, that is, crossings made for individual customers, are considered essential services and do not require a conditional use permit.

DNR policy discourages utility crossings of land use districts. If crossings must be made, standards included in Minnesota Regulations NR 79 would apply.

Public Roads

A state permit generally is required to construct or alter the use or structure of a public road across a public waterway.

A permit from the local authority is necessary to construct or alter a public road within a Scenic or Recreational land use district.

Minnesota Regulations NR 79 (j) discourage the construction of public roads in land use districts or across Scenic and Recreational rivers. If such construction is necessary, however, DNR regulations provide standards which will apply.

LAND ACQUISITION

The Wild and Scenic Rivers Act authorizes the commissioner of natural resources to "acquire the title, scenic easements or other interests in land, by purchase, grant, gift, devise, exchange, lease or other lawful means."

The act does not authorize the commissioner to acquire land by eminent domain (condemnation).

The Land Management Maps show lands recommended for acquisition in fee title or through scenic easements. (Additional lands, however, may be acquired in fee title or through scenic easements.) Land or interests in land can be purchased after designation when funds are available.

Fee Title

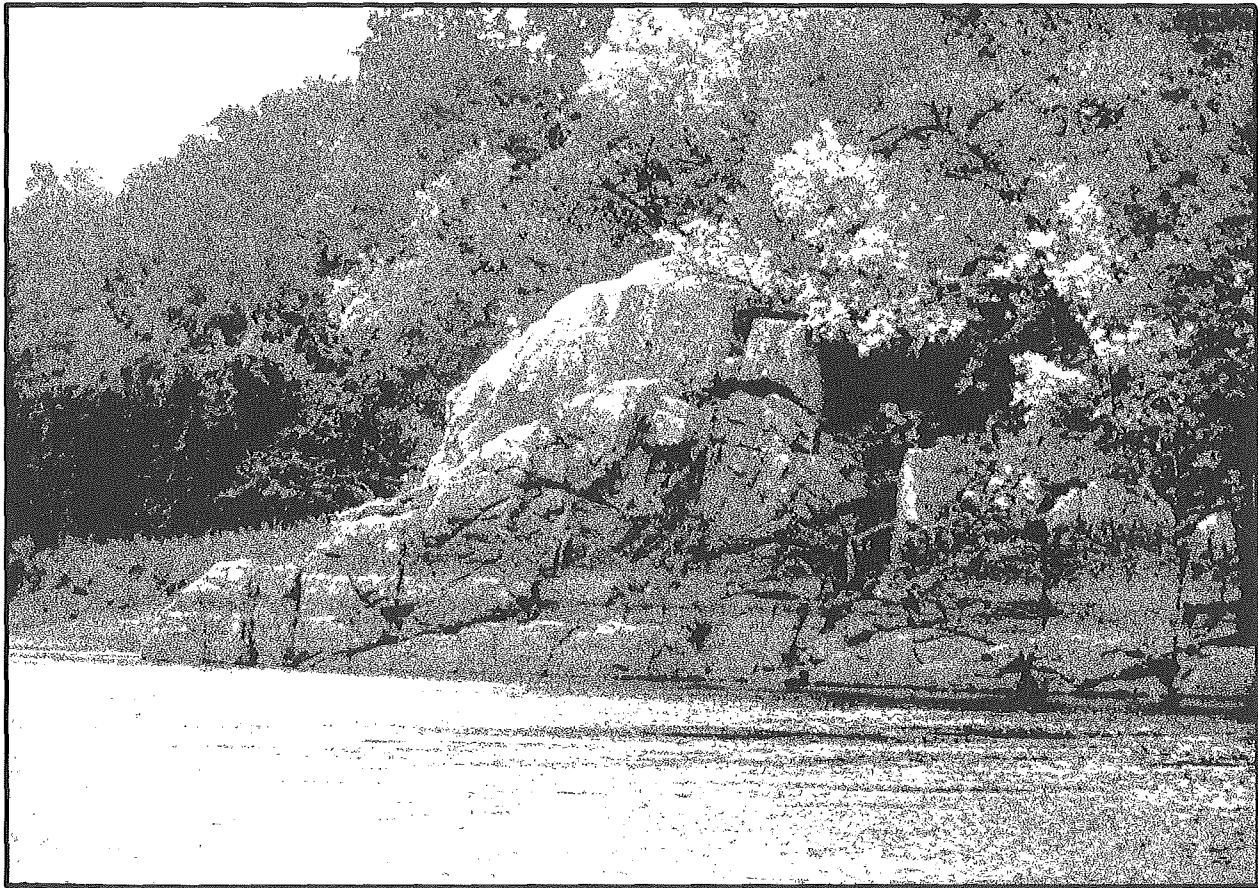
Lands that the DNR may acquire in fee title include:

- *Lands possessing outstanding scenic, natural, recreational, scientific, historical or other similar values that can best be protected by placing such lands in public ownership.

- *Lands that would consolidate existing blocks of public land and enhance the recreational value and preserve the natural character of the area.

- *Lands to be used for recreation as recommended in the management plan. (This does not include existing recreational areas.)

Lands not meeting these specific criteria may be considered for acquisition in fee title if they can be managed so as to further the intent of this management plan and the Wild and Scenic Rivers Act.



Scenic Easements

The DNR may acquire scenic easements on lands in Scenic and Recreational river land use districts.

A scenic easement is a state-held interest in land that limits the extent to which the landowner may develop that property. Briefly, the landowner is paid to keep his land the way it is. This easement remains in effect indefinitely.

The specific conditions of the easement are negotiated between the DNR and the landowner. The landowner then is paid the appraised value for the property rights he has sold.

Scenic easements cannot be acquired by the DNR without the landowner's consent.

A scenic easement does not make land public; trespassing will constitute a misdemeanor.

Scenic easements offer advantages to the landowner as well as to the DNR:

- * The landowner is paid for his land, although he retains the title and most property rights, and is able to continue most land uses. Management and maintenance of the land remains a private responsibility.
- * Scenic easements cost less than purchase in fee title; management objectives nevertheless are accomplished.
- * The land remains on the tax rolls, producing revenue for the local taxing authority. Future tax assessments, however, should be based on the fact that some development rights have been sold.
- * Scenic easements remain in effect permanently, providing long-term protection that land use controls do not.

The DNR may acquire scenic easements on these lands:

- *Lands highly visible from the river.
- *Lands next to, or across the river from, parks, forests or other public lands.
- *Lands that would be adversely affected by development.
- *Lands possessing outstanding scenic, scientific, natural, historical and other similar values.

With the landowner's consent, some lands recommended for scenic easements may be purchased in fee title.

Use Easements

Use easements also are interests in land. In this case, however, a landowner is paid for allowing certain public uses of his lands. For example, use easements may be purchased by the DNR to develop rest areas, campsites or portages on private land. A landowner may negotiate the specific conditions of the easement.

These easements, like other interests in land, may not be acquired by the DNR without the landowner's consent.

Use easements also may be acquired on public lands not administered by the DNR.

Land Exchange

Whenever feasible, land would be exchanged as prescribed by state law to acquire additional land within the land use districts. Land exchanges will not be recommended, however, if they would adversely affect this or other DNR management programs.

RECREATION MANAGEMENT

As it is used in the management plan, the term "public use" refers only to the use of public lands and waters within the designated river land use district. Private lands will remain private in every sense.

Public use of the river is expected to increase in the future, although major recreational uses probably will continue to be fishing, boating and canoeing. To alleviate unnecessary conflicts with property owners and other problems, recreational developments should have adequate facilities for access, camping, picnicking and other recreational pursuits.

Proposed Recreational Development

Most public recreational areas along the river are adequate. Others, however, lack facilities which should be provided to meet present and future recreational needs. Furthermore, sites for access, picnicking and camping should be located at intervals along the river which correspond to the needs of river-oriented recreationists. With a few improvements, existing areas would suffice. Only a few new sites then would be needed.

