LOUISIANA

ST. CHARLES PARISH

MASTER RECREATION PLAN

Prepared for

ST. CHARLES PARISH POLICE JURY

by

BURK AND ASSOCIATES, INC.
engineers · planners · environmental scientists

TK
1424
.L8
S7
1979

Property of CSC Library

U.S. DEPARTMENT OF COMMERCE NOAA
COASTAL SERVICES CENTER
2234 SOUTH HOBSON AVENUE
CHARLESTON, SC 29405-2413

TK1424.L8 S7 1979

JAN 7 1997

ST. CHARLES PARISH

MASTER RECREATION PLAN

prepared for

ST. CHARLES PARISH POLICE JURY

prepared by

BURK AND ASSOCIATES, INC.
engineers, planners, environmenal scientists

MARCH 1979

"The preparation of this report was financed in part through a grant from the U.S. Department of Commerce under the provisions of the Coastal Zone Management Act of 1972."

CONTENTS

List of Figures		ii
List of Tables		iv
Chapter 1	Introduction	1
Chapter 2	Social and Cultural Setting	10
Chapter 3	Natural Environment	27
Chapter 4	Analysis of Recreation in St. Charles Parish	41
Chapter 5	Recreation Demand and Needs	54
Chapter 6	Master Recreation Plan	68
Chapter 7	St. Charles Wetland Recreation Plan	81
Chapter 8	Funding and Implementation	97
Appendices		
Appendix A	St. Charles Recreational Plan, Related Studies	107
Appendix B	Calculations of Regional Demand for Selected Recreation Activities in St. Charles Parish	108
Appendix C	Text of Congressional Bill 2470	110
Appendix D	Detailed Inventory of Recreation Facilities, St. Charles Parish	115
References		120
Notes		123

FIGURES

Figure 1	Louisiana Coastal Parishes	2
Figure 2	Vicinity Map	4
Figure 3	Delineation of Recreation Areas for Study Purposes	6
Figure 4	St. Charles Parish Ward Map and Coastal Zone Areas	14
Figure 5	Proposed Alignment I-310, Including Hale Boggs Bridge	24
Figure 6	North-South Cross Section	28
Figure 7	Topography and Hydrology	30
Figure 8	Climatic Influences	32
Figure 9	Vegetation Map	34
Figure 10	Cross Section of Ecological Zones	36
Figure 11	Soil Types	38
Figure 12	Land Capabilities	40
Figure 13	Existing Recreational Facilities and School Property	46
Figure 14	Historic, Cultural and Archaeological Sites	52
Figure 15	Identification of Overall Recreational Needs Within State of Louisiana	62
Figure 16	Recreation Master Plan - 5 Year	70
Figure 17	Boat Launch Schematic	71

FIGURES (Continued)

Figure 18	Proposed Sunset Community Park	73
Figure 19	Proposed 10 Year Plan	78
Figure 20	Sketch of Typical Community Center	80
Figure 21	Physiographic Units of St. Charles Wetland	88
Figure 22	Sketch of Proposed Levee Launch Site	91
Figure 23	Sketch of Proposed Launch Site Adjacent to Airline Highway	91
Figure 24	Proposed Wetland Interpretive Center	94

TABLES

Table 1	Population Projections, St. Charles Parish 1980 and 2000	16
Table 2	Population Figures, St. Charles Parish, East and West Bank, 1920-1970	17
Table 3	Industries Established in St. Charles Parish, 1950-1973	18
Table 4	Family Incomes, St. Charles Parish, New Orleans SMSA, and the State of Louisiana, 1960-1970	20
Table 5	Existing Land Use, St. Charles Parish, 1976	22
Table 6	Inventory of St. Charles Parish Public Schools, 1979	47
Table 7	Parish-Leased Recreation Sites	48
Table 8	Recreation Facilities Owned by Commercial or Non-Profit Organizations	49
Table 9	Participation Rates for Various Recreational Activities, Louisiana and Region 3 (1980)	56
Table 10	Use Standards for Various Recreation Activities	58
Table 11	Motor Boat Registrations, 1973-1978, St. Charles Parish	59
Table 12	Hunting and Trapping Licenses Sold, St. Charles Parish, 1972-1978	62
Table 13	Standards for Selected Outdoor Recreational Facilties	65
Table 14	Local Supply, Demand and Needs for Selected Recreational Facilities in St. Charles Parish: 1980 and 1990	66
Table 15	Potential Federal Funding for Short-Term Development, 1980-1985	106

CHAPTER 1

INTRODUCTION

In formulating a Parish-wide master recreation plan it is necessary to first examine existing resources and growth patterns, not only within the Parish but also within the surrounding region. A view of the Parish within the context of the area it serves, and by which it is served, provides insight into the strengths and weaknesses of existing facilities and gives assistance in determining future recreational demand and need.

St. Charles Parish, located in the southeastern part of the state, is one of Louisiana's coastal parishes (see Figure 1). It has experienced an exceedingly rapid growth rate over the last twenty-five years, a phenomenon it shares with many of the other coastal parishes (see Chapter 2. Between 1970 and 1985, it is estimated that Louisiana's Coastal Zone population will grow by 32 percent. This growth is expected to be particularly heavy in the Baton Rouge-New Orleans Corridor, of which St. Charles Parish is a part.[1] Planning to meet the needs of this ever-increasing population is a difficult and challenging task, but it is an effort which, when accomplished, will pay great dividends in the future in terms of the enhanced quality of life within the Parish.

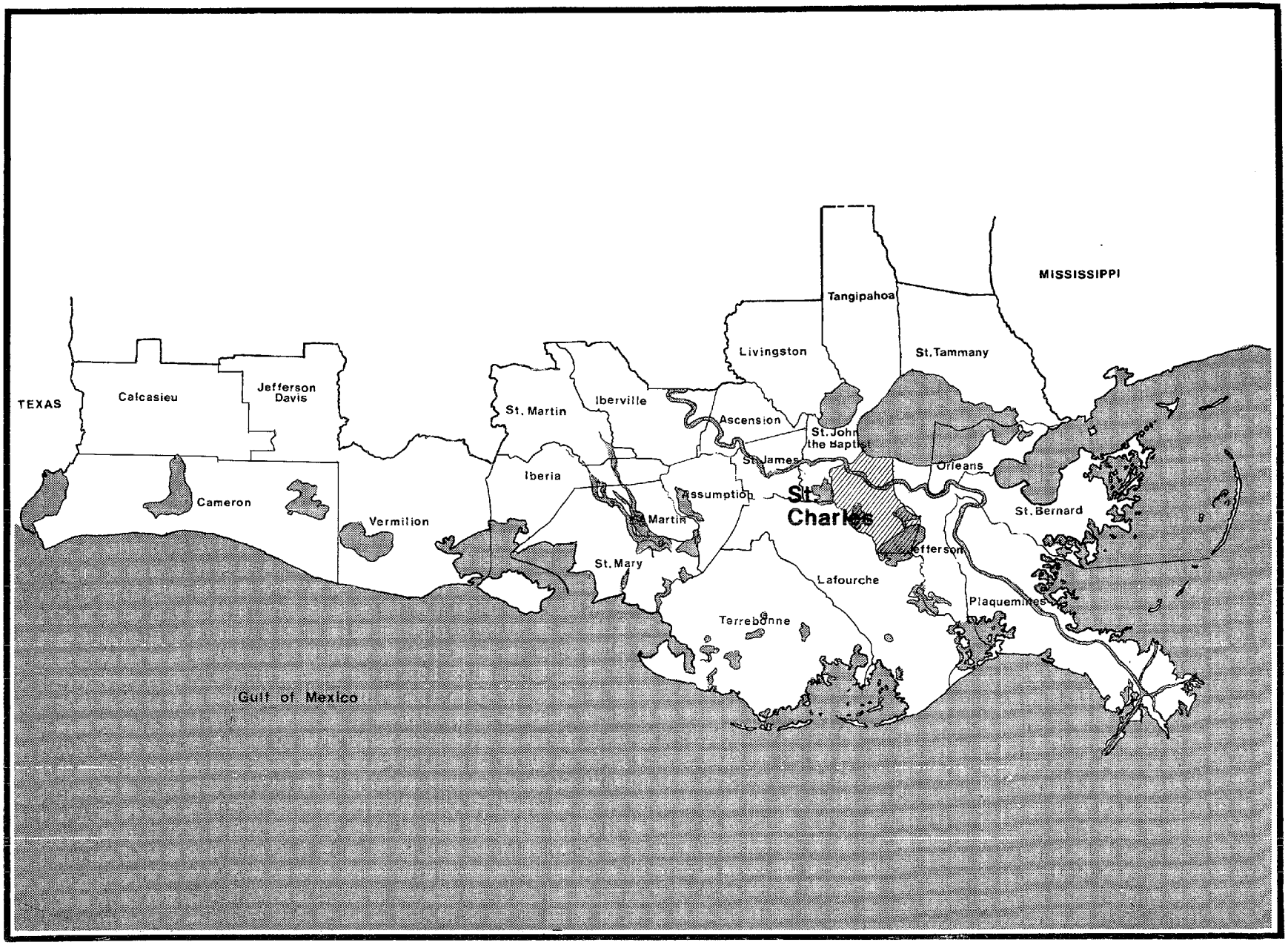
St. Charles Parish has a unique set of problems, created in part by the very large percentage of the Parish which is either water or wetlands, by the extent to which industry has located within the Parish, and by its proximity to the heavily populated New Orleans metropolitan area (see Figure 2). Developable land is at a premium, and determining policies for future land usage is a task fraught with difficulties. A limited supply of easily developable land often leads to intense competition for that which is available and can result in a failure to allot sufficient land for less intensive and profitable uses such as recreation. It appears that this has been the situation in St. Charles Parish in past years, for little public land is available today for either indoor or outdoor recreation. The St. Charles Recreation District board members have been working actively in the last few years to remedy this situation, attempting to acquire land, to upgrade existing facilities and to build new facilities. However, many of their attempts have been thwarted due to insufficient funds and lack of public support.

Figure 1

LOUISIANA
COASTAL PARISHES

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


MISSISSIPPI
Tangipahoa
Livingston
St. Tammany
TEXAS
Calcasieu
Jefferson Davis
St. Martin
Iberville
Ascension
St. John the Baptist
St. James
Orleans
Iberia
Assumption
St. Charles
St. Bernard
Cameron
Vermilion
St. Martin
Jefferson
St. Mary
Lafourche
Plaquemines
Terrebonne
Gulf of Mexico

The dearth of recreational facilities, lack of public support, and financial inadequacy of the existing recreational programs all point to the need for an overall recreation plan which will attempt to address existing recreational insufficiencies, plan for future recreational demand, and identify funding sources which can be tapped to move the recreation program forward.

The existence of the St. Charles Wetland* and the Salvador Wildlife Management Area within the Parish also creates a need for special consideration to be given to future land development, recreational and otherwise. These invaluable natural resources are used extensively for hunting, fishing, and other recreational activities by residents of St. Charles Parish and the surrounding parishes. The value of the wetland areas as a fish and wildlife habitat is such that the St. Charles Wetland is presently under consideration by Congress for creation as a National Wildlife Refuge (see Chapter 6 for more detail). The proximity of these fragile marshland areas to a heavily populated urban area puts them in increasing danger of succumbing to development pressures unless plans for preservation are made and implemented in the near future.

The Parish's ability to obtain partial federal and state funding for recreational projects should be increased with the completion and adoption of an overall recreation plan for the Parish. Commitment of governmental finances to a project often depends upon the applicant's ability to show that the particular facility is part of an orderly phased development plan which takes into consideration the needs of the entire Parish.

---

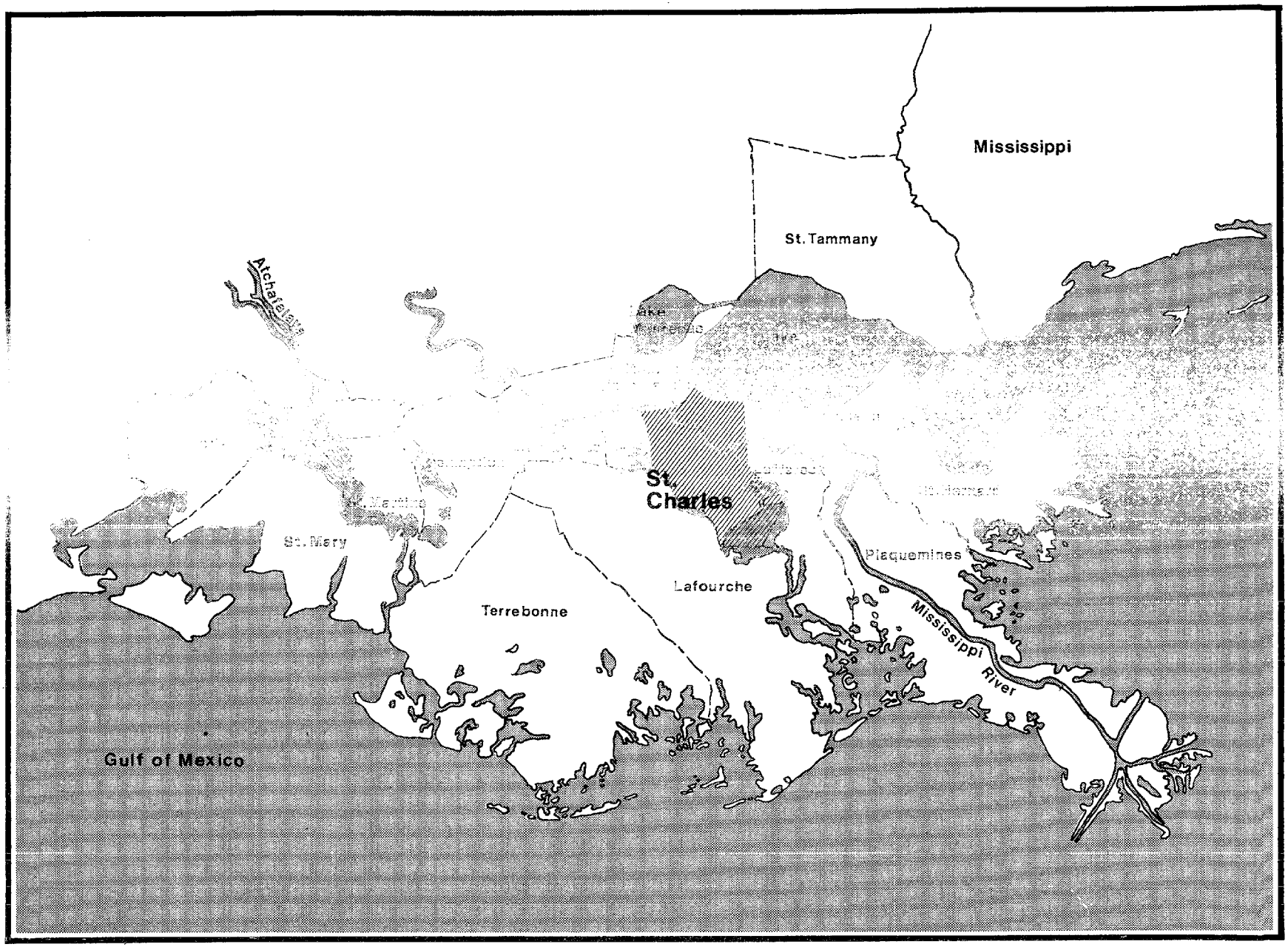
*The term "St. Charles Wetland" is being used to designate the area between the Bonnet Carre Spillway, the St. Charles-Jefferson Parish line, the Airline Highway and Lake Pontchartrain. This designation was used in the report Special Management Areas in the Coastal Zone, St. Charles Parish, prepared for the Coastal Zone Management Advisory Committee by South Central Planning and Development Commission, December, 1978.

Figure 2

VICINITY MAP

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists


Mississippi
St. Tammany
Atchafalaya
St. Charles
St. Mary
Terrebonne
Lafourche
Plaquemines
Mississippi River
Gulf of Mexico

GOALS AND OBJECTIVES

In planning for future recreational development, it is essential to establish objectives toward which a development program can be directed. The following is a summary of the objectives which will hopefully be achieved by the St. Charles Parish Master Recreation Plan:

1. Determine existing recreational capacity in St. Charles Parish and analyze its adequacy for meeting the recreational needs of Parish residents and users from the surrounding service area.

2. Analyze projected residential, commercial and industrial growth to determine its impact on future recreation needs.

3. Develop a plan which will attempt to alleviate existing problems and meet immediate needs, as well as provide an orderly development scheme for meeting long-term needs.

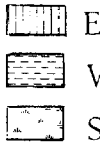
4. Develop recommendations for the St. Charles wetland area which will allow for recreational uses compatible with the ecology of the area while preserving its uniqueness as a fish and wildlife habitat.

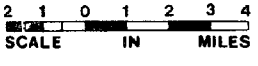
5. Develop appropriate conceptual plans for renovation and expansion of existing facilities and for proposed recreation sites.

6. Investigate and identify potential funding sources for a logical phased implementation of the plan.

Figure 3

DELINEATION OF RECREATION AREAS FOR STUDY PURPOSES

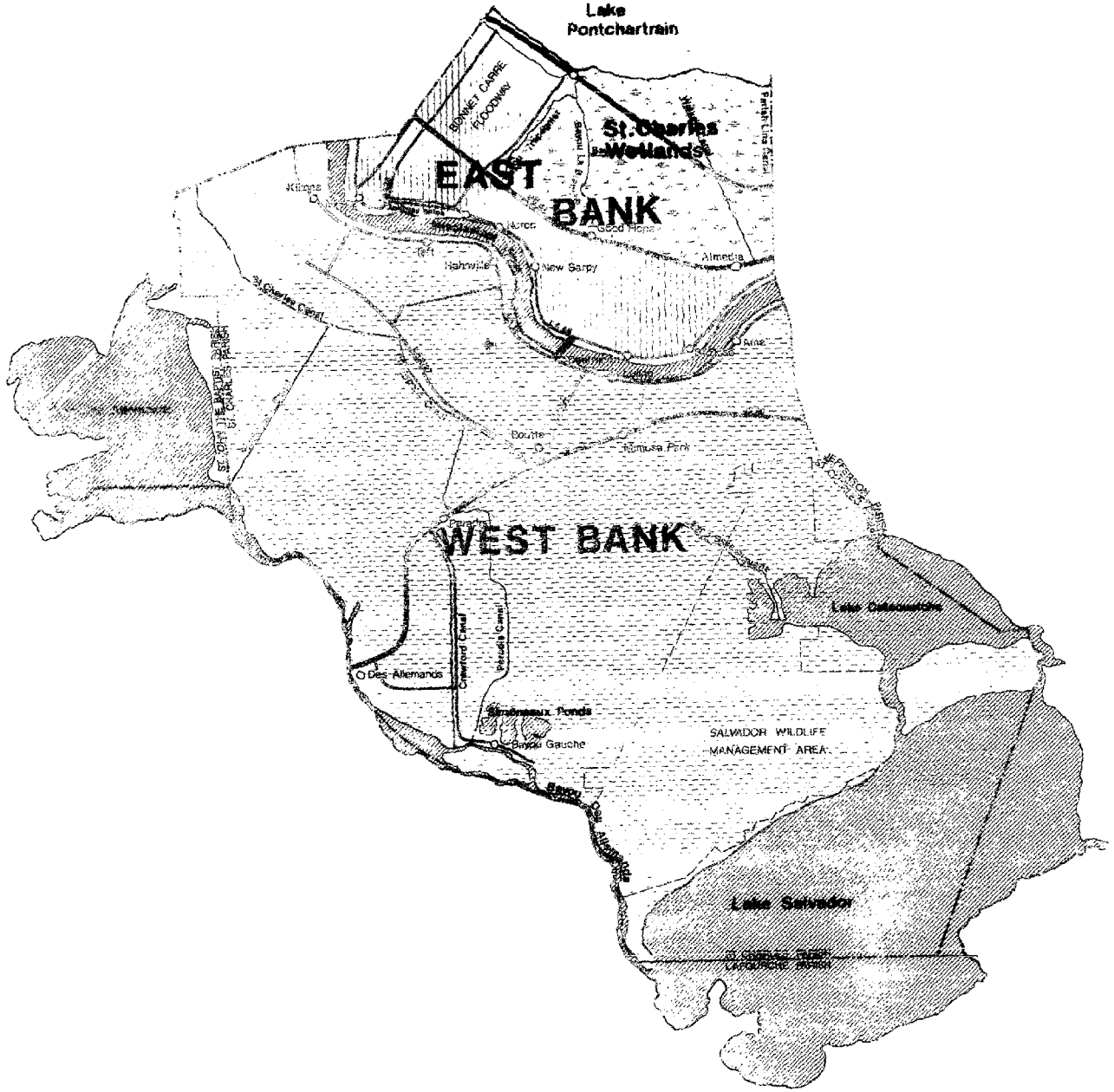




ST.CHARLES PARISH
MASTER RECREATION PLAN

prepared by

Burk and Associates, Inc.
engineers·planners·environmental scientists


Lake
Pontchartrain
BONNET CARRE
FLOODWAY
EAST
BANK
St. Charles
Wetlands
Killona
Good Hope
Hahnville
New Sarpy
Almedia
Bayou Des Allemands
Boutte
Ramusa Park
WEST BANK
Lake Cataouatche
Des Allemands
Barataria Canal
Petit Canal
Chacahoula
Bayou Gauche
SALVADOR WILDLIFE
MANAGEMENT AREA
Lake Salvador

RECREATIONAL STUDY UNITS

Though the recreation plan encompasses the entire Parish area, a logical delineation is made between the East and West banks for purposes of inventory and analysis. Additionally, the St. Charles Wetland area is given special consideration due to its unique ecological characteristics, its value as a natural habitat for fish and wildlife, and its pending designation as a National Wildlife Refuge (see Figure 3).

RELATED STUDIES

In any planning task of this scope, research of previous studies relating to the Parish or area under consideration is essential. Appendix A contains a list of those studies which were used in compiling information on recreation in St. Charles Parish.

SUMMARY OF FINDINGS

1. The supply of recreation facilities in St. Charles Parish is totally inadequate for the number of people using them. Parish population figures have more than doubled since 1950, but there has been no comparable increase in the number of recreation facilities.

2. Public recreation facilities, as opposed to private or commercial, are almost non-existent. Apart from school facilities, the Parish operates only 4 playgrounds and 2 parks (totalling approximately 36 acres) and 2 boat launches.

3. Additional land acquisition for recreational purpose is essential to adequately meet future recreation needs. The short-term lease status of the land upon which most existing facilties are built makes the future provision of recreational services uncertain at least. At a minimum, approximately 25 additional acres should be acquired on each bank to meet needs projected in the Five and Ten Year Plans.

4. Demand for recreational areas and facilities is steadily increasing, as population continues to expand both in St. Charles Parish and the surrounding service area.

5. Many of the existing public facilites are in need of renovation or expansion. Playground equipment on numerous sites has been allowed to deteriorate badly and is in need of immediate repair or replacement. Upgrading and maintenance of this equipment is essential in any plan to meet present and future Parish recreation needs.

6. Need for new public indoor and outdoor recreation facilities exists on both the East and West Banks, but the need appears somewhat greater on the East Bank.

7. The Parish possesses an abundance of natural recreational resources in the form of scenic streams and wetland areas. Bayou Des Allemands, Bayou Trepanier and Bayou La Branche are part of Louisiana's scenic river system and the St. Charles Wetland and the Salvador Wildlife Management areas are invaluable assets in terms of their unique natural environment and the recreational opportunities which they offer.

8. The current Recreation District board members appear extremely knowledgeable concerning recreation matters in their Parish, and have been working actively to upgrade the existing recreation program and facilities with the money and Parish resources available.

SUMMARY OF RECOMMENDATIONS

1. Continue to expand the program utilizing public and private school facilities for recreation.

2. Repair broken equipment at existing sites; renovate and expand facilities on land already owned or leased to the Recreation District over the long term.

3. Continue attempts to acquire additional land for recreational purposes or to acquire extended leases.

4. Make every effort to preserve existing scenic resources and to ensure that these areas are open to the general public for recreational activities compatible with the ecology of sensitive environments.

5. Try to enlist greater public support of the recreation program by publicizing needs, soliciting suggestions and involving the citizenry in decision-making processes.

6. Consider formation of a citizen's committee composed of some members of the Recreation District Board, School Board, Parish political figures and citizens-at-large for the purpose of approaching industries within St. Charles Parish to solicit contributions of land, money or equipment for the recreation program.

7. Organize all desired recreational improvements as determined by this study for the Parish into a phased implementation plan. This also is illustrated as the Five and Ten Year Program for development. Facilities of the highest priority from the Five Year Plan will be delineated and a construction cost estimate will be included for each. This will assist St. Charles officials in grant procurement for these high priority facilities which can ideally be scheduled for implementation in the near future.

CHAPTER 2

SOCIAL AND CULTURAL SETTING

In planning for the recreational needs of St. Charles Parish, it is essential to first gain as much information as possible about the "character" of the Parish. The background, socio-economic make-up, growth patterns and future growth expectations all provide vital information in determining the type and quantity of facilities needed. This chapter provides a brief analysis of the social and cultural setting of the Parish, including historical information, a socio-economic profile, delineation of jurisdictional boundaries, and a discussion of present and future land use trends.

HISTORY

The settlement patterns of St. Charles Parish reflect, in microcosm, the settlement patterns of the United States as a whole. The language, culture and traditions of numerous peoples have been interwoven, creating a social fabric which is colorful, durable and unique.

The first of many groups which offered their cultural contributions to the area were undoubtedly the Indians. Sites of old Indian villages have been located in St. Charles near Bayou Gauche, Lake Salvador, Hahnville, Killona and Good Hope. Among the tribes which lived in or near the Parish were the Chitimacha, Washa, Chawasha, Quinipissa, Tangipahoa, Acolapissa, Bayou Goula, Tensas, Okalosa, Chochaw, Tunica and Houma.[2]

In 1682, Louisiana was claimed by France, and for thirty-two years thereafter, the French persisted in their attempts to colonize the area. The French government eventually turned settlement efforts over to the management of private companies, and in 1717 John Law's "Western Company", later known as the company of the Indies, took over the concessions. In Europe, attempts at recruiting settlers were particularly successful among the Germans, who had suffered from many years of religious and political warfare.

According to historians, the first Germans arrived in what is now St. Charles Parish in the year 1719, settling about 30 miles up the river from New Orleans. This original group was joined in 1722 by a second group of Germans from an earlier settlement which had failed, and together the two villages became known as Karlstein. The area prospered, and soon became known as the German Coast. These early settlers were joined by French, Spanish, Italian and immigrants of other nationalities. In 1766, 216 Acadians exiled from Canada joined the Germans in the settlements along the Mississippi. With the intermarriage among the colonists the French culture became dominant, though the area still retains remnants of German tradition.

St. Charles Parish was one of the original twelve counties created in 1805, and when these counties were abolished by the Territorial Legislature in 1807, it became one of the nineteen parishes. Its name was derived from the old ecclesiastical parish under French rule. When the Parish was organized, the seat of justice was established near the Mississippi River and was known as St. Charles Courthouse. Hahnville was laid out in 1872 by ex-Governor Michael Hahn, and is now the Parish seat.

For the early settlers, sugar-cane production formed the basis of the economy. Other attractions of the Parish were ample timber for building and excellent trapping, fishing and hunting. In recent years, oil and petro-chemical industries have become dominant in the area, with sugar-cane production taking second place. In addition, the economy is diversified by commercial fishing and crabbing, trapping, dairying, truck-farming and cattle raising.

In the last twenty-five years, St. Charles Parish has experienced extremely rapid population growth and has become both more industrialized and more urbanized. This trend is expected to continue in the foreseeable future, and will certainly present the residents and officials of St. Charles Parish with numerous opportunities and challenges with which to deal.

JURISDICTIONAL BOUNDARIES

St. Charles Parish is located in the southeastern part of the State in close proximity to the New Orleans Metropolitan area. It is bordered by Jefferson, St. John the Baptist and Lafourche Parishes, and Lake Pontchartrain.

Politically, the Parish is located in the 3rd Congressional District, currently represented by Congressman David C. Treen; in the 19th State Senatorial District, represented by Senator Ron Landry; and in the 56th State Representative District, represented by Representative Ralph R. Miller.

Regional agencies which have some jurisdictional impact on St. Charles Parish include:

1. The River Parishes Council of Governments, representing a cooperative effort between St. Charles, St. James and St. John the Baptist Parishes;

2. The South Louisiana Port Commission, established by the State legislature for St. Charles, St. James and St. John the Baptist Parishes;

3. The South Central Planning and Development Commission, Sub-State Planning District No. 3, which covers Assumption, St. James, St. John the Baptist, St. Charles, Lafourche and Terrebonne Parishes;

4. The Pontchartrain Levee Board (East Bank) and the Lafourche Levee Board (West Bank), primarily responsible for levee construction, maintenance and patrol;

5. The New Orleans District of the Corps of Engineers, which is responsible for navigation projects, flood control, hurricane protection, environmental enhancement and water supply within a 47,000 square mile district including most of Louisiana, parts of Texas, Arkansas and Mississippi.

For purposes of State recreation planning, St. Charles Parish is located in Louisiana Planning Region III, which also includes Lafourche, Terrebonne, Assumption, St. James and St. John the Baptist Parishes.

The Parish is physically divided by the Mississippi River, creating two separate entities known as the East and West Banks. It is further divided into seven wards, with Wards 1, 2, 4 and 7 on the West Bank and Wards 3, 5 and 6 on the East Bank (see Figure 4). These boundaries are presently being redrawn, due to a need for legislative reapportionment within the Parish. However, the new maps were not completed at the time of publication of this study.

