THE GULF INTRACOSTAL WATERWAY

IN TEXAS

PRESENTED IN RESPONSE TO

THE TEXAS COASTAL WATERWAY ACT OF 1975

AND

SUBMITTED TO

THE SIXTY-SEVENTH SESSION

OF THE TEXAS LEGISLATURE

PREPARED BY TRANSPORTATION PLANNING DIVISION

THE STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION

M. G. GOODE, ENGINEER-DIRECTOR

1980



COMMISSION

A. SAM WALDROP, CHAIRMAN DEWITT C. GREER STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION AUSTIN, TEXAS 78701

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IN REPLY REFER TO FILE NO.

Governor William P. Clements

Lieutenant Governor William P. Hobby

Members of the Sixty-Seventh Legislature

Prior to 1975, the need existed for a single, local nonfederal sponsor of the Gulf Intracoastal Waterway in Texas. The Texas Coastal Waterway Act of 1975 filled that need by appointing the State Highway and Public Transportation Commission to act as agent for the State of Texas as the nonfederal sponsor of the Gulf Intracoastal Waterway in Texas.

The Act also instructed the Commission to evaluate the Gulf Intracoastal Waterway as it relates to Texas, including an assessment of the importance of the Waterway, an identification of principal problems and possible solutions to these problems, an evaluation of the need for significant modifications to the Waterway, and specific recommendations for legislative action, if any.

The evaluation mandated by the Act has been conducted and a report prepared; it represents information based upon available data and reflects the current status of Waterway-related matters as well as the possible future of these matters. It also reiterates the desire of the Commission to foster the growth of shallow-draft navigation in Texas while simultaneously fostering the protection and enhancement of the coastal environment.

The report is hereby submitted to the Sixty-Seventh Legislature in accordance with the Texas Coastal Waterway Act of 1975.

Sincerely yours,

M. G. Goode Engineer-Director

FOREWORD

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FOREWORD

World history teaches that each culture, every society and every nation in the history of man has had to face and solve complex problems. America has faced and surmounted her share of these difficult problems; she is now facing another crucial issue, an issue to which there is no single clear-cut solution but one which is fraught with emotion and electrified by far-reaching consequences. The issue of how to preserve or maintain the natural environment without damaging the nation's economy must be settled in such a way that neither the environmental nor the economic quality of life of future generations is unnecessarily restricted.

The presence of the Gulf Intracoastal Waterway in Texas has altered the coastal configuration as well as the coastal environment. This alteration occurred almost thirty years ago. Maintenance of the waterway has been performed periodically, but not without increasing opposition due to the impact on the environment. Decisions about future management practices for the waterway must be based on the best and most current information available. It is the purpose of this study to provide a broad base of factual information about the waterway and the controversies which accompany it in order to aid the decision-making process. To maintain the present vitality of the waterway commerce, decision-makers must consider the essential economic benefits in light of equally important environmental issues. Continued prosperity along the coast of Texas is dependent on maintaining this delicate balance between the economy and the environment.

vii

TABLE OF CONTENTS

FOREWARD	v
LIST OF TABLES	xiii
LIST OF ILLUSTRATIONS	xvii
PREFACE	xxi
CHAPTER ONE - A SUMMARY OF THE PREVIOUS REPORT	1-1
CHAPTER TWO - A STUDY OF RECREATIONAL BOATING IN COASTAL WATERS	2-1
CHAPTER THREE - A NEW LOOK AT TEXAS' MARINE COMMERCE	3-1
CHAPTER FOUR - THE FUTURE FOR NAVIGATION PROJECTS STILL CLOUDED	4-1
BIBLIOGRAPHY	5-1
APPENDICES	
A - STATISTICS FOR TIERS ONE, TWO AND THREE BY BOAT CLASS	A-1
B - EXPANSION FACTORS OF EACH COUNTY BY BOAT CLASS	B-1
C - EXPANDED CALCULATIONS OF GIWW MILEAGES BY BOAT CLASS	C-1
D - EXPANDED CALCULATIONS OF COASTAL BOAT TRIPS BY BOAT CLASS	D-1
E - DETERMINING SURVEY SIZE	E-1

LIST OF TABLES

LIST OF TABLES

Table	1	Cost Summary for Channel Improvements	1-5
Table	2	Cost Distribution for Channel Improvements	1-6
Table	3	Bridge Openings for GIWW Traffic	2-2
Table	4	Stratified Selection of Survey Samples	2-11
Table	5	Stratified Percentage of Survey Returns	2-12
Table	6	Reported Months of Coastal Recreations	2-15
Table	7	Coastal Domestic Trade Receipts (Tons)	3-11
Table	8	Coastal Domestic Trade Shipments (Tons)	3-11
Table	9	Coastal Domestic Trade Movements (Tons)	3-12
Table	10	Foreign Trade Shipments (Tons)	3-12
Table	11	Foreign Trade Receipts (Tons)	3-12
Table	12	Total Marine Movements (Tons)	3-13

LIST OF ILLUSTRATIONS

LIST OF ILLUSTRATIONS

Page

Figure l	Boundaries of Geographic Stratum for Boat Survey	2-9
Figure 2	Reported Annual Recreational Boat Trips	2-14
Figure 3	Total Marine Movements for Deep-Draft Ports of Texas 1970-1977	3-2
Figure 4	Patterns of Texas Inland Marine Movements	3-4
Figure 5	Patterns of Texas Coastal Marine Movements	3-5
Figure 6	Patterns of Texas Foreign Marine Movements	3-7
Figure 7	Crude Petroleum Moving Through Texas Deep-Water Ports	3-8
Figure 8	Marine Trade Patterns of Deep-Draft Texas Ports	3-9

PREFACE

PREFACE

Prior to 1975, the Gulf Intracoastal Waterway in Texas had no single local nonfederal sponsor. Various navigation districts, river authorities and port authorities located along the reaches of the Gulf Intracoastal Waterway (hereinafter cited as the GIWW) attempted to coordinate local management efforts with those of the federal sponsor, the United States Army Corps of Engineer.

In 1975, the state legislature passed the Texas Coastal Waterway Act. This Act authorized the State of Texas to act as local nonfederal sponsor of the GIWW in Texas and designated the State Highway and Public Transportation Commission to act as agency for the State in fulfilling the responsibilities of the nonfederal sponsor.

The nonfederal sponsor works closely with the United States Army Corps of Engineers to provide local cooperation and input into federal projects. Local sponsorship requirements may vary as different projects are authorized by the United States Congress. It is usually the responsibility of the nonfederal sponsor to provide all land needed for construction and maintenance of the project at no cost to the federal government. Many projects also require that the local sponsor make any necessary alterations to pipelines, cables and other utilities which may be located in the project area. The local sponsor may also be required to construct and/or maintain containment facilities for disposal material. Whatever the particular requirements of the local nonfederal sponsor may be, it is a general requirement that the federal government be held free from any damage that might result from con-

xxi

struction and maintenance of the project. In the case of state sponsorship, this requirement can be fulfilled only to the extent permitted by state law. Presently, there exists a conflict on this point between state and federal law which has delayed the implementation of full state sponsorship.

In addition to serving as the nonfederal sponsor of the GIWW, the State Highway and Public Transportation Commission received a legislative mandate to carry out the coastal policy of the State of Texas. The State has declared its support of the shallow-draft navigation of the state's coastal waters in an environmentally sound fashion and its desire to prevent the waste of both publicly and privately owned natural resources while at the same time preventing or minimizing adverse impacts on the environment. The State has also pledged itself to maintaining, preserving and enhancing wildlife and fisheries. Much of the state's coastal policy emphasizes the importance of protecting the environment while supporting navigation functions at the same time.

To carry out the legislative mandate and to further discharge the duties of the nonfederal sponsor, the Commission was instructed to continually evaluate the GIWW as it relates to Texas. Such an evaluation involves the consideration of both tangible and intangible values. If the state is to prevent the waste of its coastal resources and minimize adverse environmental impacts while simulatenously fostering an efficient system of navigation, it is first necessary to identify existing conditions and needs. This report, the third in the series required by the Act, is submitted to the Sixty-Seventh Legislature to assist in

xxii

achieving usage of the GIWW to its full potential while protecting coastal resources.

