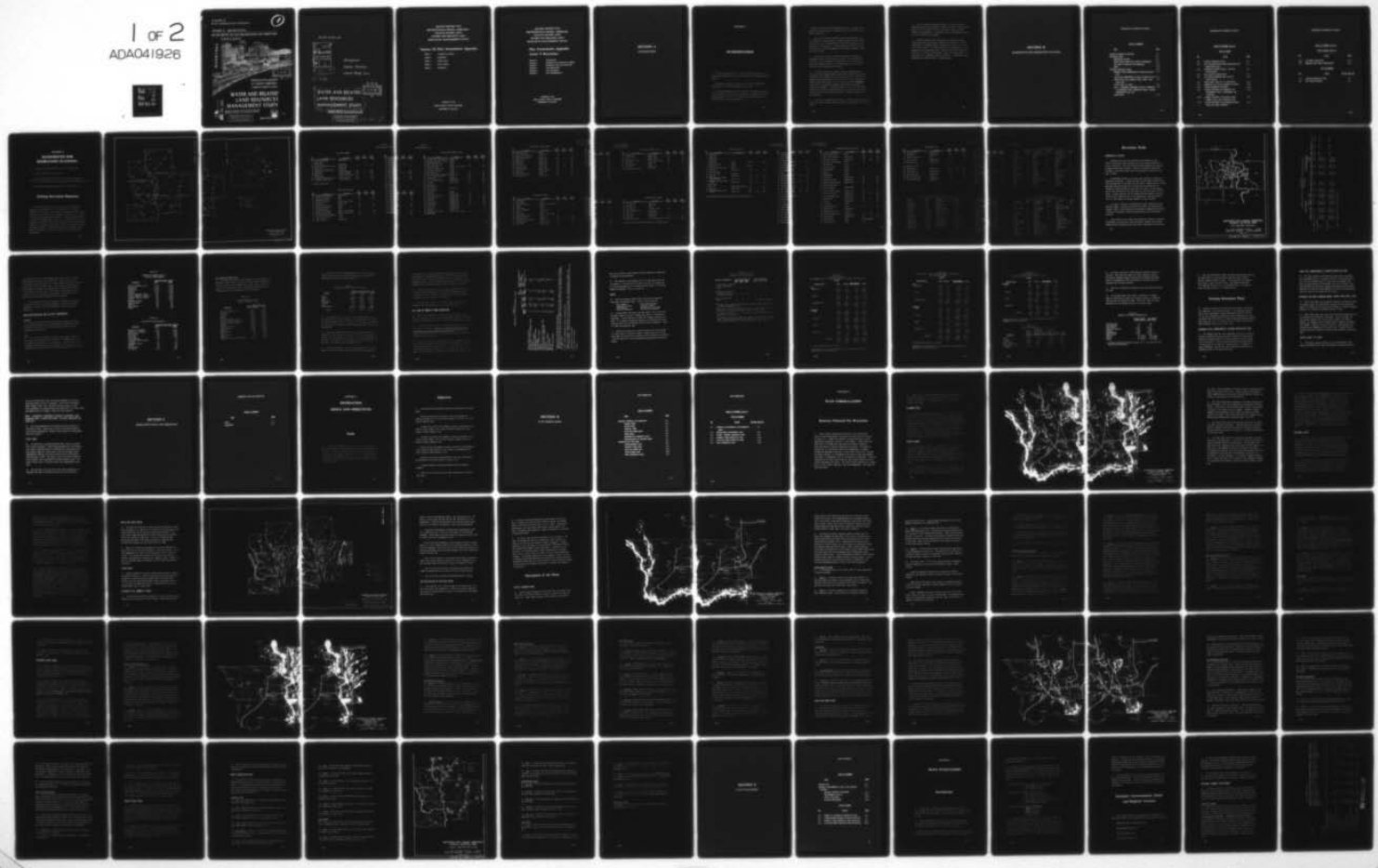
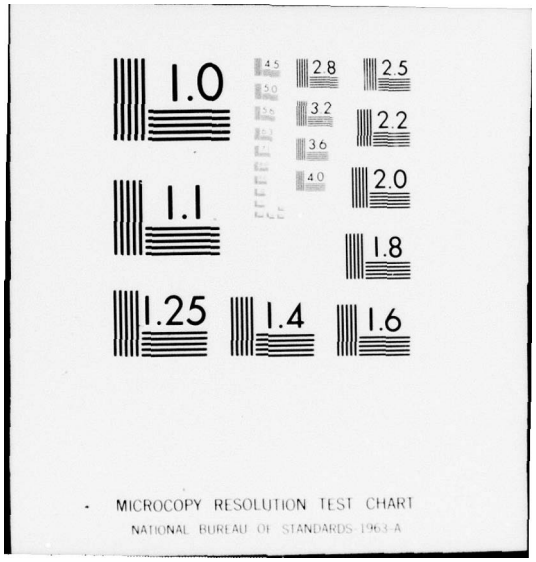
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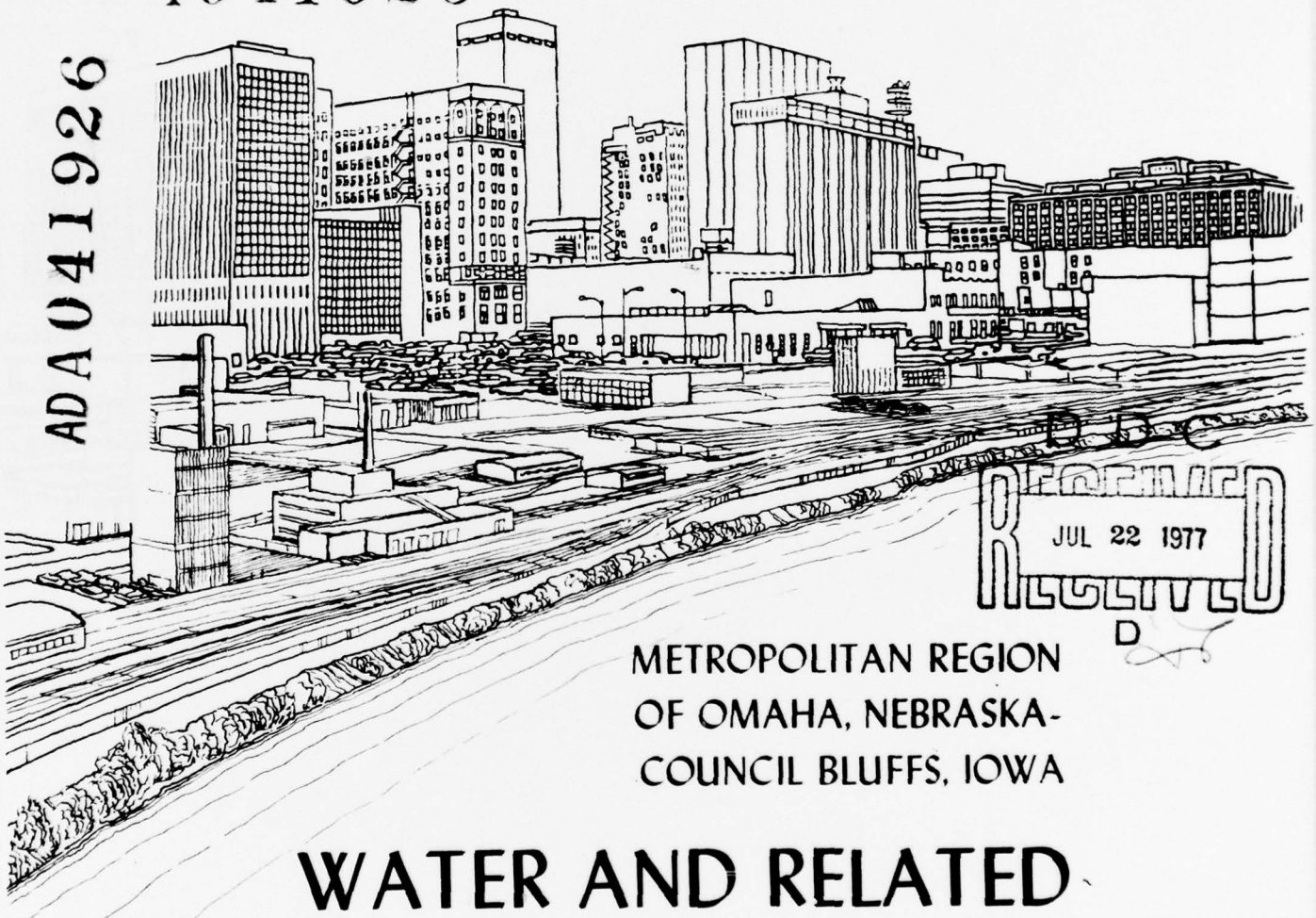
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REVIEW REPORT ON THE MISSOURI RIVER AND TRIBUTARIES

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METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA
WATER AND RELATED LAND
RESOURCES MANAGEMENT STUDY

Volume III Plan Formulation Appendix

ANNEX A	ALTERNATIVE FUTURES
ANNEX B	WASTEWATER
ANNEX C	WATER SUPPLY
ANNEX D	FLOOD CONTROL
ANNEX E	RECREATION

PREPARED BY THE

OMAHA DISTRICT CORPS OF ENGINEERS

DEPARTMENT OF THE ARMY

REVIEW REPORT FOR
METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA
WATER AND RELATED LAND
RESOURCES MANAGEMENT STUDY

Plan Formulation Appendix

Annex E Recreation

SECTION A	INTRODUCTION
SECTION B	BACKGROUND FOR RECREATION PLANNING
SECTION C	RECREATION GOALS AND OBJECTIVES
SECTION D	PLAN FORMULATION
SECTION E	PLAN EVALUATION
SECTION F	PLAN IMPLEMENTATION

PREPARED BY THE
OMAHA DISTRICT CORPS OF ENGINEERS
DEPARTMENT OF THE ARMY

SECTION A

INTRODUCTION

SECTION A

INTRODUCTION

1. This annex represents the combined efforts of the Bureau of Outdoor Recreation and the Corps of Engineers. The major work items were to:

- Inventory all available outdoor recreation opportunities and compare them with the demands of the region;

- Develop alternative methods to satisfy demands, incorporating current plans of all agencies plus additional recreation potential that may arise from other water resource measures such as flood control and flood plain management; and

→ next page

cont

- Develop implementation strategies including methods of acquisition, financing, and the identification of appropriate implementing agencies.

2. Most of the region's potential for outdoor recreation has been defined by other agencies. Therefore, State and local plans provide most of the alternatives for the outdoor recreation component of the urban study. The MAPA Open Space Plan and Program has provided the general framework for recreation planning efforts by other agencies.

3. The primary thrust of a water and related land resource management study is to determine the role of water management in providing outdoor recreation opportunities. The role of water-related recreation, however, cannot and should not be isolated from the overall outdoor opportunities.

4. A growing population, coupled with an increased amount of leisure time and urban expansion, make careful recreation planning important to the quality of life in an urban region. Parks, open spaces, and natural areas provide the public with opportunities to pursue outdoor activities, to be in touch with nature, provide a visual relief to an urban landscape, and increase the amount of fresh air circulation. Green areas can be a key to a viable urban environment, can give definition and form to sprawling urban areas, and can give the urban resident a sense of identity, association, and direction.

5. This annex concentrates primarily on regional parks and natural areas, but also includes needs and identifies potentials for community parks.

6. Local or community parks are intended to serve individual neighborhoods within a community. These parks must be easily accessible to serve the young, elderly, and others who do not have access to transportation. These parks must be strategically planned for in the growth of a community.

7. Regional parks include State parks and recreation areas, county parks, and local parks of regional significance. Regional parks should be available within a half-hour's to an hour's drive for the using public. Regional parks are not as sensitive to urban expansion as are community parks. Natural environmental areas are those which, in their current state, provide the opportunity to view nature in a relatively unspoiled setting. Uncontrolled urban development reduces the value of natural areas.

SECTION B

BACKGROUND FOR RECREATION PLANNING

BACKGROUND FOR RECREATION PLANNING

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SECTION B

BACKGROUND FOR RECREATION PLANNING

1. Important data required for recreation planning are:

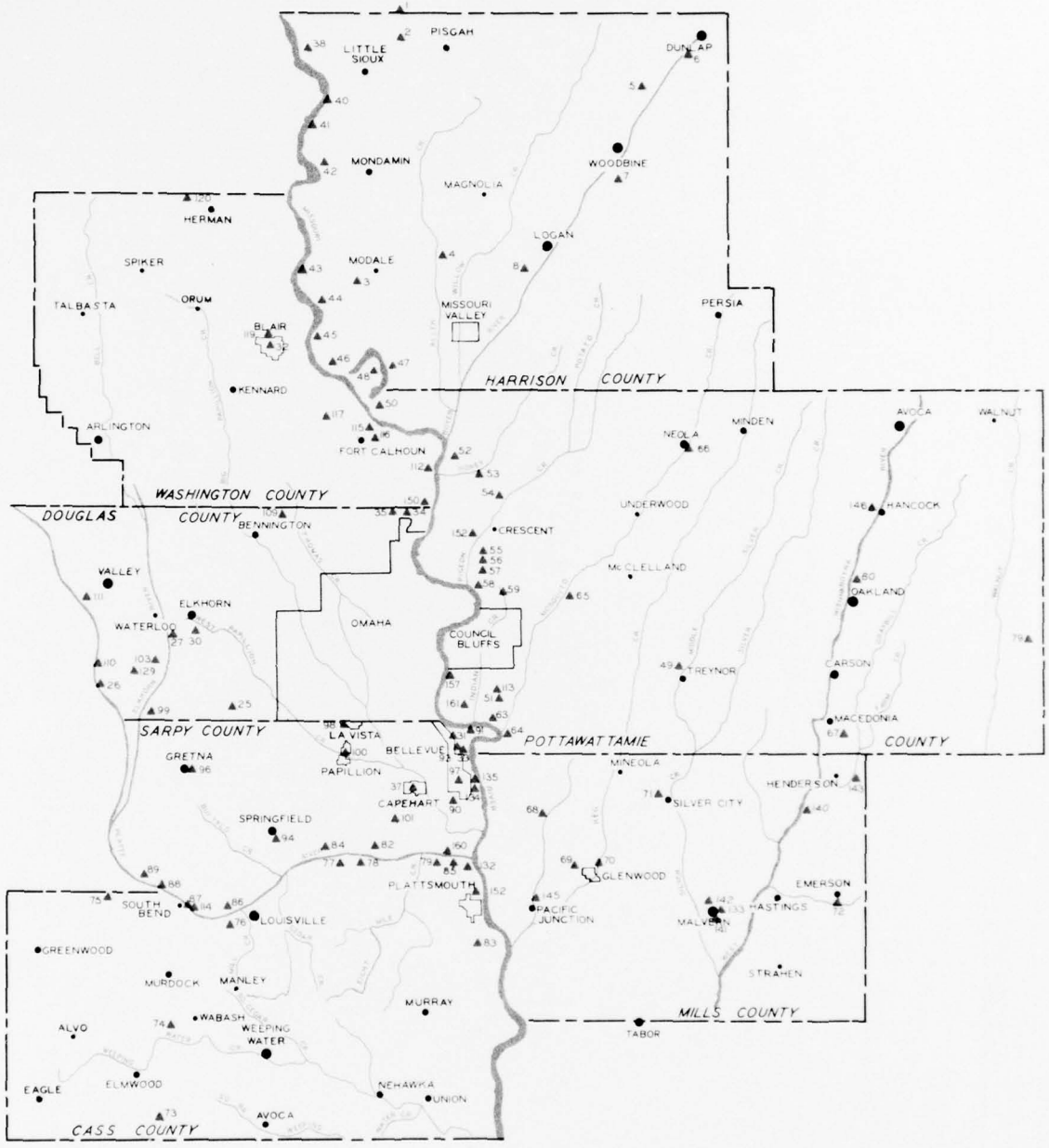
- Existing recreation opportunities.

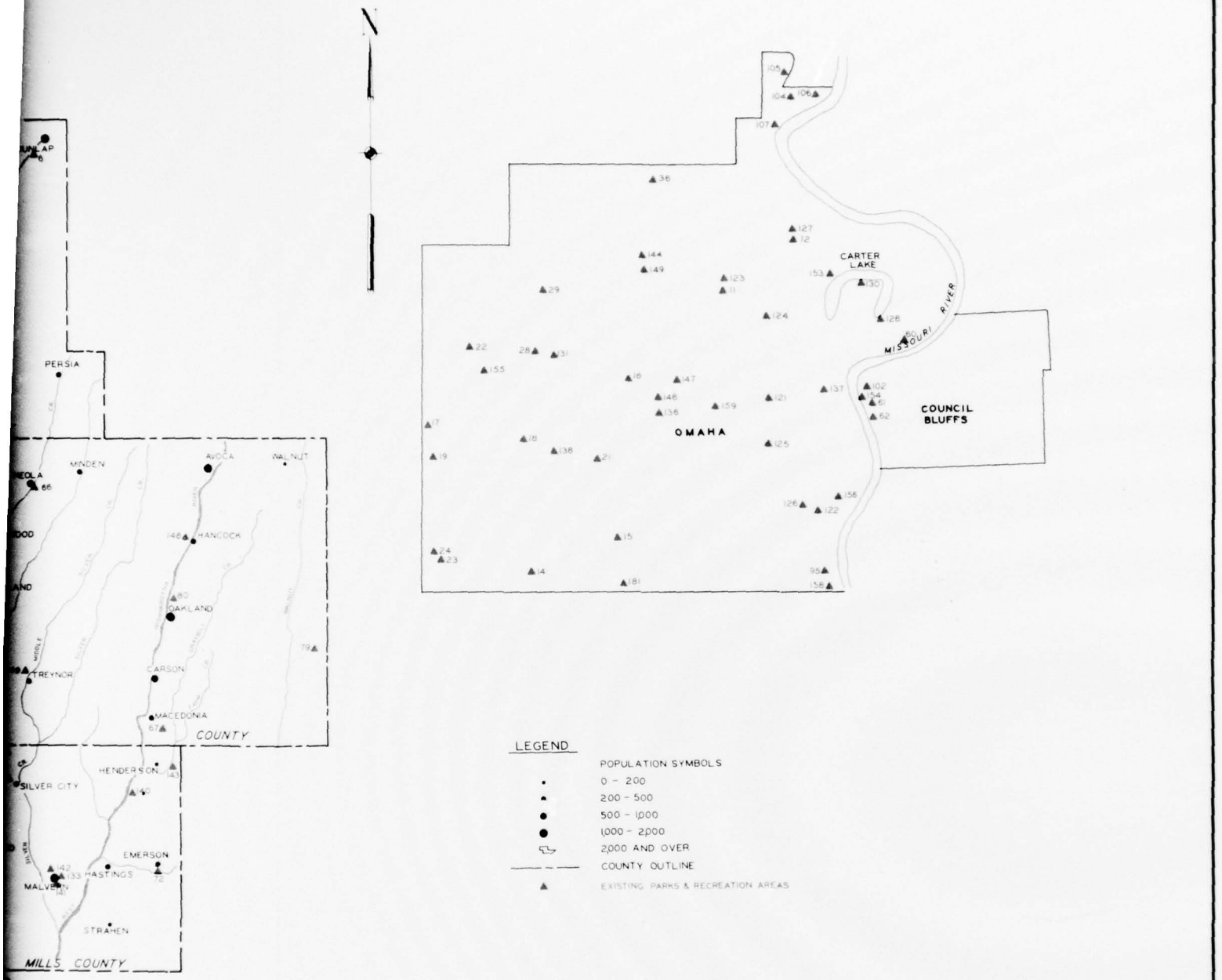
- The recreation needs in reference to demographic factors, mobility characteristics, activity preferences, and adopted standards.

- Resources to expand the recreation opportunity base.

Existing Recreation Resources

2. Figure B-1 and table B-1 identify existing recreational resources in the study area. The private sector provides 50 percent of the total of 11,750 acres of community and neighborhood parks, and playgrounds, plus 25 percent of a total of 4,887 acres of natural areas and nature preserves. Federal agencies provide 83 percent of the 9,409 acres of fish and game areas, while the State provides 70 percent of the 4,868 acres of regional parks, general parks, and recreation areas, plus 72 percent of the natural areas and nature preserves. Municipal and county governments provide nearly 50 percent of the community and neighborhood parks and playgrounds.


PISGAH
LITTLE SIOUX
DUNLAP
MONDAMIN
WOODBINE
MAGNOLIA
HERMAN
LOGAN
SPIKER
MODALE
TALBASTA
ORUM
MISSOURI VALLEY
PERSIA
BLAIR
HARRISON COUNTY
KENNARD
ARLINGTON
FORT CALHOUN
NEOLA
MINDEN
AVOCA
WALNUT
WASHINGTON COUNTY
DOUGLAS COUNTY
BENNINGTON
CRESCENT
UNDERWOOD
HANCOCK
VALLEY
McCLELLAND
OAKLAND
ELKHORN
WATERLOO
OMAHA
COUNCIL BLUFFS
TREYNOR
CARSON
SARPY COUNTY
LA VISTA
BELLEVUE
POTTAWATTAMIE COUNTY
MACEDONIA
GRETNA
PAPILLION
MINEOLA
HENDERSON
CAPEHART
SILVER CITY
SPRINGFIELD
GLENWOOD
PLATTSMOUTH
EMERSON
SOUTH BEND
LOUISVILLE
PACIFIC JUNCTION
HASTINGS
MALVERN
GREENWOOD
STRAHEN
MURDOCK
MANLEY
MURRAY
MILLS COUNTY
ALVO
WABASH
WEEPING WATER
TABOR
EAGLE
ELMWOOD
NEHAWKA
UNION
AVOCA
CASS COUNTY



METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA

EXISTING RECREATION AREAS

U.S. ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA
JUNE 1975

Table B-1

EXISTING RECREATION SITES

CASS COUNTY, NEBRASKA

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
73	Wilson Creek Watershed	Community Park	40*		40*
74	Grandpa Woods				
75	Scenic Overlook	Scenic Area			
76	Louisville State Recreation Area	Regional Park	142	50	192
77	Natural Area	Natural Area			
78	Timbered Bluff and Natural Area	Natural Area			
79	*Buccaneer Bay*	Private Development	1,750*		1,750*
83	Beaver Lake	Private Development	875	325	1,200
85	Merritt Beach	Private - Open to Public	20		20
132	Plattsmouth Waterfowl Mgt. Area	Fish and Game Area	1,465	35	1,500
151	Plattsmouth Wildlife Refuge	Fish and Game Area	500*		500*

* Includes land and water.