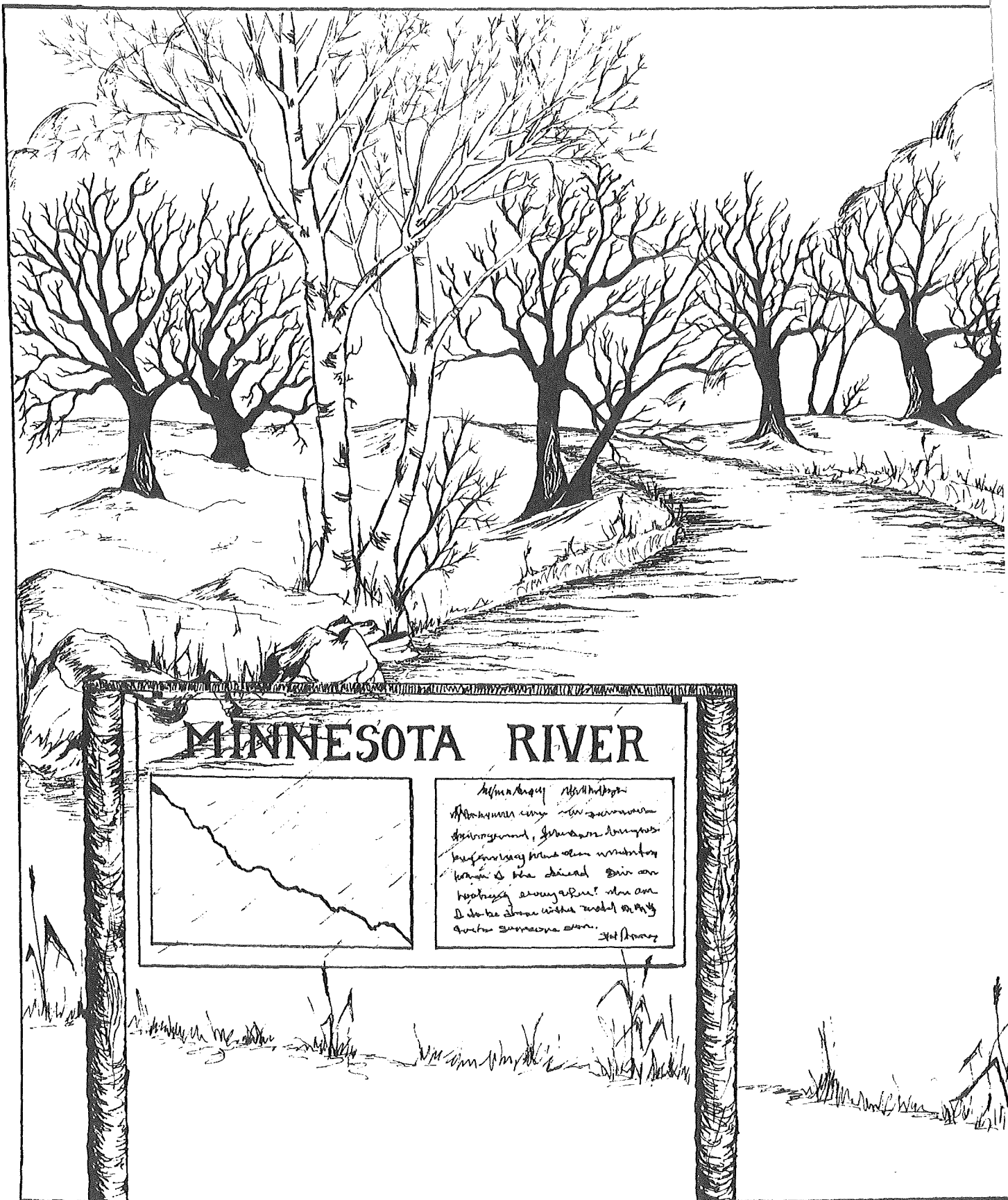
Five types of river-oriented recreational developments are recommended in this plan: accesses, campsites, rest areas, portages and river orientation centers. A single site may include more than one of these facilities.

(The recreational areas proposed in this plan are shown on the Land Management Maps. Recreational Site Typical, which specify how areas will be constructed, are shown in the management plan.)

Accesses to be developed along the Minnesota River will have a parking area and a boat launching facility.

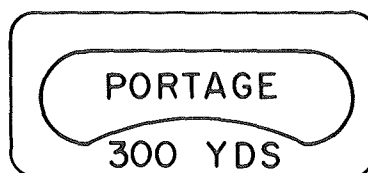
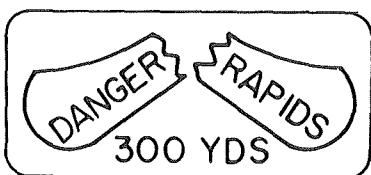
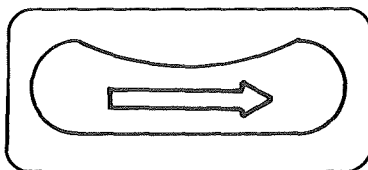
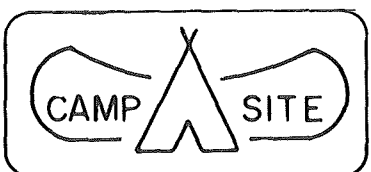
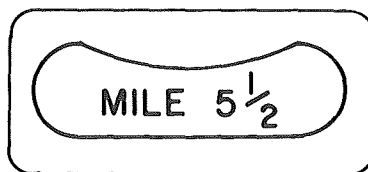
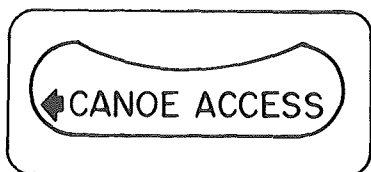
Existing campsites along the river are "modern," that is, they generally provide conveniences for many kinds of camping. The campsites proposed in the plan can best be described as "primitive," with development kept to the minimum necessary to insure public health and safety. They will be accessible only from the river. These sites will include tent pads, fire rings or grates, rustic tables and a pit-type latrine, where feasible. Each campsite will include areas for two or three tents. These sites will be constructed to accommodate more than one party while providing privacy in individual units.

Rest areas are intended primarily for day users such as fishermen, boaters, canoeists and picnickers. Most of the existing rest areas contain a full range of picnic facilities. New rest areas will be similar to primitive campsites. The clearing of brush will be kept to the minimum necessary to accommodate rustic tables, benches, fire



MINNESOTA RIVER ORIENTATION CENTER

SIGN TYPICALS



rings or grates, and sanitary facilities.

Portages should be provided around areas through which navigation is dangerous or impossible such as the Lac Qui Parle, the Granite Falls and Minnesota Falls dams, and Patterson Rapids.

River orientation centers (see illustration) are unattended display boards with maps of the river showing accesses, campsites and other lands open to the public. Regulations pertaining to the use of public lands and waters also will be displayed. Brochures on the Minnesota River may be available. These centers will inform the user that lands not specifically identified as public are not to be used without the landowner's permission.

The DNR also would post brown and yellow wooden signs along the river to mark hazards and public facilities (see sign typical).

The DNR may build recreational sites in addition to the ones shown in this plan. Future developments would not be built, however, if they would destroy the qualities which qualify the river for designation under the Wild and Scenic Rivers Act.

The DNR also may promulgate regulations or make amendments to the management plan to "reduce conflicts among users of a particular river or between users and nearby residents (Minnesota Regulations NR 80)."

Maintenance

Generally, the Division of Parks and Recreation would be responsible for maintaining DNR recreational facilities. Local governments would continue to be responsible for maintaining their lands. Related responsibilities are outlined in Regulations 2600, found in the management plan.

THE WILD AND SCENIC RIVERS ACT

CHAPTER 271—H.F. No.672

An act relating to natural resources; preservation and management of wild and scenic rivers; establishing a system of classifications of such rivers as wild, scenic, or recreational; providing policies and standards for administration thereof.

Be it enacted by the Legislature of the State of Minnesota:

Section 1. (104.31) NATURAL RESOURCES; WILD AND SCENIC RIVERS ACT. This act may be cited as the "Minnesota wild and scenic rivers act."

Sec. 2. (104.32) POLICY. The legislature finds that certain of Minnesota's rivers and their adjacent lands possess outstanding scenic, recreational, natural, historical, scientific and similar values. Because it is in the interest of present and future generations to retain these values, it is hereby declared to be a policy of Minnesota and an authorized public purpose to preserve and protect these rivers.

Sec. 3 (104.33) SYSTEM; CRITERIA FOR INCLUSION. Subdivision 1. The whole or a segment of any river and its adjacent lands in this state that possesses outstanding scenic, recreational, natural, historical, scientific, or similar values shall be eligible for inclusion within the Minnesota wild and scenic rivers system. "River" means a flowing body of water such as a stream or a segment or tributary thereof, and may include lakes through which the river or stream flows.

Subd. 2. Rivers or segments thereof included within the system shall be classified as wild, scenic, or recreational.

(a) "Wild" rivers are those rivers that exist in a free-flowing state, with excellent water quality, and with adjacent lands that are essentially primitive. "Free-flowing" means existing in natural condition without significant artificial modification such as impoundment, diversion, or straightening. The existence, however, of low dams, diversion works or other minor structures at the time any river is proposed for inclusion shall not automatically bar its inclusion as a wild, scenic, or recreational river.

(b) "Scenic" rivers are those rivers that exist in a free-flowing state and with adjacent lands that are largely undeveloped.

(c) "Recreational" rivers are those rivers that may have undergone some impoundment or diversion in the past and may have adjacent lands that are considerably developed, but that are still capable of being managed so as to further the purposes of this act.

Sec. 4. (104.34) COMMISSIONER'S DUTIES. Subdivision 1. The commissioner of natural resources shall be responsible for administering the wild and scenic rivers system and his duties shall include but not be limited to conducting studies, developing criteria for classification and designation of rivers, designating rivers for inclusion within the system, and management of the components of the system including promulgation of regulations with respect thereto.

Subd. 2. The commissioner shall promulgate, in the manner provided in chapter 15, statewide minimum standards and criteria for the preservation and protection of shorelands within the boundaries of wild, scenic, and recreational rivers. Such standards and criteria (a) may include but need not be limited to the matters covered in the commissioner's standards and criteria for shoreland areas, as set out in section 105.485, except that the distance limitations contained in section 105.485 do not apply to standards and criteria for wild, scenic, and recreational rivers; (b) shall further the purposes of this act and of the classifications of rivers established hereunder; and (c) shall apply to the same local governments as are or may hereafter be specified in section 105.485.

Sec. 5. (104.35) MANAGEMENT PLANS; HEARING; ESTABLISHMENT. Subdivision 1. For each river proposed to be included in the wild and scenic rivers system, the commissioner shall prepare a management plan, with no unreasonable restrictions upon compatible, pre-existing, economic uses of particular tracts of land to preserve and enhance the values that cause the river to be proposed for inclusion in the system. The plan shall give primary emphasis to the area's scenic, recreational, natural, historical, scientific and similar values. The plan shall set forth the proposed classification of the river and segments thereof, and the boundaries of the area along the river to be included within the system. The boundaries shall include not more than 320 acres per mile on both sides of the river. The plan shall include proposed regulations governing the use of public lands and waters within the area, which may differ from any such statewide regulations to the extent necessary to take account of the particular attributes of the area. The plan may include proposed standards and criteria adopted pursuant to section 4 of this act for local land use controls that differ from the statewide standards and criteria to the extent necessary to take account of the particular attributes of the area.