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SUMMARY

SUMMARY

The Gulf Intracoastal Waterway (GIWW) is recognized as an important marine highway for the transportation of products vital to the economy of Texas. The waterway provides an essential connecting link between the deep-water ports of Texas, the industries around them and the trade markets of the Gulf Coast and the midwest.

Most of the products transported on the GIWW consist of low-cost liquid and dry bulk commodities. The nearly 62 million tons of commodities that moved over the GIWW in Texas in 1974 were petroleum products (34.7%), chemicals (23.3%), crude petroleum (22.6%), non-metallic minerals (7.5%), marine shell (5.0%) and other commodities (6.9%).

The dimensions of the GIWW, 12 by 125 foot, must be improved to allow larger barge tows moving Texas products and raw materials. The channel dimensions presently do not allow the GIWW to be competitive with many of the major markets located on rivers that may only be nine feet deep, but have widths of over 200 feet, thereby allowing them to handle barge tows consisting of 20 to 40 barges. The GIWW widths restrict maximum tows, particularly by the sharp curvature of bends on the channel. The 1978 report advocated the need for model studies to determine the most efficient channel geometry possible.

Of increasing concern to navigation interests and supporters was the changing political climate regarding navigation projects. The first user tax on the inland navigation industry has been imposed and the federal government wants the states to share costs on all new navigation projects.

Provisions of the Flood Control Act of 1979 (P. L. 91-611) prohibit

xxvii

full sponsorship responsibilities on any water resource project without a written contract that requires the sponsor must have full authority and capability to pay damages incurred by the project, if necessary. This statuatory requirement would pledge the credit of the State, a violation of the Texas Constitution.

Efforts to resolve this conflict were initiated with the aid of an amendment introduced by Senator Lloyd Bentsen of Texas. This amendment would make the payment of damages contingent on the legislative appropriations process of the State. Unfortunately, the amendment failed to be enacted into law, and only after such remedial action is forthcoming will it be possible for the necessary contract to be formally concluded. Until such time, the official sponsorship by the State is not possible. However, immediately upon the signing of the necessary contract, the State Highway and Public Transportation Commission is prepared to begin immediate assumption of the responsibilities thereby incurred.

A study of the recreational aspects of the Gulf Intracoastal Waterway and adjacent land areas may aid in the planning for multiple-use of dredge material disposal sites or coastal public lands. The State of Texas could become a major landowner along the coastline as its navigation responsibilities develop. Since development and maintenance of the properties are conducted with public funds, multiple-use developments that would yield the greatest public benefits are most desirable. Development of these properties both in the interest of recreation as well as navigation should be one goal of the State.

55.5% of the Texas state population live within a 200 mile radius of the Texas coast, and almost 33% of the state population live within 100 miles of the coastline. An assumption was made for purposes of this study, that most coastal participants live within the 200 mile radius of the Texas coastline. Thirty-eight counties were selected for the study's survey, their combined populations totals about 84% of the persons's residing within that 200 mile boundary, thus a representative sampling of the participants of coastal recreation could be obtained.

Preliminary findings of the recreational boat study indicate that over 430,000 annual boat trips were initiated in Galvestion Bay, the area of highest recreational traffic. Following in usage of recreational traffic areas were East Galveston Bay and West Galveston Bay. These three areas of the Galveston Bay complex reportedly initiated over 800,000 recreational boat trips in a year. It was also learned from the survey that over 85% of the survey respondents reportedly make more than one trip per year. (Nearly 4% travel to the coast 50-200 times a year for recreational purposes.)

A study of the recreational boating traffic on the GIWW is important because much of the traffic must use the GIWW for protected passage from bay to bay or to reach the Gulf. A total of 1,579,164 trips was the determined annual usage of the GIWW reported by recreational craft. This is over 79% of all annual coastal boat trips reported in the State of Texas. The analysis of GIWW users were as follows:

Powerboats 1-'20'	78.4%	Traveling an average of 20.2 miles per trip
Powerboats over 20'	84.9%	Traveling an average of 49.3 miles per trip
Sailboats l'-20'	94.5%	Traveling an average of 15.1 miles per trip

xxix

Sailboats over 20' 82.0% Traveling an average of 46.1 miles per trip

Evidently, the GIWW is a vital artery of the Texas coastal waters, not only to individual or commercial traffic, but to recreational traffic as well. In addition, the \$3 billion of public recreational contributions to the Texas economy are strongly influenced by the coastal recreational activies. Proper management of the GIWW and surrounding Texas coastal waters will require an increasing awareness of the marine needs of the recreational boating public.

Bridge opening records for fiscal years 1978-1980 along a 43 mile segment of the GIWW where a complete record of the marine traffic is available, indicate that pleasure boats account for an average of 19.1% -26.1% of the marine traffic on the waterway depending upon the location. Although these totals are indicative of the high recreational traffic volumes for a short section of the GIWW, they do not show the complete traffic picture of the entire Texas coastline.

Because recreational activities generate many economical benefits, it is important to consider the actual needs and desires of the recreational boating public. A separate study to determine the nature, magnitude and extent of recreational boating in Texas coastal waters has heretofore not been performed. In the past, federal agencies conducted nationwide studies on a very extensive level and their findings could not be directly applied to Texas' coastal usage. Recreational options of the Texas Gulf Coast varied so widely that decidedly, a survey of the actual boating public involved would be most effective in revealing the true recreational participation in Texas coastal activities.

XXX

As reported in the 1978 report, the total tonnage moved on the GIWW in Texas had slumped from 60 million tons in 1972 to 59 million tons in 1975. However, increases have progressed to 72 million tons moved in 1977. Newer statistics of GIWW marine commerce have determined a more accurate total of tonnages. Previously the totals were calculated from the sums of totals of individual segments, which erroneously included duplications.

From 1955 through 1975, Texas exported more foreign goods than it imported, but in 1976 56 million tons of foreign goods moved into Texas deep-water ports and 34 million tons were exported. The sudden influx of foreign imports dramatically increased from 1976 to 1977 so that 79% of the total 162 million foreign tonnages were imports. Analysis of the major commodity tonnages of foreign trade shows that since 1972 a dramatic rise of foreign crude oil tonnage imports soon overtook those of domestic crude exports. From 1975 to 1977, the percentage increase of imports over exports was an average 5.9% per year, and it is highly probable that the percent import rate per year will continue to increase even more.

Although the GIWW is a major artery in the transportation system, its maintenance and improvements are often opposed by conflicting rules and regulations at the federal level. Unless state and regional interests are more active and alert in protecting their own local interest of maintaining a viable domestic navigation system, this trend to downgrade navigation projects at the federal level will probably continue in the future.

In the past, navigation improvements were often completely a federal government responsibility. The recovery of improvement costs was not an issue until October 1, 1980, when the federal government levied a 4¢ user fuel-tax. Those revenues are to be deposited into an open-ended navigation

fund available for inland waterway projects; apparently a cost-recovery measure.

The State of Texas was declared to be the non-federal sponsor for the main channel of the GIWW by the Texas Coastal Waterway Act of 1975. However, because the credit of the State cannot be pledged by constitutional restrictions, contracts requiring payment of any future damages incurred by waterway projects between the Corps of Engineers and the State cannot be signed.

Another factor jeopardizing the present future of the GIWW in Texas lies in the federal funding of navigation projects. Due to rising costs of construction and maintenance, and a reduction of forthcoming appropriations in 1981; much of the needed work on waterways will have to be postponed.

In addition, the Environmental Protection Agency has passed strict regulations concerning the disposal of dredge materials; often resulting in lengthy permitting processes, both state and federal, that endanger the viability of existing navigation projects. Annual permit delays and restrictions are estimated to be costing the United States 25 million tons of commerce valued at \$3.4 billion each year.

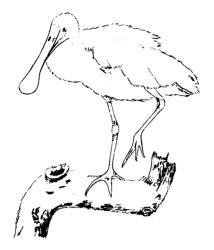
The federal pressures on the waterways systems and the apparently narrow viewpoint of the on-going federal marine studies of the systems have placed enormous pressures on states and regional bodies to initiate their own marine studies to protect their own navigation activities as well as their local economies. Recognizing this need to protect Texas' interests, this department, in cooperation with the Texas Transportation Institute, on September 1, 1980 initiated a study of the impact of navigation user-fees upon the economy of Texas. This study is scheduled to be completed by August 31, 1981, just one month before the federal userfee study recommendations are due to be presented to the U.S. Congress. Other states have already begun or completed such studies and more are in the planning stage. State and regional interests will have to be alert and active enough to protect their own interests in maintaining a viable domestic navigation system, upon which much of their economy depends.