DOUGLAS COUNTY, NEBRASKA

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
11	Fontenelle Park Golf Course	Regional Park	105	3	108
12	Miller Park Golf Course	Public	78	2	80
14	Applewood Golf Course	Public	145		145
15	Lakeview Country Club	Private - Open to Public	63		63
16	Peony Park	Amusement Park			
17	Highland Country Club	Private	180		180
18	Happy Hollow Country Club	Private	180		180
19	Westwood Golf Course	Public			
21	Cedar Hills Golf Course	Private - Open to Public	40		40
22	Miracle Hill Golf Course	Private - Open to Public	325		325
23	Oak Hills Golf Course (Millard)	Private	113		113
24	Oak Hills Country Club	Private			
25	Walnut Grove Park	Community Park			

Map No.	
26	Two Rive
27	Greenbri
28	Brookhil
29	Maple Vi
30	Skyline
34	Ponca Hi
35	Twin Bro
36	Omaha Co
95	Mount Ve
99	Circle F
103	Native F
104	N. P. Do
105	Hummel F
106	Boat Lau
107	Florence
109	Native F
110	Lake Pla
111	Ginger
121	Turner
122	Spring
123	Fontene
124	Adams P
125	Hanscom
126	Spring
127	Miller
128	Kiwani
129	Sandri
131	Meadow
60	Omaha

Table B-1

EXISTING RECREATION SITES

DOUGLAS COUNTY, NEBRASKA (Cont'd)

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
26	Two Rivers State Recreation Area	Regional Park	644	320	964
27	Greenbriar Golf Course (Elkhorn)	Private	5		5
28	Brookhill Country Club	Private			
29	Maple Village Golf Course	Public	45		45
30	Skyline Golf Course	Private - Open to Public	165		165
34	Ponca Hills Equestrian Club	Private			
35	Twin Brooks Bible Camp	Private			
36	Omaha Country Club	Private	210		210
95	Mount Vernon Gardens & Mandan Park	Regional Park	103		103
99	Circle R Lutheran Bible Camp	Private	152		152
103	Native Prairie	Natural Site	40		40
104	N. P. Dodge Memorial Park	Regional Park	445		445
105	Hummel Park	Regional Park	202		202
106	Boat Launch				
107	Florence Marina				
109	Native Prairie	Natural Site	40		40
110	Lake Platte View				
111	Ginger Cove	Private			
121	Turner Park	Community Park	8		8
122	Spring Lake Golf Course	Community Park	96		96
123	Fontenelle Park	Regional Park	105	3	108
124	Adams Park	Community Park	60		60
125	Hanscom Park	Community Park	57	1	58
126	Spring Lake Park	Community Park	96		96
127	Miller Park	Community Park	78	2	80
128	Kiwanis Park	Community Park			
129	Sandridge	Natural Site			
131	Meadow Brook Golf Course	Private - Open to Public	17		17
60	Omaha Marina				

DOUGLAS COUNTY, NEBRASKA (Cont'd)

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
136	Elmwood Golf Course	Public			
137	Central Omaha Park Mall	Community Park	55		55
138	Sunset Valley Country Club	Private	50		50
144	Benson Park Golf Course	Regional Park	215	2	217
147	Memorial Park	Regional Park	67		67
148	Elmwood Park	Regional Park	216		216
149	Benson Park	Regional Park	215	2	217
153	Levi Carter Park	Regional Park	254	281	535
155	Tranquillity Park	Regional Park	355		355
156	Henry Doorly Zoo	Regional Park & Zoo	155		155
158	Mandan Park	Regional Park	51		51
159	Field Club Golf Course	Private	80		80
181	Seymour Smith Park	Community Park	197		197

SARPY COUNTY, NEBRASKA

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
31	Camp Brewster	Private			
33	Camp Wa-Kon-Da	Private			
37	Capehart Golf Course	Private - Open to Public	160		160
84	Quarry	Private			
86	Kiewit Quarry	Private			
87	Gretna Fish Hatchery	Fish and Game	60		60
88	Quarry	Private			
89	Linoma Beach	Private - Open to Public			
90	Offutt AFB Golf Course	Private	80		80
91	Fontenelle Forest	Natural Area	1,150	50	1,200
93	Fontenelle Hills Golf Course	Private	75		75
94	Springfield Parks	Community Parks	7		7
96	Gretna Parks	Community Parks	17		17

Table B-1 (Continued)

EXISTING RECREATION SITES

SARPY COUNTY, NEBRASKA (Cont'd)

s)	Water (Acres)	Total (Acres)	Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
			97	Bellevue Parks	Community Parks	168		168
5		55	98	La Vista Parks	Community Parks	38		38
0		50	100	Papillion Parks	Community Parks	125		125
5	2	217	101	Platteview Golf Course	Private - Open to Public	200		200
7		67	114	Schramm Park	Regional Park	277		277
6		216	160	Gene Eppley Camp	Private			
5	2	217	134	Haworth Park	Community Park	75		75
4	281	535	135	Strategic Aerospace Museum	Regional Park	42		42
5		355						
5		155						
1		51						
0		80						
7		197						

WASHINGTON COUNTY, NEBRASKA

nd res)	Water (Acres)	Total (Acres)	Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
			32	Blair Golf Club	Public	52		52
			112	Scenic Area	General Park			
60		160	115	Omaha Boat Club	Private			
			116	Fort Atkinson	Historical Preserve	148		148
			117	Scenic and Natural Area	Natural Area			
60		60	119	Blair Park	Community Park	40		40
			120	Scenic Area	General Park			
			150	Neale Woods	Natural Area	120		120
80		80	48*	DeSoto Bend Wildlife	Fish and Game Regional Park	7,000	800	7,800
50	50	1,200						
75		75	* Partially located in Harrison, Pottawattamie, and Washington Counties.					
7		7						
17		17						

Table B-1 (Continued)
EXISTING RECREATION SITES

HARRISON COUNTY, IOWA

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
1	Fishing Access				
2	Hunting Area				
3	Hunting Area				
4	Hunting Area				
5	Hunting Area	Private	(7 areas)		2,149
6	Dunlap Golf Course	Public			
7	Vacation Farm	Private	(1 farm)		
8	Mo Valley Golf Course (Logan)	Public			
38	Deer Island	Natural Area	600		600
40	Small Boat Marina				
41	Little Sioux Delta	State Park	5		5
42	Round Lake	Regional Park	262	131	393
43	Tyson Island State Wildlife Management Area	Natural Area	84		84
44	California Bend State Wildlife Refuge	Regional Park	190	360	550
45	Rand Access		5		
46	Rand Bar	Natural Area and Preserve	60		60
47	Nobles Lake	Regional Park	188	49	237
48*	Desoto Bend Natural Wildlife Refuge	Natural Area	7,000	800	7,800

* Located partially in Harrison, Pottawattamie, and Washington Counties.

Map No.	
49	Treynor Recr
50	Wilson Islan
51	Lake Manawa
52	Big Timber -
53	Camp Hitchco
54	Crescent Ski
55	Camp Po-Ka-
56	Quarry
57	Hamburg Bluf
58	Big Lake Par
59	Lewis and Cl
61	Dodge Park (
62	Dodge Park G
161	Gifford Sanc
63	Long's Landi
64	Pony Creek W
65	Smith Enviro
66	Arrowhead Pa
67	Old Towne
79	Camp Wakonda
80	Oakland Count
102	Playland Park
113	Lakeshore Cou
130	Levi Carter L
146	Botna Bend Pa
154	Friendship Pa
157	Chain of Lake

Table B-1 (Continued)
EXISTING RECREATION SITES

ıd ·es)	Water (Acres)	Total (Acres)
ıs)		2,149
n)		
)		600
5		5
2	131	393
4		84
0	360	550
5		
0		60
8	49	237
0	800	7,800
s.		

POTTAWATTAMIE COUNTY, IOWA (Cont'd)

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
49	Treynor Recreation Area	Public	81		81
50	Wilson Island State Park	Regional Park	488	10	498
51	Lake Manawa State Park	Regional Park	265	660	925
52	Big Timber - KOA Campgrounds	Private	22		22
53	Camp Hitchcock	Private			
54	Crescent Ski Hills	Private			
55	Camp Po-Ka-Mo-Ki	Private			
56	Quarry	Private			
57	Hamburg Bluffs	Private			
58	Big Lake Park	Regional Park	300		300
59	Lewis and Clark Park	Regional Park	219		219
61	Dodge Park (Council Bluffs)	Community Park	190		190
62	Dodge Park Golf Course				
161	Gifford Sanctuary	Wildlife Refuge	40		40
63	Long's Landing Boat Launch	Regional Park	121		121
64	Pony Creek Watershed	Community Park	200	100	300
65	Smith Environmental Area	Natural Area	201		201
66	Arrowhead Park	Regional Park	141	16	157
67	Old Towne	Community Park	8		8
79	Camp Wakonda	Private			
80	Oakland Country Club	Private	80		80
102	Playland Park	Amusement Park			
113	Lakeshore Country Club	Private			
130	Levi Carter Lake and Park	Community Park	170	281	351
146	Botna Bend Park	Regional Park	114	7	121
154	Friendship Park	Public	Under Development		
157	Chain of Lakes Park	Public	70.5		

MILLS COUNTY, IOWA

Map No.	Site Name	Type Area	Land (Acres)	Water (Acres)	Total (Acres)
68	Pony Creek Park	Regional Park	50		50
69	Glenwood Park	Community Park	15		15
70	Glenwood Golf Course	Public	45		45
71	Silver City Park	Community Park	3		3
72	Emerson City Park	Community Park	3		3
133	Fairview Golf Club				
140	Willow Slough	Natural Area	409	150	559
141	South Malvern Park	Community Park	3		3
142	North Malvern Park	Community Park	6		6
143	Hwy. 34 Roadside Park	County Park	1		1
145	Pacific Junction Park	Community Park	3		3

Site Name
Adams
Albright
Anderson Field
Armhurst
Athletic
Bay Meadows
Bemis
Bluff View
Bowling Green
Brown
Burt Triangle
Christie Heights
Churchich
Cody
Columbus
Conoco
Corby

CITY OF COUNCIL BLUFFS, IOWA
(COMMUNITY PARKS, NEIGHBORHOOD PARKS, PLAYGROUNDS AND PLAYFIELDS)

Site Name	Acreage	Site Name	Acreage
Dodge Park	190 ac.	Westwood Park Golf Course	15.0 ac.
Lakeview Park	60 ac.	Roberts Park	11.0 ac.
Fairmount Park	80 ac.	River View Park	30.0 ac.
Frontier Park	20 ac.	Greenwood Park	20.0 ac.
Cochran Park	3.6 ac.	Elliott Street Park	3.0 ac.
Graham Park	3.0 ac.	Lewis & Clark	219 ac.
Cook Park	2.0 ac.	General Dodge House	1/2 ac.
Bayliss Square	3.6 ac.	Black Angel	1/4 ac.
Lincoln Park	2.4 ac.	Golden Spike	1/4 ac.
Kimball Park	1.6 ac.	Indian Hills Park	30.0 ac.
Prospect Park	2.0 ac.	N. 8th St. Park	12.0 ac.
Peterson Park	3.0 ac.	Viaduct Park	1.0 ac.
Sunset Memorial	7.0 ac.	Valley View Park	12.0 ac.
Avenue L Park	13.0 ac.	Swim Pool Site	1.7 ac.
Westwood Park	7.0 ac.		

Site Name
Lee Valley Pool
Lions
Logan-Fontenelle
McKinley
Maple Village
Memorial
Mercer
Metcalfe
Miami Playground
Mockingbird Hill
Montclair
Morton
Oaks Park & Pool
Orchard
Palomino Hills
Parkside

Table B-1 (Continued)

EXISTING RECREATION SITES

CITY OF OMAHA, NEBRASKA

(COMMUNITY PARKS, NEIGHBORHOOD PARKS, PLAYGROUNDS AND PLAYFIELDS)

Water (Acres)	Total (Acres)	Site Name	Acreage	Site Name	Acreage	Site Name	Acreage
	50	Adams	60	Country Club Manor	3	Happy Hollow Park	10
	15	Albright	3	Crown Point	2	H. H. Harper	7
	45	Anderson Field	15	Dahlman	4	Harrison Heights	5
		Armburst	5	Deer	18	Highland	6
	3	Athletic	4	Deer Ridge	15	Himebaugh	1
	3	Bay Meadows	5	Democracy	8	Hitchcock	50
		Bemis	9	Dewey	12	Hulac	3
		Bluff View	2	Erskine	3	Karen	11
		Bowling Green	7	Essex	1	Kellom	6
150	559	Brown	12	Fillmore	3	Kellom Greenbelt	3
	3	Burt Triangle	3	Florence	2	Keystone	4
	6	Christie Heights	6	Gallagher	19	Kingswood Park	8
		Churchich	15	Gifford	6	Kingswood Pool	1
	1	Cody	2	Gifford River Drive	13	Kiwanis Park	16
	3	Columbus	6	Grace Young	2	Kountz	10
		Conoco	8	Graham	1	Lake James	3
		Corby	1	Hanscom	58	Leavenworth	5

CITY OF OMAHA, NEBRASKA (CONTINUED)

(COMMUNITY PARKS, NEIGHBORHOOD PARKS, PLAYGROUNDS AND PLAYFIELDS)

PLAYFIELDS)							
Acreage	Site Name	Acreage	Site Name	Acreage	Site Name	Acreage
15.0 ac.	Lee Valley Pool	1	Pershing School Playground	8	Towl	28
11.0 ac.	Lions	2	Pipal	15	Trendwood	25
30.0 ac.	Logan-Fontenelle	5	Pool Maintenance Headquarters	1	Turner Park & Parkway	8
20.0 ac.	McKinley	4	Prairie Lane	5	Twenty Eighth & Craig	5
3.0 ac.	Maple Village	45	Pulaski	2	Upland	10
219 ac.	Memorial	67	Roberts	20	Vogel	2
1/2 ac.	Mercer	6	Rockbrook	18	Walnut Hill	6
1/4 ac.	Metcalfe	3	Sandoz	12	Westchester	15
1/4 ac.	Miami Playground	1	Schroeder	3	West Fair Acres	9
30.0 ac.	Mockingbird Hill	29	Signal Hill	8	Westroads Interchange & Parkway	25
12.0 ac.	Montclair	5	Skylark Park & Pool	2	Westwood Heights Golf Course	26
1.0 ac.	Morton	4	Spaulding Playground	3	Westwood Heights Park & Pool	2
12.0 ac.	Oaks Park & Pool	1	Sunny Slope	6	Yale	1
1.7 ac.	Orchard	8	Swanson (Sarpy Co.)	52	Young	4
	Palomino Hills	3	Templeton Mini	1		
	Parkside	7	Tomahawk Hills	5		

Recreation Needs

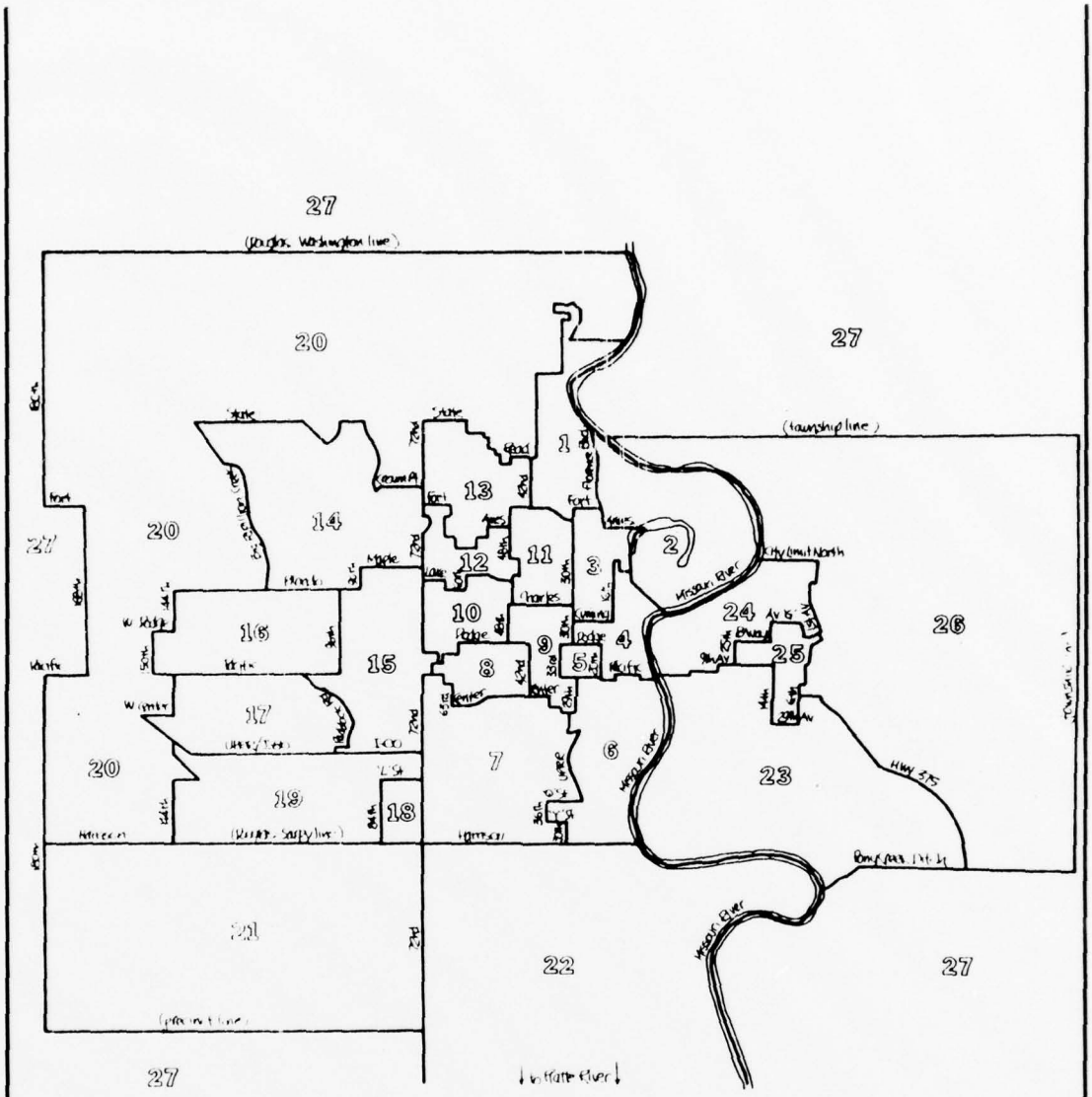
DEMOGRAPHIC FACTORS

3. Existing, 1995, and 2020 population projections for each county in the study area according to the four growth patterns are given in table B-2. The four alternate growth patterns are explained in Annex A-Alternative Futures. Table B-2 indicates a population increase in the seven-county area of approximately 500,000 over the next 50 years.

4. The Nebraska portion of the study area contains 33 percent of Nebraska's population. Douglas and Sarpy counties have a growth rate which exceeds that of the State and the Nation. Median age for the four Nebraska counties is less than 30 years, and the median age for Douglas and Sarpy Counties is less than 26.3 years. The low median age is also reflected in the Iowa portion of the study area with 28.8 years. In many respects, the two States have many similar characteristics, with a large portion of the population in the age bracket of 12 to 24 which makes the largest demand on outdoor activity.

5. In terms of education, Nebraska's and Iowa's rates exceed the national median. Surveys performed by the Center for Applied Urban Research (CAUR) at the University of Nebraska at Omaha have discovered a positive relationship between higher education and recreational activity.

6. Seven percent of the study area population consists of minority populations, such as Black, American Indian, Oriental, and Spanish. These minority populations have some unique leisure-time preferences.



METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA

ROP HOUSING SUBAREAS

U. S. ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA

JUNE 1975

VOLUME III ANNEX E FIGURE B-2

Table B-2
Population Projection Comparisons for the Seven-County Area
(Thousands)

	SMSA Counties				Non-SMSA Counties							
	Douglas	Sarpy	Pottawat-tamie	SMSA Total	Cass	Washington	Harrison	Mills	Study Region Total	Iowa	Nebraska	U.S.
1970 Census	389.5	66.2	87.0	542.6	18.1	13.3	16.2	12.5	602.8	2825.	1483.	203212.
1995 Concepts												
A	533.4	215.4	102.1	850.9	20.6	17.8	16.8	12.0	918.0	3494.	1818.	288270.
B	515.8	176.8	102.6	795.1	32.9	42.1	22.9	24.9	918.0			
C	581.7	167.1	102.1	850.9	20.6	17.8	16.8	12.0	918.0			
D	523.5	225.3	102.1	850.9	20.6	17.8	16.8	12.0	918.0			
2020 Concepts												
A	650.2	260.7	123.5	1034.5	21.5	19.3	17.7	11.4	1104.5	4672.	2354.	399013.
B	635.0	220.2	115.4	970.6	33.5	52.2	23.4	24.8	1104.5			
C	686.5	228.5	119.5	1034.5	21.5	19.3	17.7	11.4	1104.5			
D	619.3	288.2	126.9	1034.5	21.5	19.3	17.7	11.4	1104.5			

Note: Totals may not add due to rounding.

These preferences may, in some cases, be related to their cultural background, as well as their income level. Many of the minority populations in the study area live in high density population centers where there normally occurs a lack of open space and park acreage. Approximately 8 percent of the study area population is considered to be in the low income level by the Bureau of the Census. Twenty percent of the low income level is comprised of people over the age of 65 who represent 11 percent of the population.

7. Median family income of rural counties averages approximately 30 percent below the urban county averages. Minority income averages about 30 percent less than the median family income in the study area.

PARTICIPATION RATES AND ACTIVITY PREFERENCES

NEBRASKA

8. Table B-3 lists recreation activities and outdoor recreation activity days according to the Nebraska State Comprehensive Outdoor Recreation Plan (SCORP) for Recreation Planning Region I which represents the Omaha Area.

IOWA

9. The Iowa SCORP indicates the most popular outdoor recreation activities in southwest Iowa to be driving for pleasure, walking for pleasure, motorcycling, and picnicking. Table B-4 lists outdoor recreation activities and total man-days for a 15-county region in southwest Iowa, including Harrison, Pottawattamie, and Mills Counties.

Table B-3

RECREATION PLANNING REGION I
ACTIVITY PARTICIPATION

Activity	Activity Days (1,000) 1972	1990
Outdoor swimming, pool	3,342	4,463
Bicycling	3,054	4,789
Picnicking	1,765	2,235
Camping	1,339	2,016
Golfing	1,331	2,156
Outdoor swimming, beach	1,257	1,577
Sports (baseball, softball)	919	1,145
Visiting Historic Areas	785	1,072
Tennis	635	1,077
Horseback riding	343	441
Power boating	329	476
Fishing	306	356
Water skiing	144	272
Hiking	67	104

Table B-4

IOWA ACTIVITY PARTICIPATION

Activity	Recreation Man-Days (1,000) 1966	1980
Driving for pleasure	2,105	2,564
Walking for pleasure	1,013	1,212
Motorcycling	962	1,561
Picnicking	823	1,069
Bicycling	527	402
Pool swimming	483	723
Attending outdoor sports events	467	630
Horseback riding	437	463
Fishing	378	426
Playing golf	372	894
All others	1,983	2,602

SIX COUNTY RIVERFRONT AREA

10. The Center for Applied Urban Research at the University of Nebraska in Omaha surveyed activity preferences and participation rates in all study area counties except Cass County. Table B-5 lists the 1974 estimated days of recreation participated in by residents of the six counties and 1990 projections.

Table B-5

SIX-COUNTY-RIVERFRONT AREA
ACTIVITY PARTICIPATION

Activity	Days (1,000) 1974	Activity	1990
Outdoor swimming, pool	7,508		9,403
Bicycling	14,100		16,996
Picnicking	2,865		3,480
Camping	1,373		1,856
Golfing	1,575		1,827
Outdoor swimming, beach	1,626		2,263
Sports (baseball, softball)	2,363		2,943
Visiting historic areas	1,384		1,666
Tennis	2,088		2,744
Horseback riding	1,625		3,067
Power boating	1,139		1,409
Fishing	3,050		3,715
Water skiing	837		1,054
Hiking	462		693
Sail boating	152		420
Canoeing	209		443
Hunting (upland and waterfowl)	1,224		1,469

11. Multiplying the CAUR participation rates by the population projections used for the urban study yields the total activity days for each county indicated in table B-6.