Subd. 2. The commissioner shall make the proposed management plan available to affected local governmental bodies, shoreland owners, conservation and outdoor recreation groups, and the general public. Not less than sixty days after making such information available, the commissioner shall conduct a public hearing on the proposed management plan in the county seat of each county which contains a portion of the designated area, in the manner provided in chapter 15.

Subd. 3. Following the public hearing, and such additional public hearings as the commissioner shall deem necessary, he may by order establish the river or segment thereof as a wild, scenic, or recreational river and shall adopt a management plan to govern the area. The commissioner shall notify and inform public agencies and private landowners of the plan and its purposes so as to encourage their cooperation in the management and use of their land in a manner consistent with the plan and its purposes.

Subd. 4. The legislature may at any time designate additional rivers to be included within the system, delete rivers previously included in the system, or change the classification of rivers theretofore classified by the commissioner.

Sec. 6. (104.36) LOCAL LAND USE ORDINANCES. Subdivision 1. Within six months after establishment of a wild, scenic, or recreational river area, each local government containing any portion thereof shall adopt or amend its local ordinances and land use district maps to the extent necessary to comply with the standards and criteria of the commissioner and the management plan. If a local government fails to adopt adequate ordinances, maps, or amendments thereto within six months, the commissioner shall adopt such ordinances, maps, or amendments in the manner and with the effect specified in section 105.485, subdivisions 4 and 5.

Subd. 2. The commissioner shall assist local governments in the preparation, implementation and enforcement of the ordinances required herein, within the limits of available appropriations and personnel.

Sec. 7. (104.37) ACQUISITION OF INTERESTS IN LAND. To further the purposes of this act, the commissioner of administration, for the commissioner of natural resources, may acquire the title, scenic easements or other interests in land, by purchase, grant, gift, devise, exchange, lease, or other lawful means. "Scenic easement" means an interest in land, less than the fee title, which limits the use of such land for the purpose of protecting the scenic, recreational, or natural characteristics of a wild, scenic or recreational river area. Unless otherwise expressly and specifically provided by the parties, such easement shall be (a) perpetually held for the benefit of the people of Minnesota; (b) specifically enforceable by its holder or any beneficiary; and (c) binding upon the holder of the servient estate, his heirs, successors and assigns. Unless specifically provided by the parties, no such easement shall give the holder or any beneficiary the right to enter on the land except for enforcement of the easement.

Sec. 8. (104.38) RESPONSIBILITIES OF OTHER GOVERNMENTAL UNITS. All state, local and special governmental units, councils, commissions, boards, districts, agencies, departments and other authorities shall exercise their powers so as to further the purposes of this act and management plans adopted by the commissioner hereunder. Land owned by the state, its agencies and subdivisions shall be administered in accordance with the management plan, and no land owned by such governmental bodies within the designated boundaries of a wild, scenic or recreational river area shall be transferred to any other person or entity if such transfer would be inconsistent with such plan.

Sec. 9. (104.39) FEDERAL-STATE RELATIONS. Nothing in this act shall preclude a river in the Minnesota wild and scenic rivers system from becoming a part of the federal wild and scenic rivers system as established in the wild and scenic rivers act, Public Law 90-542; 16 United States Code Section 1271 et seq., as amended. The commissioner is authorized to seek, alone or in conjunction with other governmental authorities, financial and technical assistance from the federal government and to enter into written cooperative agreements for the joint administration of a Minnesota river in the federal wild and scenic rivers system.

Sec. 10. (104.40) CONFLICT WITH OTHER LAWS. Each river in the wild and scenic rivers system shall be subject to the provisions of this act, provided that in case of conflict with some other law of this state the more protective provision shall apply.

Approved May 16, 1973.

**STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES**

Rules and Regulations

CHAPTER SIX: NR 78-81

**STATEWIDE STANDARDS AND CRITERIA FOR
THE MINNESOTA WILD AND SCENIC RIVERS SYSTEM**

NR 78 General Provisions

(a) STATEMENT OF POLICY

It is in the interest of present and future generations to preserve and protect the outstanding scenic, recreational, natural, historical, and scientific values of certain Minnesota rivers and their adjacent lands. Accordingly, the Commissioner of Natural Resources does hereby provide standards and criteria for the preservation, protection, and management of such rivers, as authorized by Laws of Minnesota 1973, Chapter 271.

(b) SCOPE

The standards and criteria established in NR 78-81 will provide minimum statewide requirements for the selection, classification, management and control of Wild, Scenic and Recreational Rivers and their land use districts.

(c) JURISDICTION

(1) The standards and criteria for Wild, Scenic, and Recreational Rivers hereby established in NR 78-81 shall pertain to public waters and to public and private lands within the land use districts as defined in the management plan.

(2) The extent of the lands so covered is a maximum of 320 acres per each mile of river on both sides (not each side) of those rivers or river segments which the Commissioner of Natural Resources has designated as components of the Minnesota Wild and Scenic Rivers System.

(3) All state, local, and special governmental units, councils, commissions, boards, districts, agencies, departments and other authorities shall exercise their powers so as to further the purpose of the Minnesota Wild and Scenic Rivers Act and management plans adopted thereunder.

(4) Land owned by the state, its agencies and subdivisions shall be administered in accordance with the management plan. No land so owned within the land use district shall be transferred if the Commissioner determines such transfer is inconsistent with the plan.

(5) In case of conflict between a provision of the Minnesota Wild and Scenic Rivers Act of these rules and regulations and some other law of this state or provisions of existing local ordinances, the more protective provision shall apply.

(d) DEFINITIONS

For the purpose of these regulations, certain terms or words used herein shall be interpreted as follows: The word "shall" is mandatory, not per-

missive. All distances unless otherwise specified shall be measured horizontally.

"Agricultural Use" means the management of land for production of farm crops such as vegetables, fruit trees, grain and other crops, and their storage on the area, as well as for the raising thereon of farm poultry, domestic pets, and domestic farm animals.

"Bluffline" means a line along the top of a slope connecting the points at which the slope becomes less than 13%. This applies to those slopes within the land use district which are beyond the setback provision from the normal high water mark.

"Building Line" means that line measured across the width of the lot at the point where the main structure is placed in accordance with setback provisions.

"Campground" means an area accessible by vehicle and containing campsites or camping spurs for tent and trailer camping.

"Clear-cutting" means the removal of an entire stand of vegetation.

"Cluster Development" means a pattern of subdivision development which places housing units into compact groupings while providing a network of commonly owned or dedicated open space.

"Commissioner" means the Commissioner of Natural Resources.

"Conditional Use" means a use of land which is permitted within a zoning district only when allowed by the County Board of Commissioners or their legally designated agent after a public hearing, if certain conditions are met which eliminate or minimize the incompatibility with other permitted uses of the district.

"Essential Services" means underground or overhead gas, electrical, steam or water distribution systems; collection, communication, supply, or disposal systems, including poles, wires, mains, drains, sewers, pipes, conduits, cables, fire alarm boxes, traffic signals, hydrants or other similar equipment and accessories in conjunction therewith; but not including buildings or transmission services.

"Forestry" means the management, including logging, of a forest, woodland, or plantation and related research and educational activities, including the construction, alteration or maintenance of woodroads, skidways, landings, and fences.

"Land Use District" means those lands designated by the Commissioner as the protected land corridor along those rivers or river segments which the Commissioner has designated as components of the Minnesota Wild and Scenic Rivers System. The boundaries of such land use district shall include not more than 320 acres per each mile of river on both sides (not each side) of the river.

"Mining Operation" means the removal from the land of stone, sand and gravel, coal, salt, iron, copper, nickel, granite, petroleum products or other material for commercial, industrial, or governmental purposes.

"Nonconforming Use" means any use of land established before the effective date of a county or local ordinance which does not conform to the

use restrictions of a particular zoning district. This should not be confused with substandard dimensions of a conforming use.

"Normal High Water Mark" means a mark delineating the highest water level which has been maintained for a sufficient period of time to leave evidence upon the landscape. In areas where the normal high water mark is not evident, setbacks shall be measured from the stream bank.

"Open Space Recreational Uses" means recreation use particularly oriented to and utilizing the outdoor character of an area; including hiking and riding trails, primitive campsites, campgrounds, waysides, parks, and recreation areas.

"Primitive Campsites" means an area that consists of individual remote campsites accessible only by foot or water.

"Scenic Easement" means an interest in land, less than the fee title, which limits the use of the land for the purpose of protecting the scenic, recreational, or natural characteristics of Wild, Scenic or Recreational River areas. Unless otherwise expressly and specifically provided by the parties, such easement shall be (a) perpetually held for the benefit of the people of Minnesota; (b) specifically enforceable by its holder or any beneficiary; and (c) binding on the holder of the servient estate, his heirs, successors and assigns. Unless specifically provided by the parties, no such easement shall give the holder or any beneficiary the right to enter on the land except for enforcement of the easement.

"Selective cutting" means the removal of single scattered trees.

"Setback" means the minimum horizontal distance between a structure and the normal high water mark or between a structure and a road or highway.

"Sewage Disposal System" means any system for the collection, treatment and dispersion of sewage including but not limited to septic tanks, soil absorption systems, and drain fields.

"Single Family Dwelling" means a detached building containing one dwelling unit.

"Structure" means any building, sign, or appurtenance thereto, except aerial or underground utility lines, such as sewer, electric, telephone, telegraph, or gas lines, including towers, poles and other supporting appurtenances.