CHAPTER ONE

A SUMMARY

OF THE PREVIOUS REPORT

A SUMMARY OF THE PREVIOUS REPORT



The Texas portion of the over 1,100 mile Gulf Intracoastal Waterway (GIWW) extends approximately 426 miles along the entire Texas Gulf coast. It is recognized as an important marine highway for the transportation of products vital to the economy of Texas. As a major segment of the State's transportation

system, the waterway provides an essential connecting link between the deep-water ports of Texas, the industrial complexes which have developed around them and the trade markets of the Gulf coast and the midwest.

Commerce on the GIWW

Most of the products transported on the GIWW consist of low-cost liquid and dry bulk commodities lending themselves to the economies and energy-efficiencies of barge transport. The nearly 62 million tons of commodities that moved over the GIWW in Texas in 1976 consisted of petroleum products (34.7%), chemicals (23.3%), crude petroleum (22.6%), non-metallic minerals (7.5%), marine shell (5.0%) and other commodities (6.9%).

The total tonnage of commodities moved on the GIWW showed a drop from 66 million tons in 1974 to 59 million tons in 1975. A recovery to 62 million tons followed in 1976 with preliminary 1977 data indicating a strong continuation of this uptrend. Most of the decreases in traffic since 1972 have been identified as caused by heavy declines in the amount of crude petroleum and marine shell moved in inland marine commerce. The reduced local production of these natural resources in recent years has led to the substitution of foreign imports or other domestic materials which do not often move by barge.

The losses to the total tonnage transported, caused by crude petroleum and marine shell, had begun to be offset by substantial increases in the amount of petroleum products and industrial chemicals moved in this commerce. Since the crude petroleum and marine shell moved either in intrastate traffic or in interstate imports to Texas, declines in these two categories were also apparent. On the other hand, most petroleum products and industrial chemicals are Texas products destined for markets in other states, so an increase in interstate shipments from Texas occurred.

While over 82% of the products shipped into Texas in 1976 originated along the Gulf coast, exports in 1976 showed increases in the products shipped to the Upper Mississippi River (3.4%), the Lower Mississippi River (2.1%), the Louisiana section of the GIWW (1.6%) and minor increases in the Cumberland-Tennessee System and the Middle Mississippi River area. Decreases for the year were noted for the Ohio River System (4.1%), the Illinois River System (3.3%) and the eastern Gulf section of the GIWW (0.7%). Despite these changes, over 50% of the Texas products moving out to the state via the GIWW were destined for inland ports along the Mississippi River and its' tributaries.

Since 1960, shallow-draft marine trade for the entire midwest and Gulf coast increased from 169 million tons to over 317 million tons, a growth of 86.7% in seventeen years. The movements of Texas interstate

1-2

trade increased 73.6% in the same period. In the preceding two years, Texas had led the total trade area in growth rate but, in 1976, fell slightly behind. The drop in crude petroleum shipments to Texas and the growth in coal and grain movements in the total trade area were the general reasons for this decline. Generally, Texas contributed about 17% of all movements in this vast trade area.

Improvement Needs of the GIWW in Texas

While technological improvements successfully handled earlier waterway congestion problems, such advances in technology could no longer be depended on to carry the brunt of further traffic increases. With crude petroleum, petroleum products and chemicals representing over 80% of the Texas GIWW commerce and with these commodities representing the most hazardous cargoes moving in marine commerce, safety and the preservation of life, property and natural resources also became prime concerns. For these reasons, the 1978 report emphasized the need for waterway improvements.

Many of the major markets receiving Texas products are located on rivers whose channels may be only nine feet deep but have widths of over 200 feet. This is in contrast to the 12 by 125 foot channel dimensions of the GIWW. Many important markets can handle barge tows consisting of 20 to 40 barges while the GIWW is restricted to smaller tows which increase costs per ton-mile over areas having more favorable channel dimensions. To remain competitive, the GIWW must be improved to allow larger tows moving Texas products and raw materials.

Channel dimensions are further restricted by the sharp curvature

1-3

on bends on the GIWW. Present widths are not even sufficient for the maximum tow size when sharp curvature is considered. The 1978 report advocated the need for model studies to determine the most efficient channel geometry possible.

How Much Will These Improvements Cost

The official study of improvements for the Louisiana-Texas section of the GIWW being conducted by the U. S. Army Corps of Engineers is scheduled for completion in 1981 with final recommendations scheduled for submission to the U. S. Congress in 1983. Approximately 403 miles, 54% of the total mileage of the project, is in Texas. Because of the high cost of a project of such magnitude, a portion of which would be a state responsibility, a preliminary cost estimate of major construction items for the Texas portion of the project was included in the 1978 report. The estimate was based on five assumptions:

- The improved channel will follow the same alignment as the existing channel.
- The excavation quantities could be based on the original natural ground elevations present at the time of the original construction.
- The existing disposal areas possessing perpetual easements will not be disturbed or reduced in area during the improvement project.
- Maintenance dredging quantities are not dependent on channel dimensions.
- 5) The channel side slopes will be the same as those of the

original construction.

Based on these assumptions, estimated costs for six channel configurations were determined. The project quantities used for the cost estimates were based on a 50-year life of the project with construction assumed to begin in 1987. The only quantities studied were property, dredging and levee requirements and required open-water disposal.

A summary of project cost estimates is shown in Table 1. Costs were calculated on the basis of 1978 dollars with no provisions added for inflation or rising costs during the entire project life. Although costs are not accurate for the full term of the project life, they are useful in comparing the relative costs of various channel configurations.

TABLE 1

COST SUMMARY FOR CHANNEL IMPROVEMENTS

<u>Channel</u>	Construction	50-Year <u>Maintenance</u> *	Total Project*
250' x 12'	\$172,647,000	\$269,686,000	\$442,333,000
250' x 14'	\$247,183,000	\$272,926,000	\$520,109,000
250' x 16'	\$327,025,000	\$275,816,000	\$602,841,000
300' x 12'	\$244,865,000	\$274,338,000	\$519,203,000
300' × 14'	\$333,718,000	\$276,801,000	\$610,519,000
300' x 16'	\$427,923,000	\$276,083,000	\$704,006,000

* Includes estimated federal cost for maintenance dredging during 50-year period of \$235,801,000. This cost may be deducted to determine required initial cost of project. Table 2 provides a breakdown of the federal and state shares of the project costs. It should be noted that the federal share of the total project costs includes the cost of the maintenance dredging during the fifty year life of the project. This cost would not ordinarily be included in the initial project costs, but it was necessary that it be included here, so that the state's costs required for the acquisition of the necessary disposal areas could be included.

TABLE 2

COST DISTRIBUTION FOR CHANNEL IMPROVEMENTS

Channel	Federal Cost*	State Cost	<u>Total Project*</u>
250' x 12'	\$402,041,000	\$40,292,000	\$442,333,000
250' x 14'	\$472,694,000	\$47,415,000	\$520,109,000
250' x 16'	\$546,345,000	\$56,496,000	\$602,841,000
300' x 12'	\$468,543,000	\$50,660,000	\$519,203,000
300' × 14'	\$549,544,000	\$60,975,000	\$610,519,000
300' x 16'	\$633,620,000	\$70,386,000	\$704,006,000

* Includes estimated federal cost for maintenance dredging during 50-year period of \$235,801,000.

As indicated, the state would need to contribute approximately 10% of the total project costs. This sponsorship cost could be further increased should cost-sharing proposals be initiated. A major portion of the state's costs is caused by the assumption that all land disposal will be contained within properly designed levees. Over 50% of the state's share of project sponsorship costs could be saved if means of reusing disposal areas were developed. In addition, reuse of disposal

facilities would allow additional sites to remain in their natural state, thus reducing environmental impacts on the natural resources of Texas.