Table B-6
SEVEN-COUNTY ACTIVITY DAY PROJECTIONS

County	(Thousands of Activity Days) 1975	1995	2020
Cass	1,838	1,796	1,759
Douglas	28,136	41,004	42,835
Sarpy	5,228	14,932	31,165
Washington	983	1,816	2,638
Harrison	1,247	1,360	1,347
Mills	978	1,122	879
Pottawattamie	5,825	7,553	7,316
Totals	44,235	69,583	87,939

12. The reader may note that there is a variance among some of the findings of the various studies. CAUR also noted the differences and suggested that they were due to the timing of the surveys, the difference in geographic coverage, sampling error, and survey methodology.

13. Recreation preferences differ by age group according to the CAUR study. For ages up to 14, hiking and picnicking are most favored, and for the active population of 15 to 44, picnicking is preferred. For ones 45 to 64, pleasure driving is at the head of the list. This is also true for those over 65.

14. In terms of demand by income groups, according to the CAUR study, the $8,000 or under income groups prefer these activities:

(1) picnicking, (2) pleasure driving, (3) attending sports events, (4) walking for pleasure and swimming, and (5) fishing and bowling. The middle income groups, $8,000-$20,000 favor (1) attending zoos, museums, parks, (2) off-the-road vehicle recreation, (3) driving for pleasure, and (4) attending historic sites, bowling, and fishing.

15. Upper income groups, $20,000 and over, indicated the following preferences: (1) attending zoos, fairs, and amusement parks, (2) attending sporting events, (3) off-the-road vehicle recreation, (4) swimming, and (5) driving for pleasure.

16. Table B-7 summarizes the preference rankings based on five preference surveys, including the three discussed above.

THE ISSUE OF MOBILITY AND RECREATION

17. Another implication for outdoor recreation planning is the issue of mobility. How far a recreational site is from the individual and the individual's ability to attend the site are of importance.

18. To determine social-economic characteristics of the SMSA, this study used the report on Housing and Community Development in the Nebraska-Iowa Riverfront Development Project Area, 1973 by CAUR. Through a series of criteria, 27 neighborhood areas were identified and are shown in figure B-2.

19. The CAUR labeled each area by neighborhood residential development origin and listed key social and economic criteria. To ascertain social-economic variance among the 27 areas, each was defined by various social class criteria. Each vicinity was defined by income level, education, occupation, and percent below poverty level.

Table B-7
Comparison of Activity Rankings by Survey

	OCBMS[a] 1975	Nebr.[b] SCORP 1972	Iowa[b] SCORP 1975	BOR Nation-wide Plan 1972	Survey by League of[c] Women Voters Council Bluffs, Iowa 1974
Playing games and sports	1	3	3	6	7
Visiting zoos, fairs, amusement parks	2	N-A[d]	N-A	14	N-A
Picnicking	3	4	5	3	2
Driving for pleasure	4	N-A	1	4	1
Attending sporting events	5	N-A	8	15	6
Pool swimming	6	1	7	8	4
Visiting historic sites	7	7	N-A	N-A	N-A
Fishing	8	8	9	7	5[e]
Attending outdoor concerts and plays	9	N-A	15	N-A	12
Camping-developed campgrounds	10	5	14	11	14
Bicycling	11	2	6	10	3[f]
Walking for pleasure	12	N-A	4	1	13
Beach swimming	13	6	13	2	10
Hunting	14	N-A	12	N-A	9
Snow skiing-sledding	15	N-A	N-A	N-A	8

[a] Omaha-Council Bluffs Metropolitan Study.
Estimates and Projections of Current Needs and Future Requirements for Recreational Activities and Facilities in the Riverfront Development Project Area, 1974 and 1990; University of Nebraska at Omaha, 1974.

[b] SCORP - State Comprehensive Outdoor Recreation Plan.

[c] Based on a 2 percent random sample of all Council Bluffs, Iowa neighborhoods-70 leisure time activities surveyed. Activity participation rates were higher for some activities not on this list.

[d] Information not available.

[e] Not limited to outdoor.

[f] Hiking.

With this criteria, three baseline vicinity areas were determined to isolate low income areas.

20. The results of the analysis for low income groups are that in Subarea 4, 63.8 percent do not have a car and the average for all low income areas is 36.2 percent without an auto. Low income areas are Subareas 2 thru 6, 11, and 25.

NEEDS

21. There are numerous factors for calculating the need for additional recreational areas. Some of the factors are:

User pressure	Participation rates
Econometric models	Inventory demand
Gross demand	Population and land use
Activity preference	Recreational standards

22. In some ways, this report has used some or all of the above methods; however, the major emphasis was placed on recreational standards. In this approach, acreage per thousand population is used. It is based on standards adopted by the Metropolitan Area Planning Agency and the Nebraska Game and Parks Commission. Table B-8 lists the standards used.

23. Tables B-9 through B-11 indicate existing and future needs for three types of recreation areas. Existing and future needs were based on multiplying the average county population projections listed in table B-2 by the standards and subtracting the existing supply.

Table B-8
OUTDOOR RECREATION STANDARDS
(Acres per 1,000 population)

Types of Recreation	Nebraska Counties[a]			Iowa Counties[b]		
	1975	1995	2020	1975	1995	2020
Regional Parks, General Parks, Recreation Areas	35	45	45[c]	25	43	66
Community and Neighborhood Parks, Playgrounds, Playfields	13[d]	13[d]	13[d]	10	20	26
Natural Environment Area	35	45	45[c]	No standard available		

[a] Nebraska State Comprehensive Outdoor Recreation Plan, Nebraska Game and Parks Commission, 1973.

[b] Open Space Plan and Program, Omaha-Council Bluffs, Report No. 106, Prepared by Metropolitan Planning Agency, October 1972.

[c] No standard given for 2020. Therefore, the same acreage as designated for 1995 was used.

[d] The state plan did not identify the acreage with a specific target year. Therefore, the same standard was used for all three years. This is also an average of the 4 standards for city parks.

Table B-9
LEISURE TIME NEEDS
FOR COMMUNITY AND NEIGHBORHOOD PARKS, PLAYGROUNDS, AND PLAYFIELDS
(Acres)

State/County	Year	Supply	Requirement	Need*
Iowa				
Harrison	1975	617	154	(463)
	1995	617	368	(249)
	2020	617	497	(120)
Mills	1975	394	173	(221)
	1995	394	304	(90)
	2020	394	385	(9)
Pottawattamie	1975	1,680	873	(807)
	1995	1,680	2,044	364
	2020	1,680	3,154	1,474
Nebraska				
Cass	1975	1,112	326	(786)
	1995	1,112	425	(687)
	2020	1,112	441	(671)
Douglas	1975	6,566	7,375	809
	1995	6,566	9,697	3,131
	2020	6,566	11,664	5,098
Sarpy	1975	633	1,330	697
	1995	633	3,530	2,897
	2020	633	4,489	3,856
Washington	1975	748	257	(491)
	1995	748	428	(320)
	2020	748	497	(251)
Totals:	1975	11,750	10,488	(1,262)
	1995	11,750	16,796	5,046
	2020	11,750	21,127	9,377

* Surpluses are shown in brackets.

Calculated needs, as indicated, were not rounded and should not be considered as exact quantities.

Table B-10
LEISURE TIME NEEDS FOR REGIONAL PARKS, CENTRAL PARKS, AND RECREATION AREAS
(Acres)

State/County	Year	Supply	Requirement	Need*
Iowa				
Harrison	1975	52	385	333
	1995	52	883	831
	2020	52	1,261	1,209
Mills	1975	49	283	234
	1995	49	730	681
	2020	49	977	928
Pottawattamie	1975	3,334	2,183	(1,151)
	1995	3,334	4,906	1,572
	2020	3,334	8,006	4,672
Nebraska				
Cass	1975	192	634	442
	1995	192	1,062	870
	2020	192	1,103	911
Douglas	1975	964	14,340	13,376
	1995	964	24,242	23,278
	2020	964	29,160	28,196
Sarpy	1975	277	2,587	2,310
	1995	277	8,825	8,548
	2020	277	11,223	10,946
Washington	1975	—	501	501
	1995	—	1,071	1,071
	2020	—	1,242	1,242
Totals:	1975	4,868	20,913	16,045
	1995	4,868	41,719	36,851
	2020	4,868	52,972	48,104

* Surpluses are shown in brackets.

Calculated needs as indicated were not rounded, and should not be considered as exact quantities.

Table B-11
LEISURE TIME NEEDS FOR
DESIGNATED NATURAL AREAS & NATURE PRESERVES
(Acres)

State/County	Year	Supply	Requirement	Need
Nebraska				
Cass	1975	___	634	634
	1995	___	1,062	1,062
	2020	___	1,103	1,103
Douglas	1975	___	14,340	14,340
	1995	___	24,242	24,242
	2020	___	29,160	29,160
Sarpy	1975	1,300	2,587	1,287
	1995	1,300	8,825	7,525
	2020	1,300	11,223	9,923
Washington	1975	___	501	501
	1995	___	1,071	1,071
	2020	___	1,242	1,242
Totals:	1975	1,300	18,062	16,762
	1995	1,300	35,200	33,900
	2020	1,300	42,728	41,428

Calculated needs, as indicated, were not rounded and should not be considered as exact quantities

Table B-12
CAUR NEEDS PROJECTIONS

Activity	Existing Supply (Acres)	Current User Pressure (Participation) (days per acre)	1990 Proj. User Pressure (Part. days per acre)	Need (Acres)
Hunting	15,830	69.2	84.3	3,434
Golfing	2,408	643	746	386
Picnicking	25,333	101	123	5,320
Water Related	4,414	1,191	1,555	1,348
Playground & Park Related	14,868	1,593	1,972	3,544

24. The study conducted by CAUR developed different needs projections. This study was based on a "user pressure" approach. The approach assumes existing facilities are adequate and bases needs on accommodating future populations at the same level of opportunities currently provided.

25. Table B-12 indicates the results of the Caur need projections for 1990.

26. The Nebraska SCORP report used a combination of demand, based on participation rates, and carrying capacity to determine existing and 1990 recreation needs. Table B-13 lists the needs determined for the Nebraska portion of the study area.

Table B-13
NEBRASKA SCORP NEEDS DETERMINATION

	Present Needs (Acres except where noted)	1990 Needs* (Acres except where noted)
Swimming pools	22	NA
Lake swimming	15	22
Lake fishing	6,303	6,403
Picnicking tables	4,087	5,766
Camping	599	989
Powerboating	8,082	11,862
Water skiing	4,380	7,430
Golfing	97 holes	296 holes
Tennis	127 courts	233 courts
Hiking	25 miles	40 miles

* Includes recreation provided at sites 10, 11, 16, and 3A of the Papillion Creek project.

27. The Iowa SCORP report, since it covers a much larger area than the Iowa portion of the study area, cannot be used to define specific needs in terms of acres. It is known that the existing facilities in Iowa are heavily used. Lake Manawa experienced 2,264 uses per land acre in 1973; Arrowhead Park, 1,647 uses per acre; and Long's Landing, 9,738 uses per acre.

Existing Recreation Plans

28. Existing recreation plans that form the basis of the recreation component of the urban study are: (1) The Nebraska Game and Park's State Comprehensive Outdoor Recreation Plan (1972 SCORP); (2) The Iowa Conservation Commission's State Comprehensive Outdoor Recreation Plan (1972 SCORP); (3) Metropolitan Area Planning Agency's Open Space Plan (1972); (4) Platte Level "B" Study (1975); and (5) Mapa's Missouri River Corridor Plan (1973).

NEBRASKA STATE COMPREHENSIVE OUTDOOR RECREATION PLAN

29. The Nebraska Game and Parks Commission SCORP report outlines existing recreational areas, provides a demographic-recreational analysis, and establishes priorities and needs for future recreation in the State. A plan in terms of specific sites and funding of those sites is not detailed. Planning Region I, composed of Dodge, Washington, Douglas, and Sarpy Counties, approximates the Nebraska portion of the urban study area.

IOWA STATE COMPREHENSIVE OUTDOOR RECREATION PLAN

30. The Iowa Conservation Commission's SCORP report is similar to the Nebraska report. Of special interest to the urban study is the 15-county Planning Region IV described as "southwest Iowa" which includes Harrison, Pottawattamie, and Mills Counties. Estimated man-days and additional acreage deficiencies are forecasted, along with an outline of improvements to be made at existing areas. Specific sites for new areas are not outlined.

METROPOLITAN AREA PLANNING AGENCY (MAPA) OPEN SPACE PLAN

31. MAPA's Open Space Plan inventories existing recreational areas in Douglas, Sarpy, and Pottawattamie Counties and projects needs based on increases in population and increases in recreation demands. Basically the recreation standards approach is used.

32. MAPA's Open Space Plan identifies five major parkways that can be developed for recreational facilities. The five include the "Two Rivers" parkway, the "Lower Platte" parkway, the "Papio" parkway, the "Missouri River" parkway, and the "Eastern Pottawattamie" parkway. Specific recreation sites are located within each parkway and are designated as to type of use. The MAPA Plan is the most definitive existing recreation plan available in the study area.

PLATTE LEVEL "B" STUDY

33. This study, nearing completion, is a State-Federal interagency undertaking which underlines numerous problems confronting

the entire Platte River area, with special emphasis on the over-populated eastern portion of Nebraska. Three access development nodes, sandpit lakes, and a National Recreation Area or Scenic River designation are among alternatives proposed for the lower Platte and Elkhorn Rivers in Douglas, Sarpy, and Cass Counties.

MAPA - RIVERFRONT DEPARTMENT MISSOURI RIVERFRONT IOWA - NEBRASKA PARKS, RECREATION AREAS, HISTORIC PRESERVATION PLAN 1973

34. This study emphasizes the recreation resource potential of the Missouri River. Recreational sites are envisioned along the river bordering Washington, Douglas, Sarpy, Harrison, Pottawattamie and Mills Counties.

OTHER PLANS

35. In addition to the plans mentioned above, there are several local plans in existence. Each county has some sort of recreation plan usually contained within its comprehensive development plan. Most notable among the county plans is the Pottawattamie County Comprehensive Regional and Urban Area Open Space and Recreation Plan developed in 1969. The larger cities, particularly Omaha and Council Bluffs, have comprehensive recreation master plans. The Council Bluffs plan is contained within the Pottawattamie County Plan.

36. The available local plans were used, where appropriate, to represent the outdoor recreation plans of the local entities.

SECTION C

RECREATION GOALS AND OBJECTIVES

RECREATION GOALS AND OBJECTIVES

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SECTION C

RECREATION

GOALS AND OBJECTIVES

Goals

1. The goal of recreation planning is to provide for leisure time opportunities for the study area's existing and future populations. The goal of a water management study is to define the role of water and related land use in helping to satisfy leisure time needs. Satisfaction of the following objectives will help to satisfy the goals in the best interest of the people and resources of the study area.

Objectives

2. The following are recreation planning objectives for the urban study:

- Provide enough outdoor recreation area to accomodate an additional demand of 25,350,000 activity days by 1995 and 43,704,000 activity days by 2020.

- To meet 1995 activity day demands, provide an additional 5,046 acres of local parks, 36,851 acres of regional parks, and 33,900 acres of natural areas by 1995.

- To meet 2020 activity day demands, provide an additional 9,377 acres of local parks, 48,104 acres of regional parks, and 41,478 acres of natural areas by 2020.

- Within the above acreages, provide 26 acres for lake swimming, 8,300 acres for lake fishing, 11,952 acres for powerboating, and 6,627 acres for water skiing by 1990.

- Provide 400 miles of stream access in the lower Platte Basin as indicated in the Platte Level "B" Plan by 2020.

- Provide the above using multipurpose objectives wherever possible.

- Provide for the above with the least disturbance of existing land uses.

SECTION D

PLAN FORMULATION

PLAN FORMULATION

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SECTION D

PLAN FORMULATION

Resource Potential For Recreation

1. Major resource areas having potential either as regional parks or natural environment areas near the urban area are depicted on figure D-1. Primary environmental corridors are shown in dark shading and secondary corridors in light shading. These areas were identified in the MAPA Open Space Plan and Program as areas of major recreation or natural preservation potential. The areas are defined as: (1) the Elkhorn River area predominantly in western Douglas and Washington Counties; (2) the Platte River area in Douglas and Sarpy Counties; (3) the Missouri River area in Iowa and Nebraska from Blair to Plattsmouth; and (4) the Papillion Creek basin. Prominent features for the first three areas are flood plains flanked by scenic bluffs overlooking the rivers. The fourth area's potential is a combination of flood control dams and flood plain management. The areas are described below.

2. Nearly all the natural resources available for recreation have some relationship to water either through use of the flood plains, flood control impoundments, or use of the rivers for scenic focal points.

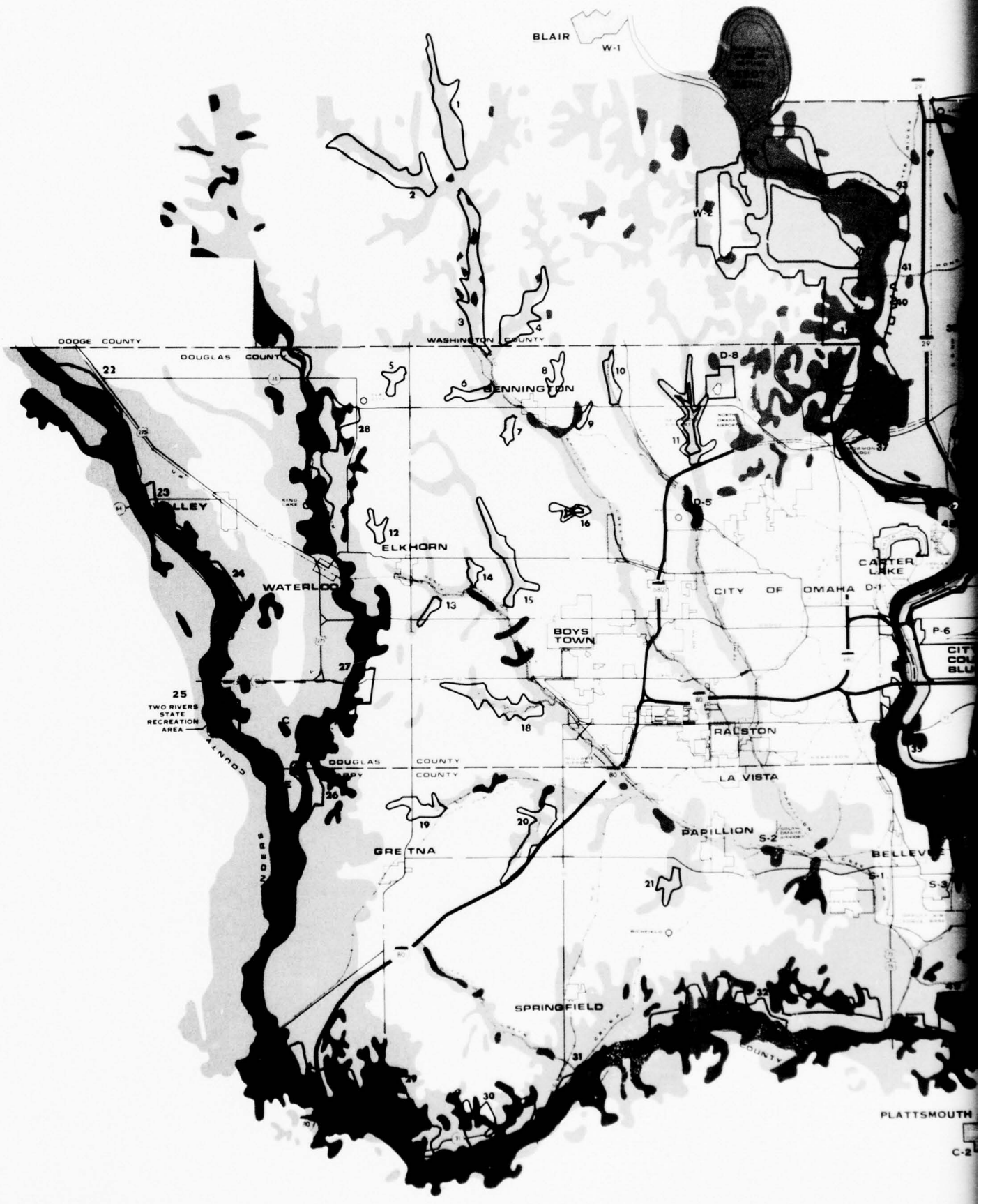
ELKHORN RIVER

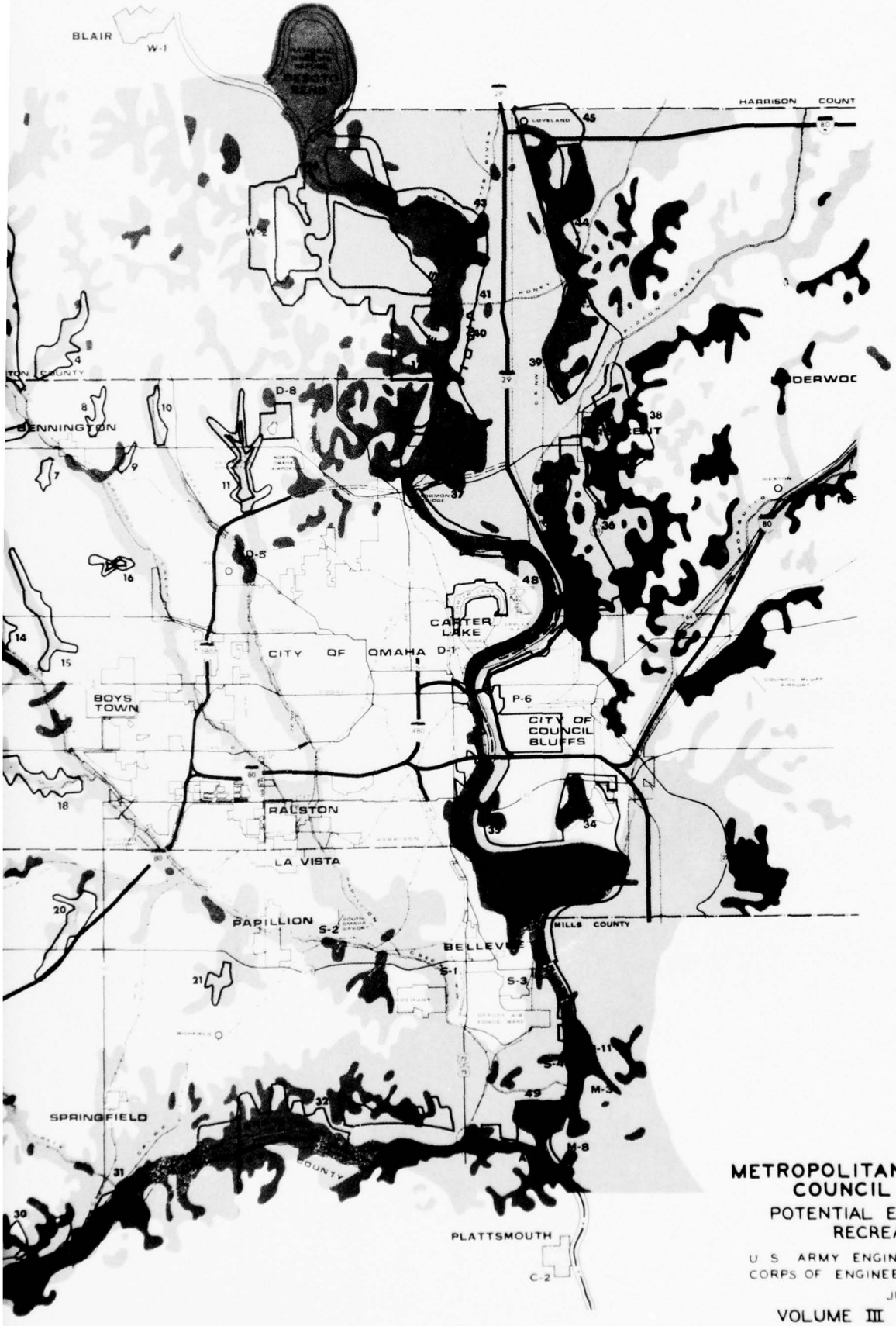
3. Extensive woodlands are found along the Elkhorn River. Also, several bluffs along the river provide views of the entire Elkhorn River valley. The area currently has several recreational camps. The bluff areas have been subject to encroachment from urban developments and, because of their location, will be subject to further residential development. The Elkhorn is a small, predominantly shallow river. Canoeing, fishing, and swimming are activities on the river itself. Currently, water quality is poor. Progress toward controlling pollution from sewage treatment plants and feedlots will improve the quality of the Elkhorn River.