"Subdivision" means improved or unimproved land or lands which are divided for the purpose of ready sale or lease, or divided successively within a five year period for the purpose of sale or lease, into three or more lots or parcels of less than five acres each, contiguous in area and which are under common ownership or control.

"Substandard Use" means any use of shorelands existing prior to the date of enactment or amendment of a county or local ordinance which is permitted within the applicable land use district but does not meet the minimum lot area, length of water frontage, structure setbacks or other dimensional standards of the ordinance.

"Variance" means a modification or variation of the provisions of the local ordinance where it is determined that, by reason of exceptional

circumstances, the strict enforcement of any provision of the local ordinance would cause unnecessary hardship, or that strict conformity with the provisions of the local ordinance would be unreasonable, impractical or not feasible under the circumstances. This shall be evaluated according to the provisions contained in NR 81.

"Watershed Management or Flood Control Structure" means a dam, floodwall, wingdam, dike, diversion channel, or an artificially deepened or widened stream channel following the same or approximately the same course as the natural channel, or any other structure for altering or regulating the natural flow condition of a river or stream. The term "watershed management or flood control structure" does not include pilings, retaining walls, gabion baskets, rock riprap, or other facilities intended primarily to prevent erosion and which must be authorized by permit from the Commissioner.

"Wetland" means land which is annually subject to periodic or continual inundation by water and commonly referred to as a bog, swamp, or marsh.

(e) SEVERABILITY

The provisions of these regulations shall be severable, and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision or any other part.

(f) RIVERS ELIGIBLE FOR INCLUSION

To be eligible for inclusion in the Minnesota Wild and Scenic Rivers System, a river or segment of a river, and its adjacent lands must possess outstanding scenic, recreational, natural, historical, scientific, or similar values. The river or its segments shall be classified into one or more of the three classes of rivers: Wild, Scenic and Recreational. Each river shall be managed so as to preserve and protect the values which qualify it for designation and classification.

(1) Wild rivers are those that exist in a free-flowing state with excellent water quality and with adjacent lands that are essentially primitive.

(aa) "Free-flowing" means existing in natural condition without significant artificial modification such as impoundment, diversion, or straightening. The existence, however, of low dams, diversion works or other minor structures shall not automatically bar its inclusion as a Wild, Scenic, or Recreational river.

(bb) "Excellent water quality" means that the water quality is in or approaches natural condition with no significant evidence of man's activities.

(cc) "Adjacent lands that are essentially primitive" means that the river's adjacent lands should possess a wilderness or natural-like appearance. These adjacent lands should be substantially free of habitation and other evidence of man's intrusion. However, the existence of a few unobtrusive structures along the river would not bar a river from Wild river classification nor would a limited amount of domestic livestock grazing and pasture land, and cropland developed for the production of hay.

Wild rivers should not be paralleled by conspicuous and well-traveled roads or railroads. Short inconspicuous and well-screened stretches would not bar a river from Wild river classification, nor would a bridge or utility crossings.

(2) Scenic rivers are those rivers that exist in a free-flowing state and with adjacent lands that are largely undeveloped.

(aa) "Free-flowing state" has the same meaning for Scenic rivers as it does for Wild rivers.

(bb) "Adjacent lands that are largely undeveloped" means that the adjacent lands still present an overall natural character, but in places may have been developed for agricultural, residential or other land uses. Small communities that are limited to short reaches of the total area would not bar a river from Scenic river classification.

Although roads and railroads may occasionally bridge certain rivers, this will not bar such rivers from Scenic river classification, nor will short stretches of conspicuous roads and railroads and longer stretches of inconspicuous and well screened roads or railroads paralleling the river.

(3) Recreational rivers are those rivers that may have undergone some impoundment or diversion in the past and that may have adjacent lands which are considerably developed, but that are still capable of being managed so as to further the purposes of this act.

(aa) "May have undergone some impoundment or diversion in the past" means that there may be preexisting water resource development and diversions having an environmental impact greater than that described for wild and scenic rivers.

(bb) "May have adjacent lands that are considerably developed" means that the bordering lands may have already been developed for a full range of agricultural or other land uses. Recreational rivers also may be readily accessible by preexisting roads or railroads.

(g) PROCEDURE FOR INCLUDING A RIVER: MANAGEMENT PLANS

(1) For each river proposed to be included in the Wild and Scenic Rivers System, the Commissioner shall prepare a management plan. The plan shall:

(aa) Give emphasis to the preservation and protection of the area's scenic, recreational, natural, historic, and similar values.

(bb) Place no unreasonable restrictions upon compatible, pre-existing, economic uses of particular tracts of land.

(2) Each Management Plan shall include:

(aa) The proposed classification of the river or appropriate segments.

(bb) The proposed land use district boundaries which shall not exceed 320 acres per each mile of river on both sides (not each side) of the river.

(cc) The proposed methods for preserving the river and its adjacent lands.

(i) Land use controls, applied through local zoning ordinances, will be employed to preserve and protect the values of the river which justified its selection and classification.

(ii) Scenic easements or fee title to land may be acquired when preservation dictates stricter limits on shoreland development than land use controls can impose.

(iii) Fee ownership, or, when sufficient, use easements, may be acquired for campsites, accesses, launch areas, trails, and other public uses of land.

(iv) The Commissioner can acquire fee and lesser interests in land by purchase, grant, gift, devise, exchange or lease.

(dd) The proposed regulations for local land use control. These shall be consistent with the river classification, but may differ from the standards and criteria of NR 78-81 to the extent necessary to take account of the particular attributes of the area.

(ee) The proposed regulations, if any, for water surface use of the river.

(ff) The proposed plan for recreational management within the land use district.

(gg) The proposed plan for administration of the management plan.

NR 79 Land Use Provisions

In order to preserve and protect those rivers and adjacent lands which possess outstanding scenic, recreational, natural, historical, scientific, and similar values, to reduce the effects of over-crowding and poorly planned development of such adjacent lands, to prevent pollution, to provide ample space on lots for sanitary facilities, to preserve natural beauty and quietude, to maintain property values, and to promote the general welfare, land use ordinances and official zoning district maps shall be enacted or amended by the county or municipality to comply with the Management Plan promulgated for lands within the jurisdiction of the local authority.

(a) LAND USE DISTRICTS

(1) The land use controls set forth herein shall apply to the area within the land use district boundaries described in the management plan, and determined in accordance with NR 78 (g) (2) (bb).

(2) The following land use districts shall be established in accordance with the classification of the river in the management plan:

(aa) Wild River Land Use District

(bb) Scenic River Land Use District

(cc) Recreational River Land Use District

(b) USE WITHIN LAND USE DISTRICTS

(1) Nonconforming Uses and Substandard Uses

(aa) Nonconforming Uses

All uses in existence prior to the effective date of enactment or amendment of the ordinance, which do not conform to the use restrictions of the newly established land use district are nonconforming uses. Under the

authority permitted by law, local authorities may adopt provisions to regulate and control, reduce the number or extent of, or gradually eliminate nonconforming uses. Local authorities shall provide for the gradual elimination of sanitary facilities inconsistent with CONS 72 (b) (2), (b) (3), and (b) (5) over a period of time not to exceed five (5) years from the date of enactment of the local ordinance.

(bb) Substandard Uses

All uses in existence prior to the effective date of enactment or amendment of the ordinance which are permitted uses within the newly established land use district, but do not meet the minimum lot area, setbacks or other dimensional requirements of the ordinance are substandard uses. All substandard uses, except for substandard signs, shall be allowed to continue subject to the following conditions and exceptions:

(i) Any structural alteration or addition to a substandard use which will increase the substandard dimensions shall not be allowed.

(ii) Each local authority shall provide for the gradual amortization of substandard signs over a period of time not to exceed five (5) years from the enactment or amendment of the ordinance.

(2) Permitted and Conditional Uses

In the following table of uses:

P means Permitted Use

C means Conditional Use

N means Nonpermitted Use

Certain of the following uses are subject to the ZONING DIMENSION PROVISIONS and SANITARY PROVISIONS. See (c) and (d). All of the following uses are subject to the VEGETATIVE CUTTING PROVISIONS and the GRADING AND FILLING PROVISIONS. See (g) and (h).

	LAND USE DISTRICTS		
	Wild River	Scenic River	Rec. River
(aa) Governmental campgrounds, subject to management plan specifications.	N	P	P
(bb) Private campgrounds, subject to management plan specifications.	N	C	C
(cc) Public accesses, road access type with boat launching facilities subject to management plan specifications.	N	P	P
(dd) Public accesses, trail access type, subject to management plan specifications.	P	P	P
(ee) Temporary docks.	C	C	P
(ff) Other governmental open space recreational uses, subject to management plan specifications.	P	P	P

	LAND USE DISTRICTS		
	Wild River	Scenic River	Rec. River
(gg) Other private open space recreational uses, subject to management plan specifications.	C	C	C
(hh) Agricultural uses.	P	P	P
(ii) Single family residential uses.	P	P	P
(jj) Forestry uses.	P	P	P
(kk) Essential services.	P	P	P
(ll) Sewage disposal systems.	P	P	P
(mm) Private roads and minor public streets.	P	P	P
(nn) Signs approved by federal, state, or local government which are necessary for public health and safety and signs indicating areas that are available, or not available, for public use.	P	P	P
(oo) Signs not visible from the river that are not specified in (nn).	P	P	P
(pp) Governmental resource management for improving fish and wildlife habitat; wildlife management areas; nature areas; accessory roads.	P	P	P
(qq) Underground mining that does not involve surface excavation in the land use district.	C	C	C
(rr) Utility transmission power lines and pipelines, subject to the provisions of NR 79 (i).	C	C	C
(ss) Public roads, subject to the provisions in NR 79 (j).	C	C	C

All uses not listed as permitted or conditional uses shall not be allowed within the applicable land use district.