State Sponsorship Hits a Snag

Of increasing concern to navigation interests and supporters was the changing political climate regarding navigation projects. A major step, after a two year battle in Congress, was the imposition of the first user tax on the inland navigation industry. Of greater concern to the State was an increasing call for cost-sharing by the states on all new navigation projects.

The formal assumption of full sponsorship responsibilities for the GIWW in Texas was delayed due to the provisions of the Federal Flood Control Act of 1970 (P.L. 91-611). The provisions of this act forbid the commencement of construction activity on any water resource project without a written contract between the sponsor and the Secretary of the Army to furnish the required cooperation for the project. One requirement for such a contract is that the proposed sponsor must have full authority and capability to pay damages, if necessary. This statuatory requirement would pledge the credit of the State, a violation of the Texas Constitution.

Efforts to resolve this conflict were initiated with the aid of Senator Lloyd Bentsen of Texas. Senator Bentsen succeeded in having an amendment to P. L. 91-611 introduced into pending legislation before the U. S. Congress. This amendment would make the payment of damages contingent on the legislative appropriations process of the State.

The legislative vehicle for this amendment also contained the authorization for the replacement of Lock and Dam 26 and the imposition of the fuel-tax on inland navigation. During the final rush for congressional adjournment, this bill never reached the floor for the final vote necessary for passage. Although the controversial portions of the act were incorporated into another bill and did become enacted into law, the remaining portions, including this desired amendment, saw no action.

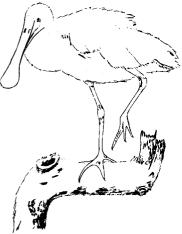
Only after such remedial action is forthcoming will it be possible for the necessary contract to be formally concluded. Until such time, the official sponsorship by the State is not possible. However, immediately upon the signing of the necessary contract, the State Highway and Public Transportation Commission is prepared to begin immediate assumption of the responsibilities thereby incurred.

CHAPTER TWO

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A STUDY OF RECREATIONAL BOATING IN COASTAL WATERS

Study Need



Our studies of the Gulf Intracoastal Waterway in Texas have shown the need for a separate study to determine the nature, magnitude and extent of recreational boating in Texas coastal waters. Bridge opening records for fiscal years 1978-1980

along the 43 mile segment of the GIWW where a

complete record of the marine traffic is available, indicate the pleasure boats accounted for an average of 19.1%-26.1% of the marine traffic on the waterway, depending upon the location.¹ (See Table 3). These traffic counts are made by the State Department of Highways and Public Transportation at the three locations that require the swing-type bridges to open for all marine traffic. Although these totals are indicative of the high recreational traffic volumes for a short section of the GIWW, they do not show the complete traffic picture of the entire Texas coastline.

Because no such recreational study had previously been performed, a complete study of coastal boating was initiated for this report. The preliminary findings of the study are presented herein. The objective of the study was to determine the nature, magnitude and extent of recreational boat traffic in all major Texas coastal waters and particularly the GIWW. Now that energy conservation is no longer only a conversational topic, but a reality, many people are now taking vacations closer to home.

¹Bridge Opening Records, 1978-1980 Fiscal Years, State Department of Highways and Public Transportation.

TABLE 3

BRIDGE OPENINGS FOR GIWW TRAFFIC

Locations	Tugs	Per- cent	Pleasure <u>Vessels</u>	Per- cent	Fishing <u>Vessels</u>	Per- cent	Work Vessels	Per- cent	Total Openings	Cargo* Vessels
Bryan Beach Bridge (FM 1495) Mile 397.6 1978 (Fiscal Year) 1979 (Fiscal Year) 1980 (Fiscal Year)	8,094 8,908 9,183	42.53 47.37 48.83	5,086 4,204 4,418	26.72 22.36 23.49	1,747 1,309 1,481	9.18 6.96 7.88	4,104 4,384 3,723	21.56 23.31 19.80	19,031 18,805 18,805	14,261 15,837 16,274
Sargent Beach Bridge (FM 457) Mile 418.0 1978 (Fiscal Year) 1979 (Fiscal Year) 1980 (Fiscal Year)	7,202 7,988 8.278	60.55 60.70 57.71	3,188 3,424 3,644	26.80 26.02 25.40	1,259 1,517 2,168	10.59 11.53 15.11	245 231 255	2.06 1.76 1.78	11,894 13,160 14,345	14,008 15,765 16,214
Matagorda Bridge (FM 2031) Mile 440.7 1978 (Fiscal Year) 1979 (Fiscal Year) 1980 (Fiscal Year)	8,452 9,514 9,314	51.63 53.39 49.78	3,717 3,203 3,123	22.71 17.97 16.69	3,199 4,044 4,847	19.54 22.69 25.90	1,001 1,059 1,428	6.12 5.94 7.63	16,369 17,820 18,712	14,203 15,861 16,288

*Cargo vessels or barges are included with tugs for number of openings.

SOURCE OF DATA: Bridge Opening Records, State Department of Highways and Public Transportation

Coastal activities can offer an appealing yet reasonably economical option to the vacationer. Recreational activities in the Texas coastal regions generate many economical benefits, therefore it becomes important to determine the actual needs and desires of the recreational boating public. Spokesmen for recreational interests at public hearings for proposed improvements to the Gulf Intracoastal Waterway have indicated that only a survey of the boating public could provide a true representation of the public's marine needs and desires.

So far as can be determined, no survey has ever been attempted to reveal the total extent of recreational boating of all types in Texas coastal waters. In the past, nationwide surveys were performed by federal agencies on a much more extensive level and therefore could not be directly applied to Texas' coastal usage which requires a more intensive restricted survey of public input. The recreational options of the Texas Gulf Coast that are determined by such factors as coastline accessibility, availability of launching facilities, marinas, housing, attractive beaches, good fishing and emergency services or facilities vary so widely even from area to area that difficulty occurs in predicting the characteristics of Texas coastal recreational boating. Conducting a survey of the actual boating public involved would be most effective in developing a true picture of these activities

Barring major changes in recreational activity due to energy shortages, these activities will be increasing along the Texas coastline, as predicted in the Texas Outdoor Recreational Plan.² As the number of

²Texas Outdoor Recreational Plan, State Summary, (December, 1975), Volume 1, page 27.

boating recreationists in Texas grows, they are gaining the rights of equal consideration in the planning of coastal area development. Along with this recreational growth, the potential for marine accidents involving commercial or sea-going vessels increases, therefore making marine safety a major concern of the State. Although the number of accidents involving recreational craft does not appear to be high, the nature of such accidents and their severe consequences requires this attention. Nine of sixty-one incidents reported to the United States Coast Guard during the period 1970-1979 involved a total loss of vessel and eight deaths were incurred in that ten year period, five of which were reported in the fiscal year 1979.³ Knowledge of the more congested areas of boat traffic will help assess where any problems of marine safety may lie and will aid the planning of public facilities to meet the needs of the boating public.

A study of the recreational aspects of the Gulf Intracoastal Waterway and adjacent land areas may also aid in the planning for multipleuse of coastal public lands. Through the results of this study, an indication of the needs of recreational boaters will be more clearly visible thus allowing for the proper planning of improvements to the coastal recreational areas and navigation channels. The State of Texas will become a major landowner along the coastline as its navigation responsibilities develop. Since the development and maintenance of the properties required for commercial navigation is conducted with public funds, it would be desirable to develop them so they may yield the greatest public benefits. Multiple-use of dredge material disposal sites is a strong

³Marine Casualty Statistics, Department of Transportation, United States Coast Guard, 1970-1979. recommendation of the Dredged Material Research Program of the Corps of Engineers.⁴ Much of the general public is critical of turning the banks of the GIWW into one long spoil area; however, functional alternatives do exist. Development of these properties both in the interests of recreation as well as navigation should be one goal of the State.

Description of Survey Area

Records from the Texas Parks and Wildlife Department indicate some 550,000 recreational boats are registered in this state as of July 1979.⁵ All boats propelled by a mechanical means must be registered with the Texas Parks and Wildlife Department. After registering a boat, the owner may then apply for a state title. Although sailboats are not required to register unless equipped with auxilliary power, many do so, as the owner may then apply for a title as proof of ownership. Boat owners have the option to register their boat for two years. As a result, boats listed as currently registered in this study may date back to 1977. After two years of non-renewal registration, the record of a boat is then purged from the department's files. These records contain descriptions of each registered boat including the name of the owner, his address, the classification of the boat's propulsion, and other data including the type of fuel used, if any, and the length of the boat. All of these factors were important in determining the parameters of the study.