PLATTE RIVER

4. The Platte River valley is characterized by wooded areas along both sides of the river and by several islands of scenic and ecological interest. Upstream of its confluence with the Elkhorn River, the Platte River is flanked by relatively flat, wooded areas, some of which are completely undeveloped. Public access to the river is very limited, with major access being by county and State roads.

5. The lower Platte River has a unique rugged topography. Steep wooded bluffs provide excellent scenic views. Undisturbed areas of hardwood trees exist. There are several sandpits and quarries along


BLAIR
W-1
W-2
DODGE COUNTY
DOUGLAS COUNTY
WASHINGTON COUNTY
BENNINGTON
ELKHORN
WATERLOO
BOYS TOWN
CITY OF OMAHA
CARTER LAKE
RALSTON
LA VISTA
PAPILLION
GRETNA
SPRINGFIELD
PLATTSMOUTH
TWO RIVERS STATE RECREATION AREA
D-1
D-5
D-8
P-6
S-1
S-2
S-3
C-2



METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA

POTENTIAL ENVIRONMENTAL AND RECREATION AREAS

U S ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA

JUNE 1975

VOLUME III ANNEX E FIGURE D-1

the river. Private seasonal dwellings are found in scattered areas along this portion of the river. Public access is non-existent. Urban communities, such as Buccaneer Bay and Hawaiian Village, are forming in this portion of the Platte River.

6. The lower Platte River is subject to frequent flooding which has contributed to the river's maintaining its natural characteristics. Platte River flows fluctuate widely from the flood stages of spring to low flows in the late summer. Canoeing, fishing, swimming, and airboating are the current recreation activities found on the Platte. The current water quality is generally good, meeting State standards for recreation most of the time.

7. The Platte River flood plain has been attractive for commercial sand and gravel operations. These operations have created a number of sandpit lakes offering excellent recreation potential. The sand and gravel industry is expected to continue its operations in the lower Platte.

8. The lower Platte River is a unique and important ecological resource to the Omaha area. It is the only river in the area still having relatively natural characteristics. The Nebraska State Water Plan (1971) designated the Platte River from the mouth of the Loup River to the Missouri River as a "Protected River Reach". "Protected River Reaches" are those water-related areas that should be preserved in the interest of environmental quality of life. The Bureau of Outdoor Recreation, in its study, Islands of America (1970), listed the Platte River islands as "an outstanding example of a diminishing environmental resource" meriting national recognition.

9. Most of the Platte River lands, although currently undisturbed, are in private ownership and not available for public use. The unique character of the lower Platte is in danger. Urban housing developments, although attractive from a private ownership view, will preclude public use on many lands. Surface flow depletion from upstream irrigation is projected to cause zero flows in the Platte River during dry years. The Nebraska constitution does not recognize recreation, aesthetics, and fish and wildlife as beneficial uses of the State's waters. Without such recognition, the above uses are in danger in the Platte River. A multitude of opportunities exist for combining flood plain management, protected flows, and preservation-acquisition concepts for protecting the Platte River resources. Implementation of these opportunities is currently lacking.

MISSOURI RIVER

10. The Missouri Riverfront corridor, with wildlife, wooded lands, rolling topography, ox-bow lakes, and bluffs, provides a high potential for a variety of regional parks or natural areas. The Missouri River valley, although channelized and urbanized in some portions, creates an awareness of the relationship between bluff and flood plain and river and flood plain. The corridor already contains many of the region's camping areas, hiking and riding trails, nature centers, wildlife refuges, and wilderness areas.

11. On the Iowa side, heavily wooded bluffs flank the Missouri River flood plain and provide scenic views. Local opinion strongly favors retaining the bluffs in a natural state. A broad flood plain on the Iowa side is used predominantly for agriculture. In many places the farming has extended up to the river bank.

Scattered areas of woodland exist along the river, many of which serve as wildlife or recreation areas, such as DeSoto Bend and Wilson Island State Park. Undeveloped woodland areas consist mainly of strip parcels along the river.

12. On the Nebraska side, the Missouri River flood plain is less extensive and more urban in character than on the Iowa side. Bluffs of significance exist between Omaha and Blair and in Cass County. Wooded areas of significance are found in Washington and Cass Counties, in the northeastern corner of Douglas County, and in the Fontenelle Forest-Gifford area. Most of Douglas County and Sarpy County lands along the river are urban or agricultural in character.

13. The river's course is controlled to provide a transportation route for commerce. Current recreation uses are powerboating and fishing. The high flow and turbulence of the river make it unsafe for canoeing or swimming. Water quality ranges from excellent to polluted - being affected by runoff from upstream agricultural lands and by untreated sewage discharges from Omaha.

14. The study area's three largest lakes are located along the Missouri River. DeSoto Bend is a combination recreation and wildlife management area. Conflicts have arisen at DeSoto Bend over powerboating and wildlife interests. Carter Lake, located adjacent to Eppley Airfield, needs to be improved to realize its full potential as a recreation resource. Evidence of sewage pollution has been found in Carter Lake. Also runoff from the airfield has been suspected of polluting the lake. A program to improve Lake Manawa, located south of Council Bluffs, has been initiated to realize its recreation potential. The program includes a master plan for the lake, expansion of recreation lands, and dredging to increase lake depths.

PAPILLION CREEK BASIN

15. The Papillion Creek Flood Control Project as originally formulated consisted of 21 reservoirs in a semi-circle around Omaha, with recreational and fish and wildlife lands around each lake. The flood control dams and lakes would provide regional park opportunities in the Papillion Creek basin. The city of Omaha has also envisioned that some of the lakes would provide community park opportunities planned into the future growth of Omaha.

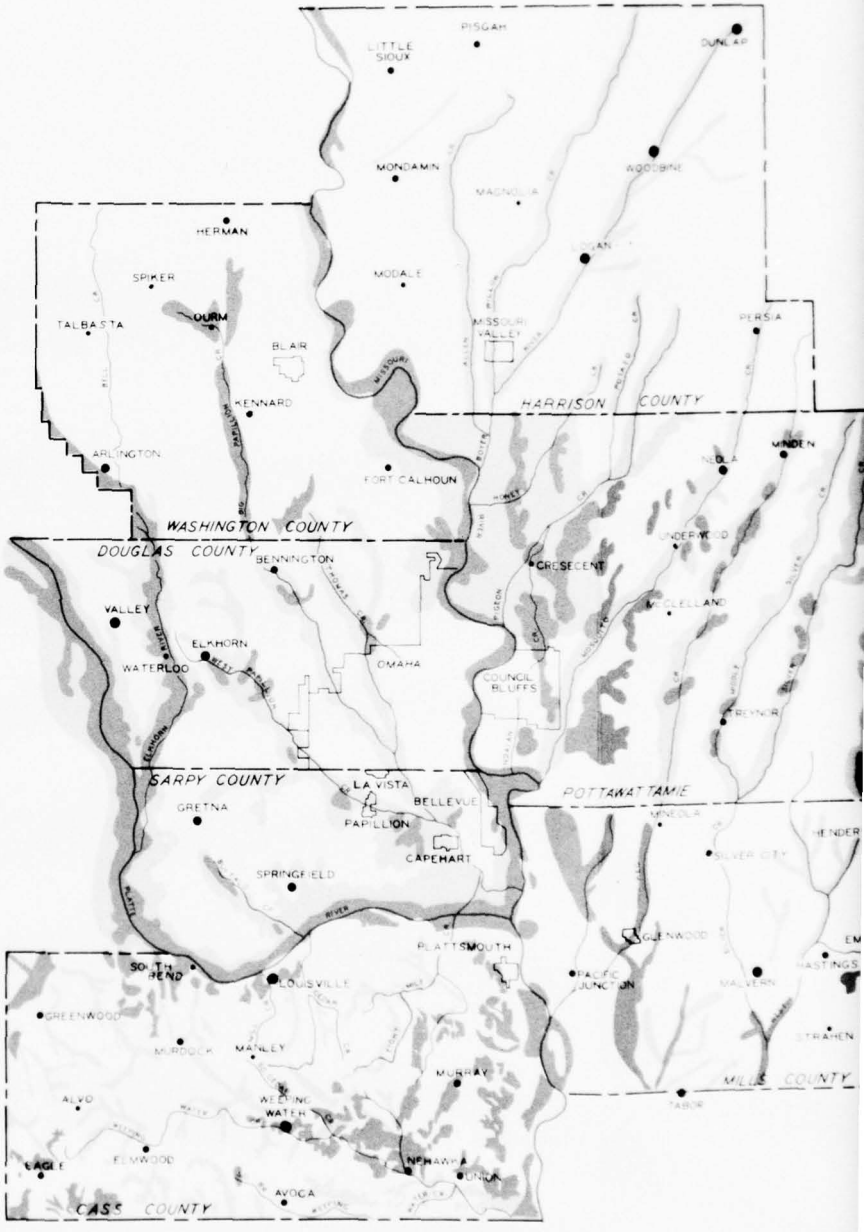
16. Based on the zoning requirements of the Flood Disaster Protection Act of 1973 and the reevaluation of the Papio Project, flood plain management will take on a more important role in flood protection. The undeveloped portions of the Papio flood plain will provide opportunities for regional and community parks. Tranquillity Park in northwest Omaha is an example of flood plain land use for recreation.

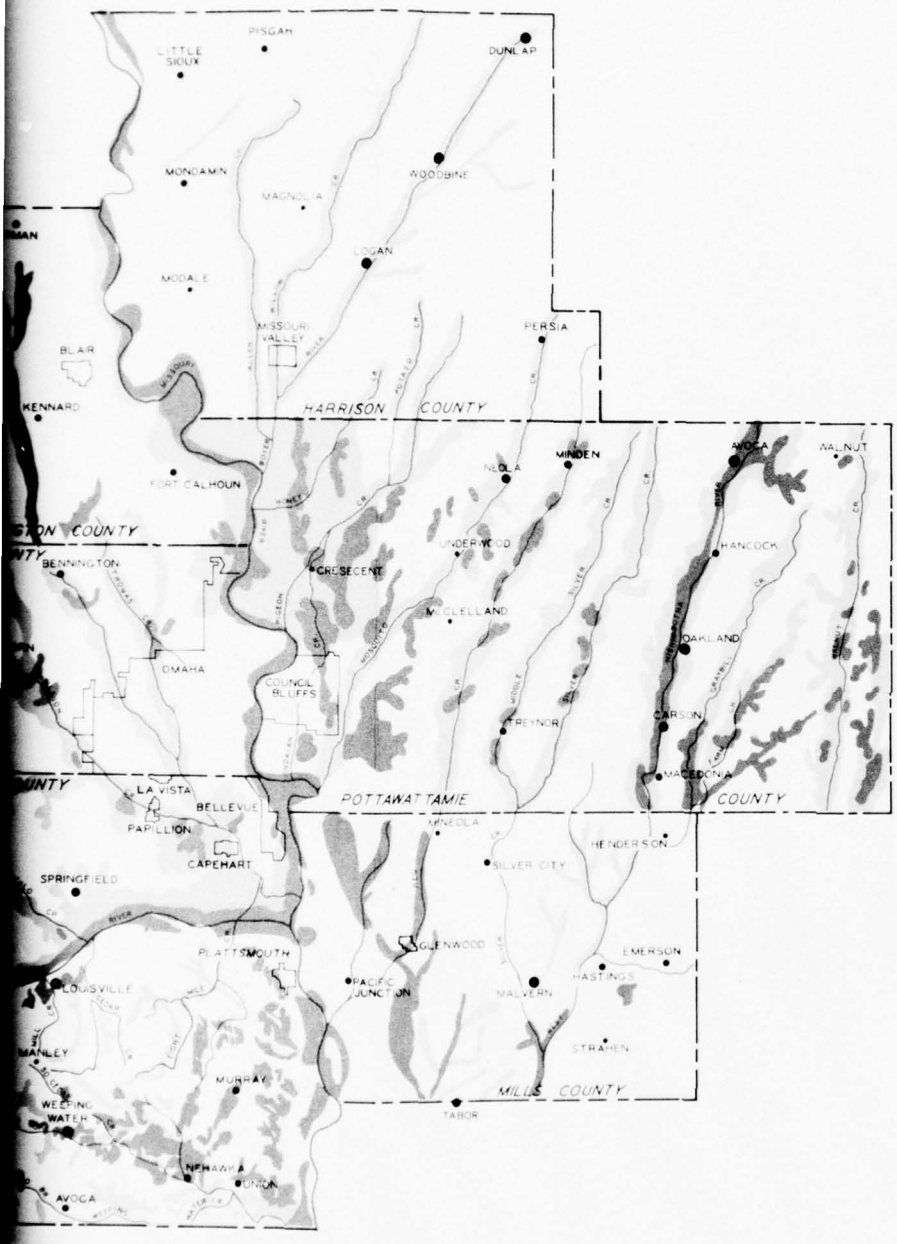
OTHER AREAS

17. Resource areas in the seven counties with recreation potential are shown in figure D-2. Most of the areas depicted are along the streams and rivers with some additional bluff lands indicated. Primary corridors (dark shaded areas) border the Missouri River in all counties, the Nishnabotna River in Pottawattamie County, and Weeping Water Creek in Cass County.

RESOURCES FOR COMMUNITY PARKS

18. The activities provided at community or local parks are not as dependent upon the natural or water resource base as are regional


PISGAH
LITTLE SIOUX
DUNLAP
MONDAMIN
MAGNOLIA
AGOSSIZE
HERMAN
SPIKER
MODALE
TALBASTA
OURM
BLAIR
MISSOURI VALLEY
PERSIA
HARRISON COUNTY
KENNARD
ARLINGTON
FORT CALHOUN
MINDEN
NEOLA
WASHINGTON COUNTY
DOUGLAS COUNTY
BENNINGTON
CRESCENT
VALLEY
ELKHORN
WATERLOO
OMAHA
COUNCIL BLUFFS
MCPLELLAND
TREYNOR
SARPY COUNTY
LA VISTA
BELLEVUE
POTTAWATTAMIE
GRETNA
PAPILLION
CAPEHART
SPRINGFIELD
PLATTSMOUTH
SILVER CITY
GLENWOOD
PACIFIC JUNCTION
SOUTH BEND
LOUISVILLE
GREENWOOD
MURDOCK
MANLEY
MURRAY
MILLS COUNTY
ALVO
WEEPING WATER
EAGLE
ELMWOOD
NEHAWKA
UNION
AVOCA
CASS COUNTY



N

LEGEND

POPULATION SYMBOLS
- 0 - 200
- 200 - 500
- 500 - 1,000
- 1,000 - 2,000
- 2,000 AND OVER
- COUNTY OUTLINE
- PRIMARY CORRIDOR
- SECONDARY CORRIDOR

NOTE: ADOPTED IN PART FROM MAPA OPEN SPACE PLAN

5 0 5 10
SCALE IN MILES

THIS DRAWING WAS REDUCED TO THREE-EIGHTHS THE ORIGINAL SCALE.

METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA

SEVEN COUNTY ENVIRONMENTAL AREA

U.S. ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA
JUNE 1975

VOLUME III ANNEX E FIGURE D-2

parks or natural environmental areas. The opportunities for community or local parks are many and are best determined by local communities. Listed below are some of the options to make better use of, or to improve, the amount of local park opportunities:

- Incorporate provisions into subdivision regulations calling for a certain portion of land to be set aside for recreational purposes. These areas could also be used as temporary ponding areas to retard the rate of stormwater runoff.

- Provide for multi-seasonal or multi-functional use of existing areas; i.e. use of tennis courts for ice skating, badminton, volleyball and basketball activities; use of golf courses for cross-country skiing and sledding during the winter months; and covers on swimming pools for winter use.

- Use of flood plains for recreational activities, particularly those flood plains containing parcels of vacant, unfarmable land, such as areas along the Papillion, Indian, and Mosquito Creeks.

- Use of utility right-of-way, open space around water and sewage treatment plants, and abandoned railroad right-of-ways.

- Use of building rooftops and designated street closures.

REVITALIZATION OF EXISTING AREAS

19. There appears to be a strong demand in the study area to improve the quality and management of existing recreation resources. The two most prominent areas in need of improvement are Lake Manawa and Carter Lake.

20. The major problem associated with Lake Manawa is the lake depth. Although the depth is over 8 feet in places, the average depth of the 600-acre lake is only 2 1/2 to 3 feet. Sailboating, powerboating, and water skiing are current popular uses of the lake. Increasing lake depths will improve the safety of powerboating and water skiing.

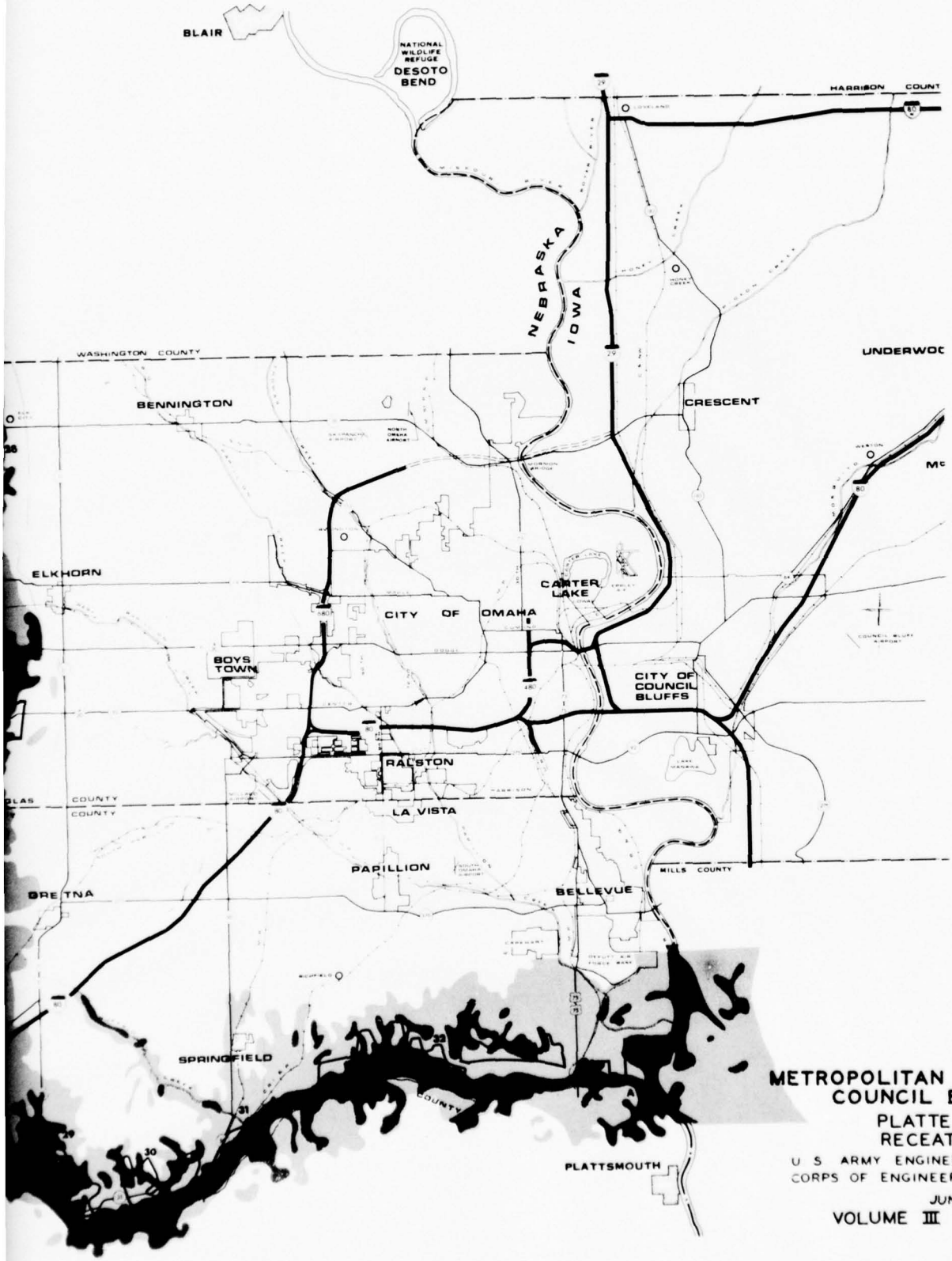
21. The Carter Lake problem is primarily one of pollution. The lake is predominately used for powerboating, water skiing, and fishing, but the lake is currently closed to swimming. The main sources of pollution appear to be storm runoff from Epply Airfield and unidentified domestic waste discharges. A fish-kill in the spring of 1975 was attributed to high concentration of ethylene glycol which is used during the winter to de-ice plane engines and runways. The Nebraska Department of Environmental Control is placing Eppley's storm discharges under the National Pollutant Discharge Elimination System and will require Eppley to take corrective actions. Other sources of pollutants discharging into Carter Lake remain to be identified.

Description of the Plans

PLATTE-ELKHORN PLANS

22. Specific site proposals from the MAPA Plan, the Platte Level "B" Study, and from the Bureau of Outdoor Recreation are shown on figure D-3. These plans recommend river access and development


BLAIR
NATIONAL WILDLIFE REFUGE
DESOTO BEND
DODGE COUNTY
DOUGLAS COUNTY
WASHINGTON COUNTY
22
BENNINGTON
38
23
ELKHORN
24
WATERLOO
CITY OF OMAHA
BOYS TOWN
27
25
TWO RIVERS STATE RECREATION AREA
RALSTON
DOUGLAS COUNTY
LA VISTA
26
PAPILLION
GRETNA
SPRINGFIELD
31
30



METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA

PLATTE - ELKHORN
RECEATION PLAN

U S ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA

JUNE 1975

VOLUME III ANNEX E FIGURE D-3

areas, sandpit lake potentials, and use of the flood plain and wooded bluff areas. The recommendations also encompass preservation of the scenic wilderness and aesthetic qualities of the Platte River islands. About 28,000 acres of potential regional park and natural areas have been specifically identified along the Platte-Elkhorn Rivers in Cass, Sarpy, and Douglas Counties.