The main Parish governing body is the Police Jury, which consists of seven jurors elected for four year terms. Each juror represents one of the seven wards into which the Parish is divided. Other regulatory units within the Parish are the Sheriff's office, the Zoning Commission, the Housing Authority, the School Board, the Board of Health and the Recreation District Board. Special districts include:

1. Two Waterworks Districts
   - Number 1, East Bank
   - Number 2, West Bank

2. Two Sewerage Districts
   - Number 1 on the East Bank, includes Norco and Good Hope
   - Number 3, includes Luling and part of Boutee

3. Two Drainage Districts
   - Gravity Drainage District Number 2, in Norco
   - Sunset Drainage District on the West Bank in Paradis, Des Allemands area

The entire East Bank, the Salvador Wildlife Management Area and a small portion of the extreme southern part of the Parish are considered part of the Louisiana Coastal Zone. These areas come under the

Figure 4

ST. CHARLES PARISH WARD MAP AND COASTAL ZONE AREAS

CURRENT POLICE JURORS*

Ward 1 · Stirling Melancon
Ward 2 · Clayton Faucheux
Ward 3 · V.J. St. Pierre, Jr.
Ward 4 · Philip Cortez
Ward 5 · Curtis T. Johnson, Sr.
Ward 6 · Freddie Giangrosso
Ward 7 · Leonard K. Fisher, Sr.

* as of March 1979

_ _ _ _ _ Ward Boundaries

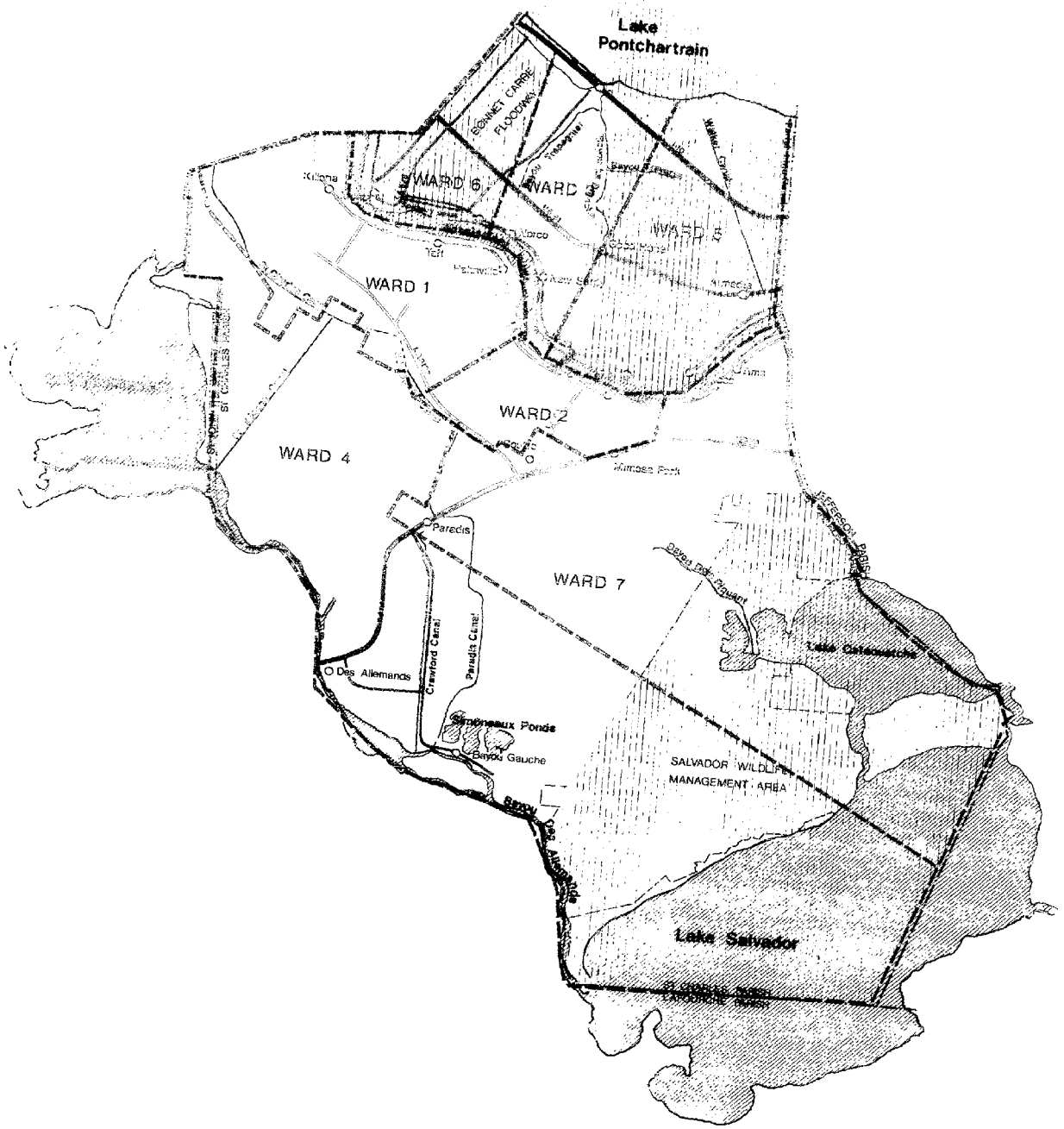
Coastal Zone Areas

2 1 0 1 2 3 4
SCALE IN MILES

N

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists


Lake
Pontchartrain
WARD 6
WARD 3
WARD 5
WARD 1
WARD 2
WARD 4
WARD 7
Paradis
Des Allemands
Crawford Canal
Paradis Canal
Bayou Gauche
Lake Cataouatche
SALVADOR WILDLIFE
MANAGEMENT AREA
Lake Salvador

jurisdiction of the Coastal Zone Management Act and the St. Charles Parish Coastal Zone Management Advisory Board. Special management[3] areas within the St. Charles Coastal Zone are delineated as:

1. Federal Lands
   - Bonnet Carre Spillway
2. State Lands
   - Salvador Wildlife Management Area
3. Other Important Wetlands
   - St. Charles Wetland
   - Wetlands surrounding Salvador Wildlife Management Area
4. Natural and Scenic Streams
   - Bayou des Allemands
   - Bayou La Branche
   - Bayou Trepagnier
5. Endangered/Threatened Species Habitat
   - Southern Bald Eagle Nest
6. Other
   - Wetland between the 80 Arpent Canal and the Mississippi River
   - Archaeological Density Sites

SOCIO - ECONOMIC PROFILE

The current population of St. Charles Parish is estimated at 36,200 people. By the year 2000 that figure is expected to total 52,003 (see Table 1). As is evidenced by the figures in Table 2, unprecedented population growth occurred in the Parish between the years 1950 and 1970, occasioned in large part by the great influx of industry into the area during that 20 year period. Figures from the early 1950's indicate that at that time, St. Charles Parish was in a period of transition between a basically agricultural economy and an industrially based economy. Between 1952 and 1973, seventeen major industries established operations in the Parish (see Table 3). Geographic factors attracting industry into the area included the abundance of available land, natural gas and water resources. In addition to the Mississippi River, which was a major asset,

the Parish offered good railroad and highway networks, proximity to the Port of New Orleans and to an extensive potential labor market. The political climate favored the growth of industry, as St. Charles Parish officials actively encouraged industrial location within Parish boundaries.

TABLE 1

POPULATION PROJECTIONS

ST. CHARLES PARISH
1980 and 2000

Age	1980 White	1980 Non-White	1980 Total	2000 White	2000 Non-White	2000 Total
00-04	2404	1285	3689	2683	1565	4248
05-09	2178	1145	3323	2842	1504	4346
10-14	2359	1116	3475	2938	1549	4487
15-19	2697	1124	3820	2811	1322	4132
20-24	2776	849	3626	2479	1060	3539
25-29	2650	916	3566	2699	1154	3853
30-34	2053	569	2622	2976	889	3865
35-39	1546	617	2163	3478	1253	4731
40-44	1368	406	1773	3642	884	4525
45-49	1493	364	1858	2907	955	3861
50-54	1419	308	1728	2142	550	2693
55-59	1174	273	1446	1582	578	2160
60-64	797	196	993	1243	336	1579
65-69	588	211	800	1200	294	1494
70-74	510	117	627	1039	151	1191
75-+	564	178	741	1103	197	1299
TOTAL	26,576	9,674	36,250	37,764	14,241	52,003

SOURCE: Segal, Saussy, Wrighton, Wilcox and Burford, Projections to the Year 2000 of Louisiana Population and Households, 1976: 197, 171.

TABLE 2

POPULATION FIGURES

ST. CHARLES PARISH, EAST AND WEST BANK
1920 - 1970

Year	1920	1930	1940	1950	1960	1970
E. Bank	2,811	6,251	5,280	6,265	9,831	12,731
W. Bank	5,775	5,860	7.041	9,160	11,388	16,819
Parish Total	8,586	12,111	12,321	15,425	21,219	29,550

SOURCE: Public Affairs Research Council of Louisiana, Statistical Profile of St. Charles Parish, 1973: 1. East and West Bank totals derived from ward figures.

The trend described above has continued unabated. According to the 1970 Census figures, manufacturing activities accounted for 32.3% of jobs within the Parish, as opposed to 25% in 1950, while agricultural activities accounted for 2.3% as compared with 10% in 1950. Industrial activities in St. Charles Parish consist mainly of chemical and petrochemical industries and grain export. As of 1973, the principal industries with the largest landholdings included:[4]

General American Tank Storage and Terminal Company	400 acres
Shell Oil and Shell Chemical	791 acres
Farmers Export Company	875 acres
Monsanto Company	1400 acres
Union Carbide Corporation	2500 acres
Louisiana Power and Light Company	3975 acres

TABLE 3

INDUSTRIES ESTABLISHED IN ST. CHARLES PARISH 1950 - 1973

Name	Date of Establishment	Location
Trans-Match, Inc.	1952	Almedia
Texaco, Inc.	1953	Paradis
Monsanto Chemical Co.	1954	Luling
Shell Chemical Co.	1955	Norco
Louisiana Power and Light	1960	Montz
International Tank Terminal	1961	St. Rose
Bunge Corporation	1961	Destrehan
Adnac, Inc.	1963	Destrehan
National Phosphate Corp.	1965	Taft
Union Carbide Corp.	1965	Taft
Lennox Industries	1966	Almedia
Argus Chemical Corp.	1967	Taft
Hooker Chemical Corp.	1967	Taft
Farmers Export Company	1968	Ama
J. M. Tull Metals, Inc.	1970	Almedia
Brewster Phosphate	1971	Luling
L.P.&L. Waterford Unit 7	1973	Killona

SOURCE: Rigamer, An Analysis of the Changing Land Use in St. Charles Parish, Louisiana, 1974.

In addition, the following 15 companies with smaller holdings are located in St. Charles Parish:

ADM Milling Corporation
Argus Chemical Company
Becker Industries
Bunge Corporation
Brewster Phosphate
Good Hope Refineries
Hooker Chemical and Plastics Corporation
International Tank Terminals, Ltd.
J. M. Tull Metals, Inc.
Lennox Industries
National Phosphate Corporation
St. Charles Grain Elevator Company
Texaco, Inc.
Trans-Match, Inc.
Whitco Chemical Corporation

As industrial activity within the Parish has grown, so has family income. Table 4 compares family income levels in 1960 and 1970 in the Parish, the New Orleans SMSA and the State of Louisiana. The most dramatic changes have occurred in the number of families which have entered the highest income bracket. According to the 1960 figures, only 1% of families in St. Charles Parish earned more then $15,000; by 1970 that percentage had jumped to 12%. The percent change between 1960 and 1970 was close to that of the New Orleans SMSA, and greater than that for the State. Another statistic worth noring is that of median family income. That figure is greater for St. Charles Parish than for either the SMSA or the State in both 1960 and 1970.

TABLE 4

FAMILY INCOME, ST. CHARLES PARISH, NEW ORLEANS SMSA AND THE STATE OF LOUISIANA 1960 and 1970

Family Income	St. Charles		New Orleans SMSA		Louisiana	
	1960	1970	1960	1970	1960	1970
All Families	4847	6738	211,161	255,870	771,252	872,772
Less than $1,000	384	197	11,220	11,538	70,934	41,960
$1000 to $1999	463	290	18,118	12,142	106,244	60,401
$2000 to $2999	464	365	22,045	13,425	97,410	62,494
$3000 to $3999	443	328	24,462	14,251	88,411	60,920
$4000 to $4999	493	409	24,849	14,828	83,162	58,364
$5000 to $5999	610	468	25,027	15,320	77,187	60,065
$6000 to $6999	623	297	20,378	16,648	63,606	60,099
$7000 to $7999	493	439	16,077	17,640	49,101	60,490
$8000 to $8999	306	574	11,841	18,131	34,687	60,825
$9000 to $9999	148	547	8,869	16,761	24,540	53,582
$10,000 to $14,999	342	1984	18,284	60,791	52,099	181,927
$15,000 to $24,999	54	690	6,607	33,288	16,469	86,253
$24,000 and over	24	150	3,384	11,107	7,402	25,392
Median Income	5289	9004	5,195	8,670	4,272	7,530
% of families with incomes over $15,000	1%	12%	4%	17%	3%	12%

SOURCES: U. S. Bureau of Census, Characteristics of Population, 1960;
U. S. Bureau of Census, General Social and Economic Characteristics, 1970;
U. S. Bureau of Census, 1970 Census of Population and Housing, New Orleans, Louisiana, Standard Metropolitan Statistical Area.

LAND USE

Land development in St. Charles Parish has basically occurred along major transportation arteries, resulting in a cluster or strip development pattern. On the East Bank, development tends to follow U. S. Hwy. 61 and La. Hwy 44 (River Road) and La. Hwy. 48. On the West Bank, the development is mainly along River Road (La. Hwy 18), La. Hwy 52, La. Hwy. 3060 and U. S. 90.

Population centers include Montz, Norco, New Sarpy, Destrehan and St. Rose on the East Bank, and Killona, Hahnville, Luling, Ama, Boutte, Mimosa Park, Paradis and Des Allemands on the West Bank. None of these centers are incorporated towns.

The physical division of the Parish by the Mississippi River has created problems of access, resulting in a necessity for duplicating many needed services and community facilities. Lack of adequate bridge crossings has accentuated the semi-isolation between the two parts of the Parish. However, the construction of the Hale Boggs Bridge, which crosses the river at the western edge of Luling, will provide a much needed link between the East and West Banks, joining U. S. Hwy. 90 on the West Bank with I-10 on the East Bank. It is estimated that bridge construction will be completed in another 2 to 3 years.

The dual growth of industry and population in St. Charles Parish has resulted in a continual absorption of agricultural land and wetland areas for industrial, commercial and residential use. The concentration of industries on the high land along the river has forced much of the residential development to occur in more low lying areas of the Parish. An estimate of existing land uses according to category, acreage and percentage of developed and undeveloped land is presented in Table 5. Noteworthy among these figures is the very large percentage of the Parish which is either water or wetlands. These two categories alone account for 82.9% of the total land area. It is also interesting to note that industrial uses account for 41.2% of the developed land within the Parish, while residential usage accounts for only 15.5%. Of the undeveloped land, extractive uses account for 8.2% of the total.[5]

TABLE 5

EXISTING LAND USE

ST. CHARLES PARISH , 1976

Category Acres	Acres	% of Dev. Land	% of Total Land
Residential	2,325	15.5	0.9
Commercial & Services	267	1.8	0.1
Industrial	6,198	41.2	2.3
Extractive	21,736	0	8.2
Transportation	3,755	25	1.4
Institutional	267	1.8	0.1
Recreation & Open Space	114	0.8	0.04
Mixed	2,109	14.0	0.8
Agriculture	21,726	-----	8.2
Rangeland	0	-----	0
Forest	1,976	-----	0.7
Water	93,119	-----	35.0
Forested Wetlands	54,340	-----	20.4
Non-forested Wetlands	73,112	-----	27.5
Barren	247	-----	0.09
Total Developed Land	15,035	-----	-----
Total Undeveloped Land	266,256	-----	-----
TOTAL	281,291	-----	-----

SOURCE:

South Central Planning & Development Commission
(based in part on N.Y. & Associates
and Louisiana State Planning Office data).
Existing Land Use Study St. Charles Parish, 1976.

Future land requirements for major development activities in the Parish are expected to exceed 4,200 acres by the year 1982. The I-310 bridge under construction between Destrehan and Luling uniting the East and West Banks of the Parish will have significant impact on future development. Residential growth alone is expected to require an additional 2,024 acres between 1975 and 1985.

The largest residential development in St. Charles Parish is Ormond Plantation Estates in Destrehan, with a land area of approximately 1,200 acres and a total of 1,682 lots. This development is proceeding in two phases. The first section, consisting of 260 acres of subdivided lots was opened in 1973 and is scheduled for complete development (sold and constructed upon) in 1980. The second section is scheduled for full improvement about 1980. Other developments on the East Bank are expected to add a total of 468 additional acres of residential land by 1980.[6] On the West Bank, residential acreage set aside for potential development by 1985 is almost as great as that on the East Bank. If these developments materialize, they should prove adequate to meet the projected residential needs of the Parish by 1985.

In terms of future industrial expansion, one major development planned for the area is Plantation Park in Destrehan by the Joseph C. Canizaro Interests of New Orleans. Plans are for utilizing the area which was once the Amoco Refinery. Koch Oil Company recently purchased approximately 1,500 acres of agricultural land in Killona. However, no definite plans for development have been made at this time.[7]

In order to meet future recreational demands for the projected increased population, it will be necessary to set aside considerable additional acreage for construction and recreational facilities, both indoor and outdoor. An indepth discussion of existing recreational facilities and future needs will follow in Chapter V.

Figure 5

PROPOSED ALIGNMENT
I-310, INCLUDING
HALE BOGGS BRIDGE

▪▪▪▪▪▪ Proposed Highway Alignment

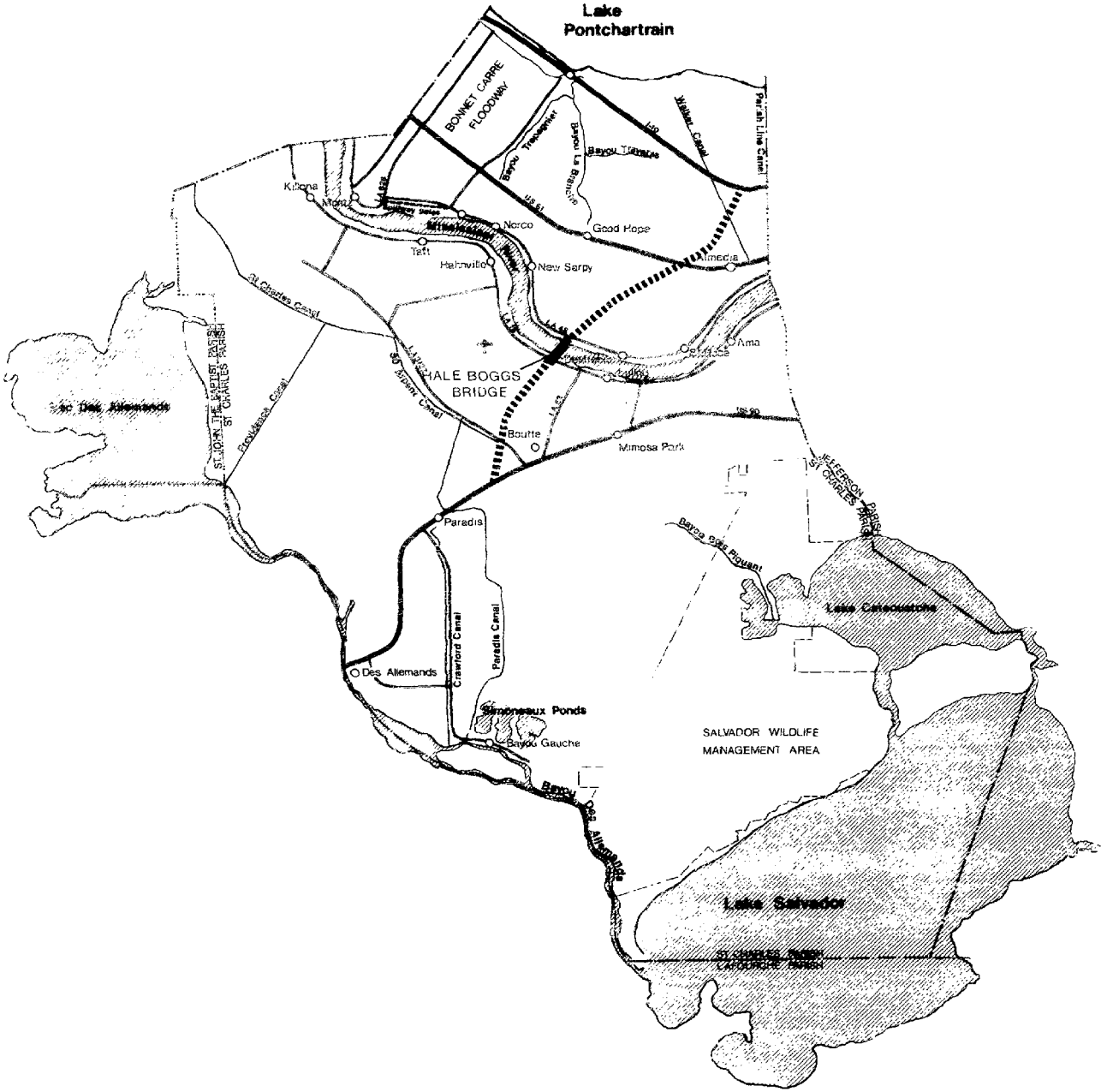
Source: Louisiana Department of Highways, 1979

2 1 0 1 2 3 4
SCALE IN MILES

N

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers-planners-environmental scientists


Lake
Pontchartrain
BONNET CARRE
FLOODWAY
Bayou Trepagnier
Bayou La Branche
Bayou Villeré
Bayou Terrebonne
Intracoastal Canal
Harvey Canal
Harvey Lock
Algiers Canal
Kenner
Norco
Good Hope
Taft
Hahnville
New Sarpy
Almedia
Paris Line Canal
St. Charles Canal
Destrehan
Ama
HALE BOGGS
BRIDGE
Boutte
Mimosa Park
Providence Canal
St. Johns Canal
ST. JOHN THE BAPTIST PARISH
ST. CHARLES PARISH
Des Allemands
Paradis
Crawford Canal
Paradis Canal
Bayou des Allemands
Simoneaux Ponds
Bayou Gauche
Bayou Des Allemands
Bayou Des Rouant
Lake Cataouatche
JEFFERSON PARISH
ST. CHARLES PARISH
SALVADOR WILDLIFE
MANAGEMENT AREA
Lake Salvador
ST. CHARLES PARISH
LAFOURCHE PARISH

By the year 1985, approximately 30 miles of new highway will have been completed. This includes La. Hwy. 3127, La. Hwy. 3141 and La. Hwy. 3160, all of which are two-lane roads; and the proposed I-310 highway (approximately 12 miles in length) which will connect I-10 on the North with U. S. Hwy 90 to the South, crossing the River by means of the Hale Boggs Bridge between Destrehan and Luling.[8] The proposed highway construction would consume a combination of farm land and swamp land (see Figure 5). However, since I-310 is expected to be partially elevated, the swamp land which it crosses should not be totally altered.

CONCLUSIONS

St. Charles Parish will face steadily increasing pressures in the future brought on by accelerated population, commercial and industrial growth. The supply of land is limited, and great demand will be placed on the still existing agricultural and wetland areas of the Parish to meet these needs. If land is to be preserved for recreational purposes, and if the vast natural resources of the wetlands are to be guarded against spoilage or ultimate destruction, wise planning decisions concerning land usage must be made in the very near future.

CHAPTER 3

NATURAL ENVIRONMENT

St. Charles Parish is located within the broad region known as the Gulf Coastal plain and more specifically the Mississippi deltaic plain. The deltaic plain consists largely of natural levee ridges, abandoned distributaries, swamps and coastal marshes containing numerous shallow bays, lakes and ponds with interconnecting bayous and numerous man-made canals.

This deltaic plain is of recent geologic formation having been formed entirely in the last 30,000 years since the last ice age. The Mississippi River's influence on the area is obvious, as all topographic features are a direct result of its activities. Natural ground elevations range from 0 to about 25 feet above mean sea level (M.S.L.) with the highest elevations being the direct result of annual river overflows. The yearly process of alluvium overflows and deposition forms the basic physiology of the Parish today. A typical North-South section of the Parish illustrates the highest elevations of the natural levees of the Mississippi with the topography sloping to the Lake Pontchartrain basin to the North and the Lac Des Allemands and Lake Salvador basins to the south (see Figure 6).

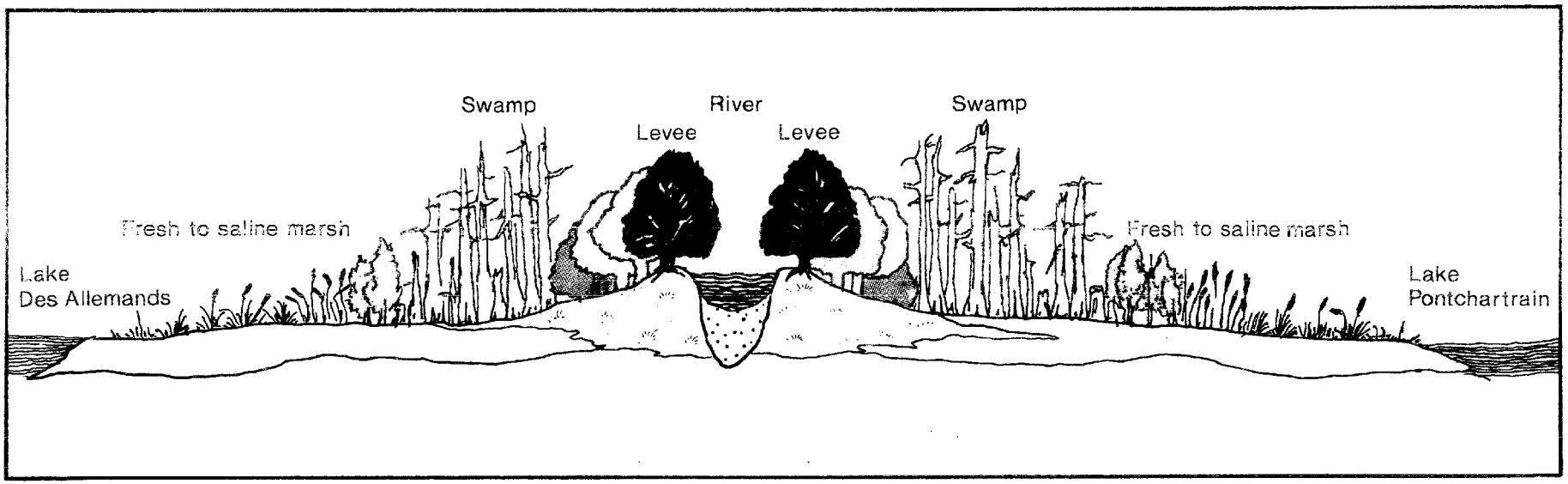
The vast majority of the Parish's total land is suitable primarily for wildlife management and natural preservation for the pursuits of hunting, trapping and the seafood industry. The majority of high ground (adjacent to the East and West Banks of the Mississippi River) is primarily utilized for agriculture, industrial pursuits and various urban uses. These uses comprise less than 10% of the total acreage of the Parish, while occupying almost all of the non-wetland portions of the area.

Figure 6

NORTH-SOUTH
CROSS SECTION

Source: Burk and Associates, Inc.

ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


Swamp
River
Swamp
Levee
Levee
Fresh to saline marsh
Fresh to saline marsh
Lake
Des Allemands
Lake
Pontchartrain

TOPOGRAPHY AND HYDROLOGY

The topography of the East and West Banks of St. Charles Parish is typical of the lower Mississippi Region. On the East Bank, the land slopes northerly away from the Mississippi River towards the swamp and marsh land south of Lake Pontchartrain. This land is essentially a flat plain which ponds the run-off from the higher elevation and which slowly drains into the Lake through many canals and natural bayous. The principal outlets are Bayou Trepagnier, located just east of the Bonnet Carre Spillway; Bayou La Branche and Bayou Traverse, in the central portion of the East Bank; Bayou Piquant, Walker Canal and Parish Line Canal at the extreme easterly side of the Parish.

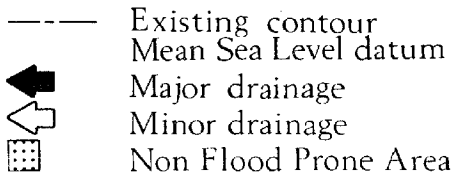
The top of the artificial levees on both the East and West Banks of the Mississippi River are at about 30 feet mean sea level (MSL), while the natural ground low point of the drainage system on the East Bank is Lake Pontchartrain which has an average water level of about 1.21 feet MSL. Because water levels in the Lake frequently equal or exceed the natural ground elevations in the swamp lands, drainage is practically non-existent in this area.

The low point of most of the drainage system for the West Bank is Bayou Des Allemands, which has an average water level of about 1.44 feet MSL at Des Allemands. A portion of the drainage system flows into Lake Salvador and Lake Cataouatche whose stages are closely approximated by the gage at Des Allemands. Because water levels in the Lakes and in Bayou Des Allemands frequently equal or exceed the natural ground elevations in the swamp lands, drainage is practically non-existent in these areas also.

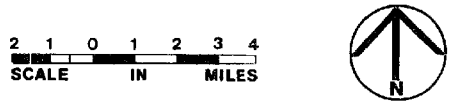
The topography of the West Bank is similar to that of the East Bank. The land slopes southerly away from the Mississippi River towards the swamp land. The swamp ponds the runoff from the higher elevations and slowly drains through numerous canals and bayous to Lake Cataouatche, Lake Salvador, Bayou Des Allemands and Lac Des Allemands. The principal outlets on the West Bank are Bayou Bois Piquant and the Louisiana Cypress Lumber Canal, which drain into Lake Cataouatche; Grand Bayou Canal, and the southern branch of Paradis Canal which flows into Bayou Des Allemands; and the Eighty Arpent and Bayou Fortier Canals which drain into Lac Des Allemands.