⁵Source: Department of Parks and Wildlife, Current Boat Registration Records, February, 1979.

⁴Walsh, Michael R., Malkasian, Mark D., <u>Productive Land Use of Dredged</u> <u>Material Containment Areas: Planning and Implementation Considerations</u>, Technical Report DS-78-20, Dredged Material Research Program, U. S. Army Corps of Engineers, December, 1978.

It would be virtually impossible to query each of the 500,000 boat owners of the State of Texas. In addition, a large percentage of the total boat owners would seldom, if ever, transport their boats long distances to the coast. This study is concerned only with the boats that participate in Texas coastal recreation, therefore, it would be of no value to query thousands of boat owners who never travel to Texas coastal waters. One of the basic assumptions of this study is that few boat owners will travel further than 200 miles to the coast with their boat due to the inconvenience of trailering a boat long distances and the rising cost of travel. Therefore, the survey was arbitrarily limited to boat owners who lived within a 200 mile radius of the coastline.

Analysis of the estimated 1975 Texas population revealed that 6.8 million people or 55.5% of the state's total live within a two hundred mile radius of the Texas coast and almost one third or 4.0 million people live within one hundred miles of the coastline.⁶ To further reduce the survey size only thirty-eight of the ninety-nine counties within the 200 mile radius were selected for a sampling. It was desirable to sample a greater percentage of recreational boat owners who are most likely to frequent Texas coastal waters for recreational purposes. The assumption was made that boat owners within regions having similar demographic characteristics would behave with little variance. Hence, the derivation of three geographical tiers of study. The first tier consisted of sixteen counties that had direct access to coastal waters. Because of the accessibility to the coast, it was assumed that tier one

⁶Source: <u>Texas Almanac</u>, 1978-1979 Edition, 1975 Estimated Population.

would have a greater percentage of residents pursuing coastal recreational activities than counties further inland. This was further justified by the much higher ratio of boat ownership to population than was encountered with other counties within the one hundred mile radius. Therefore, tier one should be more densely surveyed than the other two tiers which were located further from the coast. Tier one was further stratified into five additional regions having similar characteristics, each to receive a full sampling, or as many surveys as each of the other two tiers would receive. The five stratifications of tier one are as follows:

Tier one,	Region	one	Orange and Jefferson Counties
Tier one,	Region	two	Chambers, Harris, Galveston and
			Brazoria Counties
Tier one,	Region	three	Matagorda, Jackson, Calhoun and
			Refugio Counties
Tier one,	Region	four	San Patricio and Nueces Counties
Tier one,	Region	five	Kleberg, Kenedy, Willacy and
			Cameron Counties

The counties in the five regions of tier one contained 3.2 million people or 26.3% of the 1975 estimated state population.⁷ Thirteen counties immediately adjacent to the coastal counties constituted the second tier of this recreational boat study in which 0.6 million persons or 4.8% of the 1975 estimated state population resided.⁸ Those counties forming tier two were Bee, Brooks, Fort Bend, Goliad, Hardin, Hidalgo, Jasper, Jim Wells, Liberty, Live Oak, Newton, Victoria and Wharton. The nine urban counties of Angelina, Bell, Bexar, Brazos, Gregg, Montgomery,

⁷<u>lbid</u>. ⁸lbid.

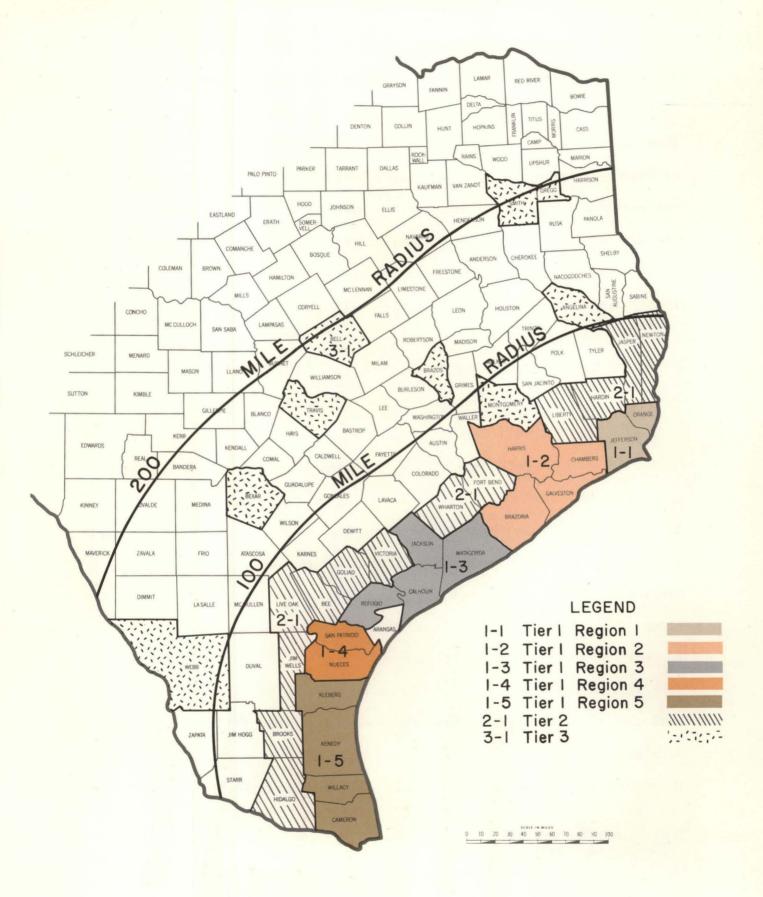
Smith, Travis and Webb were chosen for tier three because their demographic characteristics and their high boat registrations indicated these residents would be the most likely of those residents between the 100 mile and 200 mile radii to look to the coast for their boating activities. (See Figure 1). It was also necessary to determine the percentage of those residents living in close proximity to major lakes, but within the 200 mile radius, who would use the coastal waters as an alternative recreational choice. This third and final tier of the study consisted of nine urban counties within the 200 mile radius of the coast, whose populations totaled 1.9 million or 15.6% of the 1975 estimated state population.⁹ Based on the assumption that most coastal recreationists live within the 200 mile radius of the selected thirty-eight counties totaled about 84% of the persons residing within the two hundred mile radius of the coast.

Selection of the Samples

There are 240,392 recreational boats, both motor-propelled and sailboats, currently registered in the selected thirty-eight survey counties. (That number was thereafter referred to as the universe for analysis purposes in the recreational boat study.) Although a survey of the entire universe would be ideal, it was not feasible because of the cost and time required for such an undertaking. It was only necessary to determine the statistical sample of the universe that would be adequately representative of the entire study area's recreational habits. By means of statistical analysis, a stratified, random selection of

⁹Ibid.

BOUNDARIES OF GEOGRAPHIC STRATUM FOR BOAT SURVEY



samples was calculated as a second reduction of the survey size. Stratification refers to the separation of samples based on factors that would influence their level of participation in coastal recreation, i.e., geographic location, demographic characteristics and the size and type of boat registered. Since boat owners, classified as to size and type of recreational craft, would have similar patterns of activity and reply to the survey with least variance, further stratification was decided upon. The geographic strata, (tier one, regions one through five, tier two and tier three) were thus further stratified into the following four boat classes:

Powerboats	1' - 20'
Powerboats	21' and over
Sailboats	1' - 20'
Sailboats	21' and over

The number of samples selected for this survey was calculated by a statistical equation based on a sampling theory previously successful with other sampling surveys, and was based on the assumption that a minimum of 40% of the surveys would be answered and returned.¹⁰ (See Appendix E) A total of 11,274 samples was calculated to be necessary to meet the requirements of this survey. A minimum sample size within each stratum was established at 750 mailouts where permitted by the availability of samples. Where there were less than 750 available samples within a stratum, the mailout sample size was set at 100% of those registered. This sample size was mathematically derived to maintain

¹⁰Guidelines for Designing Travel Surveys for Statewide Transportation Planning, May 1974, pages 5.3-5.5.

a minimum statistical tolerance in the determination of mean yearly boat trips to coastal waters. The required number of samples, as prescribed by the sampling theory as necessary to produce the data input that would be statistically reliable, were randomly selected by computer according to the geographic strata and the four boat classes (see Table 4) and then mailed a questionnaire.