23. The Bureau of Outdoor Recreation and the Platte Level "B" Study have suggested an additional 16,000 acres of recreation and natural areas along the Platte-Elkhorn Rivers as part of a Lower Platte-Elkhorn Recreation Area. These additional acres would be required to totally fulfill the 2020 recreation planning objectives for regional parks and natural areas. Some of these additional acres could be provided for in the northern edge of Cass County along the Platte River and the southwestern edge of Washington County along the Elkhorn River. County Comprehensive Plans for both counties indicate these areas for potential parks or natural areas. A site-by-site description of each identified site is presented in the following paragraphs based on plans of the various agencies.

PLATTE LEVEL "B" PLAN

24. A preliminary draft of the Platte Level "B" Plan contains the following proposals.

25. Site A. A 100-acre Platte River access near Highway 73-75. This site would be located in the northeast corner of Cass County. Frontage along the River is available for boating and fishing. The area would be within the Platte River flood plain.

26. Site B. A 100-acre expansion of the existing Louisville State Recreation Area. This proposal could improve recreation

along the Platte River. Currently most recreation is done on the sandpit lakes within the Louisville SRA.

27. Site C. A 7,500-acre regional park near the existing Two Rivers State Recreation Area. The area would extend northward from the confluence of the Platte-Elkhorn Rivers. Heavy woods characterize part of the area. Scattered outcroppings of fossiliferous limestones of geologic interest characterize the bluffs of the Elkhorn in this area. Most of the area is within the common flood plain of the Platte-Elkhorn Rivers.

28. Site E. A 150-acre sandpit lake recreation area just south of the Douglas-Sarpy County line. This area would be within Site C. A series of small, relatively undeveloped lakes has been created by the sand and gravel industry in this area.

29. The Platte Level "B" Plan also contains several recommendations of importance to the lower Platte-Elkhorn Rivers. These include:

- Amend the Nebraska Constitution to recognize recreation, aesthetics, and fish and wildlife as beneficial uses of the State's waters.

- Establish a State agency with authority to maintain optimum flows for the above uses and to insure preservation of the natural river environment.

- Enact a Nebraska Rivers Act to study inclusion of the lower Platte River in a State protected rivers system. The Nebraska State Water Plan has already recommended that the lower Platte River be declared a Protected River Reach.

- Study further the lower Platte River to determine if it qualifies for designation under Section 5 (A) of the National Wild and Scenic Rivers Act, (PL 90-542).

- Further evaluate the lower Platte-Elkhorn Rivers to determine if they qualify for designation as a National Recreation Area.

- Initate a State level program, using the Nebraska Resources Development Fund to subsidize private landowners to open their lands to public recreation use.

- Acquire future sandpit lakes for public outdoor recreation use.

MAPA PLAN (PRIORITY BY 1990)

30. The following describes plans developed by the Metropolitan Area Planning Agency for the lower Platte-Elkhorn Rivers.

31. No. 24. A 600-acre general recreation area 1 1/2 miles south of Valley. The area is approximately 2 miles long and varies from 1/4 to 1/2 mile wide. The riverbank is densely wooded, as are two adjacent islands. The entire area is within the Platte River flood plain.

32. No. 27. A 700-acre natural environment area at the intersection of U. S. Highway 30A and the Elkhorn River south of Elkhorn, Nebraska. The area extends 1 mile north and 1 mile south of the Highway. Heavily wooded riverbanks characterize this area. The eastern side of the river south of the bridge is quite hilly and presents several scenic overlooks. Some cabin development has occurred along the western riverbank south of the bridge. Part of the area is within the Elkhorn River flood plain.

33. No. 28. A 4,000-acre natural environment area 1 mile west of Elk City. This area follows the Elkhorn River flood plain with the exception of a ravine immediately west of Elk City. Most of the wooded areas are in the Elkhorn River flood plain and do not extend back from the river farther than 1/4 mile. The area is relatively free from development except for several cabins north of the Highway 36 bridge. The ravine west of Elk City is quite unique as it is very heavily forested with extreme slopes and contain several minor dams. A local landowner has opposed public use of the ravine.

34. No. 29. A 4,500-acre general recreation area seven miles south of Gretna. This site is dominated by a high bluff overlooking the Platte River Valley. The bluff area has extreme slopes and contains numerous rock outcroppings. The entire bluff area is covered with scattered timber. Immediately east of the Gretna Fish Hatchery is an extensive stand of timber which has had only minimal development. Public access to this area is provided by a county road paralleling the river. This entire area is well suited for outdoor recreation. At the present time, the Gretna Fish Hatchery and the Schram Tract area are maintained by the Nebraska Game and Parks Commission. These areas, when combined with the riverfront and adjacent wooded areas, would offer fishing, boating, camping, hiking, and many more outdoor recreation activities. Part of the area is subject to Platte River flooding.

35. No. 30. A 2,600-acre natural environment area three miles east of the Gretna Fish Hatchery. This area is basically wooded bluff land with substantial areas of rock outcroppings which were the result of several quarry sites along the base of the bluffs. A large area of mixed hardwood and conifers, believed to be virtually

undisturbed, is located near Highway 50, approximately 1/4 mile north of the Platte River. The riverbank area is heavily wooded and has experienced extensive cabin development. Public access to the river is extremely limited.

36. No. 32. A 3,800-acre general recreation area 5 miles south of Papillion. This area contains several significant features, most of which are conducive to outdoor recreation. The Platte River offers approximately 4 miles of continual tree line along its banks. The flood plain extends approximately 1/2 mile back from the riverbank. High bluffs overlook the river valley and provide extensive woodlands as well as unusual rock outcroppings. Several quarries are currently operating in this area. Several historical sites are located in this general area as are numerous private camps. Public access to this area is limited.

MAPA PLAN (PRIORITY BY 2000)

37. No. 22. A 1,000-acre natural environment area 5 miles northwest of Valley. The area is heavily wooded along the riverbank; however, several clearings exist between the forested areas and the adjacent road. Good access is available by U.S. Highway 275. Two large islands are located in the area and are excellent examples of natural environment areas. This area would provide nearly 2 1/2 miles of riverbank for water related recreation as well as camping sites. The islands have scenic potential as well as ecological significance. The area is entirely within the Platte River flood plain.

38. No. 23. A 600-acre public access area 2 1/2 miles west of Valley. The area is approximately 2 miles long and varies from

1/4 to 1/2 mile wide. The riverbank is densely wooded, as are two adjacent islands. The area is entirely within the Platte River flood plain.

39. No. 26. A 2,000-acre general recreation area near the Douglas-Sarpy County line along the Elkhorn River. Substantial wooded areas exist along the stream channel as well as along the bluff areas. This area has several scenic overlooks and interesting bedrock outcroppings. Public access is very good south of the bridge along the Elkhorn River. Much of the bluff land is presently being used for organized camps and limited housing development. An ox-bow lake is located within the area. Areas not in the bluffs are in the combined Platte-Elkhorn River flood plain.

40. No. 31. A 600-acre sandpit lake recreation area 2 1/2 miles south of Springfield. This area contains a series of sandpit lakes with surrounding scattered patches of trees. A large island approximately 2 miles long is adjacent to the lakes. This island has remained free from development and should remain a natural environment area. At the present time, the sandpit lakes are used as a private recreation area. The area is entirely within the Platte River flood plain.

OTHER PLANS

41. The 1970 Washington County Comprehensive Development Plan lists the following future considerations for recreation along the Elkhorn River.

42. W-2. A 1,500-acre natural environment and scenic area located in the extreme southwest portion of the county approximately

2 1/2 miles southeast of Arlington, Nebraska. The area is characterized by steep wooded bluffs and wooded flood plains of the Elkhorn River.

43. W-6. A 1,000-acre natural environment and scenic area located 1 1/2 miles northwest of Arlington, Nebraska. The area is similar to W-5.

MISSOURI RIVER PLANS

44. The concept of returning to the Missouri River is a combination of efforts by MAPA, its Riverfront Development Department, and private citizens. Specific site proposals are indicated on figure D-4. Plans for the Missouri River are divided between the MAPA Plan and the Riverfront Plan.

45. The MAPA Open Space Plan outlines expansion at existing recreation areas, development of general recreation areas, and the preservation of natural areas, using a combination of flood plains and wooded bluffs along the Missouri in Douglas, Sarpy, and Pottawattamie Counties. Approximately 16,000 acres of parks and natural areas were identified in the MAPA plan.

46. The Riverfront Development proposal outlines various nodes of existing and potential parks and natural areas connected by a linear park and scenic parkway in both Iowa and Nebraska for a distance of approximately 54 miles extending from Blair, Nebraska on the north to Plattsmouth, Nebraska on the south. Several of MAPA's earlier proposals are included in the Riverfront Plan. The Riverfront Plan includes approximately 10,000 acres of parks and natural areas, 6,000 acres of which were included in the MAPA Plan,

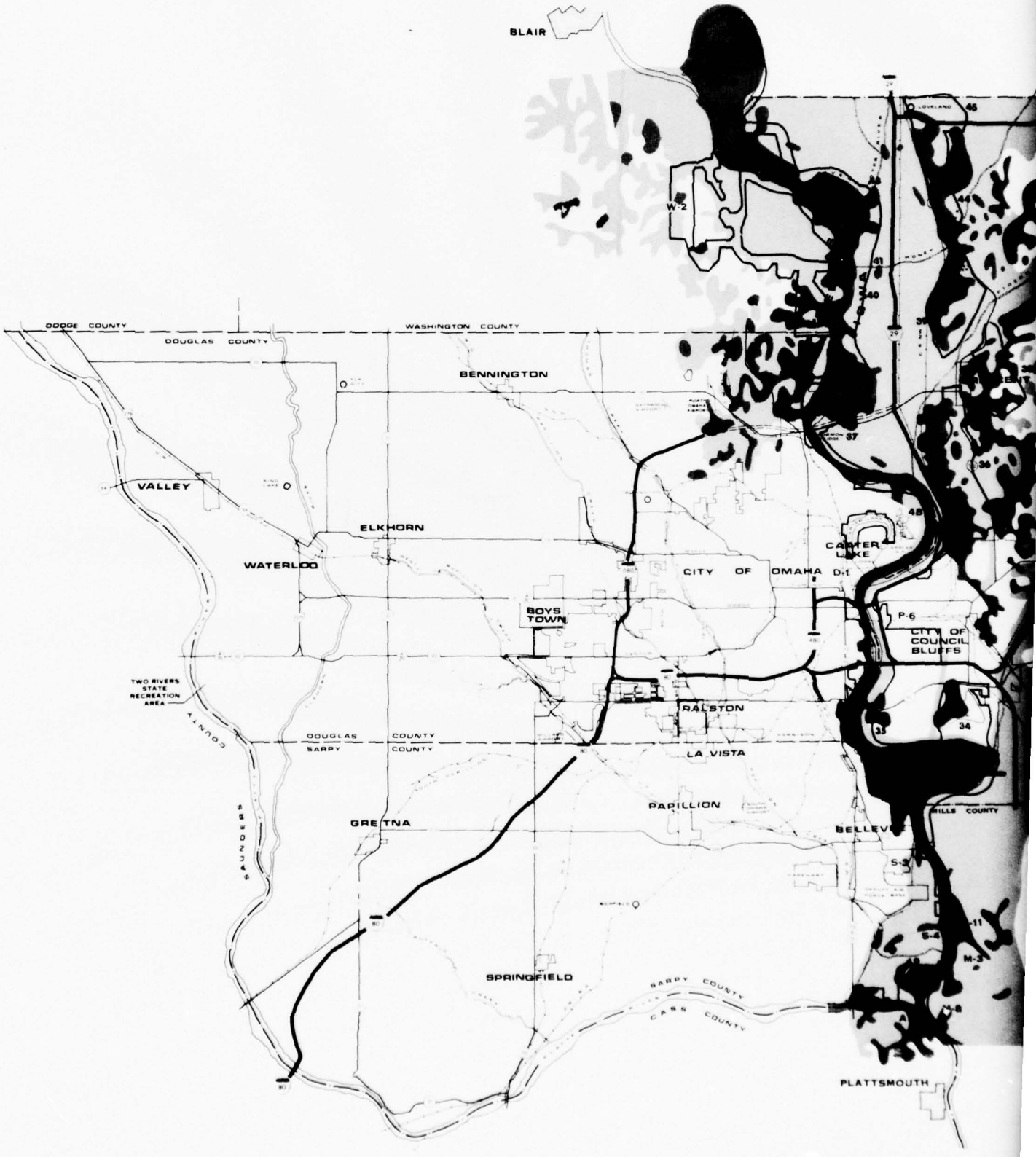
plus 4,000 additional acres. Total acreages envisioned in both the MAPA and Riverfront plans equal approximately 21,000 acres. This total does not include the Riverfront Scenic Parkway. The Riverfront Plan includes improvements at existing areas. A full range of recreation activities is envisioned at particular sites in the Riverfront Plan. The following paragraphs describe the recreation plans for the Missouri River.

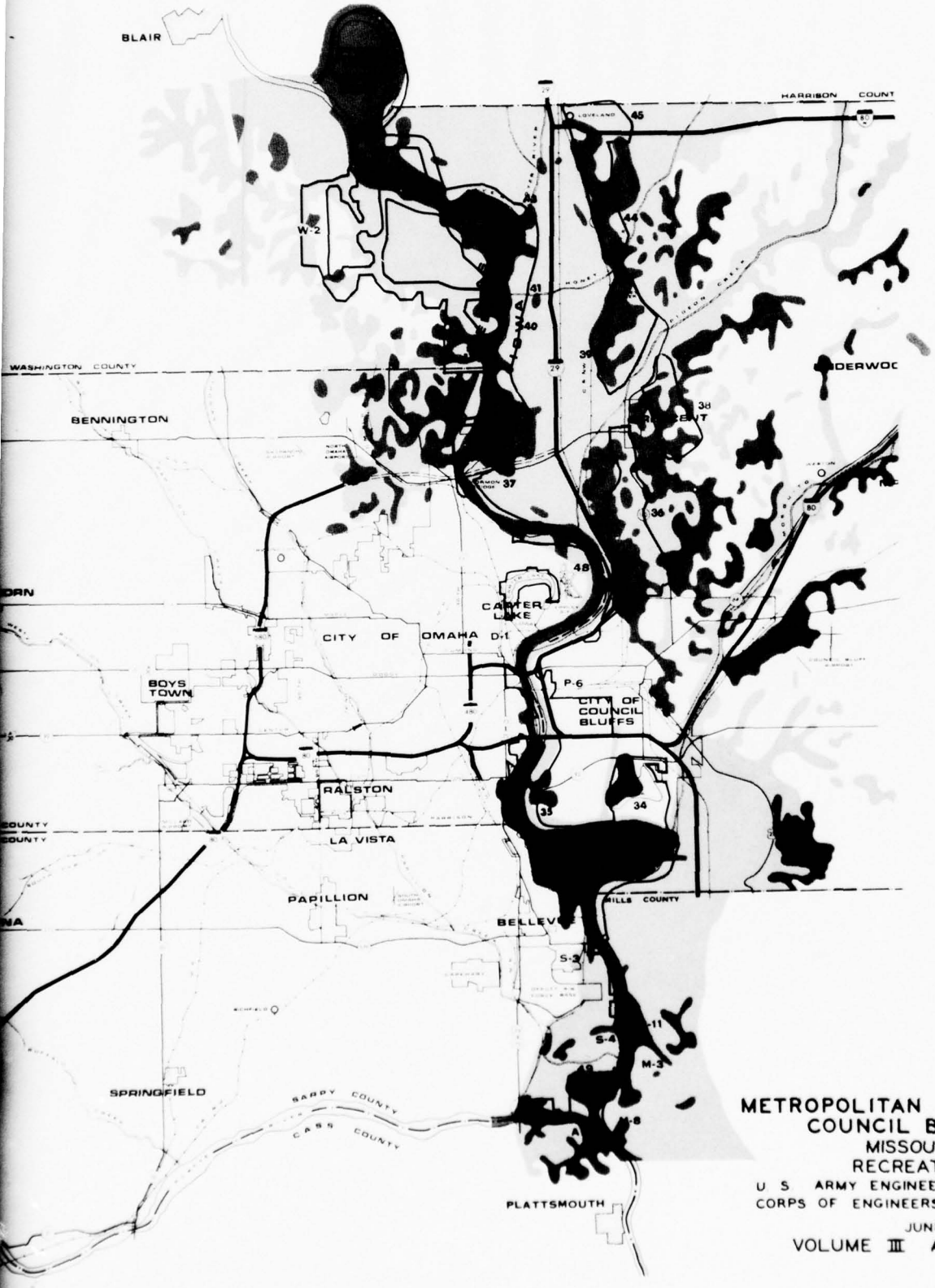
MAPA PLAN (PRIORITY BY 1980)

47. No. 17. A 971-acre natural environment area 2 1/2 miles northwest of the Mormon Bridge, (Neale Woods Area). This area is characterized by rolling hills and wooded valleys. Stands of native forests are in this bluff area; 120 acres are already under the control of the Fontenelle Forest and an Environmental Institute has been proposed by the University of Nebraska Architecture Department.

48. No. 34. A 534-acre expansion of the recreation area south of Lake Manawa, Iowa. An expansion of the recreation area south of Lake Manawa has been proposed to offer camping and outdoor sports or activity areas. The Missouri River will provide opportunity for boat launching and fishing. By connecting the existing Lake Manawa recreation area with the area adjacent to the Missouri River, a much needed public access area would be created. The land has recently been acquired.

49. No. 35. A 450-acre public access area west of Lake Manawa to the Missouri River. This area is approximately 1/4 mile wide and 5 miles long, consisting of dense wooded areas adjacent to the river bank. The river offers opportunities for fishing and boating in this area.


BLAIR
DODGE COUNTY
WASHINGTON COUNTY
DOUGLAS COUNTY
BENNINGTON
VALLEY
ELKHORN
WATERLOO
CITY OF OMAHA
CARTER LAKE
BOYS TOWN
CITY OF COUNCIL BLUFFS
TWO RIVERS STATE RECREATION AREA
RALSTON
DOUGLAS COUNTY
SARPY COUNTY
LA VISTA
PAPILLION
GRETNA
SAUNDERS COUNTY
SPRINGFIELD
SARPY COUNTY
CASS COUNTY
PLATTSMOUTH
MILLS COUNTY
IOWA
W-2
P-6
S-3
M-3



METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA
MISSOURI RIVER
RECREATION PLAN
U S ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA
JUNE 1975
VOLUME III ANNEX E FIGURE D-4

50. No. 42. A 1,620-acre primitive area along the Missouri River 2 1/2 miles west of Honey Creek, Iowa. Low marshland with scattered patches of wooded areas characterize this area. This area is commonly known as the Boyer Chute and has been proposed for a wildlife refuge and recreation area in the Missouri Riverfront Plan.

51. No. 49. A 600-acre general recreation area at the confluence of the Platte and Missouri Rivers. Bordered on 2 sides by two rivers, this park would have a strong relationship to water-oriented activities. Existing stands of vegetation would remain and the existing open space can be used for open field games. This area would be one of Bellevue's primary recreation areas. The area is currently owned by a nitrogen producing industry. The industry has plans for expansion and it is therefore unlikely that this site will be available in the forseeable future.

MAPA (PRIORITY BY 1990)

52. No. 36. A 2,240-acre general recreation and scenic drive along the bluff between Crescent, Iowa and Council Bluffs, including the present Lewis and Clark Monument. This area consists of steep topography with extensive woodlands offering many scenic overlooks. The Lewis and Clark Monument and surrounding area are presently the only attractions for recreation.

53. No's 40, 41, 43. Three 100-acre public access areas to the Missouri River west of Honey Creek, Iowa. These sites are located in wooded areas next to the riverbank. Public access is poor to site 43 and would need improvement. These areas could provide boat launch facilities, picnic areas, and perhaps limited camping.

MAPA (PRIORITY BY 2000)

54. No. 38. A 1,600-acre general recreation area and scenic drive in the bluff area east of Crescent, Iowa. This area is similar to the bluff land north of Council Bluffs. This area is nearly free from urban development.

55. No. 39. A 1,630-acre natural environment area south of Honey Creek, Iowa. Steep bluffs with extensive woodland and scenic overlooks characterize this area. A ski slope is located near the southern end of the bluff area. Natural and scenic qualities of this area dictate its use for a natural environment area.

56. No. 44. A 2,420-acre natural environment area 2 miles north of Honey Creek. Wooded bluffs with several small stream valleys characterize this area. This area also has potential for the development of scenic drives, picnic and camping areas, and hiking trails.

57. No. 45. A 700-acre general recreation area one mile north of Loveland, Iowa. This area has heavily wooded slopes and hills as well as several flat open areas. Hiking trails could be developed in the wooded areas with overnight camping sites in the clearings. The area is adjacent to I-29.

58. The bluff areas designated in the MAPA Plans have received strong support from the local counties for preservation. Similar bluff areas exist in Mills County. The bluff areas are of significant scientific and geologic interest being used for study of the formations of geologic time and the culture of man.

RIVERFRONT PLAN

59. The following describes recreation proposals of MAPA's Riverfront Development Department.

60. No. W-2. Missouri Riverfront Nebraska State Park. Originally proposed as a 7,500-acre general recreation area near Ft. Calhoun. It is currently being revised. This park would incorporate MAPA sites No. 17 and 42 plus additions in the bluff lands.

61. No. D-9. Improvements to N. P. Dodge Park. This park is a heavily used recreation facility located in the Missouri River flood plain north of Omaha.

62. No. 43. Airport Bend Park. A 525-acre general recreation area located on the riverside of the relocated levee for Eppley Airfield. The park would be adjacent to the Missouri River for a length of 6 miles. This park is also part of the MAPA Plan with a proposed use for off-the-road recreation vehicles and fishing.

63. No. D-1. Carter Lake Public Park. This park would be located adjacent to Carter Lake and would serve as a community park. The land has been acquired for this park.

64. No. 33. Forest Trail Development at Fontenelle Forest. This proposal would increase the trail system through Fonetnelle Forest to provide more hiking and nature study.

65. No. S-3. Haworth Park West. Haworth Park is an existing high-density recreation area. The expansion would increase the facilities at the park. Land for the expansion has been acquired and facility plans have been developed.

66. No. S-4. Nebraska Levee Lakes. A 40-acre general recreation area along proposed Missouri River levee unit R-616. This area would be near Bellevue and located on the riverside of the levees. Two small lakes for fishing and swimming would be created to obtain materials for levee construction.

67. No. 33A. Gifford Environmental Education Center. A 1,500-acre environmental education site east of Fontenelle Forest. The site is bordered on three sides by the Missouri River. Part of the site is offered as a private donation. The Nebraska legislature has recently authorized acquisition of this site.

68. No. P-6. A small park located along the Missouri River in Council Bluffs. The park would include the proposed Friendship Fountain.

69. No. 34. Lake Manawa Expansion and Improvements. See item 34 under the MAPA Plan. This plan would include the dredging of Lake Manawa plus implementation of a Master Plan developed by the Lake Manawa Task Force. The Iowa Conservation Commission had completed a study on the lake dredging. A bill has been introduced in the United States Congress to authorize the Corps of Engineers to dredge the lake with the Federal Government paying 50 percent of the cost.

70. No. M-11. Iowa Levee Lakes. A 100-acre park area along proposed levee units L 611-614 located along the Missouri River in the southern part of Pottawattamie and northern part of Mills Counties. Five small lakes would be created to obtain construction materials for the levees.