Figure 7

TOPOGRAPHY AND HYDROLOGY

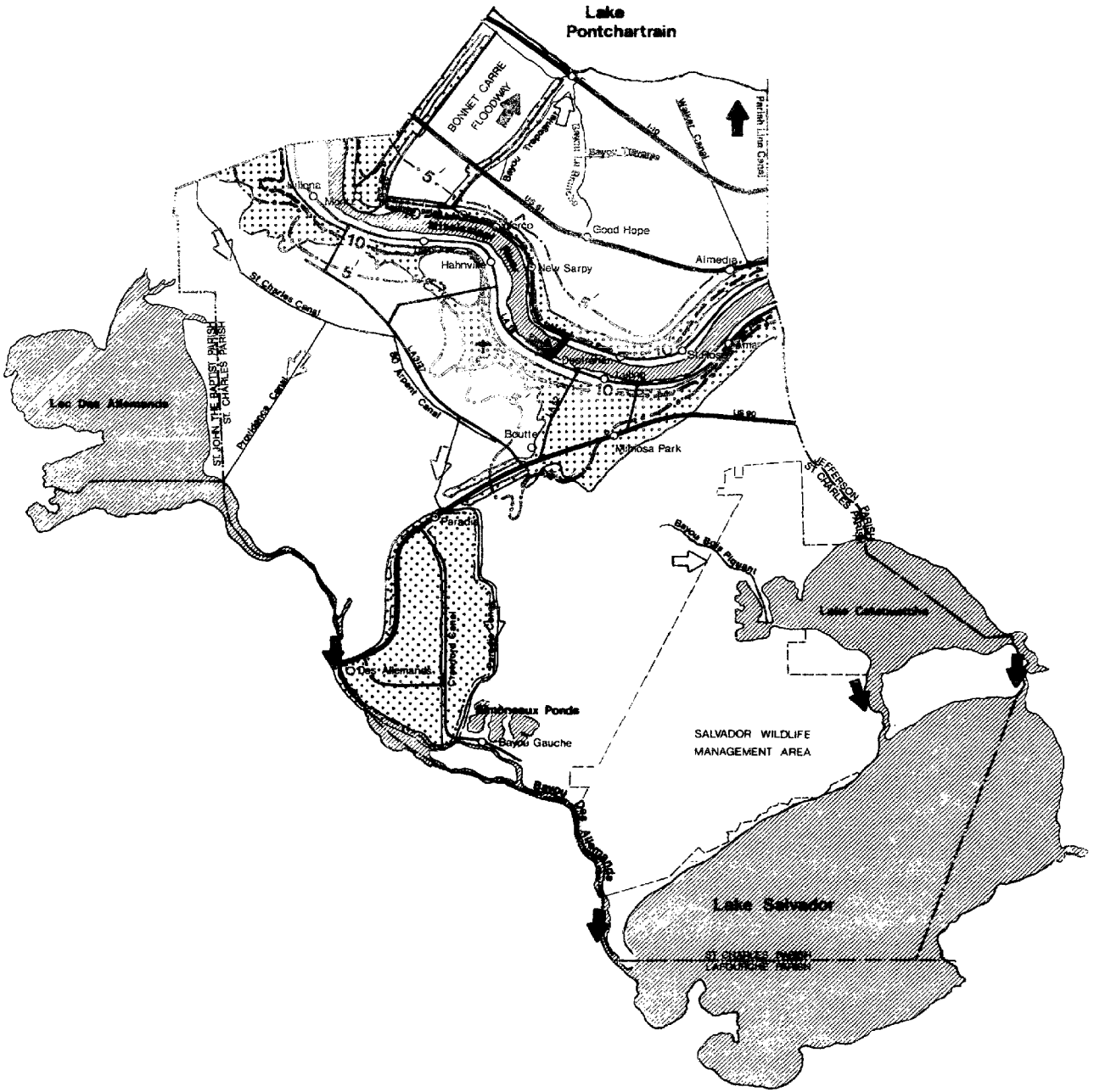


Source: U.S.Geological Survey and Burk and Associates, Inc. 1978



ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


Lake
Pontchartrain
BONNET CARRE
FLOODWAY
Bayou Trepagnier
Bayou Des Allemands
Bayou Des Allemands
Bayou Gauche
Bayou Boeuf Pumps
Bayou Boeuf Pumps
Bayou Des Allemands
Bayou Des Allemands
Bayou Des Allemands

In evaluating flood prone areas, it is important to note that these areas are not necessarily undevelopable for recreation. However, if development does occur, precautionary measures should be taken to minimize potential flood damage through building structures that are designed for seasonal flooding. Sewage treatment must be accommodated on site as most areas are not adjacent to municipal treatment systems.

Abundant ground water is also available via wells for recreational needs in areas that are not presently served by municipal water service. Figure 7 illustrates the basic hydrological and topographical features of the Parish.

CLIMATE

The climate of southern Louisiana is determined by the huge land mass to the north, its subtropical latitude and the Gulf of Mexico to the south. The prevalent winds are from the south or southeast and consequently the influence of the warm moist air from the Gulf is significant. The region's climate is generally referred to as maritime subtropical.

Summer weather is rather consistent and physical conditions are favorable for the sporadic development of thundershowers which recur in spells with considerable regularity. Temperatures range from 85 degrees Fahrenheit (F) to 95 degrees F. during afternoons and 65 degrees F. to 75 degrees F. during early mornings. Along the immediate Gulf Coast temperatures rarely exceed 100 degrees F.

Occasional periods of hot and dry weather, characteristic of the continental climate of the Plains States, interrupt prevailing summer moist conditions. The Parish is also subject during summer and fall to tropical storms and hurricanes. Hurricanes strike the Louisiana coast on the average of once every two years. Damage to the natural and human environment is often severe as high winds, tidal surge and flooding devastate low-lying areas (Figure 8).

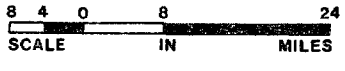
Figure 8

CLIMATIC INFLUENCES

●●●●●●● Major Hurricane Paths

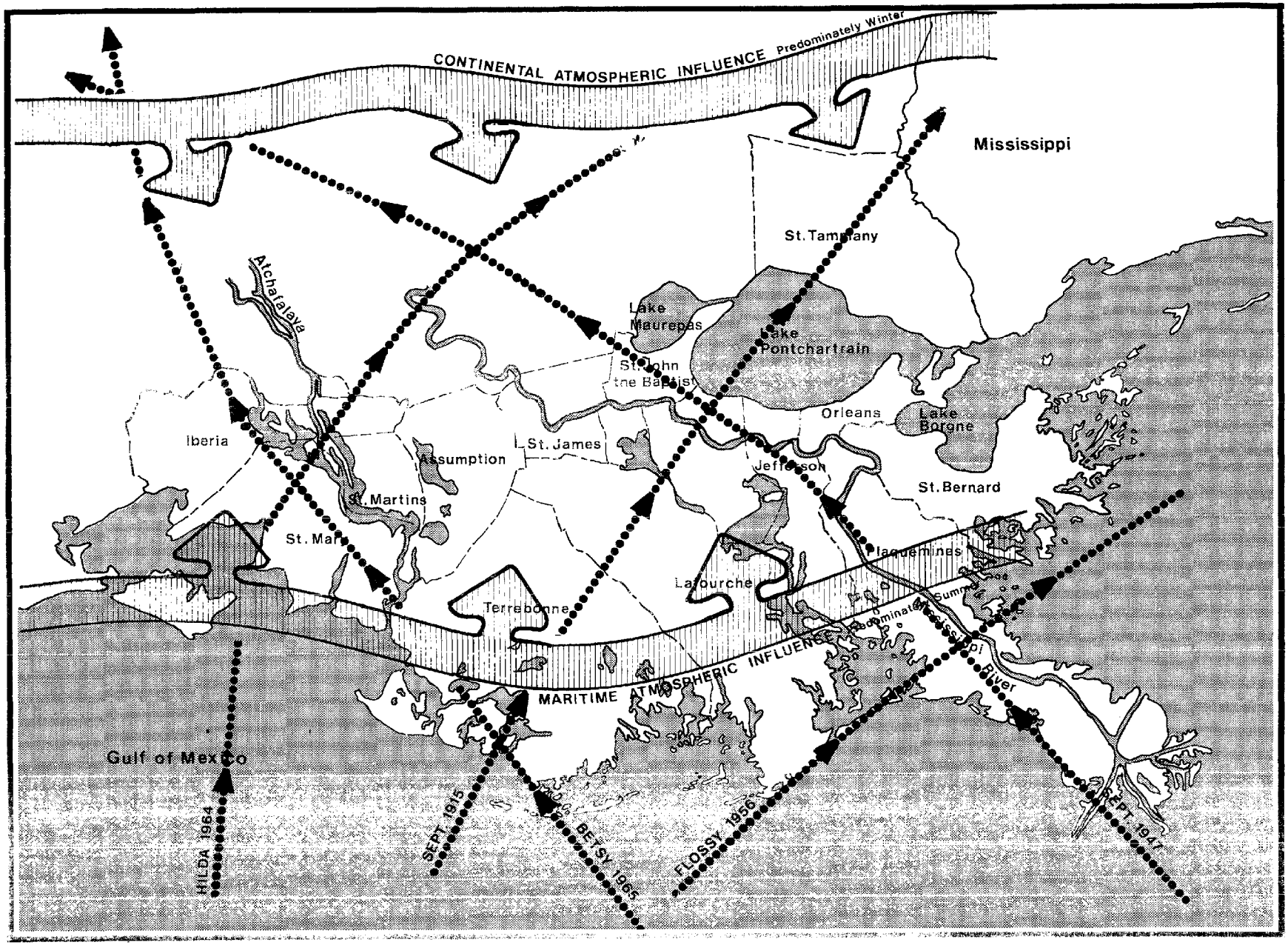
Major Atmospheric Influences

Source: U.S. Department of Commerce, National Oceanic and Atmospheric Administration. 1978



ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


CONTINENTAL ATMOSPHERIC INFLUENCE Predominately Winter
Mississippi
St. Tammany
Atchafalaya
Lake Maurepas
Lake Pontchartrain
St. John the Baptist
Orleans
Lake Borgne
Iberia
St. James
Assumption
Jefferson
St. Bernard
St. Martins
St. Mary
Plaquemines
Lafourche
Terrebonne
Predominately Mississippi River
MARITIME ATMOSPHERIC INFLUENCE
Gulf of Mexico
HILDA 1964
SEPT. 1915
BETSY 1965
FLOSSY 1956
SEPT. 1947

During the cooler seasons weather conditions are more variable as the coast is covered alternately by warm tropical maritime air and cold polar continental air. The cold air, although modified by its southward movement through the states, frequently causes large and rather sudden drops in temperature.

Average winter temperatures range from 55 degrees F. to 65 degrees F. in the afternoons to 40 degrees F. to 50 degrees F. during early morning hours, although both higher and lower readings are often observed. Freezing temperatures (32 degrees F. or lower) are recorded on an average of 10 to 35 days in the area. The average date for the first freeze in the fall is December 6, with the last freeze in the spring on February 9. This gives St. Charles Parish an average annual growing season of 301 days.

The average annual precipitation of 57 inches is generally well distributed throughout the year. Nevertheless, rainfall during any period may vary greatly from one year to the next. On the average, the month with the lowest rainfall is October with a mean of about 4 inches. The minimum recorded annual rainfall in southeastern Louisiana was 29.62 inches in 1962 and the maximum was 77.28 inches in 1961.

Louisiana is south of the regular track of large winter cyclonic storm centers, but occasionally one does develop this far south. During some winters, however, a succession of storm centers may develop over the Gulf of Mexico, bringing overcast skies and steady rains of several days duration.

The waters of the Mississippi River are usually colder than the air temperature from December through April. This causes development of river fog during these months, especially with light southerly winds. The extensive lakes, marshes and swamp areas in the Parish also increase the incidence of fog.

Figure 9

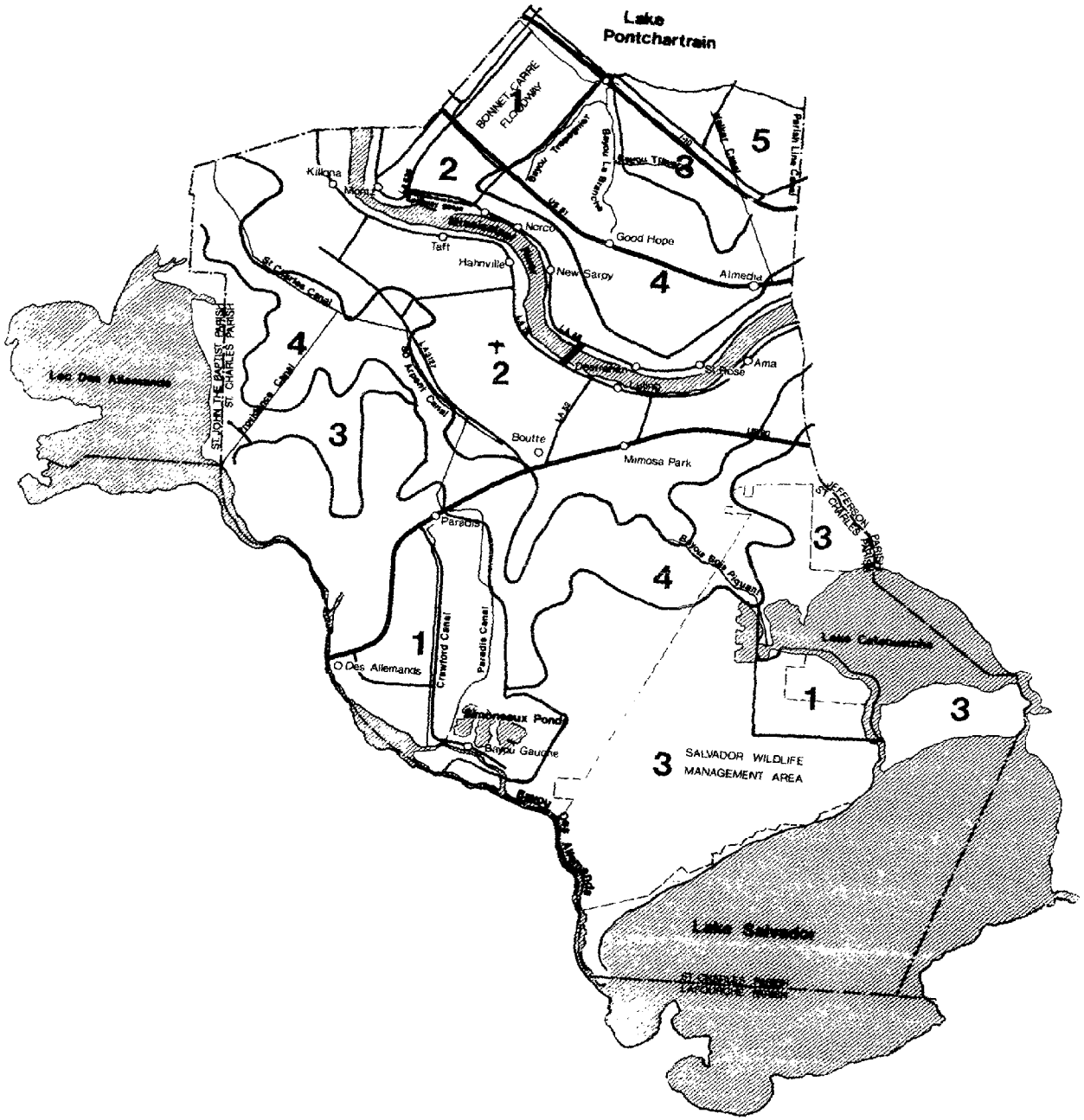
VEGETATION MAP

1. Modified wetlands
2. Natural levee forest
3. Fresh marsh
4. Forest wetlands
5. Intermediate marsh

Source: Louisiana Coastal Resources Atlas, Burk and Associates, Inc. 1978

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers-planners-environmental scientists


Lake Pontchartrain
BONNET CARRE FLOODWAY
Killona
Norco
Taft
Hahnville
New Sarpy
Good Hope
Almedia
Ama
St Rose
Boutte
Mimosa Park
Paradis
Des Allemands
Lac Des Allemands
ST JOHN THE BAPTIST PARISH
ST CHARLES PARISH
JEFFERSON PARISH
Lake Cataouatche
Lake Salvador
Barataria Bay
Bayou Gauche
Bayou Perot
Bayou Rigolettes
Crawford Canal
Paradis Canal
St Charles Canal
Trondelle Canal
Bayou Terrebonne
Bayou La Branche
Bayou Des Allemands
Bayou Boeuf Pumping
Harvey Canal
Intracoastal Waterway
U.S. 61
U.S. 90
LA. 18
LA. 3127
LA. 3213
LA. 3217
LA. 3241
LA. 3242
LA. 3251
LA. 3253
1
2
3
4
5
3 SALVADOR WILDLIFE MANAGEMENT AREA

ECOLOGICAL ZONES

Ecological zones are closely associated with a combination of elevation, soils, wildlife habitat and dominant vegetation types (Figure 9). These zones illustrate general biological associations. Within the transition zones or ecotones, there are floral (plants) and faunal (animals) characteristics that are indigenous of both. Both floral and faunal species associated with the various zones are identified (Figure 10).

SOIL TYPES

Soil types and topographic elevation in St. Charles Parish generally occur in similar zones. The non-wetland soil associations and the highest elevations found in the Parish are alluvial deposits of primarily the past 10,000 years, laid down by the Mississippi River. Annual spring overflows deposited this soil, forming the basic topographic relief as it is today. These alluvial soil associations are comprised of the Commerce-Convent Association and the Sharkey Association. Commerce soils occur at the higher elevations closest to the River and are composed of silt loam or silty clay loam surface and silty clay loam subsoil. Sharkey soils are generally found at lower elevations, still close to the River, and are poorly drained. They have a dark gray, clay surface and a gray subsoil. Commerce soils are better suited for urban and intensive recreational activities than Sharkey soils, which have a lower bearing capacity.

Other non-wetland soils consist of loamy floodplain lands which occur within the Bonnet Carre Spillway and unprotected batture areas. This soil likewise is suitable for intensive recreational activity.

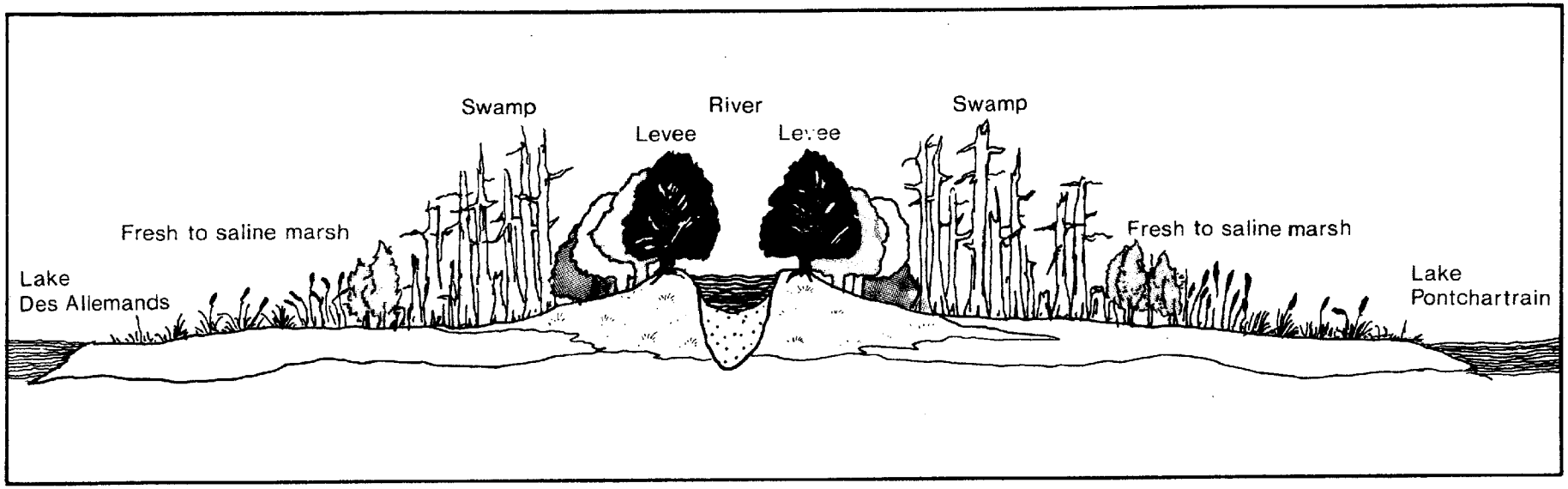
Swamp areas of lower elevation which are flooded much of the time, have soils composed of an organic surface layer one to several feet deep over firm to semi-fluid gray clays. After being drained, swamp soils have very severe limitations for most intensive recreational uses because of their low bearing strength, very high subsidence rate, and very high shrink-swell potential.

Figure 10

CROSS SECTION OF ECOLOGICAL ZONES

Source: Burk and Associates, Inc. 1978

ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists



RIDGE ASSOCIATED SPECIES

TREES

Bitter Pecan - Carya aquatica
Black Willow - Salix nigra
Boxelder - Acer negundo
Green Ash - Fraxinus pennsylvanica
Hickory - Carya spp.
Honey Locust - Gleditsia triaconthos
Live Oak - Quercus virginiana
Nuttal Oak - Quercus nuttallii
Sugar Hackberry - Celtis laevigata
Swamp Dogwood - Cornus drummondii
Sweetgum - Liquidambar styraciflua
Sweet Pecan - Carya illinoensis
Water Oak - Quercus nigra
Willow Oak - Quercus phellos
Overcup Oak - Quercus lyrata

SHRUBS AND VINES

Alabama Supplejack - Berchemia scandens
Blackberry - Rubus spp.
Dewberry - Rubus spp.
Greenbrier - Smilax spp.
Honeysuckle - Lonicera japonica
Rattlebox - Daubentonia texana
Trumpetcreeper - Campsis radicans
Waxmyrtle - Cyrica cerifera
Hawthorn - Crataegus marshalli

GRASSES, FORBS AND AQUATICS

Bermudagrass - Cynodon dactylon
Bluestems - Andropogon spp.
Carpetgrass - Axonopus affinis
Cocklebur - Xanthium stumarium
Palmetto - Sabal minor
Clover - Trifolium spp.
Crabgrass - Digitaria sanguinalis
Dallisgrass - Paspalum dilatatum
Fescue - Festuca arundinacea
Switchgrass - Panicum virgatum
Vaseygrass - Paspalum urvillei
Fall panicum - Panicum dichotomiflorum
Foxtail - Setaria spp.

SWAMP ASSOCIATED SPECIES

TREES

Bald Cypress - Taxodium distichum
Red Maple - Acer drummondii
Water Tupelo - Nyssa acquatica

SHRUBS AND VINES

Buttonbush - Cephalanthus occidentalis
Fern - Athyrium spp.

GRASSES, FORBS AND AQUATICS

Giant Cutgrass - Zizaniopsis miliacea
Sedges - Carex spp.
Smartweed - Polygonum spp.
Duckweed - Lemna spp.
Water Hyacinth - Eichhornia crassipes

MARSH ASSOCIATED SPECIES

GRASSES, FORBS AND AQUATICS

Maidencane - Panicum hemitomum
Bulltongue - Sagittaria lancifolia (= S. falcata)
Spikerush - Eleocharis parvula
Alligatorweed - Alternanthera philoxeroides
Sedge - Cyperus odoratus
Cattail - Typha spp.
Walter's millet - Echinochloa walteri
Water hyacinth - Eichornia crassipes
Water hyssop - Bacopa monnieri
- Scirpus olneyi
Southern wildrice - Zizaniopsis miliacea
Smartweed - Polygonum spp.
Deerpea - Vigna luteola (= V. repens)

Marsh soils, which cover a major part of the Parish area, consist of peat or muck underlain by slightly firm to semi-fluid gray clays. They are organic and mineral soils with high subsidence characteristics, low bearing strength, severe fire hazard potential, and very severe limitations for most intensive recreational uses after drainage (Figure 11).

LAND CAPABILITIES

Based on an analysis of all natural factors inventoried, areas able for various types of recreational activity can be delineated. With 84% of the Parish's land comprised of swamp, marsh and spillway areas, the location of intensive recreational development features (structures, organized athletic fields) is very limited. Other recreation activities (hunting and natural outdoor activities that do not require developed facilities) can, however, occur throughout the Parish.

Four zones or areas within the Parish have been delineated (Figure 12) based on their general capability to support various intensities of development. They are as follows:

Category	Capability

1. Suitable for intensive recreational development. This zone has the best soil classification (Commerce-Sharkey) for structures, roadways and sewage treatment, is not generally subject to flooding, and is not adjacent to any significant wetland areas.

2. Suitable for intermediate recreational development. This zone shares the same soil classification as #1, or is loamy floodplain (batture & spillway); however, it is subject to periodic flooding and any structures should be elevated.

Figure 11

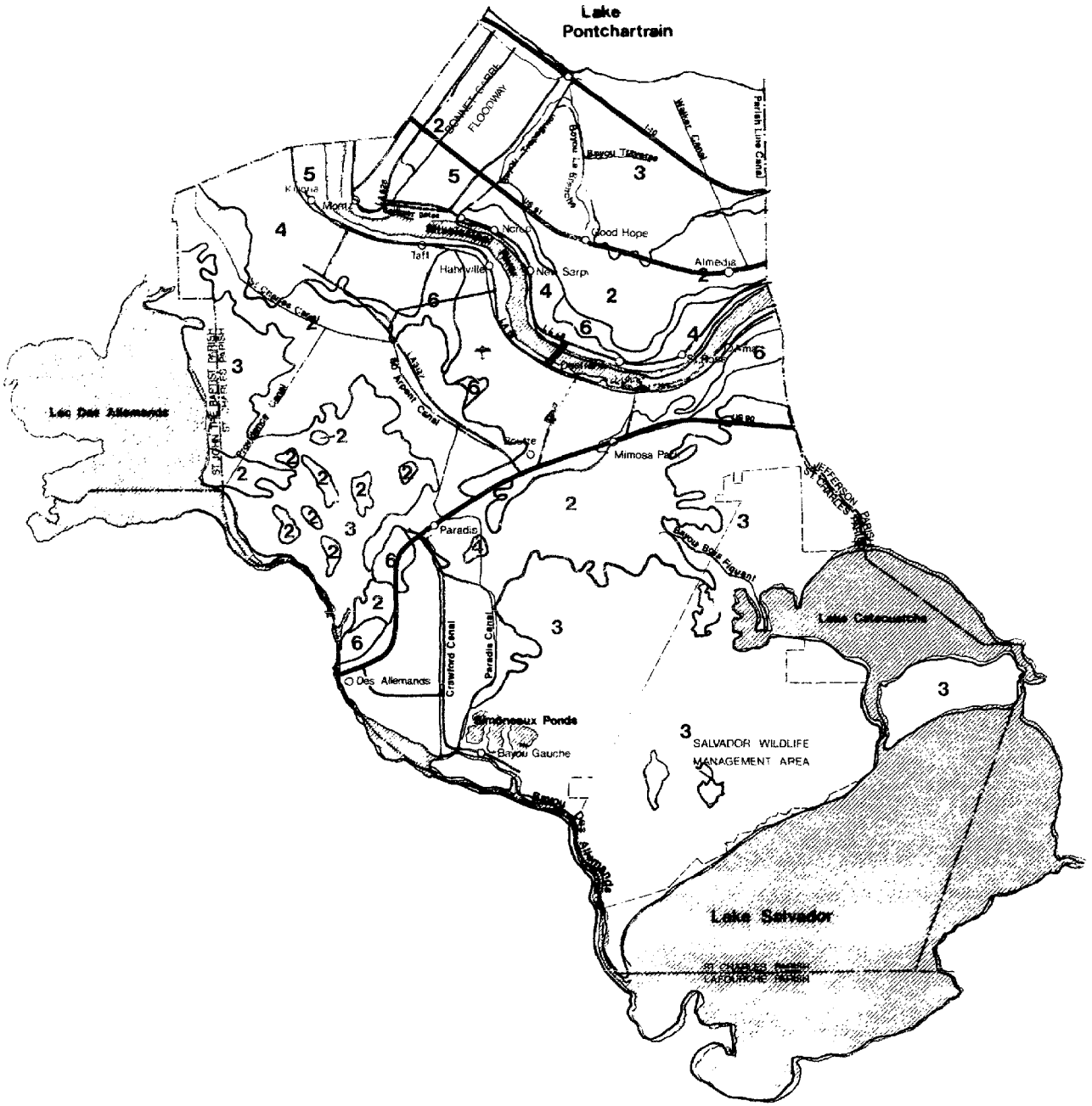
SOIL TYPES

1. Marsh, drained - Protected organic and mineral marshland
2. Swamp - Organic and mineral swampland
3. Marsh - Fresh Marsh
4. Loamy alluvial land - Loamy floodplain land
5. Sharkey association - Level clayey soils

Source: U.S. Department of Agriculture Soil Conservation Survey, 1975

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


Lake
Pontchartrain
Lake Des Allemands
Mimosa Pa
Paradis
Des Allemands
Crawford Canal
Paradis Canal
Simoneaux Ponds
Bayou Gauche
Lake Salvador
SALVADOR WILDLIFE
MANAGEMENT AREA
Lake Cataouatche
Good Hope
Almedia
Hahnville
Taft
Bonnet Carre
FLOODWAY
Bayou Terrebonne
Harvey Canal
Parish Line Canal
Bayou Des Allemands
Bayou Boeuf
Bayou Gala Figuant
ST JOHN THE BAPTIST PARISH
ST CHARLES PARISH
JEFFERSON PARISH
LAFOURCHE PARISH

3. Suitable for limited recreational development. This zone does not have a soil classification that will permit economical construction of structures and roadways. Structures will need to be elevated to prevent damage from flooding. Sewage would have to be treated properly so as not to cause a problem to adjacent wetland areas. This zone can be used for recreational access facilities (boat launches, etc.) as it is in most cases adjacent to existing water bodies.

4. Suitable for recreational activity. This zone consists primarily of cypress-tupelo swamp and marsh area and is not suitable for recreational uses that require man-made land based support facilities. It is excellent, however, for hunting, crayfishing, boating and other outdoor type pursuits (Figure 12).