(c) ZONING DIMENSION PROVISIONS

(1) Substandard Lots

(aa) Lots of record in the office of the County Register of Deeds (or Registrar of Titles) on the effective date of enactment or amendment of the local land use ordinance, which do not meet the requirements of NR 79 (c) shall be allowed as building sites provided the proposed use is consistent with the local ordinance and the SANITARY PROVISIONS, NR 79 (d), and the ZONING DIMENSION PROVISIONS, NR 79 (c), are complied with to the greatest extent practicable.

(bb) If in a group of two or more contiguous lots under a single ownership any individual lot does not meet the lot width requirements of the local ordinance, such individual lot cannot be considered as a separate parcel of land for purposes of sale or development, but must be combined

with adjacent lots under the same ownership so that the combination of lots will equal one or more parcels of land each meeting the lot width requirements of the local ordinance, or to the greatest extent practicable.

(2) Lot Size

(aa) For lots platted or created by metes and bounds description, the minimum size shall be:

(i) For Wild Rivers: At least 6 acres in area, and at least 300 feet in width at the building line and at least 300 feet at the water line for lots abutting a wild river.

(ii) For Scenic Rivers: At least 4 acres in area, and at least 250 feet in width at the building line and at least 250 feet at the water line for lots abutting a scenic river.

(iii) For Recreational Rivers: At least 2 acres in area and at least 200 feet in width at the building line and at least 200 feet at the water line for lots abutting a recreational river.

(bb) Smaller lot sizes may be permitted for planned cluster developments. See NR 79 (f).

(3) Structures: Density, Setback, Placement, Height

(aa) Density of Dwelling Units

(i) The density of dwelling units shall not exceed 1 dwelling unit per lot.

(bb) Setback Provisions

Structures, except signs specified in NR 79 (b) (2) (nn), essential services, private roads, and minor public streets, shall be placed so as to satisfy all setback requirements of the following three minimum setback tables.

(i) From the normal high water mark:

Wild River	200 feet
Scenic River	150 feet
Recreational River	100 feet

(ii) From a bluffline:

Wild River	40 feet
Scenic River	30 feet
Recreational River	20 feet

(iii) From tributaries designated in the management plan:

Wild River	100 feet
Scenic River	100 feet
Recreational River	100 feet

(cc) Placement of Structures

(i) Structures shall not be located on slopes greater than 13% unless such structures can be screened and sewage disposal system facilities can be installed so as to comply with the SANITARY PROVISIONS (d).

(ii) Where a floodplain ordinance exists, no structure shall be located in the floodway of a stream as defined in Minnesota Statutes Chapter

104.02 and furthermore shall be placed at an elevation consistent with any such applicable floodplain management ordinances. Where no floodplain ordinances exist, the elevation to which the lowest floor of a structure, including a basement, shall be placed, shall be determined after an evaluation of available flood information and shall be consistent with the statewide Standards and Criteria for Management of Flood Plain Areas of Minnesota.

(dd) Structure height shall not exceed 35 feet.

(d) **SANITARY PROVISIONS**

(1) The sanitary provision standards set forth in Minn. Regs. Cons. 72 of the Statewide Standards and Criteria for Management of Shoreland Areas of Minnesota shall apply to Wild, Scenic and Recreational river land use districts.

(2) However, the provisions of Cons. 72 (b) (4) are superseded by the following setback provisions for septic tank and soil absorption systems.

	Setback from the normal high water mark
Wild River	150 feet
Scenic River	100 feet
Recreational River	75 feet
Tributaries	75 feet

(e) **WATERSHED MANAGEMENT AND FLOOD CONTROL
STRUCTURE PROVISIONS**

Minnesota Statutes Section 105.42, as amended, requires a permit from the Commissioner of Natural Resources before any change is made in the course, current, or cross section of public waters.

(f) **SUBDIVISION REGULATIONS**

(1) **Land Suitability**

No land may be subdivided which is held unsuitable by the local authority, or the Commissioner, for the proposed use because of flooding, inadequate drainage, soil and rock formations with severe limitations for development, severe erosion potential, unfavorable topography, inadequate water supply or sewage disposal capabilities, or any other feature likely to be harmful to the health, safety, or welfare of the future residents of the proposed subdivision or of the community.

(2) **Subdivision Standards**

The provisions otherwise set forth in NR 79 shall apply to all plats except Planned Cluster Developments.

(3) **Planned Cluster Developments**

Local ordinances shall contain provisions for allowing planned cluster developments when the proposed clustering provides a means of preserving agricultural land, open space, woods, scenic views and other features of the natural environment. Smaller lot sizes than those permitted in NR 79 (c) (2) may be allowed for planned cluster developments provided:

(aa) Preliminary plans are approved by the Commissioner of Natural Resources prior to their enactment by the local authority.

(bb) Central sewage facilities are installed which at least meet the applicable standards, criteria, rules or regulations of the Minnesota Department of Health and the Pollution Control Agency.

(cc) Open space is preserved. This may be accomplished through the use of restrictive deed covenants, public dedication, granting of scenic easements, or other methods.

(dd) There is not more than one centralized boat launching facility for each cluster.

(g) VEGETATIVE CUTTING PROVISIONS

(1) On lands within 200 feet of the normal high water mark of Wild Rivers, 150 feet of the normal high water mark of Scenic Rivers, 100 feet of the normal high water mark of Recreational Rivers and lands within 100 feet of the normal high water mark of tributaries designated in the management plan and on lands 40 feet landward of the bluffline on Wild Rivers, 30 feet landward of the bluffline on Scenic Rivers, and 20 feet landward of the bluffline on Recreational Rivers, the following standards shall apply:

(aa) Clear cutting, except for any authorized public services such as roads and utilities, shall not be permitted.

(bb) Selective cutting of trees in excess of 4 inches in diameter at breast height is permitted provided that cutting is spaced in several cutting operations and a continuous tree cover is maintained, uninterrupted by large openings. In cases where the existing tree cover has been interrupted by large openings in the past, selective cutting should be performed so as to maintain a continuous tree cover in the remaining wooded areas.

(cc) The above cutting provisions will not be deemed to prevent:

(i) The removal of diseased or insect infested trees, or of rotten or damaged trees that present safety hazards;

(ii) Pruning understory vegetation, shrubs, plants, bushes, grasses, or from harvesting crops, or cutting suppressed trees or trees less than four inches in diameter at breast height.

(2) Clear cutting anywhere in Wild, Scenic, or Recreational River Land Use Districts is subject to the following standards and criteria:

(aa) Clear cutting shall not be used as a cutting method where soil, slope, or other watershed conditions are fragile and subject to injury.

(bb) Clear cutting shall be conducted only where clear-cut blocks, patches or strips are, in all cases, shaped and blended with the natural terrain.

(cc) The size of clear cut blocks, patches, or strips shall be kept at the minimum necessary.

(dd) Where feasible all clear cuts shall be conducted between September 15 and May 15. If natural regeneration will not result in adequate vegetative cover, areas in which clear cutting is conducted shall be replanted to prevent erosion and to maintain the aesthetic quality of the area. Where feasible, replanting shall be performed in the same spring, or the following spring.

(h) GRADING AND FILLING PROVISIONS

(1) Grading and filling in of the natural topography which is not accessory to a permitted or conditional use shall not be permitted in the land use district.

(2) Grading and filling in of the natural topography which is accessory to a permitted or conditional use shall be performed in a manner which minimizes earthmoving, erosion, tree clearing, and the destruction of natural amenities and shall be controlled by the local ordinance.

(3) Grading and filling in of the natural topography shall also meet the following standards:

(aa) The smallest amount of bare ground is exposed for as short a time as feasible.

(bb) Temporary ground cover, such as mulch, is used and permanent ground cover, such as sod, is planted.

(cc) Methods to prevent erosion and trap sediment are employed, and

(dd) Fill is stabilized to accepted engineering standards.

(4) Excavation of material from, or filling in a Wild, Scenic, or Recreational River, or construction of any permanent structures or navigational obstructions therein is prohibited, unless authorized by a permit from the Commissioner pursuant to Minnesota Statutes, Section 105.42.

(5) No state or local authority shall authorize the drainage or filling in of wetlands within Wild, Scenic, or Recreational River Land Use Districts.

(i) UTILITY COMPANIES, STANDARDS AND CRITERIA FOR UTILITY CROSSINGS

(1) Permits

(aa) All utility crossings (transmission and distribution) of Wild, Scenic, or Recreational Rivers, or of state lands within their land use districts which are under the control of the Commissioner, require a permit from the Commissioner pursuant to Minnesota Statutes, Sections 84.415 or 105.42. In reviewing permit applications for such crossings, primary consideration shall be given to crossings that are proposed to be located with or adjacent to existing public facilities, such as roads and utilities.

(bb) Utility **transmission** crossings of lands within the jurisdiction of the local authority within Wild, Scenic, or Recreational River Land Use Districts, require a conditional use permit from the local authority. **Transmission** means electric power, telephone, and telegraph lines, cables, or conduits which are used to transport large blocks of power between two points — with respect to electric power, generally, 69 kilo-volts or more — or main or pipeline crossings for gas, liquids, or solids in suspension which are used to transport large amounts of gas, liquids, or solids in suspension between two points. A conditional use permit is not required for high voltage (200 kilo-volts or greater) transmission lines under the control of the Environmental Quality Council, pursuant to Minnesota Statutes, Section 116C.61.