71. No. 46. Wilson Island State Park Improvements. This would include additional facilities at the existing 498-acre Wilson Island State Park.

OTHER PLANS

72. No. W-1. A 500-acre regional park northeast of Blair on the Missouri River. This park is indicated as part of Blair, Nebraska's Comprehensive Development Plan.

73. No. W-4. A 200-acre regional park in the northeast corner of Washington County along the Missouri River. The area is densely wooded.

74. No. M-3 and M-2. Regional parks encompassing 200 acres along the Missouri River in Mills County. These park areas could be in the wooded flood plain areas in the western edge of Mills County.

75. No. C-2. A 200-acre regional park in Cass County near Plattsmouth. This site would be located near the Plattsmouth Waterfowl Management Area. There are two other areas along the Missouri River designated for public and semi-public land use. These are the Goats Island Area in the extreme east-central part of the county composed of both wooded bluff and flood plain, and a wooded bluff area in the extreme southeast corner of the county called the Turtle Mound Area.

PAPILLION CREEK PLAN

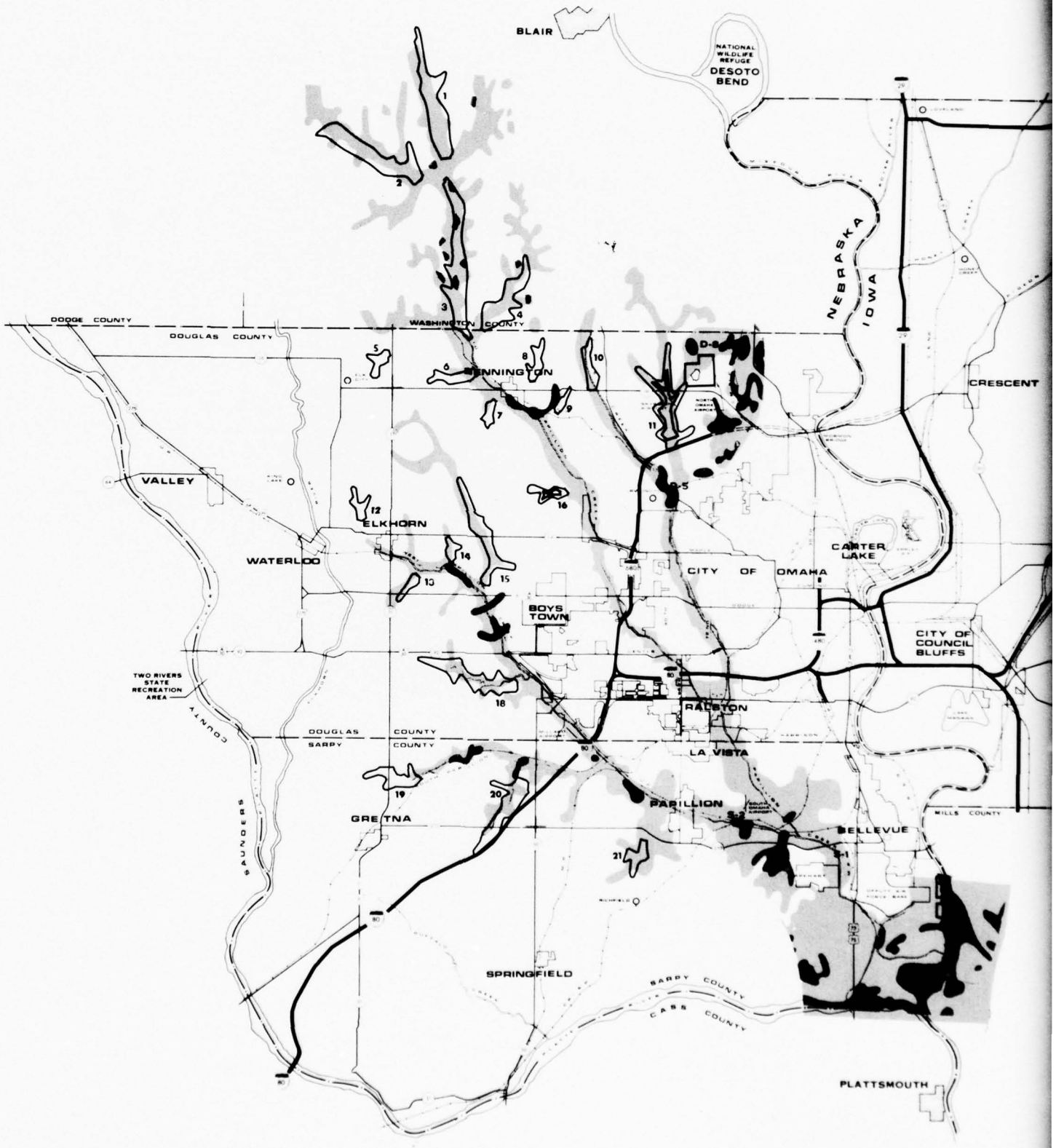
76. This plan, illustrated in figure D-5, considers the regional park and natural area potentials as a result of the Corps of Engineers authorized Papillion Creek flood control project. The project as authorized included 21 lakes. Total lands required for the project amount to about 17,000 acres. The majority of the 17,000

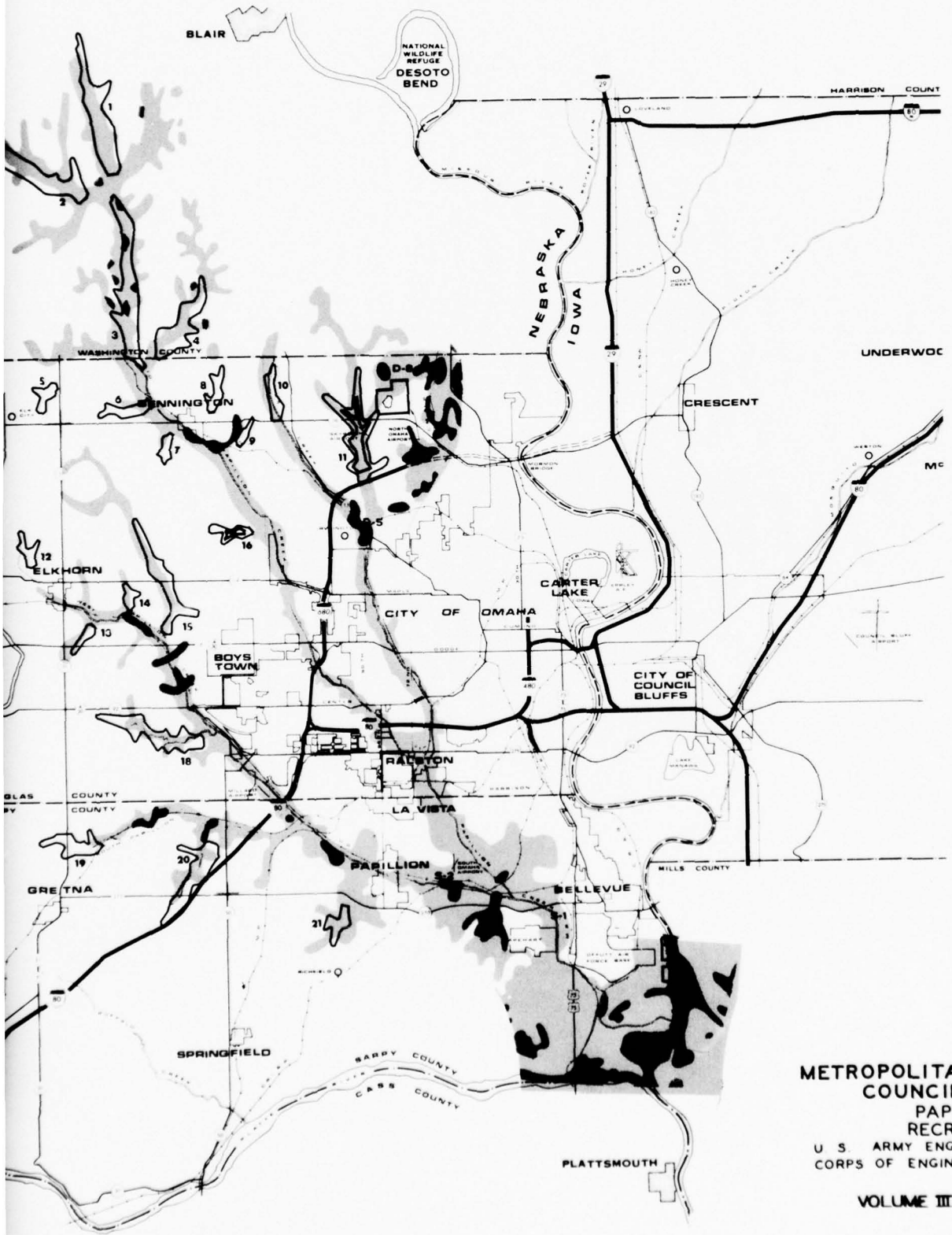
acres are required for the flood control project but would also be available for recreation or fish and wildlife management purposes. Currently, 1,723 acres are counted as exclusive recreation lands, not required for the project, but which can be cost-shared on a 50-percent Federal, 50-percent local basis. Little natural vegetation exists on the project lands - the majority of which are currently under agricultural production.

77. The Papillion basin also contains over 12,000 acres of undeveloped flood plain lands with recreation potential for community park activities. The current use is predominantly for agriculture. Future uses of the basin's flood plains would be for agriculture, recreation, and urban development constructed according to flood plain zoning requirements. As the urban area grows beyond the flood plain, the desirability for agricultural use will decline and recreation or urban use desirability will increase.

78. One of the most important features of the Papillion Flood Control Project is its contribution to water-related recreation. Power- and non-powerboating, water skiing, and fishing will be the predominant use of the lakes. There is a heavy demand for these activities in the Omaha area. All existing lakes in the region are being heavily used, with record-breaking attendance reported for the 1975 Memorial Day weekend.

79. In parallel to the preparation of this Annex, the Papillion flood control and recreation system is currently undergoing economic reevaluation. The reevaluation is largely affected by the Flood Disaster Protection Act of 1973 (PL 93-234) and subsequent guidelines. The Act requires local units of government to adopt


BLAIR
NATIONAL WILDLIFE REFUGE
DESOTO BEND
NEBRASKA
IOWA
DODGE COUNTY
DOUGLAS COUNTY
WASHINGTON COUNTY
FENNINGTON
CRESCENT
VALLEY
ELKHORN
WATERLOO
CARTER LAKE
CITY OF OMAHA
BOYS TOWN
CITY OF COUNCIL BLUFFS
TWO RIVERS STATE RECREATION AREA
RALSTON
DOUGLAS COUNTY
SARPY COUNTY
LA VISTA
PAPILLION
GRETNA
BELLEVUE
MILLS COUNTY
SAUNDERS COUNTY
SPRINGFIELD
SARPY COUNTY
CASS COUNTY
PLATTSMOUTH



METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA
PAPILLION CREEK
RECREATION PLANS
U. S. ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA

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VOLUME III ANNEX E FIGURE D-5

flood plain regulations by July 1975. Under the regulation, future development in the flood plain would be restricted or flood proofed.

80. Final results of the reevaluation will not be available prior to completion of the urban study. Therefore, recreation plans under the authorized system will be discussed first followed by a discussion of the recreation aspects of the alternatives currently under consideration.

THE AUTHORIZED PAPIO PLAN

81. The authorized Papillion Creek and Tributaries Lakes project consisted of 21 reservoir lakes. Dam No. 17 was later dropped because of economic infeasibility but was built by a developer and is now called Lake Candlewood. Approximately 17,000 acres of land will be required for the authorized project. The lakes vary in size from 40 to 650 acres with a total area of 4,000 water surface acres. The majority of the project lands will be available for land-based recreation. In addition there are approximately 1,700 acres of land to be acquired exclusively for recreation and to be cost-shared with a local sponsor.

82. Dam 11 has been constructed. Total project lands are 1,552 acres including a 390-acre lake. Approximately 130 acres of the lake will be devoted to fishing with 260 acres devoted to powerboating and water skiing. The recreation lands would be devoted to camping, picnicking, hiking, bicycling, nature study, and playgrounds.

83. Dam site 16 has been constructed. Total project lands are 531 acres including 135 water surface acres. The lake will be available for fishing and non-powerboating. Other recreation activities would include picnicking, hiking, bicycling, nature study, and outdoor sports.

84. Site No. 10 is scheduled to begin construction in the fall of 1975. Total project lands would be about 510 acres including 120 water surface acres. Water-based recreation would consist of fishing and non-powerboating; other recreation would include picnicking, nature study, and outdoor sports.

85. Sites 1 through 9 would provide about 7,810 acres of recreation lands including 2,200 water surface acres. An additional 1,200 acres of land are proposed to be acquired specifically for recreation and cost-shared with a land sponsor.

86. Sites 12 through 15 and 18 through 21 would provide about 5,900 acres of recreational lands including about 1,200 water surface acres.

THE PAPIO ALTERNATIVES

87. The flood control program for the Little Papillion Creek Basin requires only Dam No. 10 for completion. Recreation will be provided at that reservoir and at Dam No. 11. Only Dam 16 has been constructed for the Big Papillion Creek program. Dams 1 thru 9 are part of the authorized program. Alternatives currently under consideration are Dams 1, 2, 3, and 4, only, a large Dam, 3A, and a channel.

88. Sites 1, 2, 3, and 4 would provide approximately 7,200 acres of recreational lands including 1,695 water surface acres.

89. Sites 1, 2, and 3 would provide approximately 5,300 acres of recreational lands including 1,725 water surface acres. In addition, it is proposed to acquire approximately 1,060 acres of cost-shared exclusive recreation lands.

90. An alternative to Sites 1, 2, and 3 is a larger dam identified as Site 3A. Site 3A would provide approximately 3,800 acres of recreational lands including a lake surface of 1,500 acres. About 1,000 acres of cost-shared exclusive recreation lands could also be acquired. A channel, in lieu of the dams, is also being considered. The channel would not provide recreational opportunities.

91. The flood control program for the West Papillion Creek will be reevaluated during FY 76. Therefore, no recreation alternatives are available at this time.

PAPIO FLOOD PLAIN PARKS

92. The 12,000 acres of undeveloped flood plain in the Papio Basin provide an excellent opportunity for community-oriented parks. This is particularly true under the flood plain restrictions enacted locally to conform to PL 93-234. The city of Omaha noted the recreation value of these flood plains when developing its Park, Recreation and Open Space Master Plan. This plan calls for the development of linear parkways within the Papio flood plains.

93. In addition to serving community park needs, the flood plain parkways would make excellent locations for bicycling paths. Relatively flat, crossed by traffic only on major streets, and distributed widely throughout the urban area, these flood plains should be the prime focus for community type recreation development.

94. Examples of flood plain park locations shown in figure D-5, might include the following:

- No. D-5. Flood plain park in North Omaha. Size currently undertermined.

- No. S-1. Flood plain management west of Bellevue. Opportunity for park of between 700-1,000 acres.

- No. S-2. Flood plain park east of Papillion. Size currently undetermined. The above areas would be subject to flooding even with implementation of the authorized Papio Flood Control Project.

95. It is important to note that the Papio flood plains are also the location of major sanitary sewer interceptors for the Papillion Creek sewerage system. In addition, utility right-of-way easements, recreation easements or purchase could be accomplished at the same time. Also, if stormwater treatment is required, the flood plain parks could serve as temporary storm runoff storage areas.

INDIAN CREEK PLANS

96. Six alternatives are being considered for flood control in the Indian Creek basin bordering the northern section of Council Bluffs. Recreation potentials at the three best alternative sites are discussed herein. All three sites would use dry dams because the steepness of topography would limit water-oriented access. Hiking, picnicking, primitive camping, and nature study are the primary activities envisioned.

97. Alternative I-A envisions a large dam north of Council Bluffs, This dam would provide about 990 acres of permament open space. Alternative II would consist of 10 small dams providing 1,270 acres of permanent open space. Alternative III-A envisions 4 small dams providing 935 acres of permanent open space.

98. Due to an apparent lack of local financial support for Indian Creek flood control, the recreation aspects are not given further consideration.

RURAL RECREATION PLANS

99. This section briefly describes plans for regional parks or natural areas which would be located in areas not previously discussed. The plans are derived from existing county plans, multipurpose project sites of the Soil Conservation Service (SCS), MAPA plans, and from suggestions by the Bureau of Outdoor Recreation. Sites are located on figure D-6.

HARRISON COUNTY

100. H-1. Park areas along the Missouri River envisioned in the Riverfront Development Plan.

101. H-3. Natural area in the bluffs near Magnolia, Iowa. Contained in the Harrison County Plan.

102. H-4. Regional flood plain park located along the Boyer River south of Missouri Valley, Iowa suggested by BOR.

103. H-5. Natural flood plain area along the Boyer River between Logan and Woodbine, Iowa, suggested by BOR.

104. H-6, and 7. A total of 200 acres of fish and game areas in west-central Harrison County. Contained within the SCS Allen-Steer Creek Watershed Project.

105. H-8. Fish and game area located in northeastern Harrison County in the SCS Mill-Picayune Watershed Project.

106. H-9. Fish and game area located in southeastern Harrison County in SCS Mosquito Creek Watershed.

107. H-10. A 512-acre regional park at Deer Island included in the Harrison County Plan.

108. H-11. A 35-acre Missouri River access area included in the Harrison County Plan.

109. H-13. A 210-acre regional park (Saw Mill Hollow) included in the Harrison County Plan.

110. H-14. A 75-acre natural environment area included in the Harrison County Plan.

111. H-15. A 5-acre roadside park along U. S. Highway 30 included in the Harrison County Plan.

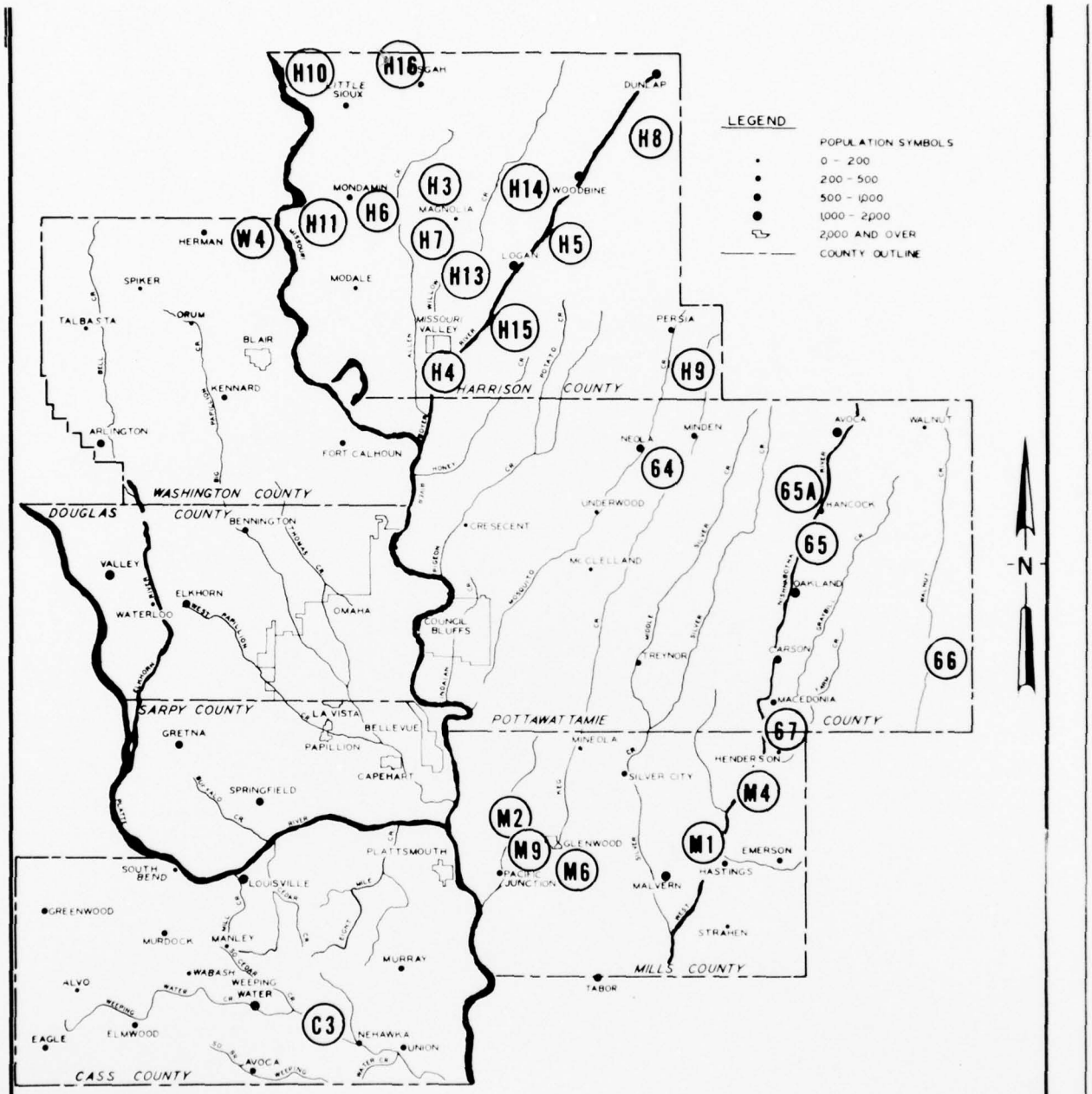
112. H-16. An 18-acre (Little Sioux River) access area included in the Harrison County Plan.

MILLS COUNTY

113. M-1. A 10-acre regional park on the West Nishnabotna River north of Hastings, Iowa. Contained in the Mills County Plan.

114. M-2. A 50-acre regional park in the SCS Pony Creek Watershed in western Mills County.

115. M-4. A natural flood plain area located on the West Nishnabotna River south of Henderson, Iowa suggested by BOR.



METROPOLITAN OMAHA, NEBRASKA
COUNCIL BLUFFS, IOWA

RURAL RECREATION PLANS

U. S. ARMY ENGINEER DISTRICT, OMAHA
CORPS OF ENGINEERS OMAHA, NEBRASKA

JUNE 1975

VOLUME III ANNEX E FIGURE D-6

116. M-6. A 37-acre fish and game area along Keg Creek south of Glenwood, Iowa (Mile Hill area - Mills County Plan).

117. M-9. A 700-acre regional park between Pacific Junction and Glenwood, Iowa suggested by BOR and indicated on the Mills County Water and Sewer Plan.

POTTAWATTAMIE COUNTY

118. No. 64. A 235-acre expansion at Arrowhead Park contained in the MAPA Plan.

119. No. 65. A 320-acre regional park located 1/2 mile south of Hancock, Iowa contained in the MAPA Plan.

120. No. 65A. A 55-acre expansion to Botna Bend Park contained in the MAPA Plan.

121. No. 66. A 1,000-acre natural environmental area 12 miles east of Carson, Iowa contained in the MAPA Plan.

122. No. 67. A 1,200-acre regional park located 2 miles east of Macedonia, Iowa contained in the MAPA Plan.

CASS COUNTY

123. C-3. A 500-acre natural area and fish and game area along Weeping Water Creek in south-central Cass County. Suggested by BOR.

124. C-4. A 1,200-acre regional park along the Missouri River in the King Hill area contained in the Cass County Comprehensive Plan.