Figure 12

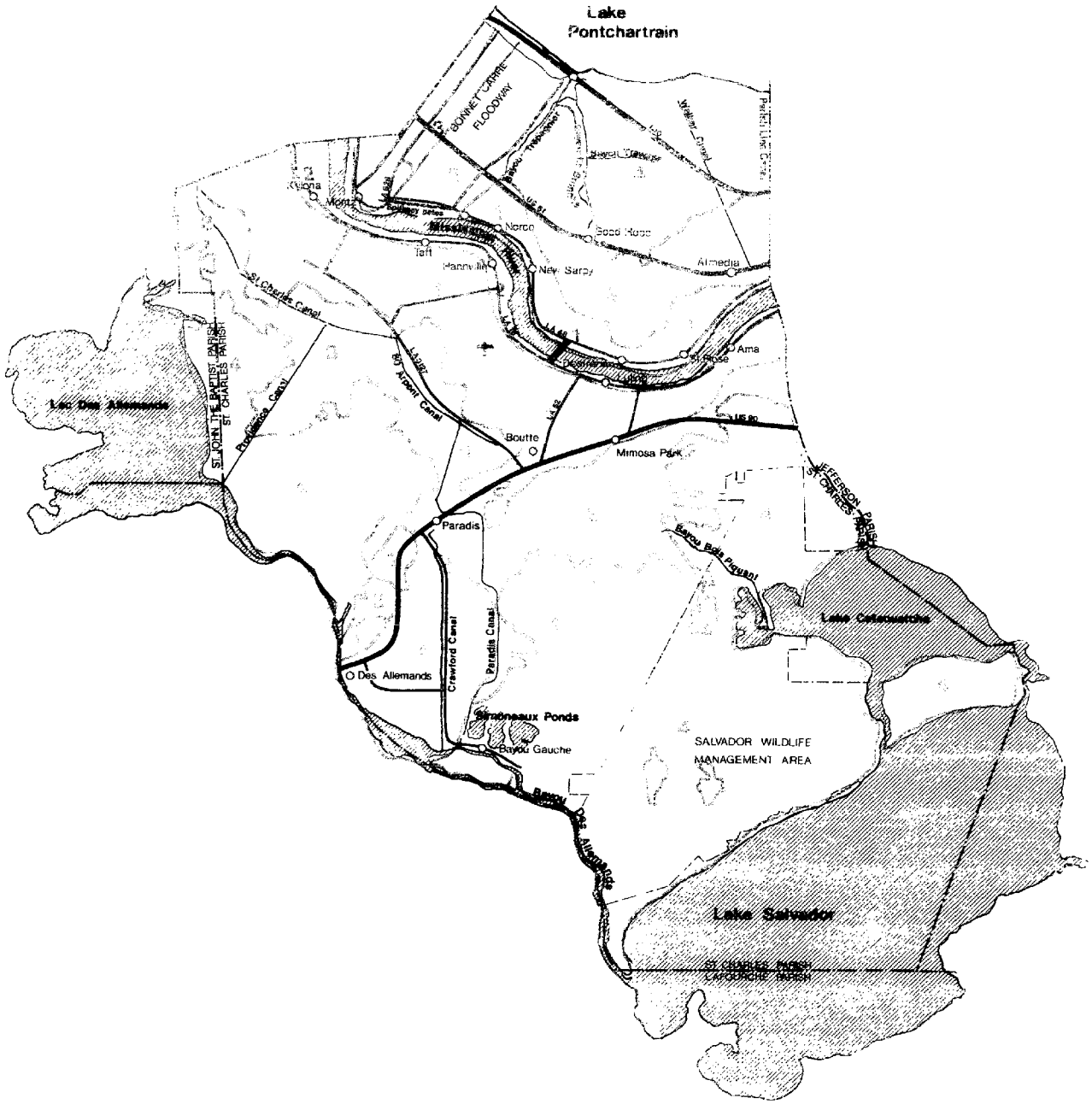
LAND CAPABILITIES

1. Suitable for intensive development
2. Suitable for intermediate development
3. Suitable for limited recreational development
4. Suitable for recreational activity

Source: Louisiana Coastal Resources Atlas, Burk and Associates, Inc. 1978

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


Lake
Pontchartrain
BONNET CARRE
FLOODWAY
Norco
Taft
Hahnville
New Sarpy
Almedia
Ama
Boutte
Mimosa Park
Paradis
Des Allemands
Lac Des Allemands
Lake Cataouatche
Barataria Ponds
Bayou Gauche
SALVADOR WILDLIFE
MANAGEMENT AREA
Lake Salvador
ST JOHN THE BAPTIST PARISH
ST CHARLES PARISH
JEFFERSON PARISH
ST CHARLES PARISH
LAFOURCHE PARISH
St Charles Canal
Lapalco
Boutte Airport Canal
Crawford Canal
Paradis Canal
Bayou Des Allemands
Bayou Bella Pigeon
US 90
LA 48
LA 18

CHAPTER 4

ANALYSIS OF RECREATION IN ST. CHARLES PARISH

Public parks and recreational areas that contain adequate facilities are practically nonexistent in St. Charles Parish. Moreover, the Parish has had a history of lacking these facilities. Three decades ago, recreational interest usually took the form of activities that did not require improved facilities. The use of open spaces in conjunction with hunting and fishing were the major forms of recreation activity.

In 1950, there were no recreational facilities offered to children other than those offered by school playgrounds and private organizations, many of which were overused and outdated, with no program for their renewal. Open areas were considered sufficient to accommodate demand. Recreation needs for entire neighborhoods were "satisfied" by vacant lots. Because open space was so abundant in St. Charles, and because of the attitude that simple "space" was sufficient, playgrounds, parks and recreation facilities were not developed.

FORMATION OF RECREATION DISTRICT

In 1967, the St. Charles Parish Recreation District was formed. Essentially, the formation of this District provided that a bond issue with a predetermined millage tax could be voted upon by all qualified voters in the Parish for the purpose of developing parks and purchasing equipment, and an additional millage tax could be voted upon for financing maintenance and operation. In November of 1978, such a bond issue was rejected by the voters of St. Charles Parish.

The Recreation District has therefore had to work with a very limited budget. In its first full year of operation (1976), the budget consisted of $18,462, most of which ($14,962) came from the St. Charles Police Jury's General Fund. The remaining $3,500 was given to the District by Interfaith Alliance through United Givers. Only $3,191, or 17% of the total budget was allocated to the purchase of equipment. The majority of the funds were utilized for salaries and overhead expenses.

In 1977, the budget picture was a little brighter for the Recreation District. The Police Jury allocated $90,000: $10,040 of this sum was spent on equipment, $11,750 was spent on various improvements, $3032 was spent on utilities (lights & water for various playgrounds), and $794 was spent on special events, such as tennis, volleyball, AAU Track, and a balloon contest. The remaining expenses (except for $26,000 dedicated to match funds from the Pontchartrain Levee District for construction on the East Bank) were allocated to salaries and overhead.

In 1978, the Recreation District not only received $90,000 from the Police Jury, but also received $26,000 from the Pontchartrain Levee Board to match District funds, $30,000 from United Givers, a private contribution of $1,500, and $2,300 reimbursement for a pilot program from Community Action. Needless to say, the recreation program was expanded to include more activities and more improvements than ever before.

Even though the amount of income received by the District increased significantly from 1976 to 1977, and increased by 63% from 1977 to 1978, this trend is by no means an indication of continuing funding stability. It has been established that the District will receive only $50,000 from the Police Jury in 1979. This will mean considerable moderation of spending over 1978 unless contributions from individuals and charities make up the difference.

The sequence of past events indicates that there is little assurance that any significant funding for recreation will be available without a successful bond issue. If passed, the funds could be used for the development and maintenance of parks, facilities and various recreational programs. The program should include the hiring of a professional director and other essential personnel; until now these positions have been primarily filled on a volunteer basis, with little or no remuneration. The following is an example of salaries that were paid in 1976 by the Recreation District:

Director (1)	$2,537
Secretary (1)	2,082
Bookkeeper (1)	607
Supervisors (3)	2,875
Playground Directors (10)	8,526
Playground Assistants (40)	8,340
Special Instructors (8)	1,678

The number of positions are directly related to budget constraints on a yearly basis, except for the Director and the volunteer Chairman of the Board, whose time and efforts have been invaluable to the promotion and direction of a recreation program in St. Charles Parish in the last few years.

THE RECREATION DISTRICT PROGRAM

As the budget permits, summer programs are initiated using some Parish-leased sites, but rely most heavily on school sites and their facilities. The summer program consists of organizational games, arts and crafts, field trips to Audubon Pool in New Orleans, skating rinks, putt-putt golf courses and the like. During the summer of 1978, a pilot program involving the transporting of East Bank children to the New Sarpy School and the Destrehan High School appeared to be working successfully. The summer program may be substantially reduced during 1979, however, due to lack of funds.

The largest program within the District, in terms of money expended and number of children participating, is the Organized Team Sports section of the Recreation program. This section evolved from various separate segregated groups which had operated since 1956 under the designations of St. Charles Recreation Association (Caucasian) and the Riverside Youth Association (Black). These groups were supported by individual donations, fund raising of various sorts and the United Givers. In 1978, United Givers voted to fund recreation through the District, and through the efforts of the Recreation District and an ad hoc group (which later evolved into the Recreation Advisory Council), most of these above mentioned private groups opted to join the Recreation District and to accept its policies--the most important of which was that membership must be open to all races.

At present, the Organized Team Sports section of the District is comprised of 57 baseball teams, 28 girls' softball teams, 29 football teams and 31 basketball teams. There is also considerable interchange between the teams on both sides of the River at this time.

INVENTORY OF EXISTING RECREATIONAL FACILITIES

The following sub-sections present an inventory of existing recreation facilities in St. Charles Parish and delineate the nature and general quality of these facilities. (Figure 13 indicates location of facilities).

Public and Parochial School Recreational Facilities

Even though Parish population figures have more than doubled since 1950, there has been no comparative increase in the number of recreation facilities. The number of schools, however, has increased over the past few decades in order to accommodate this growth and since schools are more or less evenly spaced throughout the Parish (see Figure 13), it has been the policy of the Recreation District to use school grounds and facilities whenever possible. Schools are therefore heavily depended upon and very important to the recreation program. At present, the District has secured 10-year leases on three public school sites: Norco Elementary, St. Rose Elementary and Boutte Special Education (see subsection Parish Owned or Leased Areas). It has also secured 25-year leases on two parochial sites: Our Lady of the Rosary in Hahnville and St. Gertrude in Des Allemands.

There are a total of 23 public schools on approximately 290 acres of land in the Parish. The school sites have varying degrees of recreational area and facilities which are utilized by the students during the school year. During times when they are not used for normal school acitivites, some of these facilities are used for organized recreation programs and the summer program. However, because of maintenance problems, most schools will not permit their grounds or facilities to be used unless there is supervision by an adult.

Table 6 lists the public schools in St. Charles Parish, their approximate acreage and their current enrollment.

Parish Owned Or Leased Areas (Police Jury - Recreational District)

Several sites were given to the Parish by the Federal Government for recreational purposes. One site of approximately 11 acres located near Montz on the East Bank, has been developed as a playground area with a baseball diamond, backstop and two basketball courts. The lease on another 8.8 acre site near Montz was recently revoked due to the lack of funds to develop it for recreational purposes.

Other parks and playgrounds leased by the Parish and their approximate acreage are shown in Table 7.

There are also two recently constructed public boat ramps immediately adjacent to Highway 3127.

The total amount of property owned or leased by the Parish is approximately 62 acres. Most of the leased property is based on a contract having no clause for reimbursement of monies spent on facilities in the event that the property should revert to the owners.

Many of the recreational opportunities in the Parish are offered by commercial establishments and non-profit organizations (private clubs, civic groups, etc.) These are listed in Table 8.

Figure 13

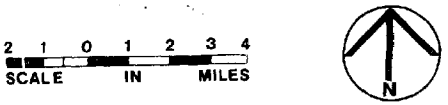
EXISTING RECREATIONAL FACILITIES AND SCHOOL PROPERTY

- ✱ Montz Playground
- □ Property leased by Police Jury – Recreation District
- ▣ School Property – leased by Police Jury – Recreational District
- ○ School Board Property
- ▲ Commercial Establishment
- △ Non–Profit Organizations and Private Clubs

Refer to Tables 6, 7 & 8 for Site Information

Source: Burk and Associates, Inc.

This map depicts general location of facilities and should be used for planning purposes only.



ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists

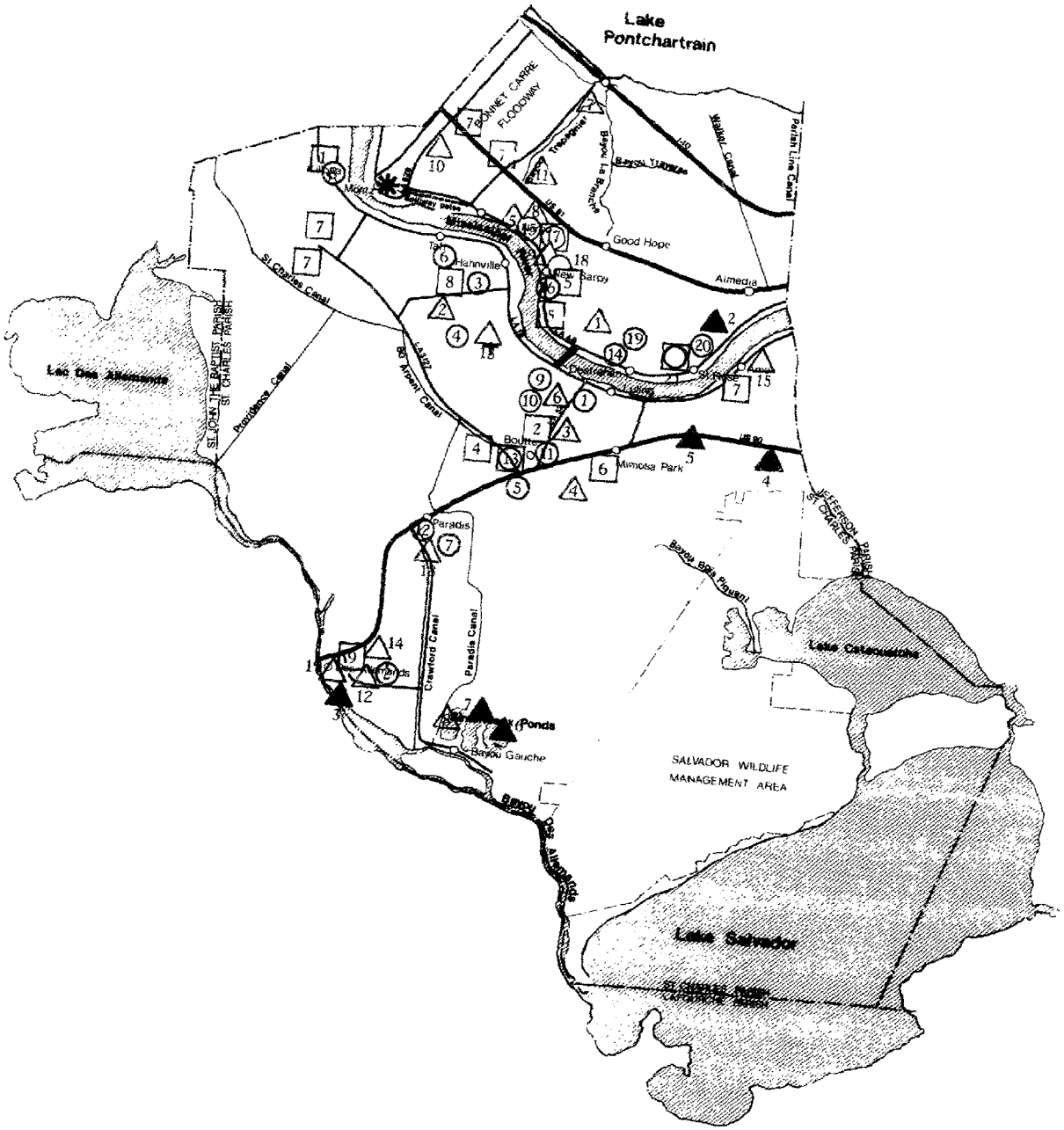

Lake
Pontchartrain
BONNET CARRE
FLOODWAY
Bayou La Branche
Bayou Labranche
Parish Line Canal
Good Hope
Almedia
Hahnville
New Sarpy
St Charles Canal
Lac Des Allemands
ST JOHN THE BAPTIST PARISH
ST CHARLES PARISH
Providence Canal
Bayou Des Allemands
Mimosa Park
Paradis
Crawford Canal
Paradis Canal
Ponds
Bayou Gauche
Bayou Des Allemands
SALVADOR WILDLIFE
MANAGEMENT AREA
Lake Cataouatche
Lake Salvador
ST CHARLES PARISH
JEFFERSON PARISH

TABLE 6

INVENTORY OF ST. CHARLES PARISH PUBLIC SCHOOLS, 1979

Map Reference # (☐ or ○ on Fig. 13)		Approx. Acreage	Current 1979 Enrollment	
WESTBANK			Grades	No.
1.	A. A. Songy, Senior Elementary (Luling)	30.00	(4-6)	420
2.	Allemands Elementary (Des Allemands)	10.00	(K-3)	364
3.	G. W. Carver Elementary (Hahnville)	10.00	(K-3)	198
4.	Hahnville Elementary (Hahnville)	14.00	(1-6)	234
5.	Hahnville High (Boutte)	36.34	(10-12)	1123
6.	Hahnville Junior High (Hahnville)	15.10	(7-11)	567
7.	J. B. Martin Junior High (Paradis)	20.00	(7-9)	810
8.	Killona Elementary (Killona)	1.00	(K-6)	124
9.	Luling Elementary (Luling)	11.00	(1-6)	652
10.	Luling Kindergarten (Luling)	.52	(K)	(1)
11.	Mimosa Park Elementary (Luling)	7.80	(1-6)	568
12.	R. J. Vial Middle School (Paradis)	11.70	(4-6)	322
13.	St. Charles Special Education Center (Boutte)	4.00		
		171.46		5382
EASTBANK				
14.	Destrehan High (Destrehan)	20.00	(9-12)	1035
15.	Good Hope Elementary (Good Hope)	.25	(1-2)	(2)
16.	New Sarpy Middle (New Sarpy)	18.00	(6-8)	644
17.	Norco Elementary (Norco)	21.40	(2-6)	543
18.	Norco Primary (Norco)	.50	(K-1)	(3)
19.	St. Charles Evaluation & Vocational Training Center (Destrehan)	28.32*		(4)
20.	St. Rose Middle (St. Rose)	15.00	(4-6)	377
21.	St. Rose Primary (St. Rose)	15.00		392
		118.47		2991
	Parish Total	289.93		8373

* Includes 7.7 acres batture.

(1) Enrollment included in Luling Elementary
(2) Enrollment included in New Sarpy Middle
(3) Enrollment included in Norco Elementary
(4) Enrollment included in Destrehan High

SOURCE: St. Charles Parish School Board

TABLE 7

PARISH-LEASED RECREATION SITES

Map Reference # (□ or ○ on Fig. 13)	Site	
1	Killona Playground (Baseball, Basketball)	12.5 acres
2	Monsanto Bicentennial Park (4 Tennis Courts)	6.0 acres
3	Bethune Playground (Baseball)	5.0 acres
4	Boutte Mini-Park (1 lot)	.5 acre
5	2 New Sarpy Parks	1.0 acre
6	Lagutta Playground	N.A.
7	Boat Launches	N.A.
17	Norco Elementary (Baseball, Football)	7.5 acres
21	St. Rose Elementary (Baseball, Football)	7.0 acres
13	Boutte Special Ed. (Baseball, Football, Basketball)	5.0 acres
8	Our Lady of the Rosary (Tennis, Basketball)	3.0 acres
9	St. Gertrude (Tennis, Basketball)	3.0 acres

SOURCE:
Burk & Associates, Inc.

TABLE 8

RECREATION FACILITIES OWNED BY COMMERCIAL OR NON PROFIT ORGANIZATIONS

Map Reference #	
Commercially Owned Areas (▲ on Fig. 13)	
1	Luling Trailrides
2	Leon Roberts Riding Stables
3	Loupe's Boat Ramp
4	Pier 90
5	Pier II
6	Jeffrey Dufresne Boat Launch
7	Sportmen's Wharf
8	Simeneaux's Fishing and Hunting Club
Recreation Areas Owned or Leased by Non-profit Organizations (△ on Fig. 13)	
1	Hill Heights Country Club
2	Fashion Golf and Country Club
3	Willowdale Country Club
4	Mimosa Park Swim and Racquet Club
5	Sun Villa, Inc. Country Club
6	St. Charles Recreation Association (Ellington Swim Club)
7	St. Charles Parish Boating Club
8	Norco Boating Club
9	Marsh Duck Club, Inc.
10	Sugarland Beagel Club
11	St. Charles Marsh and Duck Club
12	Allemands Lions Club Recreational Area
13	Hahnville Lions Club Skeet
14	American Legion Park
15	Ama Athletics Corp. Playfield
16	New Sarpy Association Playground
17	Norco Women's Club Playground
18	Paradis Nature Study Trail
19	Allemands J. C. Recreational Area

SOURCE: Burk and Associates, Inc.
St. Charles Parish
Recreation District Board

Federal and State Areas

The State Wildlife Management Area of Salvador is located along the northwestern shore of Lake Salvador. It is composed of approximately 31,000 acres of marshland and water. Access is limited to boat due to the lack of roads. Three major routes are used: 1) Bayou Segnette from Westwego into Lake Cataouatche then west; 2) Sellier Canal to Bayou Verret into Lake Cataouatche then west; and 3) through Bayou Des Allemands. Management objectives include the development of access routes and water level management through the use of water control structures.

Excellent freshwater fishing is available in Lake Salvador. Bass, bream, crappie, catfish, drum and garfish are abundant. Non-consumptive forms of recreation available in the Lake Salvador area are boating, nature study, picnicking and primitive camping.

The St. Charles Wetland is a proposed Federal Wildlife Management Area which covers 24,000 acres. It is bounded by the Bonnet Carre Spillway, the Jefferson Parish line, Lake Pontchartrain and Airline Highway. This wetland is an excellent recreational area offering fishing, hunting, trapping, boating and other related sports. The Bonnet Carre Floodway and Spillway area contains approximately 3,500 acres for the public use of hunting waterfowl, fishing, crayfishing, picnicking and boating.

Scenic Roads

Pleasure driving has been ranked as one of the most popular recreational activities in the nation, and St. Charles Parish is able to provide some of the best opportunities for this activity. A study of potential roads designated as "state scenic routes" has been completed by the Federal Highway Administration and the Office of Highways, according to the Louisiana State Comprehensive Outdoor Recreation Plan (SCORP). One such potential scenic route is the "Great River Road", a portion of which passes through St. Charles Parish on the West bank of the Mississippi River. This route follows State Highway 3127 from Killona to Boutte and joins Highway 90 to the Parish line.

Historical, Cultural and Archaeological Sites

Closely related to pleasure driving is the leisure time activity of visiting historic, cultural and archaeological sites. St. Charles Parish has several of these attractions, some of which have been placed on the National Register of Historic Places (see Figure 14 for their general locations.*)

Scenic Rivers

Louisiana's scenic river system was established by Act 398 of the 1970 Legislature. This system includes three rivers located in St. Charles Parish. They are: 1) Bayou Des Allemands (from Lac Des Allemands to Lake Salvador); 2) Bayou Trepagnier (from Norco to where it joins Bayou La Branche); and 3) Bayou La Branche (from its source to where it drains into Lake Pontchartrain). These, along with many other bodies of water located in St. Charles Parish, offer opportunities for boating, fishing, swimming, skiing and canoeing.

Other Resources

St. Charles Parish has two other available sources of land area which may be used for limited recreational activities. They are batture and levee lands. Batture is that area of land between the Mississippi River and the flood protection levee. It is flood prone, but excellent for low intensity, open space recreation activities such as picnicking, walking for pleasure and birdwatching. Levees are excellent for walking and jogging and for any other activity which does not wear away the surface of the levee, or is not otherwise detrimental to the structural integrity of the levee. However, the primary function of the levee is flood protection and any other function, including recreation, is secondary in importance.

*Some of these archaeological sites, however, are shown on the map for planning purposes only; due to the possible occurrence of vandalism, they are not publicized.

Figure 14

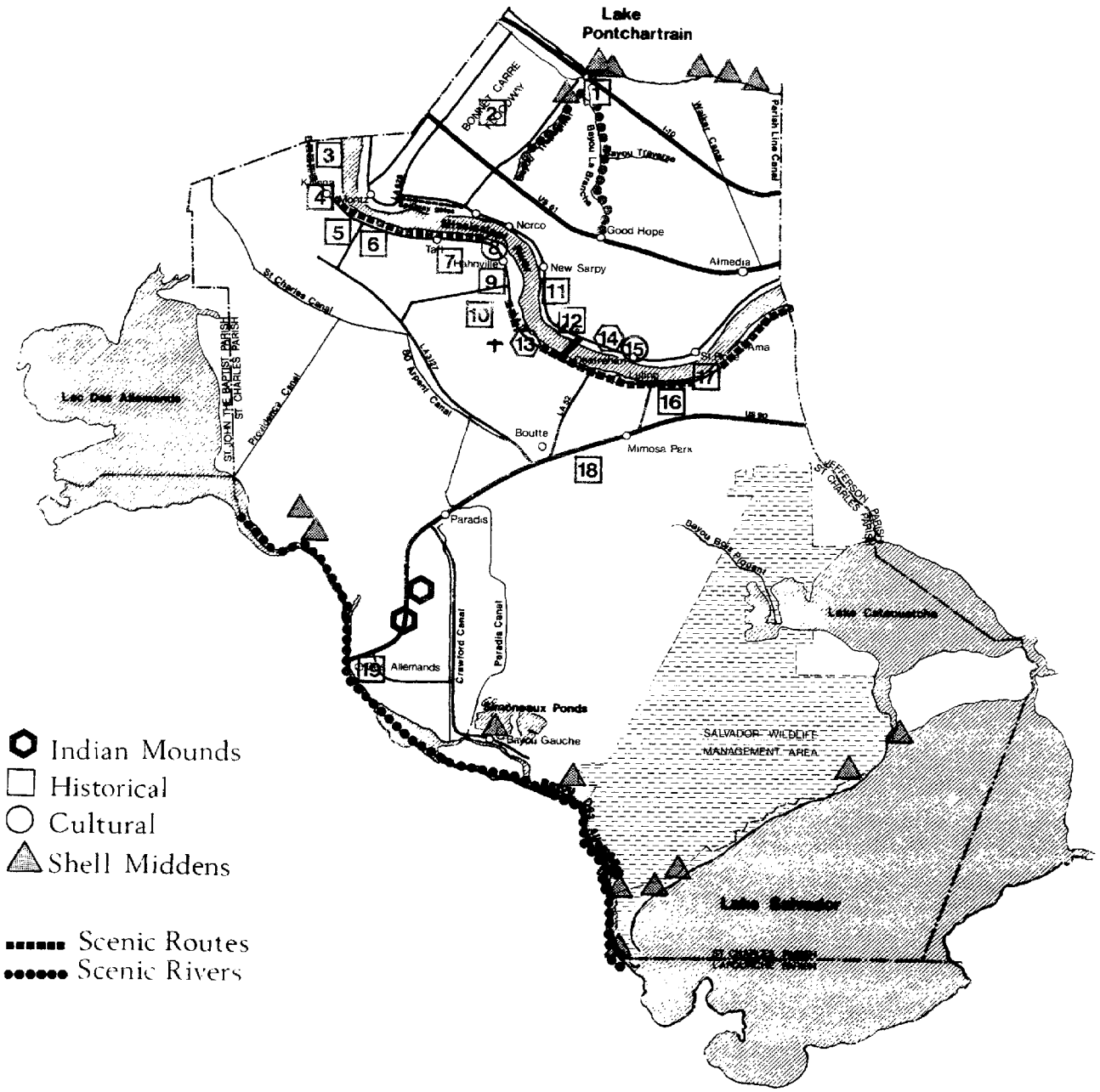
HISTORIC, CULTURAL AND ARCHAEOLOGICAL SITES

1. Trepagnier Site
2. Bonne Carre Spillway
3. The Glendale Plantation
4. Glendale Goldmine
5. Helena
6. German Coast Settlement
7. The Lock Breaux Live Oak
8. St. Charles Parish Festival
9. Keller House
10. Fashion Terrace – Dr. Lehmann House
11. Ormond House
12. St. Charles Borromeo Church
13. Homeplace Plantation
14. Destrehan Plantation
15. Destrehan Plantation Fall Festival
16. Ellington Manor
17. Pecan Grove Plantation House
18. Battle of Boutte
19. Des Allemands Area

Source: Louisiana Coastal Resources Atlas. Burk and Associates, Inc. 1978

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


Lake Pontchartrain
Norco
Good Hope
Almedia
New Sarpy
Boutte
Mimosa Park
Paradis
Allemands
Bayou Gauche
Lake Cataouatche
Lake Salvador
SALVADOR WILDLIFE MANAGEMENT AREA
Indian Mounds
Historical
Cultural
Shell Middens
Scenic Routes
Scenic Rivers

CONCLUSION

The present condition of existing recreational facilities varies with each individual site. Some sites are in excellent condition; however, most display an underdeveloped image and leave the impression that there is little maintenance. These sites do not display the organized and aesthetically pleasing image that is generally associated with a "developed" park or recreational facility. This is mostly the result of different ownership and/or lease status for each individual site. Many sites with a year-to-year lease, or even an unwritten lease that can be cancelled on a moment's notice, do not receive the maintenance or capital improvements that are necessary for a viable park and recreation program. Throughout the entire Parish, the only playground owned fee simple by the Recreation District is an 11-acre site at Montz. The uncertain ownership status of almost all Parish recreation facilities is one of the primary reasons for present recreational deficiencies in St. Charles Parish.

A listing of existing recreational facilities located in St. Charles Parish is contained in Appendix B. This inventory will serve as a base of information and should be analyzed and updated periodically as facility status changes. The inventory has been compiled by updating Recreation District information with on-site inspection of selected properties.