Distribution means lines, cables, or conduits or mains or pipelines used to distribute power, water, gas, or other essential services to the utility com-

pany's customers. These are essential services. A conditional use permit is not required for essential services.

(2) Standards and Criteria for utility **transmission** crossings of lands within the jurisdiction of the local authority within Wild, Scenic, or Recreational River Land Use Districts:

(aa) Policy

It is essential to regulate utility transmission crossings of lands within the jurisdiction of the local authority within Wild, Scenic, or Recreational River Land Use Districts in order to provide maximum protection and preservation of the natural environment and to minimize any adverse effects which may result from such utility crossings. These standards and criteria provide a basic framework of environmental considerations concerning such a proposed crossing. The considerations deal with route design, structure design, construction methods, safety considerations, and right-of-way maintenance.

(bb) Standards and Criteria

For each environmental consideration listed in these standards and criteria, the applicant shall indicate how he is satisfying the consideration, where applicable, or if he is not, why not. In dealing with route design considerations the applicant must, where applicable, also supply data on relevant site conditions. The local authority shall issue a conditional use permit if the applicant shows he has satisfied, to the extent feasible, these environmental considerations.

In general, avoid Wild, Scenic and Recreational River Land Use Districts, especially Wild River Land Use Districts, whenever practicable. But if there is no feasible alternative, the following standards and criteria shall apply.

(i) Route Design

With regard to topography:

(aaa) Avoid steep slopes.

(bbb) Avoid scenic intrusions into stream valleys and open exposures of water.

(ccc) Avoid scenic intrusions by avoiding ridge crests and high points.

(ddd) Avoid creating tunnel vistas by, for example, building deflections into the route or using acceptable screening techniques.

With regard to location:

(eee) Avoid entering areas within 200 feet of Wild, Scenic, and Recreational Rivers and avoid entering areas within 100 feet of designated tributaries with Wild, Scenic, or Recreational River Land Use Districts except where the utility has been authorized by the Commissioner to cross Wild, Scenic, or Recreational Rivers or tributaries within their land use districts.

With regard to vegetation:

(fff) Avoid wetlands.

(ggg) Run along fringe of forests rather than through them.

But if it is necessary to route through forests, then utilize open areas in order to minimize destruction of commercial forest resources.

With regard to soil characteristics:

(hhh) Avoid soils whose high susceptibility to erosion would create sedimentation and pollution problems during and after construction.

(iii) Avoid areas of plastic soils which would be subject to extensive slippage.

(jjj) Avoid areas with high water tables, especially if construction requires excavation.

With regard to crossing of public waters:

(kkk) Utility crossings of public waters requires a permit from the Commissioner pursuant to Minnesota Statutes, Section 84.415 or 105.42.

With regard to open space recreation areas:

(lll) Avoid them whenever practicable.

(ii) Structure Design

With regard to locating the utility overhead or underground:

(aaa) Primary considerations must be given to underground placement in order to minimize visual impact. If the proposal is for overhead placement, the applicant shall explain the economic, technological, or land characteristic factors, which make underground placement infeasible. Economic considerations alone shall not be the major determinant.

(bbb) If overhead placement is necessary, the crossing should be hidden from view as much as practicable.

With regard to the appearance of the structures:

(ccc) They shall be made as compatible as practicable with the natural area with regard to: Height and width, materials used, and color.

With regard to the width of the right-of-way:

(ddd) The cleared portion of the right-of-way should be kept to a minimum.

(iii) Construction methods

(aaa) Construct across wetlands in the winter in order to minimize damage to vegetation, and in order to prevent erosion and sedimentation.

(bbb) Construct at times when local fish and wildlife are not spawning or nesting.

(ccc) Effective erosion and sedimentation control programs shall be conducted during all clearing, construction, or reconstruction operations in order to prevent the degradation of the river and adjacent lands.

(iv) Safety Considerations

Applicants must adhere to applicable Federal and State safety regulations, both with regard to prevention (such as safety valves and circuit breakers) and with regard to emergency procedures in the event of failure (fire suppression, oil spill cleanup).

(v) Right-of-Way Maintenance

(aaa) If possible, natural vegetation of value to fish or wildlife, and which does not pose a hazard to or restrict reasonable use of the utility, shall be allowed to grow in the right-of-way.

(bbb) Where vegetation has been removed, new vegetation consisting of native grasses, herbs, shrubs, and trees, should be planted and maintained on the rights-of-way.

(ccc) Chemical control of vegetation is discouraged. But where such methods are justified, chemicals used and the manner of their use must be in accordance with rules, regulations and other requirements of all state and federal agencies with authority over the use.

(ddd) The Management Plan may identify areas suitable for utility corridors.

(j) PUBLIC ROADS, RIVER CROSSINGS

(1) Permits

(aa) A permit as established in Minnesota Statutes, Section 105.42, is required for the construction or reconstruction, removal, or abandonment of any road or railroad crossing, of a public water.

In reviewing permit applications required for road or railroad crossings, primary consideration shall be given to crossings located with or adjacent to existing facilities, such as roads and utilities.

(bb) A conditional use permit from the local authority shall be required for any construction of new public roads, or the reconstruction of any existing public roads within Wild, Scenic, or Recreational River Land Use Districts. **Public roads** include township, county, and municipal roads and highways which serve or are designed to serve flows of traffic between communities or other traffic generating areas. **Public roads** also include public streets and roads which serve as feeders or traffic-ways between minor public streets and major roads. A conditional use permit is not required for minor public streets which are streets intended to serve primarily as an access to abutting properties.

(2) Standards and Criteria for construction of new public roads, or the reconstruction of any existing roads within Wild, Scenic, or Recreational River Land Use Districts.

(aa) Policy

It is essential to regulate the construction of new public roads and reconstruction of existing public roads within Wild, Scenic, and Recreational River Land Use Districts in order to provide maximum protection and preservation of the natural environment and to minimize any adverse effects which may result from such development. These standards and criteria provide a basic framework of environmental considerations concerning such proposed road construction. The considerations deal with route design, construction methods, safety considerations, right-of-way maintenance, and waysides.

(bb) Standards and Criteria

For each environmental consideration listed below, the applicant shall indicate how he is satisfying the consideration, where applicable, or if he is

not, why not. In dealing with route design considerations, the applicant must, where applicable, also supply data on relevant site conditions. The local authority shall issue a conditional use permit if the applicant shows he has satisfied, to the extent feasible, these environmental considerations.

In general, avoid Wild, Scenic, and Recreational River Land Use Districts, especially Wild River Land Use Districts, whenever practicable. But if there is no feasible alternative, the following standards and criteria shall apply.

(i) Route Design

With regard to topography:

(aaa) Avoid steep slopes.

(bbb) Avoid scenic intrusion into stream valleys and open exposures of water.

(ccc) Avoid scenic intrusion by avoiding ridge crests and high points.

With regard to location:

(ddd) Avoid new public road construction within 200 feet of Wild, Scenic, and Recreational Rivers and avoid new public road construction within 100 feet of designated tributaries within Wild, Scenic, or Recreational River Land Use Districts, except where a crossing of a Wild, Scenic, or Recreational River has been authorized by the Commissioner.

With regard to vegetation:

(eee) Avoid wetlands.

(fff) Run along fringes of forests rather than through them. But if it is necessary to route through forests, then utilize open areas in order to minimize destruction of commercial forest.

With regard to soil characteristics:

(ggg) Avoid soils whose high susceptibility to erosion would create sedimentation and pollution problems during and after construction.

(hhh) Avoid areas of plastic soils which would be subject to extensive slippage.

(iii) Avoid areas with high water tables, especially if construction requires excavation.

With regard to crossing of public waters:

(jjj) A permit from the Commissioner is required for a road or railroad crossing, or reconstruction, removal, or abandonment of any existing road or railroad crossing, of a public water.

With regard to open space recreation areas:

(kkk) Avoid them whenever practicable.

(ii) Construction methods

(aaa) Construct new roads so they rest as "lightly on the land" as feasible, avoiding cuts and fills so as to blend into the natural terrain so that it appears to be a part of the natural landscape.

(bbb) Reconstruction of an existing public road or railroad should be performed in a manner that would minimize any adverse effect on the natural beauty and environment of the river.

(ccc) Effective erosion and sedimentation control programs shall be conducted during all clearing, construction, or reconstruction operations in order to prevent the degradation of the river and its adjacent lands.

(ddd) Construct across wetlands in a manner which minimizes damage to vegetation, and in a manner preventing erosion and sedimentation.

(eee) Construct at times when local fish and wildlife are not spawning or nesting.

(iii) Safety Considerations

Applicants must adhere to applicable Federal and State Safety regulations with regard to new road construction or reconstruction of an existing road.

(iv) Right-of-Way Maintenance

(aaa) If possible, natural vegetation of value to fish or wildlife, and which does not pose a safety hazard, shall be allowed to grow in the roadside right-of-way.

(bbb) Where vegetation has been removed, new vegetation consisting of native grasses, herbs, shrubs, and trees should be planted and maintained on the roadside right-of-way.

(ccc) Chemical control of vegetation is discouraged. But where such methods are justified, chemicals used and the manner of their use must be in accordance with rules, regulations and other requirements of all state and federal agencies with authority over their use.

(v) Highway Waysides

Highway waysides shall be designed in such a manner so as to harmonize with the surroundings.

NR 80 Public Use of Waters and Lands within Wild, Scenic, and Recreational River Land Use Districts

(a) POLICY

(1) In order to protect the rights of private landowners, to ensure quietude, to prohibit trespassing, to prevent littering, and to maintain the essential quality of Wild, Scenic and Recreational Rivers and their land use districts, the Commissioner and local governments shall adopt measures to manage the use and enjoyment of the rivers and their land use districts by the public.