TABLE 4

STRATIFIED SELECTION OF SURVEY SAMPLES*

POWERBOATS							
	LENGTH	1' - 20'	LENGTH 21' AND OVER				
STRATUM	AVAILABLE SAMPLES	NUMBER SELECTED	AVAILABLE SAMPLES	NUMBER SELECTED			
TIER ONE, REGION ONE	23,279	750	883	750			
TIER ONE, REGION TWO	95,509	750	6,755	750			
TIER ONE, REGION THREE	4,579	750	177	177			
TIER ONE, REGION FOUR	9,650	750	747	747			
TIER ONE, REGION FIVE	3,598	750	275	275			
TIER TWO	21,874	750	731	731			
TIER THREE	67,634	750	2,857	750			

	SAILBOATS						
	LENGTH	1' - 20'	LENGTH 21'	LENGTH 21' AND OVER			
STRATUM	AVAILABLE SAMPLES	NUMBER SELECTED	AVAILABLE SAMPLES	NUMBER SELECTED			
TIER ONE, REGION ONE	80	80	14	14			
TIER ONE, REGION TWO	690	690	120	120			
TIER ONE, REGION THREE	37	37	7	7			
TIER ONE, REGION FOUR	74	74	29	29			
TIER ONE, REGION FIVE	25	25	17	17			
TIER TWO	109	109	20	20			
TIER THREE	486	486	136	136			

*See Appendix A for the number of surveys selected for each county.

Survey Returns

The percentage of survey returns was slightly higher than predicted. Recall that a 40% response to the survey was an important component in the formula that calculated the required number of mailouts necessary to maintain statistical reliability within each of the stratifications. Fourteen of thirty-two indivudal stratum returned better than forty percent of their surveys and thirteen others came within three percent or less of the desired forty percent return. More than forty percent was received for each complete tier and overall, for the three tiers combined, 42.42% responded. The validity of the statistical formula which calculated the number of survey mailouts is supported by the good response to the survey. (See Table 5).

TABLE 5

	POWERBOATS	POWERBOATS 21' AND OVER	SAILBOATS	SAILBOATS 21'
TIER I, REGION I	36.9%	38.0%	44.0%	42.9%
TIER I, REGION II	38.2%	36.0%	35.0%	40.0%
TIER I, REGION III	39,0%	48.5%	29.7%	42.9%
TIER I, REGION IV	38.0%	39.0%	38.0%	58.6%
TIER I, REGION V	38.0%	42.5%	52.0%	47.1%
TIER I, (COMBINED)	39.4%	49.9%	36.4%	43.9%
TIER II	39.7%	37.7%	39.0%	60.0%
TIER III	44.0%	44.6%	38.6%	46.3%
TIER TOTALS	40.2%	46.8%	37.4%	45.8%

STRATIFIED PERCENTAGE OF SURVEY RETURNS*

4,782 TOTAL NUMBER OF SURVEYS RETURNED

11,274 TOTAL NUMBER OF SURVEYS MAILED

= 42.4% RETURN FOR ENTIRE SURVEY

*See Appendix A for response percentages of individual counties for each boat class.

Expanding the Data

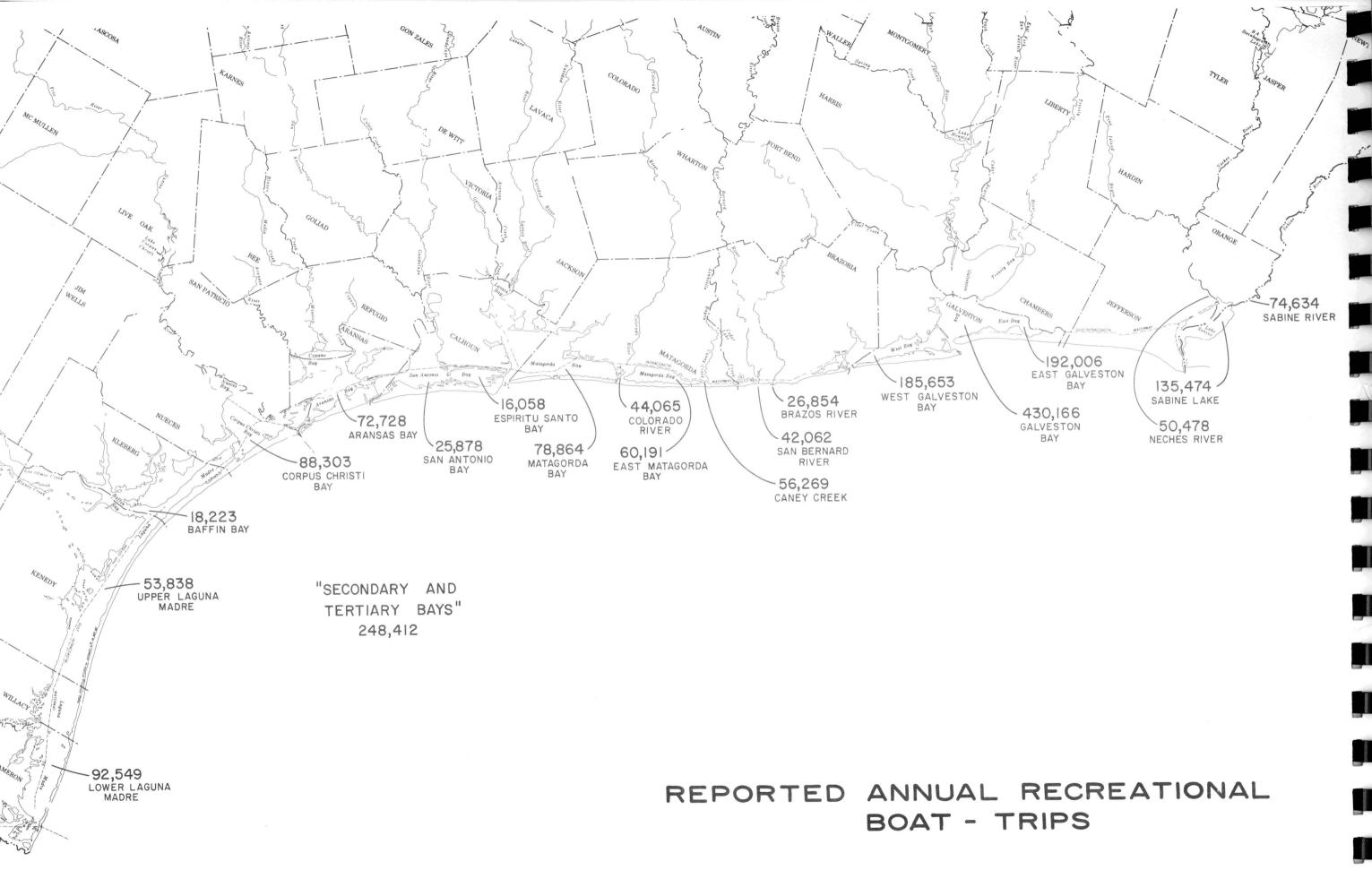
The responses to the survey questionnaire were recorded on computer tape and tabulated for analysis. The forty-two percent response was then expanded to the full universe value of 240,392 registered recreational boats. An expansion factor was calculated and applied to each answer given in the survey to raise it to its' full universe value. Appendix B lists the expansion factors used in this study.

Prelimary Findings

A complete analysis of all of the data acquired by the study questionnaire has not yet been performed. However, the replies to certain key questions have been analyzed and are submitted in this report as preliminary findings. As a result of the survey responses from boat owners in the survey area, a reasonable prediction of the volumes of recreational boat traffic along the Texas coast is now possible. The number of annual recreational boat trips reported by this survey as beginning in major bays or rivers has been depicted on the coastal map shown in Figure 2.

It is important to clarify the actual meaning of the traffic volumes. They represent the number of annual trips that recreationists reportedly begin from a given coastal point. Trips are calculated by relating the number of times per year that a recreationist reports any coastal activity, to each body of water upon which he is said to begin his trips.