125. C-5. A 400-acre wilderness and camping area on the Missouri River east of U. S. 34 and Union contained in the Cass County Comprehensive Plan.

126. C-6. A 500-acre camping and boating area between South Bend and Interstate 80 on the Platte River contained in the Cass County Comprehensive Plan.

127. C-7. A 25-acre shelter and wayside area on U. S. 73-75-34 north of Union contained in the Cass County Comprehensive Plan.

128. C-8. A 25-acre overlook and wayside area on Interstate 80 south of the Platte River contained in the Cass County Comprehensive Plan.

WASHINGTON COUNTY

129. W-4. A 200-acre regional park in northeastern Washington County, suggested by BOR.

SECTION E

PLAN EVALUATION

PLAN EVALUATION

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ENVIRONMENTAL QUALITY	E-15
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SECTION E

PLAN EVALUATION

Introduction

1. Three major recreation plans were presented in section D. Those plans are for the Platte-Elkhorn Rivers, the Missouri River, and the Papillion Creek Basin. These plans are evaluated in this section.

2. Rural recreation plans were also presented in section D. Since the rural recreation plans represent the county plans and are smaller in magnitude, they will not be evaluated.

3. Indian Creek, a potential recreation area arising from the flood control alternatives for Council Bluffs, is also not evaluated here

due to the apparent inability of local government to provide required cost sharing.

4. The three major plans contain large dispersed sites. Each plan was divided into smaller units, representing several sites. for the purpose of evaluation. The recreation plans were generally divided and categorized by geographic proximity to the urban area, similar topography, and land use. The following divisions were made:

- Platte-Elkhorn - PE-1 (Sites 26, 27, 28, W-5, W-6)
  - PE-2 (Sites 29, 30, 31, 32, B)
  - PE-3 (Sites 22, 23, 24)
  - PE-4 (Sites A, C, E)
- Missouri River - MR-1 (Sites W-1, W-4)
  - MR-2 (Sites 17, 42, W-2)
  - MR-3 (Sites 36, 38, 39, 44, 45)
  - MR-4 (Sites 40, 41, 43, 46)
  - MR-5 (Sites D-2, 48, D-1, P-6, S-3, 34, 35, 33A)
  - MR-6 (Sites S-4, C-2, 49)
  - MR-7 (Sites M-11, M-3, M-8)
- Papillion Creek- Sites 1 through 9
  - Sites 10, 11, and 16
  - Site 3A
  - Sites 1 through 4
  - Sites 1 through 3
  - Big Papio Channel

5. The Papillion Creek Plan is an authorized flood control and recreation project currently undergoing reevaluation. The first two Papillion Creek site groupings are contained in the authorized project. The last four Papillion site groupings are alternatives to sites 1 through 9 on the Big Papillion Creek. This Annex discusses primarily the recreation aspects of the Papillion Creek Project and alternatives. The Flood Control Plan Formulation Annex

should be consulted for the evaluation of the flood control components. In evaluating the recreation potential, it is assumed that impacts created by the flood control alternatives are independent of those provided by the recreation aspects; i.e. that the flood control alternative is in existence and recreation is being added.

6. It is important to note that all plans are needed to fulfill the planning objectives. The only alternatives are within the Papillion Creek Project. Therefore, this section emphasizes an evaluation of the merits of each plan rather than a comparison of alternatives.

Economic, Environmental, Social, and Regional Accounts

7. Four display accounts are presented which delineate the significant effects of the alternatives in the following categories.

National Economic Development (NED)

Environmental Quality (EQ)

Social Well-Being (SWB)

Regional Development (RD)

8. The NED account presents the benefits and costs of the alternatives. The EQ account presents beneficial and adverse effects of environmental concern. The SWB account presents quantifiable and non-quantifiable effects on the social structures in the area. The RD account displays the incidence of the effects.

9. The accounts for each plan are displayed in table E-2, E-3, and E-4 and are summarized in table E-1. Table E-1 also shows the contribution of each plan to the regional planning objectives.

NATIONAL ECONOMIC DEVELOPMENT

10. The National Economic Development (NED) account presents an evaluation of the economic impacts of each plan. Beneficial and adverse impacts are computed for each. The NED account concludes with calculation of the net benefits for each plan (total benefits minus total costs) and the internal rate of return on investment.

BENEFICIAL IMPACTS

11. Beneficial impacts are the value of the recreation provided. The value is determined by estimating the amount of annual visitation at a recreation site and assigning a dollar benefit to each visitation. Visitations at the Papio Project were estimated using a site-capability analysis. Visitations at the other areas were determined by the Bureau of Outdoor Recreation. The Bureau converted activity day projections (table B-6) to recreation days using a factor of 2.5 activity days equal to one recreation day. Thirty percent of the total recreation days were assumed to occur at regional parks, 40 percent at community parks, 10 percent at natural areas, and 20 percent at other areas. The use at each recreation facility was divided by the acres to determine use per acre.

Table D-1
Summary Of Alternativ Recreation Plans

	Platte-Elkhorn	Missouri River	Papillion Creek Sites 10, 11, 15	Papillion Creek Sites 1-9	Papillion Creek Site 3A	Papillion Creek Sites 1-3	Papillion Creek Sites 1-4
A. Plan Description	28,750 acres of natural areas and regional parks consisting of bluff lands and flood plains along the Platte-Elkhorn Rivers.	Extending some 54 miles along the Missouri, 21,000 acres of natural area, park lands, and scenic areas.	3 dams with 2,510 total acres, 645 water surface acres, and 1,869 land surface acres.	9 dams with 8,809 total acres, 2,210 water surface acres and 6,599 land surface acres.	1 dam with 5,150 total acres, 1,500 water surface and 3,650 land surface acres.	Composed of 3 dams with 6,321 total acres, 1,500 water surface acres and 4,596 land surface acres.	4 dams with 7,435 total acres, 1,985 water surface acres, and 5,210 land surface acres.
B. Significant Impacts	See text.						
C. Plan Evaluation							
1. Contribution to planning objectives to reduce current and future recreation deficiencies by (%) of recreation days provided	1975 1995 2020 60 29 20	1975 1995 2020 51 25 17	1975 1995 2020 5 3 2	1975 1995 2020 17 8 5	1975 1995 2020 13 6 4	1975 1995 2020 13 6 4	1975 1995 2020 15 7 5
2. Relationship to four national accounts							
a. National economic development							
(1) Net NED benefits ($/year)	8,095,000	4,593,000	550,900	1,302,800	1,070,200	999,000	1,171,400
(2) Internal rate of return on investment (%)	22.4	19.6	29.5	24.1	18.9	17.7	17.4
b. Environmental quality							
(1) Wildlife acres	19,176	14,592	741	2,697	1,000	2,150	2,150
(2) Water surface acres	300	0	650	2,200	1,500	1,500	1,485
(3) River miles	56.8	16.5	—	—	—	—	—
(4) Total open space (acres)	28,750	21,074	2,510	8,913	5,150	6,321	7,250
c. Social well being							
(1) Recreation visitation (recreation-days)	5,275,600	4,509,000	545,300	1,520,000	1,175,000	1,184,000	1,332,000
(2) Cropland removed (acres)	9,274	6,482	2,100	7,350	4,300	5,200	6,100
d. Regional development ($/year)							
(1) Beneficial impacts - value of increased output of goods and services	12,986,850	8,168,700	843,900	2,200,000	1,769,000	1,706,000	2,000,000

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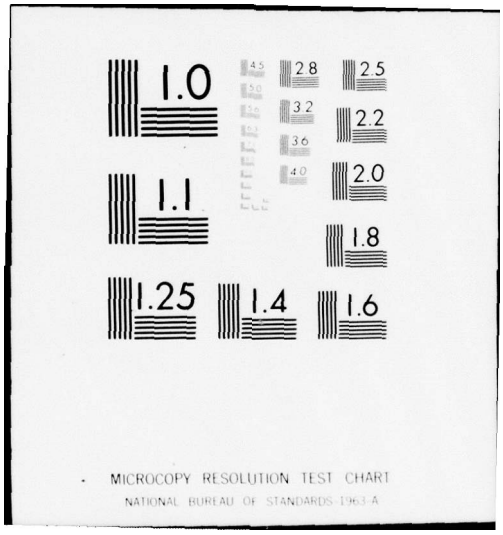

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NATIONAL BUREAU OF STANDARDS-1963-A

Table V-1
(Cont'd)
Summary of Alternative Recreation Plans

	Platte-Elkhorn	Missouri River	Papillion Creek: Plan A, Alt. 2/	Plan I-1	Plan II	Plan [illegible]	Plan [illegible]
(3) Adverse impacts							
(a) Cost to Federal	1,917,102	1,336,957	32,750	106,300	116,900	118,600	124,300
(b) Cost to local 1/	2,974,840	2,238,770	273,200	860,000	657,600	665,100	784,300
(c) Cost to Federal (NRA)	3,834,202	—	—	—	—	—	—
(d) Cost to local (NRA)	1,057,740	—	—	—	—	—	—
b. Plan response to associated evaluation criteria	See text	See text	See text	See text	See text	See text	See text
c. Implementation Responsibility							
1. Federal	FOR, State, Local	FOR, C/E, State, Local	C/E, State, Local	C/E, State, Local	C/E, State, Local	C/E, State, Local	C/E, State, Local
2. Investment	State	State, Local	State, Local	State, Local	State, Local	State, Local	State, Local

1/ Papillion Creek costs based on non-federal investment repayment at 5.116 percent interest within 50 years.

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Table E-2
Platte-Elkhorn Recreation Plans Evaluation

	Footnotes 1/	PE-1	PE-2	PE-3	PE-4
I. National Economic Development					
A. Beneficial Impacts ($/year)					
1. Value of increased output of goods and services					
a. Recreation	3, 5, 7, 9	2,499,400	5,413,950	849,750	4,288,750
B. Adverse Impacts ($/year)					
1. Project costs					
a. IWR	1, 5, 7, 9	948,390	1,496,350	220,917	1,168,840
b. O&M	2, 5, 7, 9	212,480	437,640	69,720	337,800
c. Total NED costs		1,160,870	1,933,990	290,637	1,506,640
C. Net NED Benefits ($/year)		1,338,530	3,479,960	559,113	2,782,110
D. Internal Rate of Return on Investment (%)		17.4	23.9	23.4	23.1
II. Environmental Quality					
A. Wildlife Acres	2, 5, 7, 9	5,771	6,201	2,126	5,078
B. Water Surface Acres	2, 6, 7, 9	0	300	0	0
C. River Miles	2, 6, 7, 9	9.5	18.0	13.0	16.3
D. Total Dam Space (acres)	2, 5, 7, 9	9,200	9,400	2,200	7,750
III. Social Well-Being					
A. Beneficial Impacts					
1. Recreation visitation (recreation-days)	2, 5, 7, 9	1,062,400	2,188,200	349,600	1,676,400
B. Adverse Impacts					
1. Farmland removed (acres)	1, 5, 7, 9	3,429	3,099	74	2,678
IV. Regional Development					
A. Beneficial Impacts ($/year)					
1. Value of increased output of goods and services	2, 5, 7, 9	2,499,400	5,413,950	879,750	4,223,750
B. Adverse Impacts ($/year)					
1. Cost to Federal (IWR)	2, 5, 7, 9	948,390	1,496,350	220,917	1,168,840
2. Cost to Local (O&M)	2, 5, 7, 9	212,480	437,640	69,720	337,800
3. Cost to Federal	1, 5, 7, 9	474,195	748,175	110,459	584,420

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Table 6-3
Missouri River Recreation Plans Evaluation

	Footnotes a/	MR-1	MR-2	MR-3	MR-4	MR-5	MR-6	MR-7
I. National Economic Development								
A. Beneficial Impacts ($/year)								
1. Value of increased output of goods and services								
a. Recreation	3, 5, 7, 9	381,500	1,574,895	3,376,087	58,725	2,483,190	130,800	163,500
B. Adverse Impacts ($/year)								
1. Project costs								
a. F&A	1, 5, 7, 9	104,670	864,000	836,284	31,320	687,960	32,000	57,660
b. O&M	2, 5, 7, 9	30,520	259,215	277,134	13,080	298,400	10,464	13,100
c. Total NED costs		135,190	1,123,115	1,113,418	44,400	986,360	42,464	80,760
C. Net NED Benefits ($/year)		246,310	451,780	2,212,669	14,325	1,496,830	88,336	82,740
D. Internal Rate of Return on Investment (%)		24.1	11.0	25.2	10.5	22.9	27.1	16.0
II. Environmental Quality								
A. Wildlife Acres	2, 5, 7, 9	245	5,989	5,124	60	2,934	240	0
B. River Miles	2, 6, 7, 9	2.0	5.2	0	0.3	3.5	0.5	0
C. Total Open Space (acres)	2, 5, 7, 9	700	7,500	8,790	300	3,244	240	300
III. Social Well-Being								
A. Beneficial Impacts								
1. Recreation visitation (recreation-days)	2, 5, 7, 9	152,600	1,295,979	1,385,670	65,400	1,432,000	52,320	65,400
B. Adverse Impacts								
1. Farmland removed (acres)	1, 5, 7, 9	455	1,811	3,666	240	910	0	300
IV. Regional Development								
A. Beneficial Impacts ($/year)								
1. Value of increased output of goods and services	2, 5, 7, 9	381,500	1,574,895	3,376,087	58,725	2,483,190	130,800	163,500
B. Adverse Impacts ($/year)								
1. Cost to Federal	1, 5, 7, 9	52,335	432,000	443,142	15,660	343,980	16,000	30,780
2. Cost to Local	2, 5, 7, 9	82,855	691,115	720,276	28,740	642,380	26,464	46,740

Table B-3
(Cont'd.)
Missouri River Recreation Plans Evaluation

	Footnotes 1/	MR-1	MR-2	MR-3	MR-4	MR-5	MR-6	MR-7
2. Recurring Employment (3/year)		18,312	155,409	166,280	7,848	173,040	6,272	7,552
1. Jobs created for operation and maintenance	2, 5, 7, 9	2	17	18	1	20	1	1
3. Property Damaged Value Lost ($)								
1. Perkins County	1, 5, 7, 9	0	0	0	0	31,000	0	0
2. Perry County	1, 5, 7, 9	0	0	0	0	131,000	5,000	0
3. Jefferson County	1, 5, 7, 9	79,000	320,000	0	0	0	0	0
4. Cattle Lick Creek County	1, 5, 7, 9	0	0	1,050,000	26,000	150,000	0	0

1/ Footnotes following at end of Table B-4.

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Table B-4
Papillion Creek Recreation Plans Evaluation

	Footnotes 1/	Sites 1-7	Site 10	Sites 11, 16	Site 3A	Sites 1-3	Sites 1-4
I. National Economic Development							
A. Beneficial Impacts ($/year)							
1. Value of increased output of goods and services							
a. Recreation 2/	3, 5, 7, 9	2,200,000	93,300	750,600	1,769,000	1,706,000	2,006,000
B. Adverse Impacts ($/year)							
1. Project costs							
a. I&A	1, 5, 7, 9	212,600	10,500	56,900	233,800	237,200	284,600
b. O&M	2, 5, 7, 9	684,600	26,100	191,500	465,000	469,800	550,000
c. Total NED costs		897,200	36,600	248,400	698,800	707,000	834,600
C. Net NED Benefits ($/year)		1,302,800	56,700	502,200	1,070,200	999,000	1,171,400
D. Internal Rate of Return on Investment (%)		24.1	22	31.0	18.9	17.7	17.5
II. Environmental Quality							
A. Wildlife Acres	2, 5, 7, 9	2,697	145	596	1,000	2,150	2,350
B. Water Surface Acres	2, 5, 7, 9	2,200	125	525	1,500	1,500	1,695
C. Total Open Space Acres	2, 5, 7, 9	8,933	510	2,000	5,150	6,321	7,350
III. Social Well-Being							
A. Beneficial Impacts							
1. Recreation visitation (recreation-days)	2, 5, 7, 9	1,520,000	70,000	475,300	1,175,000	1,154,000	1,333,000
B. Adverse Impacts							
1. Farmland removed (acres)	1, 5, 7, 9	7,310	420	1,680	4,300	5,200	6,100
IV. Regional Development							
A. Beneficial Impacts ($/year)							
1. Value of increased output of goods and services	2, 5, 7, 9	2,200,000	93,300	750,600	1,769,000	1,706,000	2,006,000

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Table 8-4
(Cont'd)
Papillion Creek Recreation Plans Evaluation

	Footnotes 1/	Sites 1-6	Site 10	Sites 11, 16	Site 3A	Sites 1-3	Sites 1-4
B. Adverse Impacts ($/year)							
1. Cost to Federal	1, 5, 7, 9	106,300	5,300	28,450	116,900	118,600	142,300
2. Cost to Local 2/	2, 5, 7, 9	860,000	34,000	238,400	697,900	668,100	784,060
C. Regional Employment							
1. Jobs created for operation and maintenance	2, 5, 7, 9	9	4	16	4	3	4
D. County Assessed Value Lost ($/year)							
1. Douglas County	1, 5, 7, 9	210,000	64,300	262,500	260,000	0	0
2. Washington County	1, 5, 7, 9	966,000	0	0	385,000	766,000	966,000

1/ Footnotes indexed at end of Table 8-4.

2/ Includes fish and wildlife and water quality.

3/ Based on non-Federal investment repayment at 5.116 percent interest within 50 years.

Index of Footnotes:

Timing

1. Impact is expected to occur prior to or during implementation of the plan.
2. Impact is expected within 15 years following plan implementation.
3. Impact is expected in a longer time frame (15 or more years following implementation.)

Uncertainty

4. The uncertainty associated with the impact is 50% or more.
5. The uncertainty is between 10% and 50%.
6. The uncertainty is less than 10%.

Exclusivity

7. Overlapping entry; fully monetized in NED account.
8. Overlapping entry; not fully monetized in NED account.

Actuality

9. Impact will occur with implementation.
10. Impact will occur only when specific additional actions are carried out during implementation.
11. Impact will not occur because necessary additional actions are lacking.

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12. For areas other than the Papillion Creek Project, a value of $2.50 per recreation day was assigned by BOR to regional parks, $2.25 per recreation day to natural areas, and $1.50 per recreation day to community parks. Recreation day values of $1.20 to $1.50 were used for the Papillion Creek Project reflecting use as community parks.

13. The Papillion Creek alternatives include only the recreation, fish and wildlife, and water quality benefits.

ADVERSE IMPACTS

14. The adverse impacts of the alternatives are the costs. These costs are displayed as investment and amortization (I&A), and operation and maintenance (O&M). Acquisition and development costs for the Papillion Creek alternatives include only the recreation costs and were taken from the current reevaluation with methodologies delineated in the Flood Control Plan Formulation Annex. Acquisition and development costs for the Riverfront Plan were obtained from the Metropolitan Area Planning Agency. Acquisition costs for other areas were determined by a site-specific land-use capability analysis. Lands suitable either for housing or agriculture were valued at $1,500 per acre. Other lands were valued at $450 per acre. Costs of $1,000 per acre for areas designated for general recreation use and $500 per acre for natural areas were added to acquisition cost for development purposes. Acquisition and development costs for all plans except Papillion Creek were amortized over 100 years at 7 percent interest. Papillion Creek costs were amortized over 100 years at 3 1/4 percent interest which is the rate applied to the authorized project.

15. Operation and maintenance costs for all areas except the Papillion Creek Project were valued at $0.20 per recreation day which is the value used for the Platte Level "B" Study. O&M costs for the Papillion Creek Project were obtained from the current reevaluation and are based on specific facilities.

ECONOMIC EVALUATION

16. Two evaluations of the economics of the alternatives are displayed as the net NED benefits and the internal rate of return on investment.

17. Net NED benefits are total benefits minus total costs. The internal rate of return on investment gives the benefits per dollar spent. Thus from a purely economic point of view, the larger the internal rate of return on investment, the larger is the benefit per dollar spent.

THE NED PLAN

18. Since national economic development is one of two national water resources planning objectives, the selection of a NED plan is required. The NED plan should be selected on the basis of maximum net NED benefits and the maximum rate of return on investment.

19. All recreation plans have comparable internal rate of returns on investment. The Platte-Elkhorn plan produces the largest net NED benefits and is labeled as the NED plan.

ENVIRONMENTAL QUALITY

20. Beneficial effects on environmental quality (EQ) include the preservation or creation of wildlife areas, river reaches, water surface areas, and open space.

21. Wildlife areas are those lands which will provide for wildlife habitat. Wildlife acres represent total project acres minus those acres with farming potential. In the Papillion basin, this designation is for project lands specifically earmarked for wildlife management.

22. River reaches are given in miles of streambank reserved for public use or protected from development. Water surface areas represent a benefit to aquatic life in the area. Only lake water surface acres have been included. Total open space is the total area that will be permanently preserved from development.

23. Aesthetics is a beneficial effect resulting from the scenic attributes of an area. The benefits of scenic attributes are difficult to quantify and have not been included.

THE EQ PLAN

24. Since environmental quality is one of the two national water resources planning objectives, the selection of an EQ plan is required. The EQ plan is selected on the basis of maximizing open space and wildlife habitat and the preservation of natural environments.

25. In terms of environmental quality, the Platte-Elkhorn Plan is preferrable to the other two plans. The natural characteristics of

the Platte-Elkhorn Rivers and the critical need for preservation of the streamflows and adjacent lands are well documented in the Nebraska SCORP and the Platte Level "B" Studies. Almost 57 river miles would be protected from encroachment.

26. The Missouri River Plan ranks a close second to the Platte-Elkhorn Plan. While the Missouri is a controlled river and is used for commerce, it does contain good aesthetic qualities. Lands adjacent to the Missouri River offer excellent recreational and wildlife qualities. The bluffs on the east side of the river are world-famous examples of loessial formations.

27. The Papillion Creek Plan's environmental attributes arise primarily from the lakes that will be created and the creation of open space in suburban environment. The lakes will partially fulfill a critical need for lake-oriented recreation in the study area. The lakes will, however, be subject to eutrophication problems.

SOCIAL WELL-BEING

28. The social well-being table presents the following impacts:

- Beneficial: Educational, cultural, and recreational opportunities.

- Adverse: Reduction in agricultural production.

BENEFICIAL

29. Annual recreation days provided are the criteria used in defining educational, cultural, and recreational opportunities.

The methodology for determing the recreation days under each plan was discussed earlier. In terms of the non-mobile groups discussed previously, the Riverfront Program is the most open to this group. Both the Platte-Elkhorn and Papillion Projects are really beyond the reach of these groups because of the lack of public transportation. On the other hand, the Riverfront Project includes the N. P. Dodge Park, Airport Bend Park, Gifford Environmental Center, and Lake Manawa. These parks are within the area covered by the local public transportation system.

ADVERSE

30. The impact is the amount of land taken out of agricultural production. Lands indicated for the Papillion Creek alternatives include those required for the flood control project. Since farmland is taken out of production, there would be a displacement of families. This displacement is quantified and discussed in the Flood Control Plan Formulation Annex. Displacement of families for the other plans was not quantified. Implementation of open space and recreation in these areas would not necessarily require family displacement.

31. The amount of farmland in each recreation plan was determined by specific site analysis using SCS soil surveys, aerial photography, and U.S.G.S. maps. The percentage of the total recreation plan which is currently in agriculture or which has a good potential for agricultural use is indicated.