(2) The public use and enjoyment of Wild, Scenic, and Recreational Rivers and their land use districts is limited to the public waters and designated publicly owned lands and interests in land within the land use districts. Private lands which may be located within the Land Use District do not become public in any sense. As otherwise provided in NR 78, private landowners may grant scenic easements in their land to the State of Minnesota. However, unless specifically provided by the parties, no such easement shall give the holder or any beneficiary the right to enter on the land except for enforcement of the easement.

(3) The restrictions set forth in NR 80 (b) shall not apply to persons who have been authorized by the Commissioner or by the appropriate local government to possess such items for the sole purpose of removing such items from the area.

(b) RESTRICTIONS

(1) Pursuant to Minnesota Statutes, Section 609.68, whoever unlawfully deposits garbage, rubbish, offal, or the body of a dead animal, or other litter in or upon any public highway, public waters or the ice thereon, public lands, or without the consent of the owner, private lands or water or ice thereon, may be sentenced to imprisonment for not more than 90 days or to payment of a fine of not more than \$100.

(2) No person shall discharge a firearm while traveling on or using a Wild, Scenic, or Recreational River, except for the purpose of hunting during those times and in those areas in which hunting for protected animals is allowed.

(3) No person traveling over or using publicly owned lands within Wild, Scenic, or Recreational River Land Use Districts shall use trail bikes, all-terrain vehicles, or vehicles of a similar nature, provided that snowmobiles may be provided for in accordance with the management plan. This provision shall not apply to the lawful use of such vehicles on public roads and public streets.

(4) Overnight camping, fires or campfires shall not be allowed on publicly owned lands within Wild, Scenic, or Recreational River Land Use Districts, except in areas posted or designated by the Commissioner for such purposes.

(5) No person traveling on or using a Wild, Scenic, or Recreational River shall enter upon private lands within the land use district unless he has permission from the landowner, lessee, or occupant.

(6) Anyone violating any of the provisions of NR 80 (b) shall be guilty of a misdemeanor.

(c) WATER SURFACE ZONING

Any regulations which may be necessary to reduce conflicts among users of a particular river, or between users and nearby residents, shall be promulgated as part of the management plan for the river, or as amendments thereto. The boundaries of such areas shall be described with particularity in the management plan.

NR 81 General Administration

(a) IMPLEMENTING THE PROPOSED MANAGEMENT PLAN

(1) Adoption of the management plan, and adoption or amendment of local ordinances to comply with the management plan, shall be carried out pursuant to the procedures described in Laws of Minnesota 1973, Chapter 271, sections 5 and 6.

(2) When the Commissioner deems it necessary to expedite the preservation and protection of the designated river, he may request the local authority to initially implement the land use controls described in the adopted

management plan by passing an interim zoning resolution, providing such a resolution would be otherwise lawful.

(b) CERTIFYING CERTAIN ACTIONS

(1) In order to ensure that the standards herein are not nullified by unjustified exceptions in particular cases, and to promote uniformity in the treatment of applications for such exceptions, a review and certification procedure is hereby established for certain local land use decisions. These certain decisions consist of any decisions which (1) directly affect the use of land within a Wild, Scenic, or Recreational River Land Use District, and (2) are one of the following types of action:

(aa) Adopting or amending an ordinance regulating the use of land, including rezoning of particular tracts of land.

(bb) Granting a variance from a provision of the local land use ordinance which relates to the ZONING DIMENSION PROVISIONS of NR 79 (c) and any other zoning dimension provisions established in the management plan.

(cc) Approving a plat which is inconsistent with the local land use ordinance.

(2) No such action shall be effective unless and until the Commissioner has certified that the action (1) complies with the Minnesota Wild and Scenic Rivers Act, the statewide standards and criteria, and the management plan; and (2) conforms to the following decision guides:

(aa) A land use ordinance or amendment must comply with the Act, the statewide standards and criteria, and the management plan.

(bb) The grant of a variance requires the presence of these conditions:

(i) The strict enforcement of the land use controls will result in unnecessary hardship. "Hardship" as used in connection with the granting of a variance means the property in question cannot be put to a reasonable use under the conditions allowed by the zoning provisions. Economic considerations alone shall not constitute a hardship if any reasonable use for the property exists under the terms of the ordinance.

(ii) Granting of the variance is not contrary to the purpose and intent of the zoning provisions herein established by these standards and criteria, and is consistent with the comprehensive management plan adopted by the Commissioner.

(iii) There are exceptional circumstances unique to the subject property which were not created by the landowner.

(iv) Granting of the variance will not allow any use which is neither a Permitted or Conditional use in the land use district in which the subject property is located.

(v) Granting of the variance will not alter the essential character of the locality as established by the management plan.

(vi) Exception:

Where a setback pattern from the normal high water mark has already been established on both sides of the proposed building site, the setback of

the proposed structure may be allowed to conform to that pattern. (This provision shall apply only to lots which do not meet the minimum lot width restrictions of the ordinance).

(cc) Approval of a plat which is inconsistent with the local land use ordinance is permissible only if the detrimental impact of the inconsistency is more than overcome by other protective characteristics of the proposal.

(3) Procedures for the certification process

(aa) A copy of all notices of any public hearings, or where a public hearing is not required, a copy of the application to consider zoning amendments, variances, or inconsistent plats under the local ordinance shall be received by the Commissioner at least thirty (30) days prior to such hearings or meetings to consider such actions. The notice or application shall include a copy of the proposed ordinance or amendment, or a copy of the proposed inconsistent plat, or a description of the requested variance.

(bb) The local authority shall notify the Commissioner of its final decision on the proposed action, within 10 days of the decision.

(cc) The Commissioner shall, no later than 30 days from the time he receives notice of the final decision, communicate to the local authority either:

(i) Certification of approval, with or without conditions; or

(ii) Notice of non-approval.

(dd) The action becomes effective when and only when either:

(i) The final decision taken by the local authority has previously received certification of approval from the Commissioner; or

(ii) The local authority receives certification of approval after its final decision; or

(iii) Thirty days have elapsed from the day the Commissioner received notice of the final decision, and the local authority has received from the Commissioner neither certification of approval nor notice of non-approval; or

(iv) The Commissioner certifies his approval after conducting a public hearing.

(ee) In the case of notice of non-approval of an ordinance or a variance or an inconsistent plat, either the applicant, or the chief executive officer of the county or municipality, may, within 30 days of said notice, file with the Commissioner a demand for hearing. If the demand for hearing is not made within the 30 days, the notice of non-approval becomes final. Also:

(i) The hearing shall be held in an appropriate local community within 60 days of the demand for it but not before 2 weeks published notice. Notice and the conduct of the hearing and the allocation of costs of the hearing shall be accomplished in the same manner as provided in Minnesota Stats. 105.44, subdivisions 5 and 6 (1971) as amended.

(ii) Within 30 days after the hearing, the Commissioner shall either certify his approval of the proposed action, or deny it. His decision shall be based upon findings of fact made on substantial evidence found in the

hearing record. If the Commissioner concludes that the proposed action satisfies the standards and criteria of NR 81 (b) (2), then he shall certify his approval; otherwise, he shall deny it.

(c) REVIEWING APPLICATIONS FOR CONDITIONAL USE PERMITS

A copy of all notices of any public hearings, or where a public hearing is not required, a copy of the application to consider issuance of a conditional use permit shall be received by the Commissioner at least thirty (30) days prior to such hearings or meetings to consider issuance of a conditional use permit. A copy of the decision shall be forwarded to the Commissioner within ten (10) days of such action.

(d) COPIES OF ALL PLATS SUPPLIED TO THE COMMISSIONER

Copies of all plats within the boundaries of wild, scenic, or recreational river land use districts shall be forwarded to the Commissioner within ten (10) days of approval by the local authority.

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This addendum to A Management Plan for the Minnesota River shows the changes the Department of Natural Resources (DNR) has made to the plan after the public informational meetings and review of the preliminary draft of the plan.

The preliminary plan (dated June 1976) as amended by this addendum, constitutes the final draft of the management plan for the Minnesota River as it will be discussed at the public hearings.

Further changes may be recommended by the hearing officer after the hearings.

Most of the changes appearing in the addendum are the result of a new state law requiring that proposed regulations appear in the State Register, a new state legal publication. Publication in the State Register requires a new outline format and the elimination of the Land Management Maps that appeared in the preliminary draft. The DNR has instead described sites it wishes to develop as recreational sites in the text of the addendum. Sites proposed for campsites, accesses, rest areas and portages remain unchanged from the preliminary draft.

Reverse

Pages 2 - 6 are amended to read:

STATE OF MINNESOTA
DEPARTMENT OF NATURAL RESOURCES
Regulations

CHAPTER TWENTY - SIX: NR 2600

DESIGNATION , CLASSIFICATION AND MANAGEMENT OF THE
MINNESOTA RIVER IN LAC QUI PARLE, YELLOW MEDICINE,
CHIPPEWA, RENVILLE AND REDWOOD COUNTIES.

NR 2600 DESIGNATION

A. THE RIVER

That portion of the Minnesota River from the Lac Qui Parle dam to the Redwood County State Aid Highway 11 bridge near Franklin is designated a component of the Minnesota Wild and Scenic Rivers System.

B. AUTHORITY

This designation is made by the commissioner of natural resources pursuant to the authority of the Minnesota Wild and Scenic Rivers Act, Minnesota Statutes 1974, Sections 104.31 to 104.40.