Galveston Bay was reported as initiating the highest volume of boat trips with over 430,000 annual recreational boat trips assigned to this body of water. That is more trips initiated than the next two highly



concentrated areas combined, East Galveston Bay and West Galveston Bay. The Galveston Bay complex alone initiates over 800,000 boat trips each year. In addition to this heavy recreational traffic, the Galveston Bay area is a hub of industrial activity and the entrance to one of the busiest port areas in the United States. It was learned from the survey that over 85% of the survey respondents reportedly make more than one trip per year. (Almost 4% travel to the coast 50-200 times per year). See Appendix C.

The questions in this survey were designed not only to locate the regions of maximum activity, but to reveal the periods of expected peak usage. The following list of reported months of usage by recreational boaters is a preliminary indication of when they pursue coastal recreational activities. These tabulations are not a complete picture of which months have the most activity because the affect of the number of trips made by each boat-owner in a given month is not reflected in these peak months. A listing of the months that recreational boaters report using coastal waters in a year is provided in Table 6.

Table 6

	Reported Months	ns	
Month	Expanded Respondents	Month	Expanded Respondents
January	18,690	July	78,526
February	18,894	August	79,711
March	32,895	September	75,308
April	51,452	October	63,332
May	68,562	November	42,052
June	77,787	December	24,100

Although not specifically requested by the questionnaire, many comments were received on survey response cards detailing some of the type of facilities recreationists want and need to make their trips more safe and enjoyable. Some of the more frequently mentioned comments requested more public boat launching facilities along coastal beaches and the addition of docking facilities. The need for additional navigation aids, especially lighted aids for nighttime navigating, was the major need reported for recreational boating, followed by better channel maintenance. Occasionally, criticism of the present marine safety regulations was given. Those who responded this way believed the State could issue better water safety certification and improve the present rules of the road to be more applicable to recreational craft. Enforcement of such rules of the road would be a must for adequate boating safety.

The Importance of the GIWW

Interest in the Gulf Intracoastal Waterway boating traffic is important in any study of coastal boating because much of the traffic must use the GIWW to get from one bay to another or to reach the Gulf. The smaller boats must use it because they can not safely navigate the rougher open waters of large bays or the Gulf and in the event of sudden squalls they would be endangered. The much larger boats must travel the dredged channels of the GIWW because it has sufficient depth for their deeper draft. A total of 1,579,164 trips was determined as the annual reported recreational traffic using this channel. (See Appendix D-3). This is over 79% of all annual coastal boat trips reported in the State of Texas. The breakdown of the totals by boat classes shows that 78.4% of the powerboats from 1'-20' in length, 84.9% of the powerboats over 20' in length, 94.5% of the sailboats from 1'-20' in length and 82.0% of the sailboats over 20' in length are reported as using the GIWW on their coastal boat trips.

Tabulation of the average miles per boat trip on the GIWW for each of the four boat classes is provided in Appendices C-5 through C-8. The necessary data involved in these tabulations came from expanded survey responses, specifically, the reported average miles of travel per trip on the GIWW and the reported number of trips on the waterway. The results of the survey show that the larger class boats, both motor-propelled and sailboats, reported more GIWW mileages per trip than the smaller class boats. The average GIWW mileages per trip for each of the four boat classes were as follows:

Boat Cla	ass l	20.24 miles per trip)
Boat Cla	ass 2	49.25 miles per trip	כ
Boat Cla	ass 3	15.13 miles per trip	2
Boat Cla	ass 4	46.14 miles per trip	5

The Gulf Intracoastal Waterway is a vital artery to the Texas coastal waters system, not only to industrial or commercial traffic, but to recreational traffic as well. Analysis of the survey data indicated that over 79% of the nearly 1,600,000 recreational boat trips on Texas coastal waters each year, use the GIWW for passage from one area to another. Proper management of the Texas GIWW and surrounding Texas coastal waters will require an increasing awareness of the marine needs of the recreational boating public.

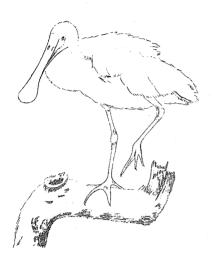
Summary

Since recreational boating contributes greatly to the Texas coastal activity, its' interests should be an important consideration in the State's planning for the development of its' coastal areas. The total contribution to the Texas economy generated by the public recreational activities has been estimated to be approximately 3 billion dollars each year.¹¹ A substantial portion of this sum is generated by coastal recreational activities. Thus, whatever improvements are made to the coastal areas in the interest of recreationists are more readily justified. Continued improvements for the marine safety of recreationists should be a major concern of the State. It may be assumed that with the growing volumes of marine traffic that often produce congestion, the potential for accidents increases and therefore merits the attention of the State in providing education and regulations for marine safety and in planning the strategic placement of emergency facilities. As a result of this study, it will be easier to determine the actual needs of the recreational boating public and consequently, developing answers to their needs should be easier also.

¹¹Texas Outdoor Recreation Plan, State Summary, (December 1975), Volume 1, page 27. CHAPTER THREE

A NEW LOOK AT TEXAS' MARINE COMMERCE

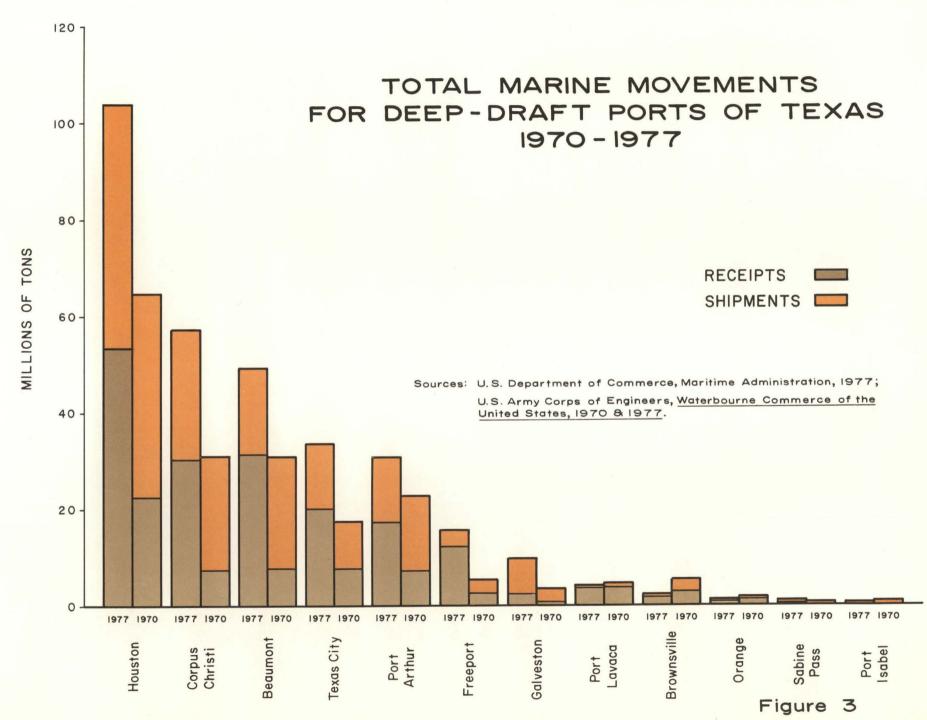
A NEW LOOK AT TEXAS' MARINE COMMERCE



The 1978 GIWW report noted that the tonnage moved on the GIWW in Texas had slumped from a total in 1972 of 69 million tons to a total of 59 million tons in 1975. Movement of goods since 1975 has increased and was recorded to reach 72 million tons in 1977 (the latest year for which statistics were available.) The use of most recent available statistics for indi-

vidual marine movements rather than statistics obtained from totaling tonnages for individual segments determined a more accurate total of tonnages without the previous duplication errors. This increase affirms the fact that the GIWW remains a major artery in the movement of goods and is deserving of consideration and support to enhance its service to the transportation system of our nation.