CHAPTER 5

RECREATION DEMAND AND NEEDS

It is generally agreed that the need for outdoor recreation is based primarily on, "man's biological need to retain some association with the outdoors and also on his psychological need for contrast and change in spatial surroundings."[8] To a great extent, the need for outdoor recreation is directly proportional to the degree of urbanization, and given the rapid urbanization occurring in St. Charles Parish, the provision of such facilities is becoming a visible necessity. The determination of overall recreational facility needs in the Parish was an assimilation of three primary sources:

a. Existing and future recreational needs for the region using standards and participation rates as outlined by the Louisiana State Parks and Recreation Commission and some national standards;

b. Present needs as determined by on-site facility inspection;

c. Needs as determined by the St. Charles Parish Police Jury, Recreation District and other local officials,

The term "recreation" does not mean the same thing to every person, and by the same token each urban population exhibits different values concerning recreation. Regional populations have their own unique characteristics as to what can be offered and what is desired. A comprehensive recreation plan should strive to respect these diverse values and particular desires while taking into consideration existing land use or environmental constraints.

A fair measure of determining desires within the Parish may be shown by participation rates of various recreation acitivites as shown in Table 9. A participation rate is the average number of times each person participates in a given activity each year, and may be taken as a meaningful reflection of interest. It may be noted here, however, that participation is more a matter of consumption than demand, essentially reflecting available opportunities. Therefore, a comparison to national standards will also be made in order to detect deficiencies in the existing inventory of recreation facilities and to point out certain facilities that may be desired by residents of St. Charles Parish. These participation rates will be used as guidelines to help determine priorities of demand and will be referred to frequently in the text.

Also referred to in the text will be the "Use Standard Table" (see Table 10). A use standard is defined as a unit of space that is required for one person to participate in a particular recreation activity. For instance, a minimum of .036 acres of land per person is required for tent camping. Standards for some of these activities have been developed, but basically they are activities for which no special facility is required. It should be noted that standards for recreation space can and should play a role in the recreation planning process. They are, however, only guidelines to provide a given measure of land or quantity of facilities. All standards and participation rates used in this study have been obtained from the Louisiana State Comprehensive Outdoor Recreation Plan (SCORP), unless otherwise specified.

Exact demand for outdoor recreation facilities in a particular locality is not easily defined or quantified. In the context of American lifestyle, demand is a composite of various elements such as income and mobility of the population served. The quantity of facilities needed, however, is essentially a function of population and is, therefore, one of the most important elements associated with recreation demand. It has been estimated that the total population of St. Charles Parish in 1980 will be 36,250 and in 1990 will be 44,271. Calculations in this study are based on these figures.

TABLE 9

PARTICIPATION RATES FOR VARIOUS RECREATIONAL ACTIVITIES, LOUISIANA AND REGION 3 (1980)

Activity	Louisiana	Region 3*
Birdwatching	2.35	.66
Bicycling	9.14	4.17
Camping, Tent	1.56	.30
Camping, Trailer	1.52	.67
Canoeing	.30	.09
Crayfishing	1.96	2.48
Crabbing	1.92	2.06
Driving for Pleasure	9.95	4.41
Fishing, Freshwater	6.04	2.78
Fishing, Saltwater	2.22	2.89
Golfing	1.81	2.34
Hiking	1.06	.52
Horseback Riding	1.51	1.06
Hunting Big Game	2.10	.81
Hunting Small Game	3.75	2.10
Hunting Waterfowl	1.66	1.28
Motor Boating	5.05	3.55
Motor Cycling	2.98	1.58
Nature Walk	2.62	1.20
Picnicking	3.19	1.33
Playing Baseball	3.80	1.38
Playing Basketball	2.75	.98
Playing Football	3.22	1.46
Playing Volleyball	2.02	.34
Sailing	.37	.10
Sightseeing	6.38	7.23
Swimming, Gulf	2.01	1.04
Swimming, Lakes	2.34	.49
Swimming, Pools	6.53	3.09
Tennis	2.43	1.65
Walking	10.17	3.30
Watching Auto Racing	.63	.26
Watching Baseball	4.39	2.60
Watching Football	4.95	3.85
Watching Golf	.42	1.00
Watching Horse Racing	1.10	.56
Watching Outdoor Concerts	.53	.15
Watching Tennis	.73	.82
Water Skiing	1.53	1.19

*Region 3 is located in the southern part of Louisiana and is made up of the following six parishes: St. Charles, St. James, St. John the Baptist, Assumption, Lafourche, Terrebonne.

SOURCE: Louisiana Department of Culture, Recreation, and Tourism, Louisiana State Comprehensive Outdoor Recreation Plan, 1977.

REGIONAL DEMAND

"Regional demand" for St. Charles Parish recreation facilities is a term defined to mean demand originating from non-resident users from adjacent parishes, especially the highly urbanized and densely populated parishes of Orleans and Jefferson (see Figure 2). It is impossible to determine with any great certainty what proportion of the participants from other parishes use certain activities in St. Charles Parish. The calculations for existing and projected regional demand are determined by using total Parish population figures, and, therefore, should be construed as "minimal guidelines" for the number of facilities needed to meet that demand. St. Charles is most suited to offer the region unique recreational surroundings that cannot possibly be offered by the highly urbanized parishes. St. Charles Parish is comprised of a total of 281,291 acres; of this acreage 93,119, or 35%, is composed of water (lakes, streams, bayous, etc.), and 127,452 acres, or 48%, is composed of forested and non-forested wetlands. Therefore, regional demand in St. Charles Parish is generally limited to those activities which are dependent on the existence of these types of land uses, such as watersports, hunting, fishing, picknicking and camping. As may be seen in Table 11, the number of motorboat registrations have increased steadily over the last five years. In 1978, there were 3,346 motorboats registered within the Parish. The number of licenses for sport fishing has increased as well since 1972, but has remained relatively constant since 1973, averaging approximately 4,500 licenses sold to residents of St. Charles Parish per year. An average of 20 non-resident "seasonal" fishing licenses were sold yearly, and non-resident "per trip" fishing licenses have averaged approximately 112 sold per year.

TABLE 10

USE STANDARDS FOR VARIOUS RECREATION ACTIVITIES

Activity	Use Standard
Birdwatching	No Standard
Bicycling	No Standard
Camping, Tent	.036 acres
Camping, Trailer	.025 acres
Canoeing	.16 miles stream
Crayfishing	No Standard
Crabbing	No Standard
Driving for Pleasure	No Standard
Fishing, Freshwater	.012 acres land
Fishing, Saltwater	.012 acres land
Golfing	.14 acres
Hiking	.03 acres
Horseback Riding	.05 miles
Hunting Big Game	26.00 acres
Hunting Small Game	No Standard
Hunting Waterfowl	No Standard
Motor Boating	.008 ac. land/2.72 ac. water
Motor Cycling	No Standard
Nature Walk	.025 miles
Picnicking	.02 acres
Playing Baseball	.025 acres
Playing Basketball	.0025 acres
Playing Football	.033 acres
Playing Volleyball	No Standard
Sailing	No Standard
Sightseeing	No Standard
Swimming, Gulf	110.87 sq. ft.
Swimming, Lakes	No Standard
Swimming, Pools	4.48 sq. ft.
Tennis	.002 acres
Walking	No Standard
Watching Auto Racing	No Standard
Watching Baseball	No Standard
Watching Football	No Standard
Watching Golf	No Standard
Watching Hose Racing	No Standard
Watching Outdoor Concerts	No Standard
Watching Tennis	No Standard
Water Skiing	.008 acres land

SOURCE: Louisiana Department of Culture, Recreation and Tourism, Louisiana State Comprehensive Outdoor Recreation Plan, 1977.

TABLE 11

MOTOR BOAT REGISTRATION
1973 to 1978
ST. CHARLES PARISH

Year	Number of Boats Registered
1973	1,454
1974	1,670
1975	1,880
1976	2,454
1977	2,885
1978	3,346

SOURCE: Louisiana Department of Wildlife and Fisheries (1978).

It is apparent from these figures that the demand is high for such water-oriented activities and, fortunately, the supply of these natural resources is abundant in St. Charles Parish. There is, however, a lack of access to these areas, not only in St. Charles Parish, but throughout the State. The State Comprehensive Outdoor Recreation Plan states:

> "One would not expect to find a severe need for water-oriented facilities in a state that has the abundance of water that Louisiana has. However, there is in this state an acute lack of access to existing water areas. Because of limited water access, often the same location, although not actually a boat ramp, is used repeatedly as a launching site, and thus becomes a de facto boat ramp. In many instances these locations are privately owned and require trespass by the user to gain access to the body of water.

"Water access is usually gained by utilizing the area under the bridge at a public highway crossing. In addition to normally requiring trespass, this practice has the additional disadvantages of not offering parking space, not having garbage disposal areas, and committing the individual to a float that may vary from between a few hours to two or more days, depending on the location of the next access/egress point, which is usually a second bridge. Any given access point is usually the only point of contention on a stream. Once off the stream, so long as the individual respects the rights of the adjacent property owners, there is little or no conflict. The lack of adequate access points has resulted, however, in fence cutting, damage to the stream bank in the immediate vicinity of the point, and problems of litter and vandalism."[9]

As shown in the inventory section of this report, there are eleven existing boat launches in St. Charles Parish and one to be constructed in the Bonnet Carre Floodway. According to a compilation of recreation area and facility space standards currently being used by many organizations throughout the United States, "one ramp on 1-1/2 acres (is needed) for every 125 boat owners if boaters average 8 trips a year," and "21,000 sq. ft. of parking space per ramp, assuming a parking lot capacity equal to maximum ramp capacity."[10] There are 3,346 boat owners (registered boats) in St. Charles Parish, or 9% of the population. Assuming that most of these are trailerable boats, there should be a total of 26 boat ramps, or an additional 15 ramps to service the population. If 9% of the projected 1990 population are boat owners, then a total of 32 boat ramps will be needed by that year. These projections, however, only address local demand and do not reflect the additional untold number of boats from adjacent parishes that may use St. Charles waterways.

Trapping and hunting small and large game have become an increasingly popular activity in the Parish, as seen by the statistics in Table 12. While there are no standards for trapping, there are minimum space standards set for both small game hunting and big game hunting. Using the general participation rates, high quarter participation rates and use standards for Region 3 (calculations appear in Appendix C), it is estimated that a total of 21,996 acres is currently needed to satisfy the demand for big game hunting acreage. By 1990, 26,852 acres will be needed. For small game hunting, 17,539 acres are currently needed and 21,420 acres will be needed by 1990. The number of acres currently needed for both small game hunting and big game hunting total 39,535. Since there are already approximately 39,565 acres designated as hunting grounds within the Parish, this is enough to serve local, as well as, some regional demand.

Picnicking is another recreational activity that lends itself to both local and regional demand. Using the same method of computation as above, it is estimated that at least 28 acres of land are needed to satisfy local demand. According to the inventory of existing facilities, there are approximately 18 acres of land and 63 tables used for picnicking in the Parish. Therefore, an additional 10 acres and 133 additional tables are needed to satisfy demand. By 1990, there will be 33.9 acres with 238 picnic tables in demand. According to SCORP standards, there should be no more than seven tables per acre; one oven and one trash receptacle are needed per every two tables. Potable water and comfort station facilities should be included in larger picnic areas, and for every developed acre there should be 5 acres of undeveloped land.

There are presently no trailer camping areas in St. Charles Parish. Demand indicates that 17.5 acres are needed for this activity in order to accommodate a maximum number of 10 trailers per acre. By 1990, 21.4 acres will be needed to accommodate 214 trailers.

According to the SCORP Standards, the following facilities should be included on each trailer or tent camp site: one table, one fire pit, one trash receptacle and one parking space. Potable water and toilet facilities should also be available.

TABLE 12

HUNTING AND TRAPPING LICENSES SOLD, ST. CHARLES PARISH — 1972 - 1978

	Hunting Licenses Sold			Trapping Licenses Sold	
Season	Resident	Non-Resident Season	Non-Resident Trip	Big Game	Small Game
1972-73	2,968	0	29	619	60
1973-74	3,194	0	24	763	98
1974-75	3,226	0	15	764	143
1975-76	3,092	0	24	799	105
1976-77	3,393	2	35	951	154
1977-78	3,049	2	19	922	181

SOURCE: Louisiana Department of Wildlife and Fisheries, Fur and Refuge Division, 1978.

Tent camping is available in St. Charles Parish. Norco Boating Club, a non-profit organization, has 30 acres of camp grounds with accommodations for 51 tents. According to the computations, only 11.3 acres are needed, but this is based upon an accommodation rate of 7 tents per acre (the maximum number of tents per acre). This means that there is enough space allotted, but accommodations for 28 more tent sites are in demand. By 1990, enough space will be needed to accommodate 96 tents.

Canoeing is another sport for which there is both local and regional demand. Based upon a participation rate of .09 for the Region it is estimated that 15 miles of stream are currently needed to meet demand; by 1990 approximately 18 miles will be required. This need is easily satisfied by the numerous streams and tributaries located within the Parish. According to the Louisiana Wildlife and Fisheries Commission, there are 10 streams in the Region totalling 139.8 miles. Hence, there are more than enough streams to satisfy regional demand. However, the obstacle to serving this demand is the lack of adequate access.

Approximately 55.3 miles of trails are presently in demand for horseback riding. By 1990, 68 miles of trails will be needed. At present, there are two commercially run horseback riding establishments in St. Charles Parish, each comprised of only one acre of horseback trail (Luling Trailrides and Leon Roberts Riding Stables in St. Rose). According to SCORP, a riding trail should be at least 6 miles long. Facilities should include loading chutes, corral space and horsetrailer parking for a minimum of 10 vehicles. It may be concluded that available facilities are insufficient. To rectify the situation, 55.3 miles of riding trail are needed in St. Charles Parish.

Other popular recreational acitivities which lend themselves to regional demand but have no space or use standards are: birdwatching, crayfishing and crabbing. Due to the abundance of natural recreational resources in the Parish, these activities should be easily served. Figure 15 summarizes regional demand and identifies the vast amount of demand for public recreational facilities in the State, particularly in and around the St. Charles Parish area.

LOCAL DEMAND

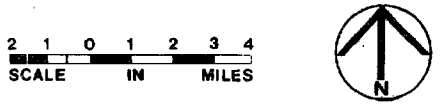
Urbanization in St. Charles Parish is not in clustered formation, but rather follows the River and Highway 90 with mixed residential, commercial, and industrial uses. The remaining population is sparsely scattered throughout the Parish. In planning for this type of population distribution, a reasonable method for obtaining local demand data is the application of national standards per thousands of people. Table 13 depicts the standards for those facilities that are most in demand by communities nationwide. They are calculated as minimum requirements, that is, basic recreational standards for the average community.

In order to quantify total Parish demand, the population standards for individual recreational facilities have been divided into the estimated 1980 population (36,250) and the projected 1990 population (44,271). The supply documented in Table 14 is for public facilities only. Need has been likewise calculated by subtracting existing supply from projected demand for each facility type.

Figure 15

IDENTIFICATION OF OVERALL RECREATIONAL NEEDS WITHIN STATE OF LOUISIANA

Source: State Comprehensive Outdoor Recreation Plan, 1975-1990



ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists

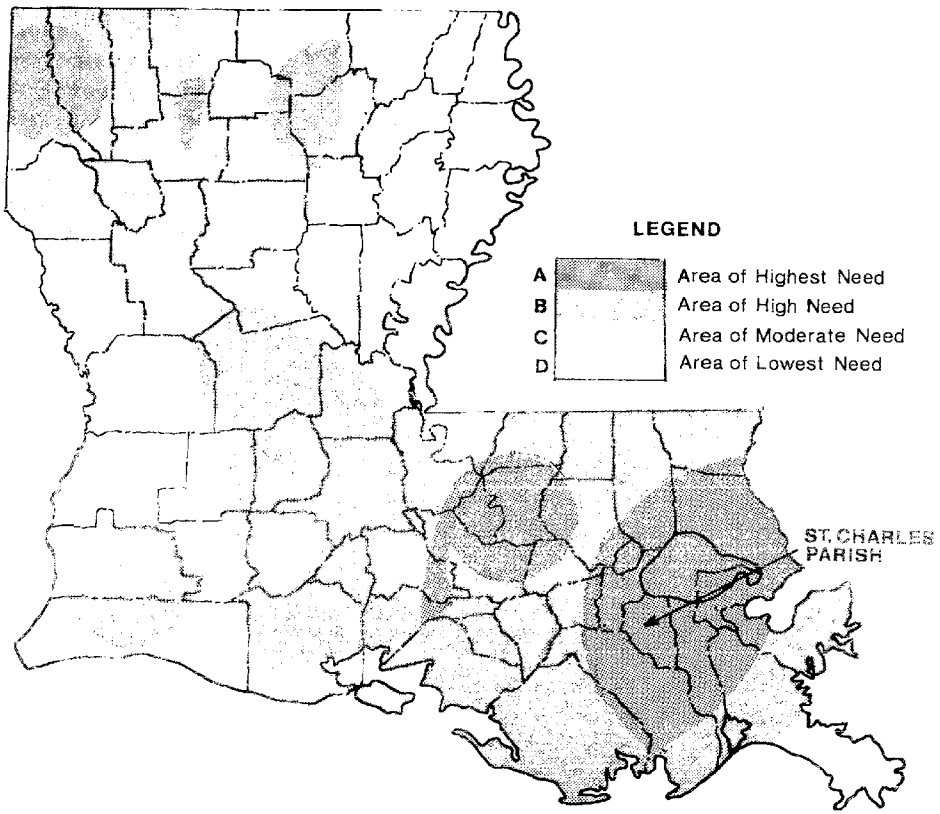

LEGEND
A
B
C
D
Area of Highest Need
Area of High Need
Area of Moderate Need
Area of Lowest Need
ST. CHARLES PARISH

TABLE 13

STANDARDS FOR SELECTED OUTDOOR RECREATIONAL FACILITIES

Facility (Outdoor)*	Standard /1,000 people	Comment
Baseball diamonds	1 per 6,000	Regulation 90 ft.
Softball diamonds (and/or youth diamonds)	1 per 3,000	
Tennis Courts	1 per 2,000 ft.	(Best in battery of 4)
Basketball Courts	1 per 500	
Swimming Pools		Based on 15 sq. ft. of
-25 meter	1 per 10,000	water for each 3% of pop.
-50 meter	1 per 20,000	
Skating Rinks (artificial)	1 per 30,000	
Neighborhood Centers	1 per 10,000	
Community Center	1 per 25,000	
Outdoor Theaters (noncommercial)	1 per 20,000	
Shooting Ranges	1 per 50,000	Complete complex incl. high-power, small-bore trap and skeet, field archery, etc.
Golf Course (18-hole)	1 per 25,000	

*All of the facilities listed are desirable in small communities, even though their population may actually be less than the standards. Every effort should be made to light all facilities for night use, thus extending their utility.

SOURCE: Robert D. Beuchner (Ed.), National Park Recreation and Open Space Standards. (Washington, D.C.: National Recreation and Park Association, 1971). p. 13.

TABLE 14

LOCAL SUPPLY, DEMAND & NEED FOR SELECTED RECREATIONAL FACILITIES IN ST. CHARLES PARISH: 1980 AND 1990

	1980 Supply			1980 Demand			1980 Need			1990 Demand		
	East	West	Total	East	West	Total	East	West	Total	East	West	Total
Football fields*	3	8	11	7	11	18	4	3	7	9	12	22
Combination Baseball/ Softball diamonds	6	13	19	7	11	18	1	0	1	9	12	22
Tennis courts	5	13	18	7	11	18	2	0	2	9	12	22
Basketball courts**	4	11	15	8	12	20	4	1	5	10	14	24
Swimming pools:												
- 25 meter	0	0	0	2	2	4	2	2	4	2	2	4
- 50 meter	0	0	0	1	1	2	1	1	2	1	1	2
Skating rink	0	0	0	1 or	1	1	1	1	1	1	1	1
Neighborhood center	0	0	0	2	2	4	2	2	4	2	2	4
Community centers	0	0	0	1 or	1	1	1	1	1	1	1	1
Outdoor theaters (noncommercial)	0	0	0	1 or	1	1	1	1	1	1	1	1
Shooting ranges	1	0	1	1 or	1	1	1	1	1	1	1	1
Golf courses (18-hole)	0	0	0	1 or	1	1	1	1	1	1	1	1

*Computation of demand for football playing fields was derived from SCORP: One playing field per 2,000 population (36,250 ÷ 2,000 = 18).

**If national standards were used for basketball courts, as shown in the previous table, 73 courts would be in demand (36,250 ÷ 500 = 73). Considering this to be out of proportion, SCORP standards and participation rates have been used to calculate a more realistic demand figure.

After computing Parishwide demand, further analysis reveals the number of facilities needed on the Eastbank and on the Westbank. In order to ascertain the population distribution, the proportion based on school enrollment within the Parish was used: 40% enrolled in Eastbank schools and 60% enrolled in Westbank schools.

CONCLUSIONS

It is evident from the data presented in this section that the supply of recreation facilities, particularly of public facilities, in St. Charles Parish is sorely lacking. There is, additionally, a vast need for public land allocated to recreation with "fee simple" ownership or a long term lease arrangement. Although private and commercial establishments serve a portion of demand, they cannot possibly serve the population of greatest need and least mobility, which is the poor.

CHAPTER 6

MASTER RECREATION PLAN

During the past few decades, the entire region of Southern Louisiana has been impacted significantly by the oil and gas industry. As this is the leading industry in St. Charles Parish, the Parish has likewise been the focus of considerable economic and population growth. Life was rural in character until just two decades ago, but has become increasingly urbanized due to the industry's growth. It is anticipated that St. Charles Parish will experience additional growth upon completion of the Louisiana Offshore Oil Port ("Superport"). Moreover, one of the most significant development factors expected to affect the Parish is the Hale Boggs Mississippi River Bridge. The bridge, currently under construction, is being developed as part of a proposed interstate highway connection between U. S. Highway 90 at Luling on the West Bank and Interstate 10 on the East Bank. Upon the completion of this bridge and the proposed highway, the Parish will be more accessible from other parts of the region and intra-Parish travel will be much improved.

Future population growth is expected to result in the loss of some outdoor recreation resources, place an increased demand on present facilities and necessitate the addition of new facilities. Other trends and factors are also expected to affect the need for recreational opportunities in St. Charles Parish. Among these are:

1. An increasing amount of leisure time due to a trend toward shorter work days, shorter work weeks and longer vacation periods;

2. An increasing number of older persons seeking leisure time activities;

3. Increasing popularity of all outdoor recreation activities;

4. In future years, there will be an even greater demand placed on recreation facilities in St. Charles Parish by the residents of adjacent parishes which have urbanized to a point where open space and natural surroundings are extremely scarce.

FIVE YEAR PLAN

Given these trends and the need for recreational facilities as documented in the previous chapter, it is clear that there is much to accomplish in providing an adequate level of recreational opportunities in St. Charles Parish. The Five-Year and Ten-Year plans outlined in this

chapter indicate the improvements which the Parish should pursue in the coming decade. With a reasonable level of funding and adequate public and political support, implementation of the recommended improvements will be a major step toward making life in St. Charles Parish richer and more enjoyable.

Of course, funding is an essential ingredient of this objective. Until a secure and recurring source of funding is found, the Recreation District will be extremely limited as to what it can accomplish. Efforts must be devoted to the maintenance of existing property, the renovation and improvement of facilities on existing property, and the acquisition of new facilities for existing property. Acquisition and development of new property in the first phase of this plan (1980-1985) can be accomplished by the donation and/or lease of property in conjunction with various funding sources as outlined in Chapter VIII.

It is recommended that within this five-year period all efforts should be devoted to the following courses of action:

1. **Continue maintenance of existing owned and leased properties;**

2. Coordinate planning efforts with School Board and determine long term lease agreements on properties owned by the School Board;

3. Establish methods of advising the general public of the needs of recreational development within the Parish by the following methods:

   - community meetings
   - newspaper articles
   - local billboards promoting recreational needs
   - newsletters to concerned citizens
   - survey letters requesting input from residents;

4. Investigate and actively pursue the various funding sources that have been outlined herein;

5. Form a committee comprised of a number of high ranking Parish officials and executives from industry for the explicit purpose of searching for and obtaining new land.

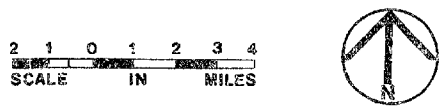
Figure 16

RECREATION MASTER PLAN - 5 YEAR

1. Montz Playground
2. La Branch Launch*
3. Cross Bayou Launch*
4. I-310 Interpretive Center*
5. Killona Batture Park
6. Hwy. 3127 Launches
7. Home Place Plantation
8. Sunset Community Park
9. Monsanto Park

*Illustrated in Chapter 7, Figures 22, 23 & 24

Source: Burk and Associates, Inc.



ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists

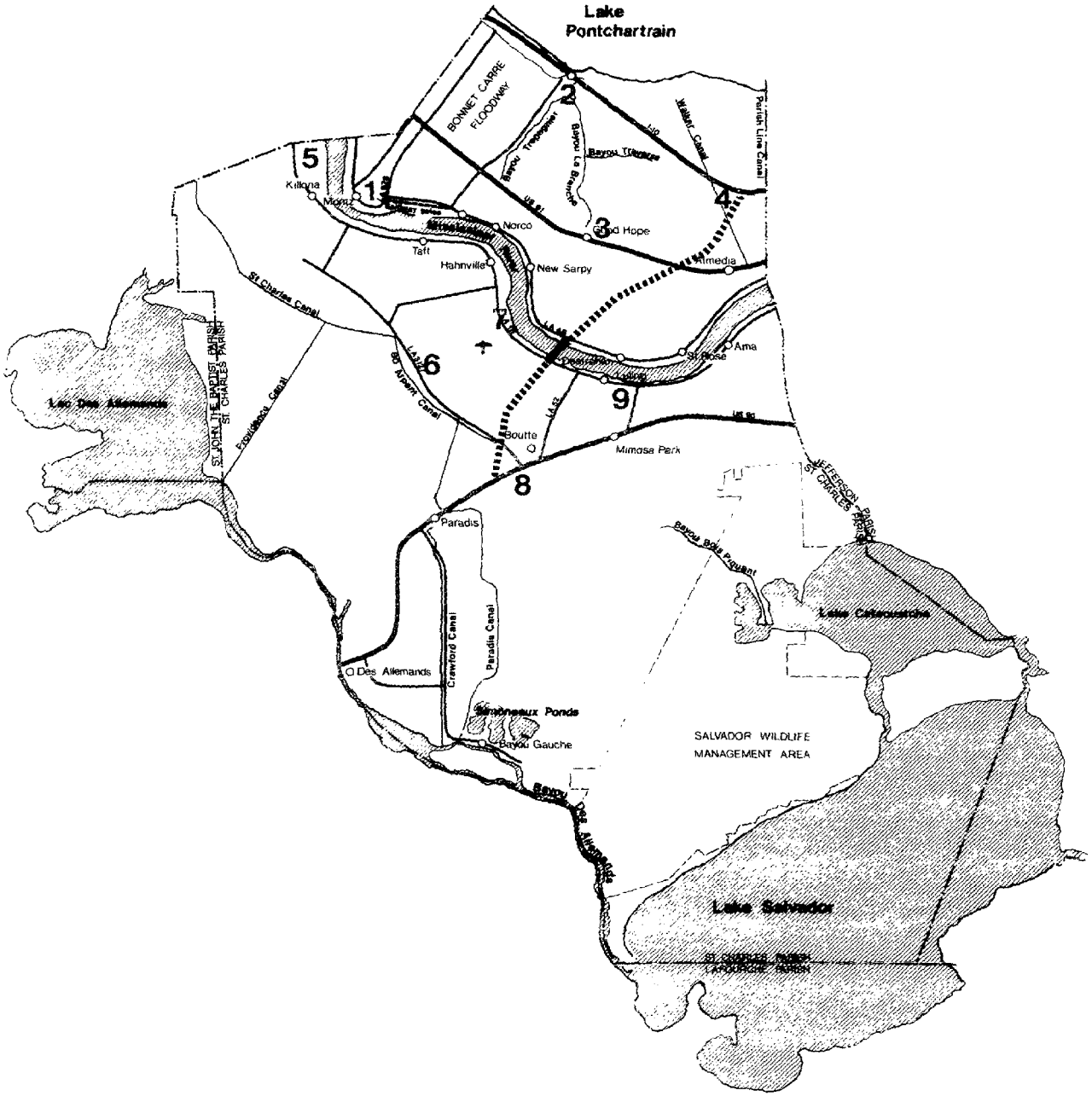
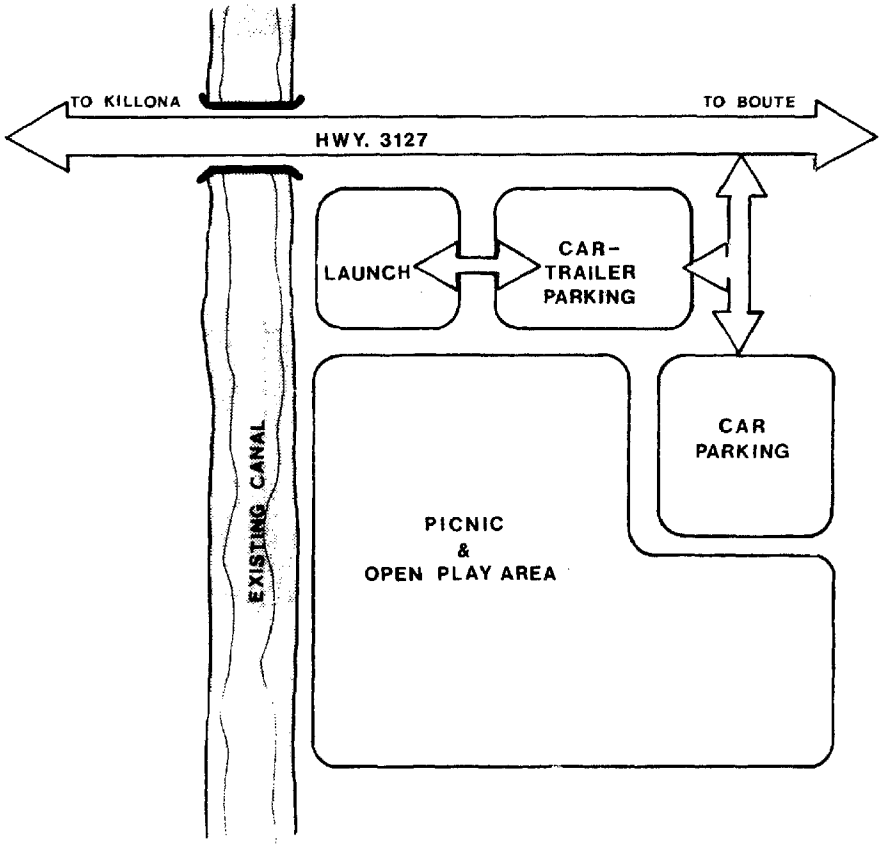

Lake
Pontchartrain
BONNET CARRE FLOODWAY
Bayou Trepagnier
Bayou La Branche
Bayou Trepagnier
Mallard Canal
Parish Line Canal
US 61
Killona
Mont
Norco
Taft
Hahnville
New Sarpy
Good Hope
Almedia
St Charles Canal
LA 48
LA 3127
LA 3
St Rose
Ama
LA 6
St Rupert Canal
Lac Des Allemands
ST JOHN THE BAPTIST PARISH
ST CHARLES PARISH
Pigeonneau Canal
Boutte
LA 52
US 90
Mimosa Park
JEFFERSON PARISH
ST CHARLES PARISH
Paradis
Bayou Bois Piquant
Lake Cataouatche
Des Allemands
Crawford Canal
Paradis Canal
Pigeonneaux Ponds
Bayou Gauche
SALVADOR WILDLIFE
MANAGEMENT AREA
Bayou Des Allemands
Lake Salvador
ST CHARLES PARISH
LAFOURCHE PARISH
1
2
3
4
5
6
7
8
9

Figure 17
BOAT LAUNCH SCHEMATIC



Not to Scale

N

ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers planners environmental scientists

In addition to the above *recommendations*, the Five-Year Plan includes proposals for: (1) renovation and expansion of several existing recreation and cultural sites, (2) acquistion of additional sites and provision of recreation improvements. (3) sites scheduled for immediate improvement. These sites will include project cost estimates and will be discussed in further detail on page 72. The location of specific proposals in the Five-Year Plan are illustated on Figure 16. As indicated on Figure 16 Legend Labranch Launch, Cross Bayou Launch and the I-310 Interpretive Center will be discussed in further detail in Chapter 7 (St. Charles Wetlands.) They are an integral part of that proposed plan. Elements of this plan are outlined below:

Montz Playground

In addition to existing facility renovation, this playground needs a covered shelter with a drinking fountain and electrical service. The park should have area lighting for nighttime activity and prevention of crime and vandalism. Landscaping is needed for visual interest and to provide shade for picnicking. The facility, though not centrally located on the East Bank, is of primary importance for the Parish as it is the only park that is on Parish-owned property and is, therefore, eligible for numerous federal funding programs.