C. SHORELAND INCLUDED

The designation and these rules apply to the river and the adjacent lands indicated by the Land Use District Descriptions. The land use district boundaries were delineated in accordance with Minnesota Regulations NR 78 (g) (2) (bb).

D. SEVERABILITY

The provisions of these regulations shall be severable, and the invalidity of any paragraph, subparagraph or subdivision thereof shall not make void any other paragraph, subparagraph, subdivision or any other part.

NR 2610 CLASSIFICATION

That portion of the Minnesota River and adjacent lands from the Lac Qui Parle dam to the U.S. Highway 212 bridge in the corporate limits of Montevideo is classified as Scenic.

That portion of the Minnesota River and adjacent lands from the U.S. Highway 212 bridge in the corporate limits of Montevideo to the Minnesota Falls dam is classified as Recreational.

That portion of the Minnesota River and adjacent lands from the Minnesota Falls dam to the Redwood County State Aid Highway 11 bridge is classified as Scenic.

These classifications are made in accordance with the provisions of Minnesota Statutes 1974, Section 104.33, Subdivision 2; and Minnesota Regulations NR 78(f).

NR 2620 LAND MANAGEMENT

A. ZONING

1. The counties of Lac Qui Parle, Chippewa, Yellow Medicine, Renville and Redwood shall each enact or amend such ordinances and maps as necessary to:

a. Establish Scenic and Recreational river land use districts as applicable according to Minnesota Regulations NR 2610, to include the lands identified by the Land Use District Descriptions.

b. Conform to the provisions of Minnesota Regulations NR 78-81.

2. The municipalities of Montevideo, Granite Falls, North Redwood and Morton shall enact or amend such ordinances and maps as necessary to:

a. Establish Scenic and Recreational river land use districts as applicable according to Minnesota Regulations NR 2610 to include the lands identified by the Land Use District Descriptions.

b. Conform to the use, dimensional and sanitary provisions of the Recreational Development classification of Minnesota Regulations NR 83, and the provisions of Minnesota Regulations NR 79 (e-j), 80 and 81.

c. The vegetative cutting provisions of Minnesota Regulations NR 79 (g) shall conform to the structural setback pattern specified in Minnesota Regulations NR 83.

3. The zoning provisions specified above shall not be changed by annexations or incorporations occurring after the date of designation.

4. All local ordinances and regulations which are more protective than those required to be adopted by this management plan shall be continued.

B. LAND ACQUISITION

1. The lands or interests in land recommended to be acquired in this plan will be acquired when funds are available for such purchases from willing sellers, as provided for in Minnesota Statutes 1974, Section 104.37.

a. Fee title acquisition is recommended in those areas where recreational sites are needed. These areas are identified in the Fee Title Descriptions.

b. Scenic easement acquisition is recommended in those areas having outstanding scenic or natural characteristics as identified in the Scenic Easement Descriptions.

c. Because fee title acquisition or scenic easement acquisition is from willing sellers at the appraised market value, some lands recommended for scenic easement acquisition may be purchased in fee title. Some lands recommended for fee title acquisition may be purchased in scenic easement. This change from the recommended acquisition would be based on the mutual agreement by and between the state of Minnesota and the landowner(s).

2. Other forms of acquisition, such as use easements or leases, may be used to acquire interests in lands within the land use districts.

3. Land will be exchanged, whenever feasible, to acquire lands within the land use districts. These exchanges will be done in the manner prescribed by state law. However, land exchanges will not be recommended if such exchanges would adversely affect this or any other Department of Natural Resources management program.

4. Additional lands or interests in land may be purchased within the land use districts to further the policies established in Minnesota Statutes 1974, Section 104.32 and this management plan.

NR 2630 RECREATION MANAGEMENT

A. Recreation management in the Scenic and Recreational river land use districts shall conform to the policies and provisions of Minnesota Regulations NR 80.

B. As provided for in Minnesota Regulations NR 79 (b) and the management plan, the development of public or private recreational facilities within the Scenic and Recreational river land use districts shall conform to the design specification guidelines as shown on the Recreational Site Typical.

C. No Department of Natural Resources river-oriented camping facilities will be provided close to private river-oriented camping facilities which are designed to serve the same needs.

D. The recreational use of the Minnesota Scenic and Recreational River and adjacent public lands will be regulated where necessary to insure that the use does not adversely affect the values which qualified the river for designation.

E. Snowmobiling in the land use district will be allowed:

1. On private lands only with permission from appropriate landowners.

2. On trails specifically designated for snowmobiling.

F. On areas which are not presently publicly owned, some type of land interest must be purchased before lands are available for public use.

G. The Division of Parks and Recreation shall allocate funds for the maintenance of Department of Natural Resources recreational facilities within the Minnesota River land use districts from the department's river development and maintenance account.

H. Priority areas for recreational development are shown:

1. In the fee title descriptions on land which is not presently publicly owned.

2. On publicly owned lands:

- a. At the Corp of Engineers Recreation Site at the Lac Qui Parle Dam - portage and an access.
- b. At the Department of Natural Resources Access at Montevideo - A rest area.
- c. At Spartan State Wildlife Management Area - An access.
- d. At Renville County Park #2 - An access.
- e. On Department of Natural Resources Land near Morton - An access.
- f. At Lower Sioux Agency Historic Site - A campsite and rest area.

I. The department's Enforcement Division shall enter into discussions with the local units of government concerning the delineation of responsibilities for the enforcement of applicable Wild, Scenic and Recreational river regulations.

NR 2640 RECOMMENDATIONS

A. Federal-State relations

1. Since the Department of Natural Resources is responsible for administering the Minnesota River as a Scenic and Recreational river, it is recommended that the State of Minnesota, through the appropriate application process, apply for those islands presently administered by the Bureau of Land Management to be transferred to the Department of Natural Resources under the authority granted the commissioner of natural resources in Minnesota Statutes 1974, Section 104.35. (1974).

2. It is recommended that the Agricultural Stabilization and Conservation Service give high priority for providing technical assistance and funds to alleviate bank erosion problems on the Minnesota River.

B. Other Governmental Units

1. To further the purposes of the Minnesota Wild and Scenic Rivers Act, it is recommended that all State Highway Department lands within the Scenic and Recreational river land use districts be administered in accordance with the provisions of Minnesota Regulations NR 78-81 and this management plan. In particular, it is stated in Minnesota Regulations NR 79 (j) (2) (bb) (v) that:

a. Highway waysides shall be designed in such a manner so as to harmonize with the surroundings.

b. Such development plans shall be reviewed and approved by the commissioner of natural resources.

2. It is recommended that the Minnesota Pollution Control Agency be appropriated sufficient funds to conduct an ongoing analysis and monitoring of water quality information, and to allow for appropriate measures to insure that water quality regulations and standards are maintained for the Minnesota River.

3. To help insure that the outstanding heritage of the Minnesota River is protected for future generations, it is recommended that the Minnesota Historical Society conduct an inventory of all historical and archaeological sites within the proposed Scenic and Recreational river land use districts and recommend appropriate methods for preservation of those sites having outstanding historical significance.

4. To further enhance the recreational potential of the Minnesota River and to complement the existing Lower Minnesota River Valley Trail, it is recommended that a corridor trail system from LeSueur to Ortonville be established through state legislation and developed by the Department of Natural Resources and local units of government.

5. It is recommended that the counties which border the river adopt zoning ordinances to protect blufflines which lay beyond the land use district boundaries.

6. To further the purposes of the Minnesota Wild and Scenic Rivers Act, it is recommended that the Indian reservation lands of the Upper Sioux Agency and Lower Sioux Agency be managed in a way consistent with this act.

7. It is recommended that agencies in charge of public outdoor recreation on the Minnesota River work with the Department of Natural Resources in improving and developing recreational facilities.

8. It is recommended that those lakes in the Minnesota River valley between Lac Qui Parle and Franklin, which are delineated as "intended for acquisition" on the preliminary Public Waters Inventory maps, be given priority status for acquisition.

Page 32, first paragraph. The following sentence is deleted: "The land use district is shown on the Land Management Maps."

Page 50, first paragraph under SCENIC EASEMENT DESCRIPTIONS AND ACREAGES. The following sentence is deleted: "Areas recommended for scenic easement acquisition are shown on the Land Management Maps."

Pages 58 and 59 are amended to read:

FEE TITLE DESCRIPTIONS AND ACREAGES

Fee title acreages are based on the original Government Land Office survey. Certain acreages, however, have been estimated because of an apparent conflict with the survey. These estimates are denoted by an asterisk*.

LAC QUI PARLE COUNTY

Description	Acreage	Proposed Recreational Facility
T 117 N - R 41 W		
Section 9		
Government Lot 3 all but W 20	12.25	access
Section 14.		
*Government Lot 3 the N	10.00	campsite
Government Lot 2 the N	5.00	
Lac Qui Parle Total	27.27	

YELLOW MEDICINE COUNTY

T 116 N - R 40 W		
Section 13		
Government Lot 3 all	24.10	campsite, rest area
T 116 N - R 39 W		
Section 34		
portage around Granite Falls Dam	2.00	portage
T 115 N - R 39 W		
Section 1		
portage around Minnesota Falls Dam	2.00	portage
Yellow Medicine Total	28.10	

REDWOOD COUNTY

T 113 N - R 35 W		
Section 28		
Government Lot 5.	24.97	campsite, rest area
Government Lot 4 all but W 20	33.10	campsite, rest area
Redwood Total	58.07	

RENVILLE COUNTY

T 114 N - R 37 W		
Section 24		
Government Lots 6, 5 and 4		
portage around Patterson Rapids	2.00	portage
Renville Total	2.00	

TOTAL	115.42	
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