32. All plans as currently formulated would incorporate some food-producing lands. The Papillion Creek Project requires a greater amount of agricultural land in comparison to the recreation provided

than the Platte-Elkhorn or Missouri River Plans. All agricultural lands required for the recreation plans could be returned to production if required to respont to future food shortages. Lands in the Papillion Creek Plan would be more difficult to return to production than would lands under the other two plans.

REGIONAL DEVELOPMENT

33. Implementation of any of the recreation plans would create changes in the region's income, employment, population distribution, and economic base which in turn would influence the course and direction of the development of the region. Beneficial impacts include redistribution of income from the Nation to the region, measured in the value of the recreation provided, increased regional employment, and improvement of the economic base of a few small communities. Adverse impacts consist of the local costs of the recreation plans and the decrease of the tax base.

34. Income redistribution would result from the incidence of the benefits and costs of each alternative between the Nation and the region. Recreation benefits would accrue primarily to the region. The value of the use of unemployed labor also would accrue to the region. The costs of each alternative are divided between the region and the Nation in accordance with Federal cost-sharing policies. For the Platte-Elkhorn area, two alternative cost-sharing arrangements are indicated. Alternative A assumes National Recreation Area designation with all costs being provided by the Federal government. Alternative B assumes the standard 50 percent Federal, 50 percent State/local cost share. Recreation costs for the Papillion Creek Project are shares 50/50 between the Corps and a local sponsor. Operation and maintenance costs on all plans are assumed

to be a local responsibility, however, under a NRA, the Federal Government may provide all or part of the O&M costs. All of the recreation plans provide a redistribution of income from the Nation to the region.

35. Regional employment includes the jobs created for operation and maintenance at all recreation sites. In Nebraska and Iowa this amounts to about 60 percent of total O&M&R costs.

36. The number of acres each alternative would remove from each county's tax rolls was computed. Assessed valuation per unincorporated acre was determined from County Assessor's data.

SECTION F

PLAN IMPLEMENTATION

PLAN IMPLEMENTATION

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SECTION F

PLAN IMPLEMENTATION

Purpose

1. This section presents the legal, organizational, financial, and political arrangements required to implement recreational plans for the urban study area.

Introduction

2. The development of institutional arrangements represents one of the final steps in the urban study planning process. It is the step that outlines the procedures necessary to convert a plan into an action program.

3. This section discusses the status of current recreation planning, suggests problems associated with implementation, and presents alternative institutional arrangements for implementation of proposed plans.

Recreation Planning in the Study Area

4. Recreation planning for the urban study area is being conducted by planning agencies at all levels of government and by some private organizations.

5. The U. S. Army Corps of Engineers has developed detailed recreation plans for a number of proposed reservoirs to be constructed under the authorized Papillion Creek flood control project.

Other Corps' planning efforts related to leisure time will be pursued for the Missouri River Levee Units project.

6. The Bureau of Outdoor Recreation is currently engaged in the proposed National Trail systems studies for the Lewis and Clark Trails, for the Mormon Trails, and for the Platte Level "B" study.

7. The National Park Service coordinates with the State historical societies by recognizing the existing historical and cultural sites and accepting recommendations for sites to be added to the National Register.

8. The Soil Conservation Service is providing planning assistance to private landowners for a number of small watershed projects in Harrison, Douglas, and Washington Counties.

9. Planning efforts by the Federal agencies have been generally confined to specific projects rather than to long-range comprehensive studies. Federal agencies do however, maintain an awareness of and consider local outdoor recreation plans.

10. At the State level, the Nebraska Game and Parks Commission and the Iowa Conservation Commission are the agencies responsible for planning for leisure-time needs. Statewide comprehensive outdoor recreation plans have been developed and maintained for both States. These plans present the overall needs and identify the regional viewpoints relating to recreation. The programs and facilities in these statewide plans can be partially funded by the Federal Land and Water Conservation Fund provided that the plans meet certain Federal requirements. Since the initiation of the fund, Omaha has received $1.25 million and Council Bluffs has received approximately $390,000.

11. At the regional level, planning is carried out by the Metropolitan Area Planning Agency. This agency provides planning assistance to the metropolitan area including Nebraska planning regions 1 and 2 and Iowa planning region 4.

12. The Open Space Plan and Program Report completed by MAPA in 1972 recommends an open space system which identifies the natural resource potential for Douglas, Sarpy, and Pottawattamie Counties. The Riverfront Development Division of MAPA is actively involved in the Missouri Riverfront Corridor Study. The overall goal of this effort is to fully utilize the potentials of the river to provide an optimum environment for the metropolitan area.

13. At the local level, outdoor leisure-time planning is carried out by the individual local entities. The cities of Omaha, Council Bluffs, Blair, Bellevue, and Plattsmouth have established planning divisions and have developed short-range programs that are very site specific. Long-range planning efforts appear to be more difficult to conduct because of the need to direct all available recreation resources to meet immediate problems.

14. Smaller community planning efforts are generally the responsibility of a local park manager or city department, such as water and sewer departments.

15. County planning effectiveness varies among the rural and urban counties. The urban counties are experiencing considerable growth which is placing pressure on their manpower resources. The rural counties are not experiencing this growth sprawl and, therefore, have very general planning programs. There are exceptions in that several counties have developed historical plans.

16. In almost every on-going planning program, there is some degree of overlap, duplication, or deficiency in identifying and analyzing the effect and contributions of the private sector. A number of consultants are involved in leisure-time planning for various governments. Most of this planning is site specific rather than comprehensive.

17. Individual citizen task force groups have contributed significantly to on-going planning efforts. Noteworthy among these are the Lake Manawa Task Force, the Friendship Fountain Association, the Papio Valley Preservation Society, the Papio Valley Flood Protection Association, and the MAPA Trails Task Force.

Problems Associated with Recreation Programs

18. The Corps of Engineers in cooperation with the Bureau of Outdoor Recreation has identified some implementation problems associated with recreation planning and programs.

COORDINATION

19. Coordination of leisure-time activity planning efforts among various levels of government and the private sector is difficult

because of variations in planning approaches. This problem could be alleviated if all planning were accomplished within the acceptable planning framework of the planning agency at the next higher level of government. That is, State plans would be developed within the broad framework of the nationwide plan, regional plans and programs would then be developed within the guidelines and criteria of the State plans, and local plans would be in accord with the regional plans.

PLANNING STAFF

20. Some counties and local entities have no on-going leisure-time programs either because of a lack of technical expertise or because of insufficient funding. In such cases, park and recreation departments could be established. Where practical, the smaller local entities that are not able to establish a separate department could initiate a coordinated effort with county, regional, or State leisure-time planning agencies to obtain assistance in planning and development.

LAND

21. Counties become concerned when land is taken off the tax rolls for public use. Similar tax losses occur in inner-city areas when populations migrate to the suburbs. To retain a tax base, certain types of public recreation lands could be kept in private ownerships through scenic and recreational easements or lease backs. On Corps of Engineer projects, 75 percent of lease-back payments on project lands is returned to the counties through the state in lieu of tax losses. Also, property values around recreation projects generally increase and improve the tax base.

FUNDING

22. Funding for leisure-time developments is limited because of competition with other programs for general funds. This reduces local capacities for participating in cost-sharing under Federal programs. Local governments could designate a single entity with overall responsibility for leisure-time planning, coordination, and implementation. Funds could be earmarked to conduct these efforts as well as to provide a stable financial base.

Implementation of Recreation Programs

23. Successful implementation of leisure-time planning recommendations will require coordinated action by Federal, State, local, and private organizations. The average citizen demands recreation facilities improvement and preservation of open space and natural areas, as well as protection and enhancement of the environment in which he lives and recreates. Therefore, citizen involvement is essential in the development and support of a planning effort.

FEDERAL PROGRAMS

24. Federal and local groups have looked at the Platte River, the Elkhorn River, and the Missouri River as possible candidates for National Recreation Areas (NRA's). There has also been some discussion about nominating these waterways for inclusion in the National Wild and Scenic Rivers System.

25. The Corps of Engineers cooperates with local groups in developing recreation facilities along navigable waterways and around lakes at multiple-purpose dams.

NATIONAL RECREATION AREAS

26. The establishment of an NRA requires a concentrated effort by local, State, and Federal agencies. Moreover, an NRA must be officially designated by a separate Public Law enacted by Congress.

27. The criteria for selection of NRA's are established by the President's Recreation Advisory Council.

28. Primary Criteria. Application of the following seven primary criteria is mandatory for all proposals:

- National Recreation Areas should be spacious areas, including within their perimeter an aggregate gross area of not less than 20,000 acres of land and water surface, except riverways, narrow coastal strips, or areas where total population within a 250-mile radius is in excess of 30 million.

- NRA's should be located and designed to achieve a comparatively high recreation-carrying capacity in relation to type of recreation to be served.

- NRA's should provide recreation opportunities significant enough to assure interstate patronage within the region of service, and to a limited extent should attract patronage from outside of the normal service region.

• The scale of investment, development, and operational responsibility should be sufficiently high to require either direct Federal involvement or substantial Federal participation, to assure optimum public benefit.

• Although non-urban in character, NRA's should nevertheless be located within 150 miles of urban centers representing a total population in excess of 3 million. Such areas should be readily accessible at all times for all-purpose recreational use.

• Within NRA's, outdoor recreation shall be recognized as the dominant or primary resource management purpose. If additional natural resource utilization is carried on, such additional use must be compatible with fulfilling the recreation mission, and none will be carried on that is significantly detrimental to it.

• NRA's should be established only in those areas where programs (Federal or non-Federal) will not fulfill high priority recreation needs in the foreseeable future.

29. Secondary Criteria. Application of the following six secondary criteria will be given weight in situations where they bear a meaningful relationship to a specific proposal:

• Preference should be given to proposed NRA's that: are in or near U. S. Census divisions having the highest population density; are in areas which lack sufficient private and public recreation areas and facilities as determined by the National Recreation Plan; are in areas which have a comparatively low amount of Federally

provided recreation-carrying capacity; and will show an optimum ratio of carrying capacity to estimated cost.

- NRA's may be based upon existing or proposed Federal water impoundments where it can be shown that significant increases in the scale of recreation developments are required, beyond the level normally justified under standard multiple-purpose project development, in order to assure that full recreation potential is provided for projected needs.

- NRA's may include within their boundaries scenic, historic, scientific, scarce, or disappearing resources, provided the objectives of their preservation and enjoyment can be achieved on a basis compatible with the recreation mission.

- NRA's should be in conformity with the National Recreation Plan prepared by the Bureau of Outdoor Recreation, and must take into consideration State, regional, and local comprehensive plans.

- Whenever possible, NRA's should be selected, developed, and managed to provide maximum compatability with the recreation potential of adjacent rural areas in private ownership.

- Preference should be given to areas in or near to a Redevelopment Area as officially designated by the Department of Commerce and deemed significant in the economic improvement of such a Redevelopment Area.

30. The determination of whether an area meets the above criteria can and should be made by local and State officials before proceeding with plans to nominate the area for NRA designation. The Bureau of Outdoor Recreation can be asked to assist in the determination.

31. Procedure. The procedure to establish an NRA could consist of the following steps:

- Local agencies or interest groups, such as a chamber of commerce, in coordination with BOR conduct a preliminary study to determine the recreation potential of the proposed area by applying the above criteria.

- Local groups contact their U. S. Congressional representatives and request Congressional funding of a full study of the proposed area.

- Develop a study of required recreational facilities to include area boundaries, proposed operating agency, land acquisition requirements, local cooperation, construction costs, and operation and maintenance costs.

- Develop proposed Federal legislation to authorize the establishment of the NRA.

NATIONAL WILD AND SCENIC RIVERS

32. Public Law 90-542, the Wild and Scenic Rivers Act, declared that selected rivers of the Nation possessing outstandingly remarkable scenic, recreational, geological, fish and wildlife, historical, cultural, or other similar values, shall be preserved in free-flowing conditions and preserved for present and future generations.

33. The law establishes an initial list of rivers and river segments to be included in the system and establishes the criteria for addition of other river segments. The law describes a wild, scenic,

or recreational river area eligible to be included in the National system as a free-flowing stream and the related adjacent land. Rivers are categorized as follows:

- Wild river areas - Those rivers or sections of rivers that are free of impoundments and are generally inaccessible except by trail, with watersheds or shorelines essentially primitive and with unpolluted waters. These represent vestiges of primitive America.

- Scenic river areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

- Recreational river areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

34. In February 1970 the U. S. Departments of Interior and Agriculture jointly published guidelines for evaluating river areas proposed for inclusion in the National Wild and Scenic Rivers system. The next few paragraphs summarize the guidelines.

35. Qualifications. In order to qualify for inclusion in the National system, a State free-flowing river area must be designated as a wild, scenic, or recreational river by act of the State legislature, with land areas wholly and permanently administered in a manner consistent with the designation by any agency or political subdivision of

the State at no cost to the Federal Government, and be approved by the Secretary of the Interior as meeting the criteria established by the Wild and Scenic Rivers Act and the guidelines as published by the Secretary of the Interior.

EVALUATION

36. In evaluating a river for possible inclusion in the system or for determining its classification, the river and its immediate land area should be considered as a unit, with primary emphasis upon the quality of the experience and overall impressions of the recreationist using the river or the adjacent riverbank. Although a free-flowing river or river unit frequently will have more than one classified area, each wild, scenic, or recreational area must be long enough to provide a meaningful experience. The number of differently classified areas within a unit should be kept to a minimum.

37. Any activity, use, or development which is acceptable for a wild river is also acceptable for scenic and recreational river areas, and that which is acceptable for a scenic river is acceptable for a recreation river area.

• The Wild and Scenic Rivers Act provides that rivers must be in a free-flowing natural condition, i.e., a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes which are without impoundment, diversion, straightening, riprapping or other modification of the waterway. Low dams, diversion works, and other minor structures will not automotically preclude the river unit from being included in the National Wild and Scenic Rivers System, provided such structures do not unreasonably diminish the free-flowing nature of the stream and the values of the area.

• Generally, any unit included in the system should be at least 25 miles long; however, a shorter river or segment that possesses outstanding qualifications may be included in the system.

• There should be sufficient volume of water during normal years to permit, during the recreation season, full enjoyment of water-related outdoor recreation activities generally associated with comparable rivers. In the event the existing supply of water is inadequate, it would be necessary to show that additional water can be provided reasonably and economically without unreasonably diminishing the scenic, recreational, and fish and wildlife values of the area.

• The river and its environment should be outstandingly remarkable and, although they may reflect substantial evidence of man's activity, should be generally pleasing to the eye.

• The river should be of high quality water or susceptible of restoration to that condition. A concept of nondegradation whereby existing high water quality will be maintained to the maximum extent feasible will be followed in all river areas included in the National system.

38. The guidelines go on to explain the technical requirements for water quality and to outline procedures. The procedure whereby a State or local agency would nominate a river area for inclusion in the National system is included in Public Law 90-542.

CORPS OF ENGINEERS PARTICIPATION IN RECREATION PROJECTS

39. Section 4 of the Flood Control Act of 1944. This Act authorized the Chief of Engineers "... to construct, maintain, and operate public park and recreational facilities in reservoir areas under

the control of the (Secretary of the Army), and to permit the construction, maintenance, and operation of such facilities." In 1959 and again in 1962 the Chief of Engineers issued instructions on inclusion of recreation development at reservoirs as a project purpose under specific limitation. The Flood Control Act of 1962 broadened the 1944 authority to include all water resources projects.

40. Senate Document 97, 87th Congress. New policies and standards approved by the President in May 1962 for evaluation of Federal water resources development recognized long-term recreational development as a valid project purpose to be considered on an equal basis with other established water resource purposes.

41. The Federal Water Project Recreation Act of 1965 (PL 89-72) This Act established development of the recreational potential at Federal water resources projects as a full project purpose.

- Section 2(a) specifies that benefits for recreation should be included in the economics of a contemplated project, provided that non-Federal public entities agree to participate in the recreation development.

- Section 3(b) authorizes land acquisition to preserve the recreation potential of the project for a 10-year period when no local sponsor can be found.

- Section 9 limits Federal cost allocations to recreation and fish and wildlife enhancement (excepting special types) to no more than 50 percent of the sum of the allocations to all project purposes.

42. Cost Apportionment. There are specific guidelines pertaining to the Federal and non-Federal shares of the costs of recreation development.

- At reservoirs the Federal Government assumes joint costs allocated to recreation and not more than one-half of the separable first costs of construction of recreation facilities, including one-half of the cost of any project lands acquired specifically for recreation, except as noted in the subparagraph below. The Government acquires and retains title to all lands and facilities not leased to non-Federal interests. The non-Federal entity must assume; a) at least one-half of the separable first costs of planning and construction of recreation facilities, including project lands acquired specifically for recreation, access and basic site preparation; and b) all costs and full responsibility for the operation, maintenance, replacement, and management of recreation lands and facilities.

- At reservoirs, separable lands may be acquired at Federal expense to preserve recreation potential created by the project. This procedure is used only when a formal agreement regarding non-Federal participation cannot be obtained prior to initiation of project construction. If lands so acquired are not developed within 10 years, they may be declared surplus or used for an alternate compatible purpose.

- At non-reservoir projects the non-Federal entity must provide fee title to all additional lands required for development and control of the recreation areas. Where the appraised value of the lands provided amounts to less than 50 percent of the total first cost of the recreational development, the non-Federal sponsor must make

additional contribution sufficient to bring the non-Federal share to at least that level. This additional contribution may consist of the actual cost of carrying out an agreed-upon portion of the development, or a cash contribution at the time of construction or a combination of both. The non-Federal entity must operate, maintain, and replace without expense to the Federal Government the recreational areas and all installed facilities.

- The Federal Government does not contribute to the development of revenue-producing facilities such as golf courses, pools, riding stables, or marinas.

43. Payment. Non-Federal interests may furnish their share of separable recreation costs at reservoirs by cash payment during construction, by provision of lands or facilities, by long-term payment with interest, or by a combination of these. Long-term repayment is not normally appropriate at non-reservoir projects although it may be considered in exceptional cases.

SOURCES OF FUNDING

44. The foundation of any implementation program is a stable financial base. The Federal participation in recreational programs is partly explained in the above paragraphs. Actual limitations on Federal participation in local or State programs are contained in the applicable Public Laws.

45. For funding local programs or funding the local share of joint local-Federal programs, the taxation of real and personal property is the method most widely recognized. The funds collected under

this system may be earmarked for recreation. Taxation can be accomplished in a number of ways as explained in the following paragraphs.

46. A retail sales tax may be levied on the sale of specific items such as recreation equipment, cigarettes, and alcoholic beverages. The Dingle-Johnson, Pittman-Robertson programs use this method. The head-tax or occupation tax is used in a number of larger cities which provide employment opportunities for people in the surrounding suburbs. Similarly, real estate transfer tax may be levied on the conveyance of real property by a taxing jurisdiction. A portion of these funds could be set aside for recreation.

47. The statutes of many States allow for the establishment of park and recreation departments or metropolitan park and recreation districts within defined jurisdictional boundaries. These entities are given the authority to assess a mill levy and to use the funds for recreation. These same entities could be given authority to issue bonds to develop recreation facilities or areas.

48. In Nebraska the Resource Development Fund is available to qualified responsible governmental entities for grants and loans. This program is designed to preserve or develop fish and wildlife resources, protect and improve public lands, and provide outdoor recreation lands and facilities. The funds are administered by the Nebraska Natural Resources Commission.

49. A major funding source is available to State and local governments through the Land and Water Conservation Fund. This Federal legislation provides a 50-percent matching grant-in-aid program for the acquisition and development of outdoor recreation sites and areas.

50. The State of Nebraska has established a program which permits local entities to receive an additional 25-percent in State funds in conjunction with the Land and Water Conservation Fund. Eligible local governments need only provide 25-percent of the funding for acquisition or development of outdoor leisure-time areas. Iowa has not initiated this type of program.

51. The Communities Development Act (PL 93-383) provides an additional source of funding. This act provides block grants to be used for community projects whose priorities are established at the local level. These may include park and open space projects.

52. Financial assistance is possible under the Historic Preservation Act for acquiring or developing historic sites, buildings, structures, or objects that are significant in American history. This program provides 50-percent matching grant-in-aid funds.

53. User fees and service charges can also provide needed revenue for leisure-time programs. The concept dealing with user fees is based upon allocating costs of services to those persons who benefit from them.

LAND USE CONTROLS

54. Land use regulations are an important tool, especially where land acquisition costs are prohibitive. A well conceived land use plan will identify the best leisure-time site and area location and identify incompatible adjacent developments.

55. Zoning ordinances determine land use and are designed to protect natural resource areas. Flood plain zoning has been effective

in the control of development in flood prone areas, making them available for parkways and green belts. Another form of zoning is density development control associated with cluster and planned unit development. This zoning concept requires a developer to provide a specified number of acres for parks and open space within the area to be developed.

56. Other land use controls include partial purchase, fee simple acquisition, and recreation or conservation easements. Partial purchase allows a governmental unit to acquire land and then sell it to a private developer with specific land use stipulations. The developer makes improvements and leases the facilities back to the public.

57. Recreation easements allow a limited right for public use. This method lends itself to trail development. Title to the land remains with the owner who would agree to keep portions of the land in a natural state.

REGIONAL IMPLEMENTATION

58. The metropolitan Omaha-Council Bluffs area has a pressing need for increased recreation facilities, especially water-oriented recreation. Many political jurisdictions and the Metropolitan Area Planning Agency have developed plans for satisfying recreation needs; however, a lack of funds is restricting the implementation of the plans.

REGIONAL RECREATION AUTHORITY

59. Area officials could enhance the creation of additional recreation facilities by forming a regional recreation authority to study

recreation potential, develop and publicize programs, seek State and Federal funding assistance, and to advise city and county officials on implementation of recreation projects.

60. The recreation authority could be formed under the sponsorship of the Metropolitan Area Planning Agency or as a separate organization sponsored by the chambers of commerce of the many cities wishing to participate in improving recreation opportunities in the area.

61. The advantages of such an authority include: (1) a cooperative regional authority could resolve recreation facility siting problems and coordinate among local public, private agencies, and Federal agencies; (2) increased local recreation enhances local well-being; (3) recreation facilities attract new business to the area; (4) local residents using facilities keep money in the area; and (5) out-of-state visitors bring in new income to the area.

62. Institutional analysis of the metropolitan area indicates there are no legal roadblocks to establishing a regional recreational authority; inter-governmental cooperation statutes are in existence in both States. The organization of the authority could be flexible and responsive to the desires of the various political entities. Funds for the authority could be provided as discussed in previous paragraphs of this section. The political problems associated with this organization could be difficult to overcome. The siting of recreation facilities raises many positive and negative political, social, and economic arguments. The regional recreation authority would find it difficult to reach agreement with the cities and counties unless the authority received the backing of all jurisdictions and was able to produce implementable plans for projects in a short time.

Summary

63. This section has presented: (1) the institutional arrangements available to develop and implement recreation programs and projects in the urban study area; (2) alternate ways to approach regional recreation needs; and (3) the Federal and State recreation assistance programs available to local entities.

64. It appears that the most pressing need in the study area is to consolidate the various plans and to assign priorities to the construction of projects. A regional cooperative effort could produce a dynamic areawide program. The minimum requirement seems to be the need to conduct planning within the framework of the planning agency at the next higher level of government.

65. Whatever course of action decision makers follow, it is necessary for them to use available plans, solicit maximum public involvement and support, assign priorities to programs and projects, and to work together to provide adequate recreational opportunities for residents of the study area.