Killona Batture Park

This batture site will make an excellent recreational facility due to its diversity of natural features. However, it is subject to periodic flooding, so all permanent facilities will need to be elevated. The site contains a large pond suitable for a small boat launch and areas for supportive parking facilities. Other facilities that can be accommodated in the area include bridle and pedestrian trails, picnic facilities and large areas for open play and viewing the River. In the first Five-Year plan, property acquisition or a long term lease arrangement should be pursued. If this is successful, recreational improvements might be provided by utilizing Great River Road Funds or other federal sources.

Highway 3127 Launches

At two locations on Highway 3127, primitive shell boat launches have been constructed within the highway right-of-way. These sites need improvements to the launches in addition to organized parking for car-trailers. (See Figure 17.) Additional needs include lighting for night-time activity and security, trash receptacles and other minor facilities which would further enhance the area. See page 72 for the project cost estimate for this facility.

At the launch closest to Boutte, the Parish should investigate acquisition of an additional tract of land to be utilized for a picnic area and space for open play, and possibly organized field sports in the future. As population increases in future years, it will probably occur in the Boutte, Luling, and Hahnville areas, and this site would be in close proximity to these new residents.

Home Place Plantation

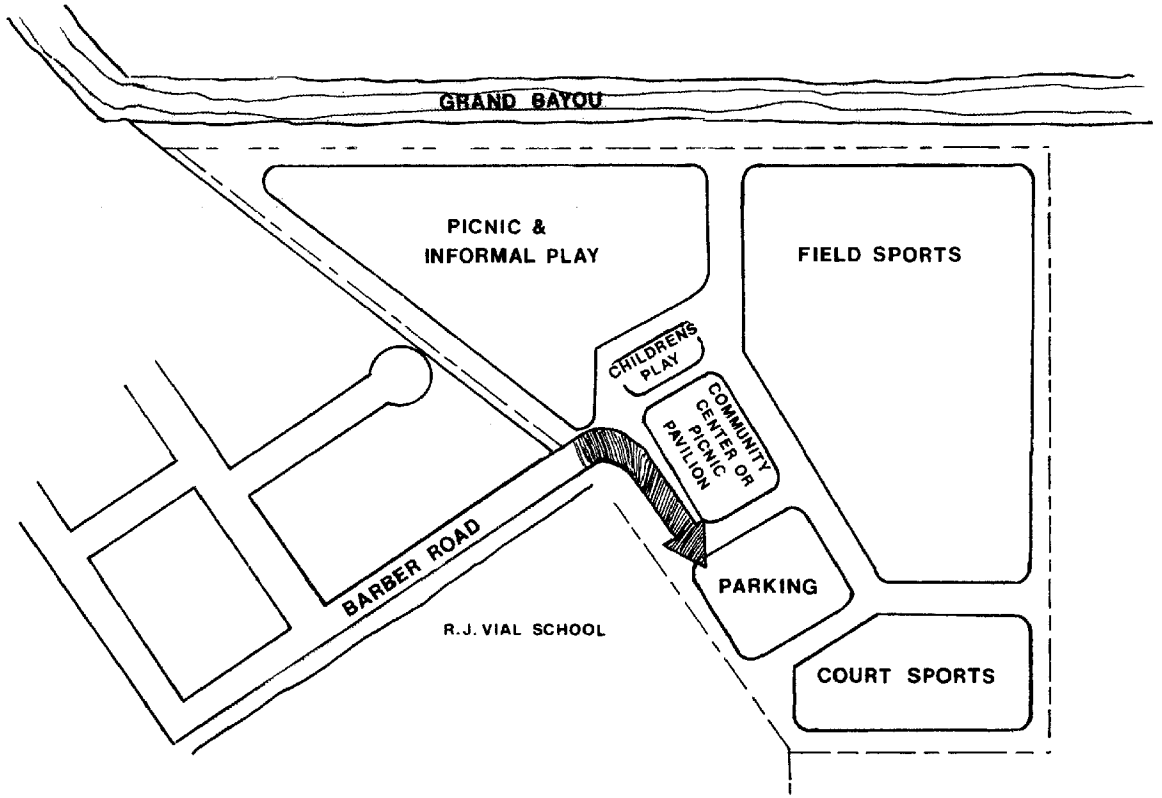
This elegant plantation, listed on the National Register, is in dire need of restoration. In addition to intensive work on the structure, the adjacent property should also be restored. Located on the Great River Road this plantation has the potential to be a popular tourist attraction for numerous tour buses and sightseers that travel the roadway between New Orleans and Baton Rouge.

Additionally, if property is available, a picnic area for visitors could be provided adjacent to the plantation. There is a possibility that the Great River Road funding program could be utilized to implement these improvements.

Sunset Community Park

The Recreation District board is currently negotiating with the Sunset Drainage District to obtain a 25 year lease on a 25 acre site adjacent to the R. J. Vial School in Paradis. This site, undeveloped at present, would make an excellent location for a community park for the St. Charles West Bank because of its proximity to adjacent schools and its central location. In addition to this 25 acre site, the Recreation District and School Board should investigate the possibility of acquiring a parcel of land contiguous to the R. J. Vial School site

Figure 18
PROPOSED SUNSET COMMUNITY PARK



Not to Scale

N

ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists

for a joint facility. This facility would be used by both the school system and the Recreation District and should possibly include a gymnasium and pool complex in addition to meeting rooms, a kitchen, arts and crafts equipment and other facilities for all age groups.

Site improvements should include the following: an area for court sports (tennis, volleyball, basketball), an area for field sports to contain at least one regulation baseball and football field, an area for picnicking and group gatherings, restrooms and a children's tot lot. See page 72 for the project cost estimate for this facility.

The present 25 year lease under negotiation will be sufficient to pursue Heritage Conservation and Recreation Service funds for the proposed facilities (see Figure 18).

Monsanto Park

This existing park, owned by the Monsanto Corporation and leased to the Recreation Committee, has some facilities for recreational usage. The numerous live oaks that are on the site provide the atmosphere for an excellent picnic area. Located on the River Road, this park should also be lighted for evening activity.

PROPOSED IMMEDIATE IMPROVEMENTS

The following sites which are a part of the Five-Year Plan are scheduled for immediate implementation. They are sites deemed of highest need and will provide organized recreational facilities in addition to access to vast wetland areas of the East and West Banks of the Parish. These sites selected on the West Bank are the Sunset Tract of approximately 25 acres adjacent to the R.J. Vial School and the northernmost Hwy 3127 launch adjacent to the 80 Arpent Canal. On the East Bank the sites selected are the La Branch Launch adjacent to the East Spillway Levee and the Cross Bayou Launch at Airline Hwy. The project cost estimates for these East Bank sites will be illustrated in Chapter 7 as they are associated with the St. Charles Wetland.

Sunset Community Park

*	1.	Site preparation and grading 25 acres @ $2,000/acre	$ 50,000
*	2.	Field construction, fine grading and turf establishment	$ 97,800
		10 acres fine grading @ $1,000/acre	$ 10,000
		5400 yds^3 top soil @ $7/$yd^3$	$ 37,800
		20 acres turf establishment @ $2,500/acre	$ 50,000
*	3.	Roadway and Paving	$ 78,200
		1100 yds^2 asphalt entrance roadway @ $12/$yd.^2$	$ 13,200
		Bridge L.S.	$ 25,000
		4000 yds^2 asphalt parking lot @ $10/$yd.^2$	$ 40,000
	4.	Perimeter fencing 4,300 L.F. @ $8/L.F.	$ 34,400
*	5.	Field equipment (backstops, goal posts, bleacher etc./L.S.)	$ 40,000
*	6.	Picnic Area 2000 sq. ft. shelter @ $30/sq. ft.	$ 60,000
		10 picnic tables, grills, trash receptacles @ $1,100/ea	$ 11,000
*	7.	Children's Play Area Climbing structure, other play apparatus, benches etc. L.S.	$ 15,000
	8.	Court Sports	
		6 tennis courts @ $15,000/ea.	$ 90,000
		2 basketball courts @ $10,000/ea	$ 20,000
		600 L.F. fencing @ $10/L.F.	$ 6,000

	9.	Community Center 4000 sq. ft. building @ $70/sq. ft.	$280,000
*	10.	Utilities Utilities for site, L.S. Electrical lighting, L.S.	$ 40,000 $175,000
	11.	Miscellaneous Signs, benches, walkways, water fountains, etc., L.S. Landscaping, L.S.	$ 30,000 $ 25,000
Construction Cost			$1,052,400

*Would be a logical first phase if project is phased due to monetary constraints.

Highway 3127 Launch

1.	Site preparation and grading 14.5 acres @ $1,500/acre 9 acre turf establishment @ $2,000/acre	$ 15,000 $ 18,000
2.	Shell parking and access roadway 8,900 yd^2 @ $4.00/$yd.^2$	$ 35,600
3.	Boat Launches 4 ramps @ $9,000/ramp Boarding Piers L.S.	$ 36,000 $ 15,000
4.	Shelter and rest rooms 1,000 sq. ft. @ $40/sq. ft.	$ 40,000

5.	Picnic Area 10 tables, grill and trash receptacle combinations @ $1,100 each	$ 11,000
6.	Backstop, L.S.	$ 5,000
7.	Lighting, L.S.	$ 20,000
8.	Miscellaneous @ 5%	$ 6,880
Construction Cost		$144,480

TEN YEAR PLAN

Proposals for the Ten-Year Plan are outlined below. It is important to note that most proposals outlined in this phase are contingent upon property acquisition and/or other development in the first Five-Year Plan. If some of these objectives are not obtainable in the first phase, they should be subsequently pursued as part of the Ten-Year Plan (see Figure 19).

East Bank Community Park

To serve the needs of the East Bank's expanding population a community center site should be obtained. The site should be located in an area central to present and future populations. The physical structure at this center should contain basically the same facilities as the one proposed for the West Bank at Sunset Park. Additionally, if funding is available, the Parish also needs an olympic size swimming pool in conjunction with the community center itself. The pool should ideally be adjacent to a high school site to serve the school system for physical education programs and organized swimming teams. It should also be available to serve the general public.

Other outdoor facilities at this site will be determined by the amount of property available and available funding. However, a variety of outdoor activities for organized team sports should be pursued (see Figure 20).

Figure 19

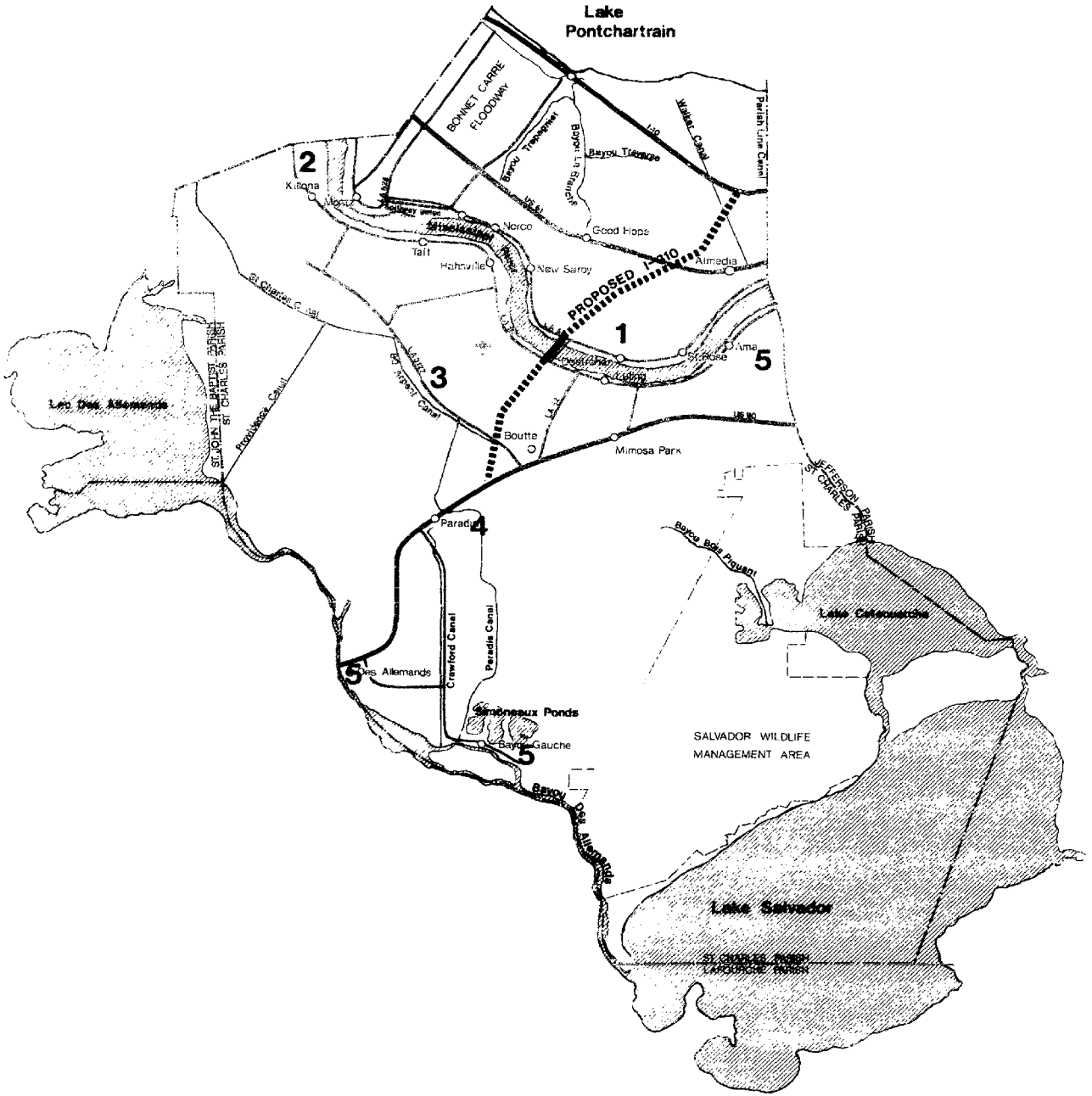
PROPOSED 10 YEAR PLAN

1. East Bank Community Park
2. Killona Batture Park
3. Hwy. 3127 Launch & Park
4. Sunset Community Park
5. Public Boat Launches

Source: Burk and Associates, Inc.

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists


Lake
Pontchartrain
BONNET CARRE
FLOODWAY
Bayou Trepagnier
Bayou La Branche
Bayou Trepagnier
US 61
Illinois Central
Kiln
Killona
Norco
Good Hope
Taft
Hahnville
New Sarroy
Almedia
PROPOSED I-310
St Charles Canal
Lac des Allemands
ST JOHN THE BAPTIST PARISH
ST CHARLES PARISH
Petit Lac
Bayou Des Allemands
Lac des Allemands
Boutte
Mimosa Park
US 90
Paradis
Bayou Boeuf Paquet
JEFFERSON PARISH
ST CHARLES PARISH
Lake Cataouatche
Crawford Canal
Paradis Canal
Des Allemands
Simoneaux Ponds
Bayou Gauche
SALVADOR WILDLIFE
MANAGEMENT AREA
Bayou Des Allemands
Lake Salvador
ST CHARLES PARISH
LAFOURCHE PARISH
1
2
3
4
5
5
5
5

Killona Batture Park

Assuming acquisition or a long term lease of this site in the Five-Year Plan, recreational improvements should continue to be made on this unique site. Killona Batture Park will be in close proximity to expanding populations in the Waterford area and will be able to serve these needs.

Highway 3127 Launch

In addition to the boat launches and parking improvements proposed in the Five-Year Plan an additional tract of land, if it can be obtained at the site closest to Boutte, will be excellent for a waterfront park. This parcel will contain a picnic area adjacent to the water and an area for open play. As population increases in this area, open play areas can be adapted to accommodate organized sports (little league baseball, football, etc.)

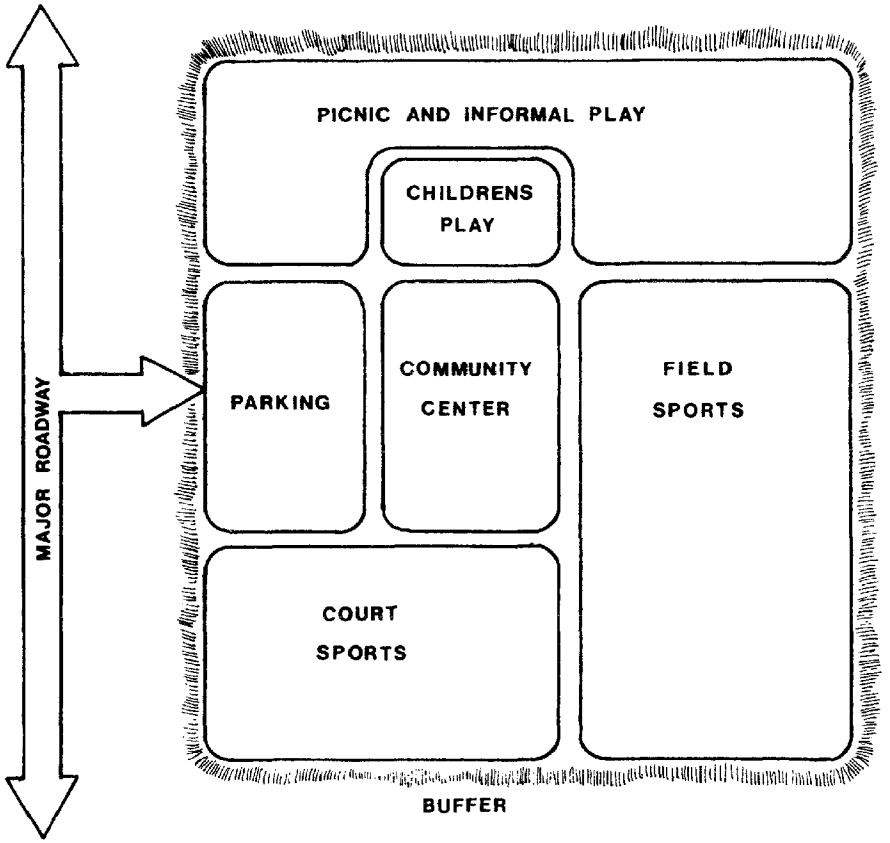
Sunset Community Park

Assuming title can be obtained to this site, recreational improvements can proceed as outlined in the Five-Year Plan (Figure 18). Improvements which are outlined in the plan and are not implemented in the first five year phase will be undertaken in the Ten-Year Plan. This will provide the West Bank a much needed community center and park facility. If title cannot be obtained to the site, present long term lease arrangements will be sufficient to obtain HCRS funds for most outdoor facilities, including a large picnic pavilion, restrooms and other facilities proposed in the Five-Year Plan. In this phase of development, should title be unobtainable, the Parish should pursue the acquisition of a centrally located site for construction of a West Bank community center.

Public Launches

Public boat launches are in great demand throughout the Parish in order to give residents access to the many waterbodies throughout the area. While the need for launch facilities on the East Bank is addressed in Chapter VI, additional public launches are also needed on the West Bank. Pending availability of land, launches should be located in the following areas: Lac Des Allemands and Highway 90 vicinity, Bayou Gauche area and the area adjacent to Sellers Canal and Highway 90. These proposed launches should include adequate parking and access, lighting, picnic areas and other supportive facilities.

Figure 20
SKETCH OF TYPICAL COMMUNITY CENTER



Not to Scale

N

ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists

CHAPTER 7

ST. CHARLES WETLAND RECREATION PLAN

St. Charles Parish contains within its boundaries several valuable wetland areas. One of these, the St. Charles Wetland, is currently under consideration for designation by Congress as a National Wildlife Refuge. It is with this particular wetland area, and its value as a natural fish and wildlife habitat and a recreational resource, that this chapter is concerned. Contained herein is introductory material on the value of wetlands in general, a description of the St. Charles Wetland, a discussion of current and pending legislation affecting the area, and a proposed recreation development plan.

WETLAND ECOLOGY

Wetlands can be defined as transitional area between dry land and open water. They are areas of low topography, poor drainage and standing water. Historically they have been considered areas of minimal value, being fit for little except breeding grounds for disease. In years past, it was generally felt that draining and filling such areas was a "progressive" step. As a result, it is estimated that in the last one hundred years, the American wetlands have been reduced to 70 million acres, or slightly more than half of the original acreage.

In recent years, there has been a significant shift in both public attitude and public policy toward the wetlands. There is a growing awareness of the value of the wetlands themselves, not merely because they are natural habitats for fish and wildlife, but also because of the vital functions which they perform. The resource value of wetlands can be summarized as follows:

1. Wetlands affect the quality of water, performing a natural filtering function by trapping and storing the nutrients from upland runoff in plant tissue and serving as a settling basin for silt from upland erosion.

2. Wetlands influence the quantity of water by retaining water during dry periods and holding it back during floods, thus keeping the water table relatively stable.

3. Wetlands make a positive contribution to overall environmental health and diversity by providing breeding and nesting grounds for fish and wildlife, habitats for a wide range of vegetative communities, and sites for recreation, research and education.

4. Coastal wetlands provide an additional valuable function as barriers to storms and floods.

St. Charles Parish possesses extensive tracts of valuable wetland areas. The St. Charles Wetland, a 24,000 acre area bounded by the Bonnet Carre Spillway, the Jefferson Parish line, Lake Pontchartrain and Airline Highway is a transitional wetland between the Mississippi River and Lake Pontchartrain. It is characterized as a back-water swamp grading into marshland along the Lake Pontchartrain shoreline. The swamp is a cypress and tupelo gum woodland that occurs at low elevations and is flooded most of the time. The marsh area supports a treeless community of grasses and sedges, and the water table is at or above the soil surface most of the year.

This vast wetland area has been identified as one of the top five coastal wetlands in a study recently completed for the Louisiana State Planning Office, Coastal Resources Program. For purposes of this study, fifty areas in Coastal Louisiana were evaluated as natural areas. Criteria used for evaluative purposes were: naturalness, diversity, representativeness, unique ecological value, susceptibility to damage, degree of threat, aesthetic quality, educational and scientific value, and recreational value.

The St. Charles Wetland received extremely high ratings in diversity, representativeness, susceptibility to damage, aesthetic quality and educational and scientific value.*

---

*Diversity refers to the number of different species or habitats in the biotic community of the area.

A representative area is a typical example of a distinct wetland type or native biotic community.

Susceptibility to damage is a measure of how sensitive or fragile an area is and the ease with which natural conditions can be altered by natural or man-made changes.

Aesthetic quality is a ranking of the scenic value and natural beauty of an area.

Educational and scientific value. This is an indicator of the value of an area for environmental training, research or scientific interest.

The wetlands provide a wintering habitat for thousands of ducks and a nesting and feeding area for numerous shore birds and wading birds. Deer, raccoon, otter, bobcat, mink, nutria and muskrat also make their home in the area. The area is of prime importance as a nursery ground for fish in Lake Pontchartrain.

In addition to being an extremely valuable fish and wildlife habitat, the wetland is an excellent recreational resource, offering fishing, hunting, trapping, boating and other water related sports. Two streams which traverse the area, Bayou Trepagnier and Bayou La Branch, are protected under Louisiana's Scenic and Natural Rivers System. These streams and the surrounding wetlands are used extensively for recreational purposes not only by residents of St. Charles Parish, but also by residents of the surrounding parishes.

Proximity to the continually expanding New Orleans metropolitan area makes the St. Charles Wetland extremely vulnerable to pressures to reclaim the land and develop it for residential and commercial purposes. The presence of the area within the Coastal Zone of Louisiana has led to some control over development; however, efforts are also underway to guarantee preservation of the wetlands as a fish and wildlife habitat by having it declared a National Wildlife Refuge.

CURRENT LEGISLATION AND REGULATION AFFECTING THE WETLANDS

Presently, the Corps of Engineers has regulatory jurisdiction over all ocean and coastal waters. Their jurisdiction extends to the entire surface and bed of all water bodies subject to tidal action, including bays, estuaries and marshlands. A permit from the Corps is required before any construction activity can begin. Such construction activity includes:

1. Dams or dikes;

2. Structures or work requiring excavation, dredging and/or disposal activities;

3. Activities that alter or modify the course, condition, location, or capacity of a navigable water;

4. Construction of fixed structures or artificial islands on the outer continental shelf;

5. Discharge of dredge of fill material; and

6. Transportation of dredge materials for purposes of dumping in ocean waters.

The Corps sends copies of permit applications to relevant State agencies for review and comment.[12]

The only Louisiana State Agency currently issuing permits regarding land use in the coastal areas is the Louisiana Department of Wildlife and Fisheries. This agency administers the Natural and Scenic Streams System. Class B permits are issued by the Commission for all significant uses affecting the streams, including pipelining, tree cutting, building of bridges, building of camps, bulkheading, dredging and canalling of adjacent lands. Prohibited uses include: channelization, clearing and snagging, channel realignment and reservoir construction. A permit for dredging in wetlands and for use of the spoil for fill behind a bulkhead is also required. Approval by Wildlife and Fisheries is necessary for all permit applications to the Corps for wetland activities. Wildlife and Fisheries requirements may be added to those of the Corps in order to receive the permit.[13]

Within St. Charles Parish itself, three ordinances that relate directly to Coastal Zone management are flood insurance, zoning and subdivision regulations. The flood insurance ordinance relates to coastal zone management because of the establishment of a permit system primarily concerned with floodprone areas. The current zoning ordinance places the majority of the coastal zone into a category titled "A-1 Rural", which allows for a number of uses, as long as the use is on a lot greater than 20,000 square feet. The following is a list of allowed uses in an A-1 area:

Section VI. Zoning District Regulations

A. The regulations in the A-1 Rural District are:

1. Use Regulations: A building or land shall be used only for the following purposes:

a. Farming

b. Animal Raising

c. Trapping and Fishing

d. Single-Family and Two-Family Dwellings

e. Boat Houses and Boat Docks

f. Cemeteries

g. Churches and Temples

h. Golf Courses and Golf Practice Ranges

i. Home Occupations

j. Mineral Extraction and Development of Natural Resources

k. Private Clubs and Lodges

l. Recreational Uses

m. Tourist Courts and Trailer Parks

n. Public and Private Schools

o. Conservation Projects

p. Nurseries

q. Public and Private Stables, and Kennels

2. Area Regulations: Every lot shall contain an area of not less than twenty thousand (20,000) square feet per family. (SCP & DC, 1978, Vol. 2).

PROPOSED LEGISLATION AND REGULATIONS

Currently the Wildlife and Fisheries service is considering preservation of the wetland area under two different programs. One is aimed at identifying and preserving priority marsh areas in the states of Louisiana, Alabama and Mississippi that are vital to waterfowl. The other is aimed at preserving "unique" natural areas or ecosystems.[14]

In the 2nd session of the 95th Congress, a bill was introduced by Representatives Dave Treen and Bob Livingston proposing the establishment of the St. Charles Swamp National Wildlife Refuge. The bill was not passed during that session and has therefore been reintroduced in the current session by Representatives Treen, Livingston and John Breaux. A copy of the text of the current bill (H.R. 2470) is included in Appendix D.

According to the proposed legislation, the Secretary of the Interior is empowered to select approximately 24,000 acres of land within the selection area deemed appropriate for the purposes of a national wildlife refuge. An official map depicting the boundaries is to be prepared, sufficient land acquired to constitute an area which can be initially administered to carry out the purposes of the Act, and a comprehensive plan is to be prepared.

The Secretary is given five years after the date of enactment to acquire land within the boundaries of the refuge by donation, purchase or exchange. Mineral rights may not be acquired by condemnation, and persons owning camping facilities within the boundaries are to be allowed a period of three years after the date of establishment of the refuge to remove such facilities.

The Secretary is to develop and administer the land in accordance with the National Wildlife Refuge Administration Act of 1966. Under this act, the Secretary is authorized to permit by regulations the use of any area within the system provided "such uses are compatible with the major purposes for which such areas were established." Outdoor recreational uses such as hunting and fishing would be encouraged. Oil and gas production could be permitted under specified conditions.[15]

The laws of the State with respect to hunting, fishing and trapping are to apply unless otherwise provided for in the comprehensive plan to be developed. The Secretary is called upon to construct, administer and maintain at an appropriate site within or near the refuge a wildlife interpretation and education center.

The comprehensive plan is to consider the effects of salt water intrusion and provide remedies for it; provide for contingencies arising from expansion of the New Orleans International Airport, including granting of a right-of-way for runways and approaches and formulation of measures to minimize adverse effects; recognize the appropriateness of use of a portion of the refuge for construction, operation and maintenance of I-310, and provide for granting without compensation a right-of-way to the Louisiana Department of Transportation and Development; contain other provisions deemed necessary for preserving, protecting and enhancing the refuge.

ST. CHARLES WETLAND RECREATION PLAN

Declaration of the St. Charles Wetland as a National Wildlife Refuge would ensure preservation of the area in its natural state, provide a habitat for fish and wildlife and access to the public for recreational enjoyment compatible with the ecology of the swamp and marsh. However, in the event that the proposed legislation is not passed by Congress, efforts should be made on the part of the Parish to safeguard this extremely valuable natural resource and to provide for its utilization for public recreation.

From a recreational perspective, it appears there are several problems preventing optimum usage of the area. These include the effects of salt water intrusion on the swamp, the extremely limited access to the swamp and marsh, and the lack of public space available for hunting, crayfishing and other water related sports. Each of these problems will be addressed in the following sections and recommendations will be made not only to provide remedies, but also to enhance the recreational potential of the wetlands.

Saltwater Intrusion

It is not within the scope of this report to present a marsh management plan. A detailed environmental study would be required to illustrate the full effects of salt water intrusion on the St. Charles Wetland. Reference will be made in this section only to techniques which would increase the recreational value of the swamp and marsh.

Figure 21

PHYSIOGRAPHIC UNITS OF ST. CHARLES WETLAND

1. Natural Marsh Unit
2. La Branche Impounded Wetland
3. Freshwater Swamp Unit

C-Cross Bay

L-Labranch

W-Wetland Interpretive Center

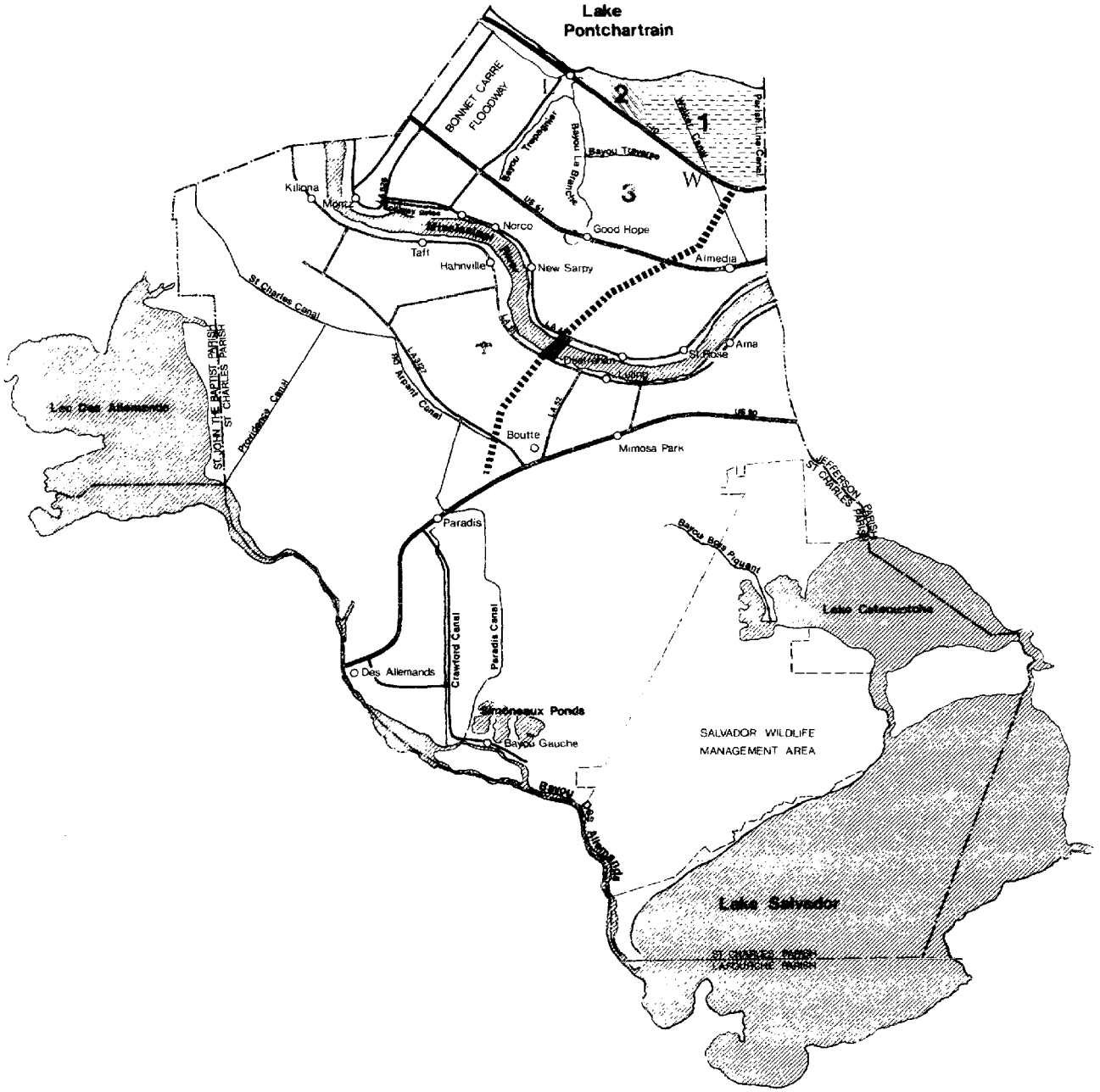
Source: Burk and Associates, Inc. 1978

2 1 0 1 2 3 4
SCALE IN MILES

N

ST. CHARLES PARISH
MASTER RECREATION PLAN

prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists


Lake
Pontchartrain
BONNET CARRE
FLOODWAY
Bayou Trepagnier
Bayou Le Blanchon
Bayou Trepagnier
Bayou Labranche
Pontchartrain Canal
1
2
3
W
Kiliona
Montz
Norco
Good Hope
Almedia
Taft
Hahnville
New Sarpy
St Charles Canal
LA 3127
LA 3127
LA 3127
LA 48
LA 48
US 61
US 61
US 90
Destrehan
Wharton
St Rose
Ama
Mimosa Park
Boutte
Providence Canal
90 Airport Canal
Les Des Allemands
ST JOHN THE BAPTIST PARISH
ST CHARLES PARISH
Paradis
Crawford Canal
Paradis Canal
Des Allemands
Simoneaux Ponds
Bayou Gauche
Bayou Des Allemands
Bayou Bois Piquant
ST CHARLES PARISH
JEFFERSON PARISH
Lake Cataouatche
SALVADOR WILDLIFE
MANAGEMENT AREA
Lake Salvador
ST CHARLES PARISH
LAFOURCHE PARISH

Generally, there are three rather distinct physiographic units within the wetland study area (see Figure 21). It is recommended that:

1) The area between the Pipeline Canal, the Interstate and the Parish Line Canal be maintained as an intermediate marsh and nursery area for fish. Existing wooden weirs that have broken through should be repaired along the Lake Pontchartrain shoreline.
2) The La Branche Wetland area be impounded, protecting the shallow ponds in the vicinity from merging with the Lake. This area is an abandoned and flooded agricultural area and now consists of shallow ponds left from prior draining of the land. Reduced salinity and water level control through levees and pumps would benefit this area for waterfowl and freshwater fishing.
3) The area below the Interstate be maintained as a freshwater swamp.

A reduction in overall salinity is valuable from a recreational viewpoint because many of the wildlife and fish depend for their existence upon vegetation which is nourished by nutrients contained in freshwater. A periodic influx of freshwater would introduce additional nutrients into swamp and marsh, having the effect of fertilizing the entire ecological system. Increased vegetative growth would be conducive to enlarged fish and wildlife populations, with resulting increased opportunities for sport fishing and hunting. A lessening of the effects of saltwater intrusion could be accomplished by controlling existing water flow and by periodically diverting freshwater into the system.

Many of the wooden dams constructed to control water levels and reduce salinity within the swamp and marsh areas are currently in a state of poor repair. Replacement of these dams with weirs would help stabilize water levels while allowing for some fluctuation or water flow. Controlled fluctuation is beneficial, as occasional drying out periods are necessary for growth of many of the annual plants which feed the waterfowl and fur bearing animals during the winter season. Wooden slides could be constructed to one side of the weirs to enable boats to be pulled across, thus providing access to all the bayous within the swamp area.

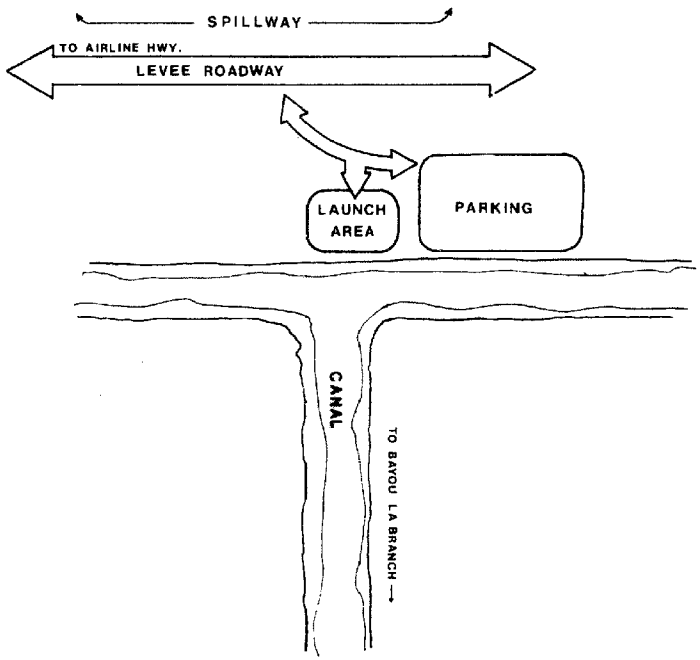
Periodic diversion of freshwater into the system could be accomplished by opening the gates of the Bonnet Carre Floodway. The diverted freshwater would eventually work its way into the swamp and marsh area of the St. Charles Wetland. Serious study of the overall environmental effects of such an action should be considered in order to determine whether the positive effects on the wetlands would outweigh any detrimental effects which might occur.

In addition to controlling freshwater content in the swamp and marsh, it is recommended that the shoreline along Lake Pontchartrain be restabilized with riprap in the La Branche area. Freshwater fishing in the shallow ponds in that area will be endangered if the waters of the Lake are allowed to merge completely with the waters of the ponds.

Access (Cross Bayou and La Branche Launches)

Access to the wetland areas is extremely limited, and the facilities which exist are in need of considerable renovation and expansion. Two makeshift boat launches service the area. One is located on the eastern side of the lower guide levee in the La Branche area and provides access into Bayou La Branche via a small canal. The other is located at Airline Highway (La. 61) and Cross Bayou Canal, and also provides access into Bayou La Branche. Neither of these facilities is a properly constructed boat launch. The road along the guide levee leading to the La Branche boat launch is in a state of disrepair, and parking facilities are inadequate. The proximity of the launching site at Cross Bayou Canal to a major highway, and the total lack of parking facilities at the site constitute an extremely hazardous situation. In order to alleviate these problems and to provide expanded boating access to the wetland area, it is recommended that the boat launch on the levee be completely renovated and that a shell parking area be added on the inside of the levee (see Figure 22) and project cost estimate. Additionally it is recommended that the boat launch located directly off Airline Highway be moved across the canal onto an enlarged spoil bank. Access to the launching site could be provided via a small bridge, such as those built by the oil companies to provide road access to their operations. In addition to the launch itself, parking facilities, a small picnic area, shelter and restrooms could be provided (see Figure 23) and project cost estimate.

Figure 22
SKETCH OF PROPOSED LEVEE LAUNCH SITE
(La Branch Launch)

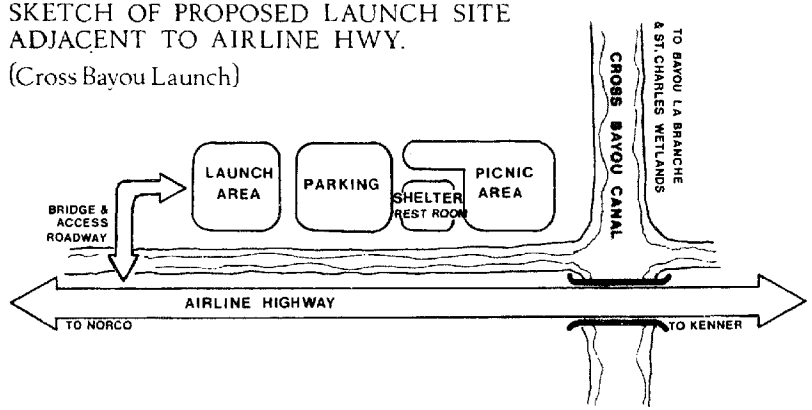


Not to Scale

N

ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists

Figure 23
SKETCH OF PROPOSED LAUNCH SITE
ADJACENT TO AIRLINE HWY.
(Cross Bayou Launch)



Not to Scale

N

ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers·planners·environmental scientists

LABRANCH LAUNCH

1.	Site preparation & grading 2 acres @ $1,500/acre	$ 3,000
2.	Shell parking & launch area 9,600 yds.^{2} @ $7.00/yd.^{2}	$ 67,200
3.	Boat Launches 2 @ $10,000/launch	$ 20,000
4.	Boarding Piers L.S.	$ 10,000
5.	Miscellaneous @ 5%	$ 5,100
Construction Cost		$105,300

CROSS BAYOU LAUNCH

1.	Site preparation & grading	
	3 acres @ $4,000/acre	$ 12,000
	8,900 cu. yds. fill @ $5/yd.	$ 44,500
	2 acres turf est. @ $2,500/acre	$ 5,000
2.	Shell parking & access roadway 5,000 yd.^{2} @ $5.00/yd.^{2}	$ 25,000
3.	Boat Launches	
	2 launches @ $10,000/ramp	$ 20,000
	Boarding Piers L.S.	$ 10,000
4.	Access Bridge L.S.	$ 60,000
5.	Shelter 500 sq. ft. @ $30/sq.ft..	$ 15,000
6.	Picnic Area 6 tables, grills & trash receptacle combinations @ $1,100/ ea.	$ 6,600
7.	Lighting L.S.	$ 10,000
8.	Miscellaneous @ 5%	$ 10,155
Construction Cost		$218,255

Land Ownership

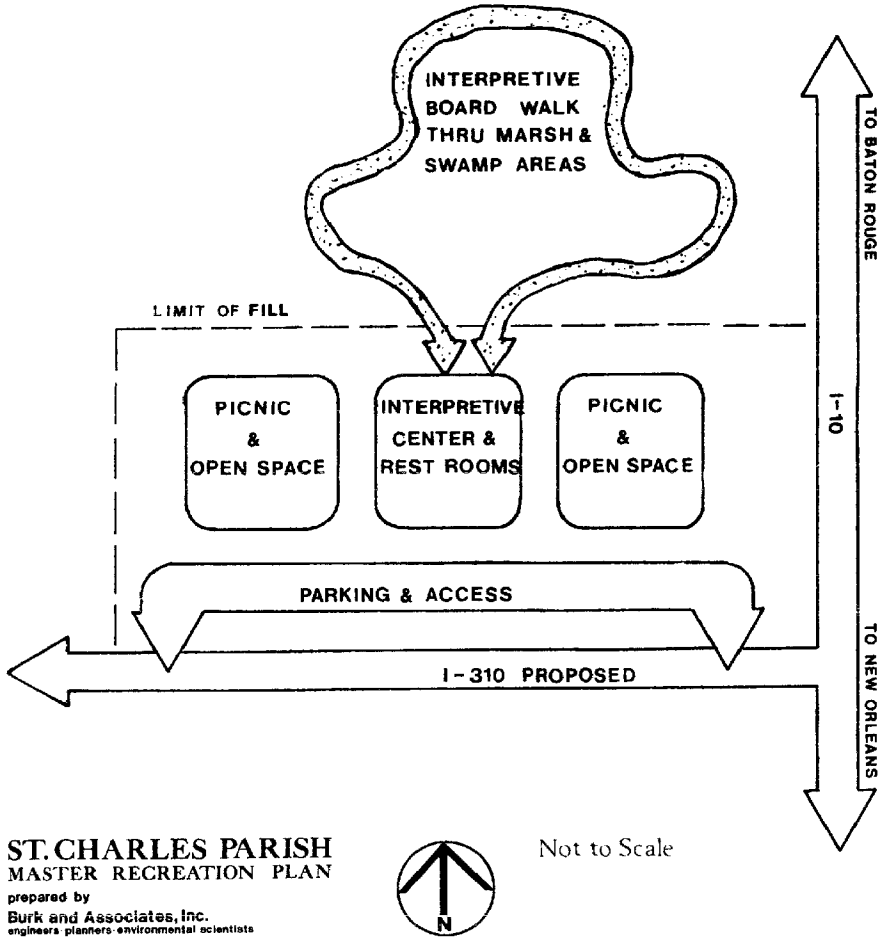
Another problem which detracts from public enjoyment of the St. Charles Wetland area for recreational purposes is the fact that most of the land appears to be privately owned. A trip along Bayous La Branche, Trepagnier, and Traverse reveals innumerous "Posted" signs, with land being either off limits entirely or open for usage only to members of private hunting clubs. Whether or not all this "Posted" land is actually leased for private purposes is a matter which bears further investigation. It is possible that these warning signs are encroaching upon some land which may in reality be open to the public. According to information from the Coastal Zone Advisory Board, approximately 400 feet along the entire lakefront in St. Charles Parish is owned by the Parish. This land was acquired by the Parish in the past as a possible right-of-way for a future levee. If the St. Charles Wetland does not become a National Refuge, perhaps an effort could be made on the part of the Parish to acquire additional acreage within the wetland for public use. Since it has been designated an area of special concern because of its unique ecology, it is feasible that federal funding sources could be tapped to assist in such a purchase (see Chapter VII).

Educational Facilities (I-310 Wetland Interpretive Center)

The ecology of the wetlands is extremely complex, and it can be safely assumed that the average layman's understanding of its intricate functioning is quite minimal. Recognizing that recreational enjoyment can be maximized by some knowledge about the environment which one is experiencing, it is recommended that an interpretive center be located within the wetland boundaries. This center would provide information on the deltaic formation of Southern Louisiana and the functioning of the wetlands. It would also delineate types of fish, wildlife and vegetative communities residing there, and the effect of man-made modifications on the wetland environment. In order to service both tourists and residents of the surrounding region, it is suggested that the center be located at the junction of I-10 and the proposed I-310 (see Figure 25). Facilities would include a rest area with picnic tables and restrooms, a parking area and a boardwalk-type structure leading into the adjacent swamp/marsh complex. In order to minimize any additional damage to the surroundings, this facility would utilize a spoil area necessary for construction of the new roadway.

Figure 24

PROPOSED WETLAND INTERPRETIVE CENTER



ST. CHARLES PARISH
MASTER RECREATION PLAN
prepared by
Burk and Associates, Inc.
engineers · planners · environmental scientists

Not to Scale

WETLAND INTERPRETIVE CENTER

1.	Access Roadway & parking*	
	3,400 yds.^{2} parking @ $19/yd.^{2}	$ 64,600
	4,600 yds.^{2} roadway @ $22/yd.^{2}	$101,200
2.	Site Leveling, fill, grading & turf est.	
	Leveling & grading, 14 acres @$2,000/acre	$ 28,000
	Fill 23,000 yd.^{3} @ $8/yd.^{3}	$184,000
	Turf est. 12 acres @ $3,000/acre	$ 36,000
3.	Interpretive Center & rest rooms	
	Offices, 500 sq. ft.	
	Storage & Maintenance, 800 sq. ft.	
	Interpretive Center, 1,400 sq. ft.	
	Rest Rooms, 300 sq. ft.	
	3,000 sq. ft. @ $60/sq. ft.	$180,000
	Package Plant, L.S.	$ 50,000
4.	Picnic Areas	
	20 tables, grills, trash receptacle combinations, 20 @ $1,100/ea.	$ 22,000
	2 shelters 1,000 sq. ft. each	
	2,000 sq.ft. @ $30/sq. ft.	$ 60,000
5.	Board Walk	
	1/3 mile length X 8' width	
	17,600' x $10/sq. ft.	$176,000
6.	Lighting L.S.	$ 80,000
7.	Miscellaneous @ 5%	$ 49,050
Construction Cost		$1,030,850

* Does not include cost of ingress & egress ramps to I-310 which should be constructed in anticipation of this proposed facility.

In addition to this center, it is recommended that simple interpretive signs be placed along Bayous La Branche, Trepagnier and Traverse, forming a type of "Canoe Trail." The signs would consist of unobtrusive but recognizable numbered plaques which would correspond to explanations pertaining to the overall ecology of the area contained in a printed leaflet. The leaflets could be distributed through commercial shops which specialize in selling or renting outdoor sporting equipment, through tourist information centers, at the proposed interpretive center, and at the proposed boat launch facility at Cross Bayou Canal.

CONCLUSION

The St. Charles Wetland is an invaluable asset to the Parish, both in terms of its unique ecological environment and the recreational opportunities which it affords. The Recreation Plan presented herein seeks to enhance recreational enjoyment compatible with the sensitive wetland environment. Preservation of this fragile environment will be assured if Congress declares the area a National Wildlife Refuge. However, in the event that this does not occur, a concerted effort should be made by Parish officials, the Coastal Zone Advisory Board, the Recreation District Board and concerned residents to see that the wetland area is protected.

CHAPTER 8

FUNDING AND IMPLEMENTATION

An investigation of potential funding sources is essential to implementation of the recreation plan described in the previous chapters. This chapter identifies federal, state, regional and local funding sources, explains regulations and application procedures where applicable, and comments upon the likelihood of obtaining funding from these sources for recreation projects in St. Charles Parish.

FEDERAL SOURCES

The Land and Water Conservation Fund

One major source of funding for outdoor recreation projects is money available through the Land and Water Conservation Fund. Since the inception of this program, over $26 million of the monies have been obligated by the State of Louisiana for over 289 projects. These projects range from development of park facilities on urban lands located underneath freeway interchanges to acquisition of vast acreages to be set aside as wildlife refuges.

The fund is administered by the U.S. Department of the Interior, Heritage Conservation and Recreation Service (HCRS) at the Federal level and the Louisiana Department of Culture, Recreation and Tourism at the State level. It is intended to provide Federal financial assistance for the acquisition and/or development of public outdoor recreational lands and facilities. Financial assistance is granted on a 50 percent reimbursable basis. The project sponsor is to pay the total cost, after which 1/2 of the cost will be repaid to the sponsor from Federal funds. Sponsors must agree to operate and maintain the area or facilities at their own expense. Costs must be incurred after the project has received Federal Heritage Conservation and Recreation approval and the sponsor has been notified that the monies have been obligated.

Donated land may be used to secure matching assistance. However, to be eligible for matching assistance, the donation of the property may not be made until the project is approved and the funds obligated. The Act of Donation may not contain any restrictive clauses. Because of this, land donated for recreational use under a lease is not eligible to be used as a match for federal funds.

Matching assistance is based upon the appraised value of the property. Prior to contracting for the appraisal, the applicant must submit to the Regional Office the names and qualifications of three competent appraisers. This office reviews the appraiser nominees and makes a selection. The appraisal must then be prepared according to HCRS guidelines.

The initial project must include outdoor recreational development equal in cost to at least the donated value of the property. If extensive development is planned, the planning should be phased into maximum $200,000 segments ($100,000 federal funds).

After all documentation has been received by the Louisiana Department of Cultural Recreation and Tourism, Office of Program Development, Division of Outdoor Recreation, the proposal must be reviewed by the Louisiana State Parks Board in order to secure approval. The board meets on a quarterly basis. The project is also submitted to the Louisiana Department of Urban and Community Affairs, which must be given time to comment on the proposed project. By law, they have sixty days in which to review the project and comment upon it.

Upon review and approval at the State level, the project is submitted to the Federal Heritage Conservation and Recreation Service where it is reviewed to determine technical adequacy. If the project qualifies, it is then retained at the State level until funds are available to obligate.

Funds granted under this act may be matched with local funding sources or with federal funding under HUD's community development program.

Coastal Energy Impact Program

The Coastal Energy Impact Program was established to compensate coastal areas which have been impacted by energy activity. Sections 308 (d) (1) and 308 (d) (2) apply to the financing of public facilities and services needed because of new or expanded energy activities. Community recreational centers, local parks and playgrounds and facilities for amateur sports

and performing arts are all eligible for funding under these sections. Financial assistance is granted in the form of loans to state and local governments at Federal rates of interest. Alternatively, bonds issued by governments can be guaranteed by the Federal government. Formula grants are available as a secondary source of funding under Section 308 (b) (4) (b).

Conceivably, St. Charles Parish may be eligible for grant assistance under Section 308(b). Under this section, assistance is available to fund programs to remedy the unavoidable environmental and recreational losses suffered in the coastal zone from the consequences of coastal energy activity. Eligible losses are those which cannot be attributed to an identifiable person, prevented by existing regulations or paid for with funds that are available from other Federal Programs.

The primary source of assistance is the Formula Grant 308 (b) (5) (C). These are 100% federal funds and require no matching funds from the applicant. The secondary source is the Fund Grant 308 (d) (4).

A copy of the preapplication is submitted to the Regional and State clearinghouses to initiate the A-95 review proecess. The Parish President forwards the preapplication, by letter of transmittal or resolution to the Louisiana Department of Transportation and Development (DOTD). DOTD obtains certification of compliance with the Coastal Zone Management Plan, establishes project priority, and forwards the approved preapplications of the U.S. Office of Coastal Zone Management for determination of

DOTD notifies the applicant of project approval/disapproval and, if approved, the applicant is requested to prepare a complete application.

This program places no restrictions on matching funds.

The Estuarine Sanctuary Program

The rules and regulations of the Coastal Zone Management Act re-

quire each state and locality to define areas of preservation and restoration that are of particular concern to the State. There are two such areas in St. Charles Parish: Bayou Bois Piquant Crevasse Swamp and La Branch Wetlands (St. Charles Swamp).

Acquisition of such areas has been provided for under Section 315 of the CZM Act. This section allows for 50/50 matching grants for acquiring lands to provide access to public beaches and other public coastal areas of environmental, recreational, historic, aesthetic, ecological or cultural value, and for preservation of islands (PL 95-370, Sec. 315 Amend. 1976). The same section also allots money for "acquiring, developing or operating estuarine sanctuaries." Local match may be made with other federal funds.

The Great River Road Program

The Great River Road project is a funding program administered by the U.S. DOT Federal Highway Administration. Funds are channeled through the La. DOTD Office of Highways on a 75% Federal, 25% State or local basis.

The intent of this program is the development of a national scenic and recreation highway known as the Great River Road. The Federal Aid Highway Act of 1973 established the program, but no money was appropriated until May, 1976. At that time, Congress appropriated $80 million to cover a ten state area. The Louisiana share of this fund was $6.4 million. For the fiscal year 1979, Louisiana received $2 million.

The type of activities which are eligible for funding under this program are restricted to aesthetic and scenic improvements adjacent to the existing roadway. Such improvements include development of rest areas, scenic overlooks and historical sites immediately adjacent to the road. Recreational facilities such as parks would also qualify for funding if they are adjacent to the road at some point.

Within St. Charles Parish, the designated Great River Road is on the West Bank, but it does not follow the road next to the river (La. 18). It follows newly constructed La. 3127 from Killona to Boutte and then joins Highway 90 through the rest of the Parish. However, according to the State Highway Department, sites adjacent to both this designated Great River Road and sites adajcent to the River itself (between River Road, La. 18, and the River) could be eligible for funding under the program.

Qualifications for eligibility:

1. Parish or State must own the land to be developed.
2. 25% local matching funds are required.

Great River Road Funds cannot be matched with other federal funds. However, funds obtained from a source such as the Levee Board could be used as a local match.

This program could be a good source of financial assistance for recreation facilities development within St. Charles Parish, as two areas of the Parish qualify for funding. The major drawback is that ordinarily land upon which facilities are developed must be State or Parish owned, so this restricts the sites which would qualify. However, it is a funding source worth pursuing.

Recreation facilities are eligible for funding through this program administered by the Economic Development Administration under the auspices of public tourism promotion. The types of assistance available are project grants and direct loans. Qualified projects must fulfill a pressing need of the area and must:

1. Tend to improve the opportunities for the successful establishment or expansion of industrial or commercial plants or facilities;

2. Assist in the creation of additional long term employment opportunities; or

3. Benefit the long-term unemployed and members of low-income families or otherwise substantially further the objectives of the Economic Opportunity Act of 1964.

Though the funding of recreational projects is technically eligible under this act, the likelihood of obtaining funds is diminished unless it can be proven that the project will provide a substantial number of jobs for the unemployed or members of low-income families. Additionally, a parish must have an approved recreation plan before a particular project can be eligible for funding.

Community Development Block Grants/Discretionary Grants

The objectives of this program are to assist communities in providing decent housing and suitable living environment and to expand economic opportunities, principally for persons of low and moderate income. Construction of public recreation facilities would be an eligible project under this Act. However, as with Economic Development Administration assistance, priority is given to projects which provide benefits to low and moderate income people. About 300 applications are received statewide under this program every year, and of these only about 35 can be funded. Therefore, chances of obtaining funding for recreational facilities for St. Charles Parish under this Act are not great.

Resource Conservation and Development Loans

There are two programs in this category which provide funding for recreational projects. They are administered by the Farmers Home Administration (FmHA) and the Soil Conservation Service, respectively. However, since St. Charles Parish is not presently in an established Resource Conservation and Development District, it is not eligible to receive funds from this source. A further difficulty with this source is that the amount of funding has recently been drastically cut back at the Federal level, and therefore also at the State level.

U.S. Army Corps of Engineers

Under the Federal Water Project Recreation Act of 1965 the Federal government can assume up to 50% of the separable costs of recreational development at a water resource project location if local interests agree to fund the other 50%, and also agree to operations, maintenance and replacement of construction facilities. These projects are considered on an individual basis, with contact being made by local officials to the Corps Office when they are ready to begin a project.

Federal Revenue Sharing

Under the Federal Revenue Sharing Program funds are apportioned by the Federal government to the states to be used at their discretion. The states in turn allot money to the various muncipalities

to use for whatever purposes are deemed most pressing. Given the critical need for recreation facilities in St. Charles Parish, this revenue sharing program could be a source of funding for land acquisition, or for facility improvement. Increased land acquisition for recreational purposes would enhance the Parish's chances for obtaining funding for facility implementation from other sources.

STATE SOURCES

Louisiana Office of Public Works

The Office of Public Works does not have a grant or loan program as such. However, there is some limited funding available for flood control, navigation, drainage and water resource development. Each project is considered on its own merits and participation is determined on the basis of overall State benefits. Funding therefore depends on local needs and on the Office's financial capabilities at the time the project is applied for.

Louisiana Highway Department

The role of this office concerning recreation is primarily one of providing access to recreation areas and scenic parts of the State. In conjunction with the construction of highways, the Department constructs and also maintains rest areas, bicycle paths, boat launches and other facilities. Eligibility for a particular project is determined on an individual basis.

Louisiana Department of Wildlife and Fisheries

The Wildlife and Fisheries Commission has the responsibility for managing and protecting the State's fish and wildlife resources. In addition to this responsibility, this agency is involved in a continual effort of boat launch and access facility construction throughout the State. The Department also offers technical assistance in specific projects according to the limits of their manpower and finances at the time the request is received. Requests for assistance are handled on an individual basis.

Louisiana State Parks and Recreation Commission

This agency's primary function is the administration of 31 State park areas. The commission has an implementation program to be funded through State bonds for three 5-year phases for recreational development. According to the State Parks and Recreation Commission's "Louisiana State Parks Plan," in the period 1981-85 the Lac Des Allemands State Park will be constructed on an 850 acre site at a cost of approximately $2,000,000. This park will be located between St. Charles and St. John the Baptist Parishes, and will provide recreational facilities for both parishes.

REGIONAL SOURCES

Levee District Funding

Funding for recreational purposes can sometimes be obtained from the levee district or districts within which the Parish resides. Application for such funds is handled on an individual basis, contingent upon the feasibility of the project and the availability of funds at the time. In the past, St. Charles Parish has received money for recreational projects from both the Lafourche Levee District and the Pontchartrain Levee District.

Local Sources

Another source of funding which should be considered is a local bond issue for funding recreational improvements and for acquiring land for recreational purposes. Such an issue was put before the voters of St. Charles Parish in November, 1978. Though it was defeated, the margin was not so great as to indicate implacable opposition. Therefore, it is feasible that in the not too distant future such an issue might meet with voter approval, particularly if there is tangible evidence of progress being made in obtaining funding from other sources and in actual implementation of planned programs. The new 1/2 cent sale tax which was passed this year has the potential of being used on a large scale for recreational facilities in the future. On the short term, smaller amounts may be available to match federal funds.

CONCLUSIONS

The Land and Water Conservation Fund Act, the Great River Road Fund and the Coastal Energy Impact Program appear to be the most likely sources of funding for recreation programs in St. Charles Parish. It is recommended that these sources be immediately investigated, particularly for the projects listed in Table 15.

Additionally, it is recommended that a citizens' committee be set up for the purpose of approaching industries located within St. Charles Parish to solicit support of the recreation program. Such support could be in the form of contributions of land, money or equipment. Since many of the industries which located in the Parish in the last 10 - 15 years have now used up their period of tax exemption, they might well be interested in making such contributions as tax write-offs. A committee such as this should be composed of a cross-section of citizens including businessmen, politicians, members of the Recreation and School Boards, and others.

TABLE 15

POTENTIAL FEDERAL FUNDING FOR SHORT TERM DEVELOPMENT 1980-1985

PROJECT	SUGGESTED FEDERAL FUNDING SOURCE
Improvement of boat launches on Hwy. 3127 - West Bank	Great River Road Funds
Renovation of Homeplace Plantation, landscaping of grounds - West Bank	Great River Road Funds
Development of facilities on land adjacent to R. J. Vial School - West Bank	Land and Water Conservation Act - The Federal Heritage Conservation and Recreation Service
Expansion of picnic facilities at Monsanto Park	Great River Road Funds; HCRS funds
Expansion of boat launch on levee in St. Charles Wetland Area near La Branche	Coastal Energy Impact Program Funds
Construction of boat launch off the Airline Highway at Cross Bayou Canal	C.E.I.P. Funds; Highway Department Funds
Possible acquisition of a portion of the St. Charles Wetland for public recreational use	HCRS funds; C.E.I.P. funds under section 808 (b) (5) (C)
Expansion of playground facilities at Montz; development of picnic grounds; landscaping	C.E.I.P. funds or HCRS funds
Acquisition of land and development of batture park in Killona	C.E.I.P. Funds; Great River Road Funds

APPENDIX A

ST. CHARLES RECREATION PLAN

RELATED STUDIES

An Analysis of the Changing Land Use in St. Charles Parish, Louisiana; Thesis by Gregory C. Rigamer, May, 1974.

Exisiting Land Use and Future Land Use Plan, St. Charles Parish, N-Y Associates, Inc., June, 1974.

Existing Land Use Study St. Charles Parish, South Central Planning and Development Commission, 1976.

St. Charles Parish, Louisiana: Community Facilities Plan, N-Y Associates, May, 1974.

St. Charles Parish, Louisiana: Economic Study, N-Y Associates, February, 1974.

St. Charles Parish, Louisiana: Initial Housing Study, Review of Codes, Subdivision Regulations, Zoning Ordinances, N-Y Associates, June, 1973.

St. Charles Parish, Louisiana: Flood Plains Study, N-Y Associates, Inc., 1973.

St. Charles Parish Population Study, N-Y Associates, February, 1974.

St. Charles Parish Solid Waste Management Study, N-Y Associates, April, 1975.

APPENDIX B

CALCULATIONS OF REGIONAL DEMAND FOR SELECTED RECREATION ACTIVITIES IN ST. CHARLES PARISH

Big Game Hunting

1980	1990	
36,250	44,271	Population
.81	.81	Participation Rate
29,363	35,859.5	High Quarter User Day Part.
2.88%	2.88%	
846	1,032.8	High Quarter Sunday Part.
26	26	SCORP Standard
21,996	26,852	Acres in Demand

Small Game Hunting

1980	1990	
36,250	44,271	Population
2.10	2.10	Participation Rate
27,125	92,969	High Quarter User Day Part.
2.88%	2.88%	
2,192.4	2,677.5	High Quarter Sunday Part.
8	8	Standard*
17,539	21,420	Acres in Demand

Picnicking

1980	1990	
36,250	44,271	Population
1.33	1.33	Participation Rate
48,213	58,880	High Quarter User Day Part.
2.88%	2.88%	
1,389	1,696	High Quarter Sunday Part.
.02A	.02A	SCORP Standard
227.7	34	Acres in Demand
7	7	SCORP Standard
194	238	Number Tables in Demand

*Outdoor Recreation Space Standards: p. 55, Recreation in Wisconsin, p. 67, "8 acres of range per hunter" needed.

Trailer Camping

1980	1990	
36,250	44,271	Population
.67	.67	Participation Rate
29,662	24,287.5	High Quarter User Day Part.
2.88%	2.88%	
854	699.5	High Quarter Sunday Part.
.02A	.02A	SCORP Standard
21.4	17.5	Acres in Demand
10	10	SCORP Standard
214	175	Maximum Number of Trailers

Tent Camping

1980	1990	
36,250	44,271	Population
.30	.30	Participation Rate
10,875	13,281	High Quarter User Day Part.
2.88%	2.88%	
313.2	382.5	High Quarter Sunday Part.
.036	.036	SCORP Standard
11.3	13.8	Acres in Demand
7	7	SCORP Standard
79	96	Tent Sites

Horseback Riding

1980	1990	
36,250	44,271	Population
1.06	1.06	Participation Rate
38,425	46,927	High Quarter User Day Part.
2.88%	2.88%	
1,106.64	1,352	High Quarter Sunday Part.
.05	.05	SCORP Standard
55.3	68	Miles of Trail in Demand

Canoeing

1980	1990	
36,250	44,271	Population
.09	.09	Participation Rate
3,262.5	3,984	High Quarter User Day Part.
2.88%	2.88%	
93.96	114.8	High Quarter Sunday Part.
.16	.16	SCORP Standard
15	18	Miles of Stream in Demand

APPENDIX C

TEXT OF CONGRESSIONAL BILL 2470

96th CONGRESS
1ST SESSION H.R. 2470

To establish the Saint Charles Swamp National Wildlife Refuge in Louisiana.

IN THE HOUSE OF REPRESENTATIVES

February 27, 1979

Mr. Treen (for himself, Mr. Breaux, and Mr. Livingston) introduced the following bill, which was referred jointly to the Committees on Merchant Marine and Fisheries and Public Works and Transportation.

A BILL

To establish the Saint Charles Swamp National Wildlife Refuge in Louisiana.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. DEFINITIONS.

For purposes of this Act--

(1) The term "interests therein" means any property interest (including, but not limited to, any leasehold, easement, future interest, or equitable use) in lands or waters.

(2) The term "land" means lands, waters, and interests therein.

(3) The term "refuge" means the Saint Charles Swamp National Wildlife Refuge established under section 2(a).

(4) The term "Secretary" means the Secretary of the Interior.

(5) The term "selection area" means the area within the State--

(A) the northern boundary of which is Lake Pontchartrain;

(B) the eastern boundary of which is the boundary between Saint Charles Parish and Jefferson Parish;

(C) the southern boundary of which is a line generally parallel to highway U. S. 61 and each point on which is not less than one thousand feet north of such highway; and

(D) the western boundary of which is the eastern boundary of the Bonnet Carre Floodway.

(6) The term "State" means the State of Louisiana.

SEC. 2. ESTABLISHMENT AND ADMINISTRATION OF REFUGE.

(a) ESTABLISHMENT.--The Secretary shall establish, in accordance with this section, the Saint Charles Swamp National Wildlife Refuge, by publication of a notice to that effect in the Federal Register after--

(1) the Secretary selects approximately twenty-four thousand acres of land within the selection area which the Secretary deems appropriate for the purposes of a national wildlife refuge;

(2) prepares an official map depicting the boundaries of the selections made under paragraph (1) and places such map on file, and makes such map available under public inspection, at offices of the United States Fish and Wildlife Service;

(3) acquires sufficient land within the boundaries depicted in the map prepared under paragraph (2) to constitute an area which can be initially administered to carry out the purposes of this Act; and

(4) completes the comprehensive plan required to be prepared under section 3.

The refuge shall consist of the land acquired for purposes of paragraph (3) and land thereafter acquired within the boundaries set forth on the map required to be prepared under paragraph (2).

(b) ACQUISITION AND ADMINISTRATION.--(1) The Secretary shall, within five years after the date of the enactment of this Act, acquire land within the boundaries of the refuge, by (A) donation, (B) purchase (with donated, transferred, or appropriated funds), or (C) exchange; except that the Secretary may not acquire mineral rights by condemnation, and shall allow persons owning camping facilities within the boundaries a period of three years after the date of the establishment of the refuge to remove such facilities.

(2) The Secretary shall develop and administer the land which is acquired for the refuge in accordance with the National Wildlife Refuge System Administration Act of 1966. The use of areas within the refuge for the transportation purposes described in section 3(b) is appropriate and consistent with the purposes of the refuge. The Secretary may also exercise any other authority available to him for the conservation and management of wildlife and natural resources, the development of wildlife recreational opportunities, wildlife interpretation, and environmental education, to the extent deemed by him to be appropriate to carry out the purposes of this Act. The laws of the State with respect to hunting, fishing, and trapping shall apply unless provided otherwise in the comprehensive plan developed under section 3. In the administration of the refuge, the Secretary shall cooperate with the United States Corps of Engineers regarding flood control.

(c) WILDLIFE INTERPRETATION AND EDUCATION CENTER.-- The Secretary shall construct, administer, and maintain, at an appropriate site within or near the refuge, a wildlife interpretation and education center. Such center shall be designed and operated to promote environmental education and to provide an opportunity for the study and enjoyment of wildlife in its natural habitat.

SEC. 3. COMPREHENSIVE PLAN.

(a) GENERAL.--Within three years after the date of the enactment of this Act, the Secretary shall, in cooperation with the State and political subdivisions thereof, develop a comprehensive plan for the conservation, protection, preservation, and interpretation of the refuge by the Secretary (or appropriate State authorities should the State request management authority).

(b) OTHER REQUIREMENTS.--The comprehensive plan under subsection (a) shall--

(1) consider the effects of salt water intrusion into the refuge and provide for the mitigation thereof, if appropriate;

(2) provide for contingencies which may arise if the New Orleans International Airport is expanded (including, but not limited to (A) the granting of a right-of-way within the refuge for runways and approaches to runways, and (B) the formulation of such measures as the Secretary may consider appropriate to minimize the adverse effects, if any, of such expansion on the refuge);

(3) recognize the appropriateness of the use of a portion of the refuge for the construction, operation, and maintenance of Federal aid highway I-310 as a transportation facility (which construction, operation, and maintenance may be conducted without regard to section 4(f) of Public Law 89-670 and section 138 of title 23, United States Code) and provide for the granting without compensation of a right-of-way therefor to the Louisiana Department of Transportation and Development;

(4) permit hunting, fishing, and trapping in accordance with the basic principles of wildlife management, to the maximum extent allowed by law; and

(5) contain such other provisions relating to public use, law enforcement, wildlife conservation, environmental education and interpretation, and other matters as the Secretary and the State deem necessary to preserve, protect, and enhance the refuge and to carry out the purposes of this Act.

SEC. 4 ACQUISITION AND EXCHANGE OF LEVEE RIGHTS-OF-WAY.

The Secretary may acquire rights-of-way for the construction of a levee outside the boundary of the refuge and may exchange such rights-of-way with the Pontchartrain Levee Board for such rights-of-way within the refuge as such Board may have acquired at the request of the Corps of Engineers. The value of any interests so exchanged need not be equal if such rights-of-way must be furnished by the Pontchartrain Levee Board to the Army Corps of Engineers in fulfillment of commitments made in connection with the flood control project authorized in section 204 of the Flood Control Act of 1965.

SEC. 5. BONNET CARRE FLOODWAY

The Secretary may enter into a cooperative agreement with the Chief of Engineers for the management of wildlife within the Bonnet Carre Floodway in a manner consistent with the purposes of the refuge and with such actions as are determined by the Chief of Engineers to be necessary and appropriate to provide for flood control and prevention.

SEC. 6. NEW ORLEANS INTERNATIONAL AIRPORT.

In recognition of the plans for the development of New Orleans International Airport, and notwithstanding the establishment of the refuge, it is the intent of Congress that the Department of Transportation, in approving airport development projects at, or adjacent to, such airport, shall not be required to either perform the analysis required by section 4(f) of the Department of Transportation Act (49 U.S.C. 1653(f)) or make the finding required by section 16(c)(4) of the Airport and Airway Development Act of 1970. Nothing in this or any other Federal statute shall be construed as exempting any property later acquired by New Orleans International Airport authorities from any taxes which might otherwise be applicable.

SEC. 7. AUTHORIZATION OF APPROPRIATIONS.

For purposes of carrying out this Act, there are authorized to be appropriated in the period beginning October 1, 1979, and ending September 20, 1983--

(1) not to exceed $20,000,000 for the acquisition of land for the refuge; and

(2) not to exceed $7,000,000 for the development of the refuge.

APPENDIX D

DETAILED INVENTORY OF RECREATIONAL FACILITIES, ST. CHARLES PARISH

INVENTORY OF RECREATIONAL FACILITIES

ST. CHARLES PARISH																								
												SWIMMING		PICNIC		BOAT		CAMPING FACILITIES						
E or W BANK	NAME OF FACILITY (COMMUNITY)	Total Acreage	Baseball / Softball Fields	Football Fields	Playfields	Basketball Courts	Volleyball Courts	Tennis Courts	Playground/Equipment	No. Pools	Area (Sq. Feet)	No. Tables	Area (Acreage)	Boat Ramps	Rental Boats	No. Tents	Acreage	No. Trailers	Acreage	Hunting Acreage	Other Facilities and/or Comments
E	Sun Villa, Inc. (Norco)	2						2		1	3375										
E.	Hill Heights Country Club (Destrehan)	28						1		1	3150	6	10								
E	Norco Boating Club	6									.	45	6			51	30				
E	St. Charles Parish Boating Club (Norco)	25												1							
E	Norco Boating Club	32													4						
E	Marsh Duck Club, Inc.	3,000																		3,000	with cabin, 30' fish pier
E	Sugarland Beagel Club	65																		65	
E	Leon Roberts Riding Stables (St. Rose)	15																			with shelter

* Property owned or leased by Police Jury – Rec. Dist.

INVENTORY OF RECREATIONAL FACILITIES

ST. CHARLES PARISH												SWIMMING		PICNIC		BOAT			CAMPING FACILITIES				
E or W BANK	NAME OF FACILITY (COMMUNITY)	Total Acreage	Baseball / Softball Fields	Football Fields	Playfields	Basketball Courts	Volleyball Courts	Tennis Courts	Playground Equipment	No. Pools	Area (Sq. Feet)	No. Tables	Area (Acreage)	Boat Ramps	Rental Boats	No. Tents	Acreage	No. Trailers	Acreage	Hunting Acreage	Other Facilities and/or Comments
E	*Montz Playground	11	1		1	2															
E	Bonne Carre Spillway & Floodway	3800												2						3500	
E	*Norco Elementary	7.5	2	1																	10-year lease, Lighted Permanent Steel Stands
E	Norco Women's Club Playground	1						1													
E	Hyland Park (Norco)		1	1																	owner allows usage-no formal agreement
E	New Sarpy School	18				1		2													Gymnasium used through Community Education
E	*New Sarpy Playground	.5																			
E	*New Sarpy Playground	.5																			
E	Destrahan High School	20			1	1		3													Gymnasium used through Community Education
E	*St. Rose Elementary	7	1	1																	
E	*Bethune Playground (Norco)	5	1																		

* Property owned or leased by Police Jury — Rec. Dist.

INVENTORY OF RECREATIONAL FACILITIES

ST. CHARLES PARISH

E or W	NAME OF FACILITY (COMMUNITY)	Total Acreage	Baseball / Softball Fields	Football Fields	Playfields	Basketball Courts	Volleyball Courts	Tennis Courts	Playground Equipment	SWIMMING: No. Pools	SWIMMING: Area (Sq. Feet)	PICNIC: No. Tables	PICNIC: Area (Acreage)	BOAT: Boat Ramps	BOAT: Rental Boats	CAMPING FACILITIES: No. Tents	CAMPING FACILITIES: Acreage	CAMPING FACILITIES: No. Trailers	CAMPING FACILITIES: Acreage	Hunting Areas	Other Facilities and/or Comments
W	*Our Lady of the Rosary Church (Hahnville)	3	2	1		2	2	2													Limited lighting 25-year lease from Church
W	*Killona Playground	12.5	1	1		2															
W	American Legion Park (Des Allemands)	5	3	1	2																
W	*Boutte Spec. Ed.	5	1	1		1															
W	*Lagutta Playground Mimosa Park		1	1																	
W	Mimosa School	7	2	1																	Tradition allows usage
W	Luling Elementary	11	2	1																	Tradition allows usage
W	Mt. Pilgrim (Ama)		1	1																	
W	*St. Gertrude (Des Allemands)	3				2	1	2	1												Limited lighting 25-year lease from Church
W	Luling Tennis & Basketball Park					2		2													
W	J. B. Martin (Paradis)	20																			Gymnasium used through Community Education
W	Hahnville Jr. High	15																			Gymnasium used through Community Education
W	*Monsanto Bicentennial Park (Luling)	6						4					5								
W	Hahnville High	36						3													
W	Allemands J. C. Rec. Area	5			1																

* Property owned or leased by Police Jury — Rec. Dist.

INVENTORY OF RECREATIONAL FACILITIES

ST. CHARLES PARISH																							
												SWIMMING		PICNIC		BOAT		CAMPING FACILITIES					
E or W BANK	NAME OF FACILITY (COMMUNITY)	Total Acreage	Baseball / Softball Fields	Football Fields	Playfields	Basketball Courts	Volleyball Courts	Tennis Courts	Playground Equipment	No. Pools	Area (Sq. Feet)	No. Tables	Area (Acreage)	Boat Ramps	Rental Boats	No. Tents	Acreage	No. Trailers	Acreage	Hunting Acreage	Other Facilities and/or Comments
W	Ellington Swim Club (Luling)	4	1	1				2		1	3375										
W	Ama Athletics	1	1	1								-									
W	Monsanto Park (Luling)	5	1				1					3	2								
W	Willodale Country Club (Luling)	243			1			2		1	3200										1 18-hole golf course
W	Mimosa Swim & Racquet Club							2		1	2400										
W	Fashion Golf & Country Club (Hahnville)	50																			1 9-hole golf course
W	Hahnville Lions Club Skeet											10	1								Outdoor skeet, pistol and rifle range
W	Pier 90 (Off Hwy. 90)	10											1								
W	Pier II (Off Hwy. 90)	1																			
W	Sportsman's Wharf (Bayou Gauche)	1										2	1	1							
W	Loupe's Boat Ramp (Des Allemands)	1												1							
W	Simeneaux's Fishing & Hunting Club	2000												1	40					2000	
W	Jeffrey Dufresne Boat Launch (Bayou Gauche)	1												1							
W	Luling Trailrides	15																			
W	Paradis nature Study Trail	15																			with shelter

* Property owned or leased by Police Jury — Rec. Dist.

INVENTORY OF RECREATIONAL FACILITIES

ST. CHARLES PARISH

(B or W) BANK	NAME OF FACILITY (COMMUNITY)	Total Acreage	Baseball / Softball Fields	Football Fields	Playfields	Basketball Courts	Volleyball Courts	Tennis Courts	Playground Equipment	No. Pools	SWIMMING Area (Sq. Feet)	PICNIC No. Tables	PICNIC Area (Acreage)	BOAT Boat Ramps	BOAT Rental Boats	CAMPING FACILITIES No. Tents	CAMPING FACILITIES Acreage	CAMPING FACILITIES No. Trailers	CAMPING FACILITIES Acreage	Hunting Acreage	Other Facilities and/or Comments
W	Allemands Lions Club Rec. Area	10		1																	
W	*Boutte Mini-Park	.5																			1 lot (4 benches)
W	*Public Boat Launch (Off Hwy. 3127)	1												1							
W	*Public Boat Launch (Off Hwy. 3127)	1												1							
W	Salvador Wildlife Management Area	31,000																		31,000	

* Property owned or leased by Police Jury — Rec. Dist.

REFERENCES

Burk and Associates, Inc. Land Capability Study of the Louisiana Coastal Zone. New Orleans, La., 1977.

Burk and Associates, Inc. Louisiana Coastal Resources Atlas, St. Charles Parish. Prepared for Louisiana Department of Transportation and Development., 1978.

Burk and Associates, Inc. Potential Preservation and Restoration Areas In the Louisiana Wetlands, prepared for Louisiana State Planning Office Coastal Resource Program.

Department of Culture, Recreation and Tourism, Office of Program Develoopment; Louisiana State Comprehensive Outdoor Recreation Plan, Part I: Information Base for Executive Decision, 1977.

Deputy Director, Fish and Wildlife Service. "Memorandum to Legislative Counsel regarding HR 11393." 1978.

Engineer Agency for Resource Inventories, U. S. Army Engineer Topographic Laboratories. Inventory of Basic Environmental Data New Orleans, Baton Rouge Metropolitan Area. Washington, D. C., 1975.

Gold, Seymour M., PhD. Urban Recreation Planning. Philadelphia, Lea and Febinger Publishing Co., 1973.

Gulf South Research Institute, in cooperation with the Louisiana State Parks and Recreation Commission. Louisiana State Parks Plan

McHarg, Ian L. Design With Nature. New York, Doubleday and Company, Inc., 1969.

N-Y Associates. Existing Land Use and Future Use Plan, St. Charles Parish. Metairie, La., 1974.

N-Y Associates. St. Charles Parish, Louisiana: Community Facilities Plan, Metairie, La., 1974.

N-Y Associates. St. Charles Parish, Louisiana: Economic Study. Metairie, La., 1974.

N-Y Associates. St. Charles Parish, Louisiana: Initial Housing Study Review of Codes. Subdivision Regulations, Zoning Ordinance. Metairie, La., 1973.

N-Y Associates. St. Charles Parish, Louisiana: Population Study. Metairie, La., 1974.

N-Y Associates. The Comprehensive Plan for St. Charles Parish, Louisiana: Solid Waste Management Study. Metairie, La., 1975.

Ohmer, Dr. M. M. and Ohmer, Merlin P. Coastal Zone Management, St. Charles Parish. Thibodaux, La.

Public Affairs Research Council of Louisiana, Inc. Statistical Profile of St. Charles Parish. Baton Rouge, La., 1973.

Rigamer, Gregory C. An Analysis of the Changing Land Use In St. Charles Parish, Louisiana. A thesis submitted to the Graduate Faculty of the University of New Orleans in partial fulfillment of the requirements for the degree of Master of Science in the Department of Urban Studies, 1974.

Segal, Harris; Saussy, Gordon; Wrighton, Fred; Wilcox, Don; and Burford, Roger. Projections to the Year 2000 of Louisiana Population and Households. The Division of Business and Economic Research, College of Business Administration, University of New Orleans, 1976.

South Central Planning and Development Commission. Existing Land Use Study, St. Charles Parish. Thibodaux, La., 1974.

South Central Planning and Development Commission. Coastal Zone Management Program for St. Charles Parish, Vol. I: Report of the Coastal Zone Management Advisory Board to the St. Charles Police Jury. Thibodaux, La., 1978.

South Central Planning and Development Commission. Coastal Zone Management Program for St. Charles Parish, Vol. II: Report of the Coastal Zone Management Advisory Board to the St. Charles Police Jury. Thibodaux, La., 1978.

South Central Planning and Development Commission. Natural Resources, Resource Uses and Users of the Coastal Zone, St. Charles Parish. Thibodaux, La., 1978.

South Central Planning and Development Commission. Special Management Areas In the Coastal Zone, St. Charles Parish. Thibodaux, La., 1978.

State Parks and Recreation Commission. Outdoor Recreation In Louisiana 1975-1980. Baton Rouge, La. 1974.

Thurow, Charles; Tones, William and Early, Duncan. Performance Controls for Sensitive Lands. Washington, D.C.: American Society of Planning Officials, 1975.

U. S. Department of the Interior Bureau of Outdoor Recreation. Outdoor Recreation Space Standards, 1970.

NOTES

1. Burk and Associates, Inc. Land Capability Study of the Louisiana Coastal Zone, New Orleans, La., 1977.

2. Nancy Tregre Wilson. St. Charles Parish...A Brief Look At the Past, A Bicentennial Project of St. Charles Parish Bicentennial Committee, 1976.

3. South Central Planning and Development Commission. Special Management Areas In the Coastal Zone, St. Charles Parish, Thibodaux, La., 1978.

4. Gregory C. Rigamer. An Analysis of the Changing Land Use In St.Charles Parish, Louisiana, New Orleans, 1974.

5. South Central Planning and Development Commission. Existing Land Use Study, St. Charles Parish, Thibodaux, La. 1974.

6. Dr. M. M. Ohmer and Merlin P. Ohmer. Coastal Zone Management, St. Charles Parish, Thibodaux, La.

7. Ibid.

8. Ibid.

9. Seymour M. Gold, PhD. Urban Recreation Planning, Philadelphia, Lea and Febiger Publishing Co., 1973.

10. Department of Culture, Recreation and Tourism, Office of Program Development, Louisiana State Comprehensive Outdoor Recreation Plan, October, 1977, p. 4.03.11.

11. Department of Interior Bureau of Outdoor Recreation, Outdoor Recreation Space Standards, 1970; 1.24 Reference: Baltimore County, "Waterfront Recreation Survey," p. 22.

12. This section was prepared utilizing the following sources:

Charles Thurow, William Tones and Duncan Early, Performance Controls For Sensitive Lands, Washington, D. C.: American Society of Planning Officials, 1975.

South Central Planning and Development Commission, Special Management Areas In the Coastal Zone, St. Charles Parish, Thibodaux, La. 1978.

Burk and Associates, Inc., Potential Preservation and Restoration Areas In the Louisiana Wetlands, June, 1977.

13. South Central Planning and Development Commission, Coastal Zone Management Program for St. Charles Parish, Vol. I: Report of the Coastal Zone Management Advisory Board to the St. Charles Police Jury, Thibodaux, La., 1978.

14. Ibid.

15. Deputy Director, Fish and Wildlife Service, "Memorandum to Legislative Counsel regarding H.R. 11393", 1978.

16.. Ibid.

Burk & Associates
Incorporated

engineers · planners · environmental scientists

4176 CANAL ST. NEW ORLEANS, LA 70119 (504) 486-5901
101-B SECURITY BLDG. GULFPORT, MS 39501 (601) 864-0854

job no. 7853

NOAA COASTAL SERVICES CENTER LIBRARY
3 6668 00000 8096