In a portion of Chapter 4 of the 1978 report, text and illustrations explained trade movements along segments of the waterway and noted amounts of goods that moved on these segments. In this chapter, movement of goods through the deep water ports of Texas will be reported as well as the changing pattern of these movements as compared to previous years. Using 1970 and 1977 as comparative years, Figure 3 compares the total tonnage of shipments and receipts using the deep water ports of Texas. Immediately noticeable is the rapid growth of tonnage that is received in these ports as compared to the amount that are shipped out. Houston receipts were up 133% while shipments increased by 21%. Corpus Christi





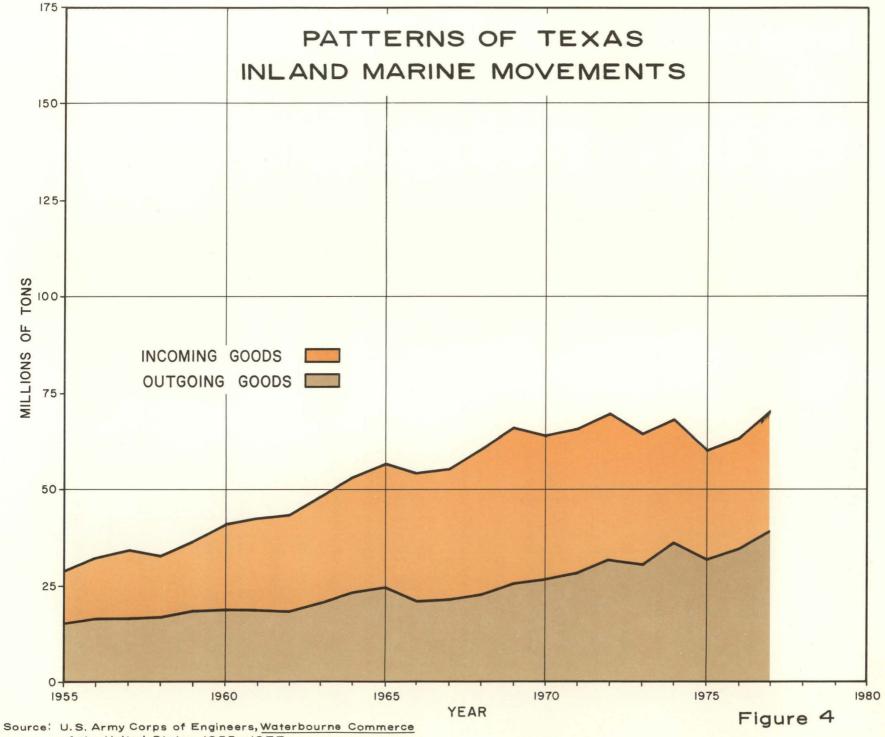
receipts were up 318% while shipments were up 14%. Beaumont receipts up 310%, shipments down 23%. These and other records show that there is a changing pattern that is in progress at these deep water ports that as shown in Figure 3 is beneficial to some ports and not to others.

In order to understand more easily the significance of these changes it is necessary to plot the changes of movement of goods along the three recognized paths of waterway traffic. These paths are: inland waterways that include the GIWW and all other inland waterway systems serving the inland United States, coastal waterways that serve other states and are waterways that follow deep water paths of the coastline; and foreign trade movements.

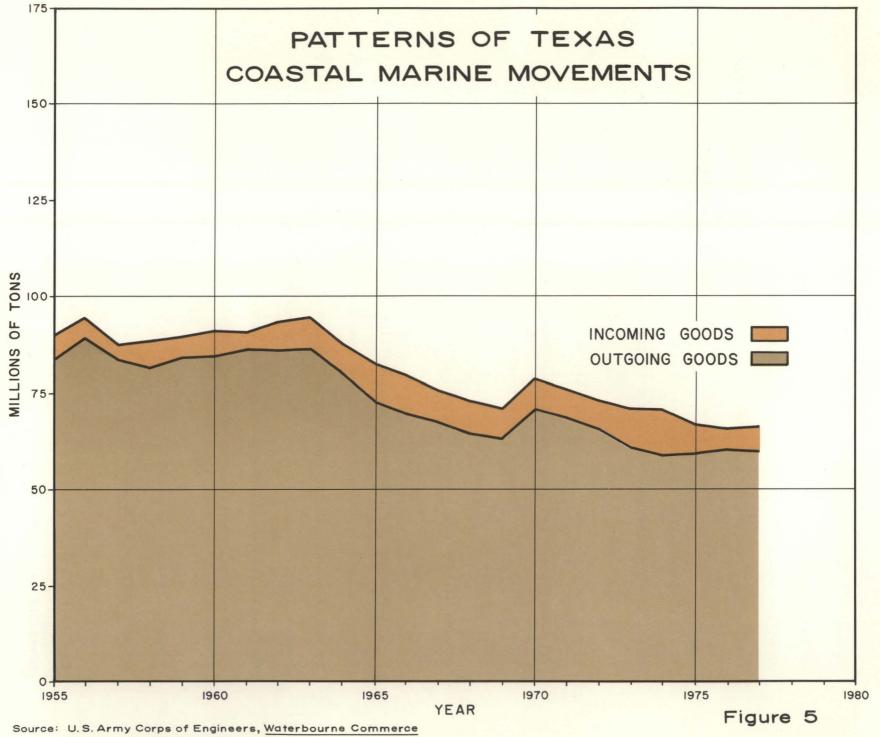
Total volume of inland marine movement has been increasing moderately since 1955 with the exceptions of 1973 and 1975 where some declines occurred. Totals in 1975, 1976 and 1977 again increased until a total of 72 million tons of movement was recorded in 1977. This pattern of movement shown in Figure 4 notes that until 1973 the higher percentage of movement was incoming goods to the port areas from the GIWW. But in 1973, this trend reversed and out-going volumes are now more than the in-coming. As the coastal and foreign movements through the deepwater ports are developed it will be noted that their patterns are opposite trends to the changes that have occurred within inland marine movements.

The coastal marine movements and their patterns are illustrated in Figure 5. Though the total volumes of coastal marine movements have fluctuated for many years, there was a steady decline of total tonnages from 1963 to 1977 with only a few upward trends shown in 1970 and again

3~3



of the United States, 1955–1977.



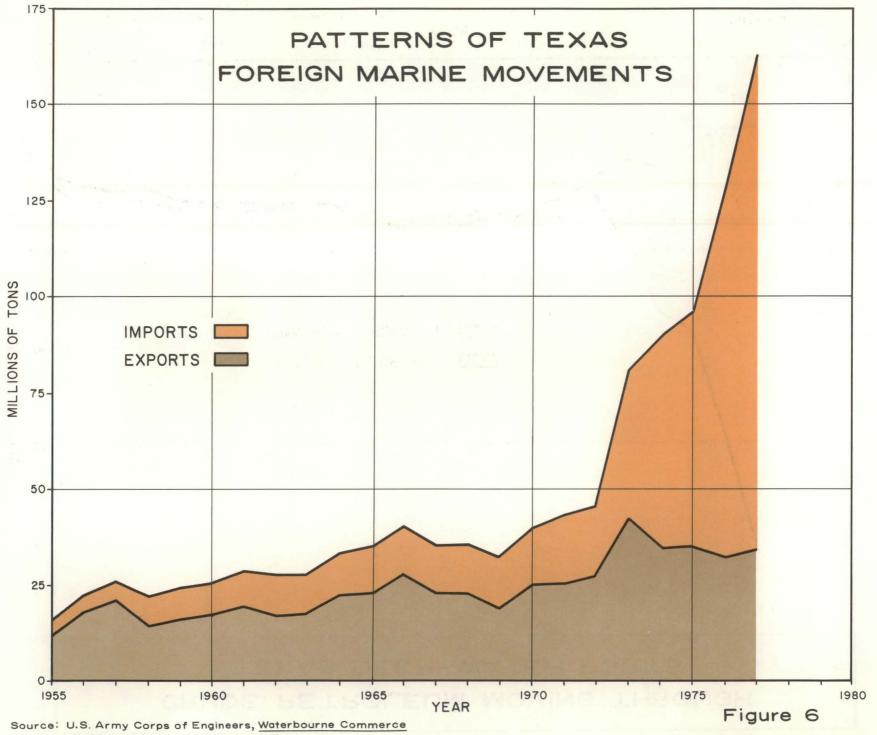


in 1977. A greater volume of out-going goods has always been apparent as compared to in-coming goods with the percentages of each remaining about the same. The coastal marine movements therefore have had only a small effect on changing patterns seen in collective total marine movements.

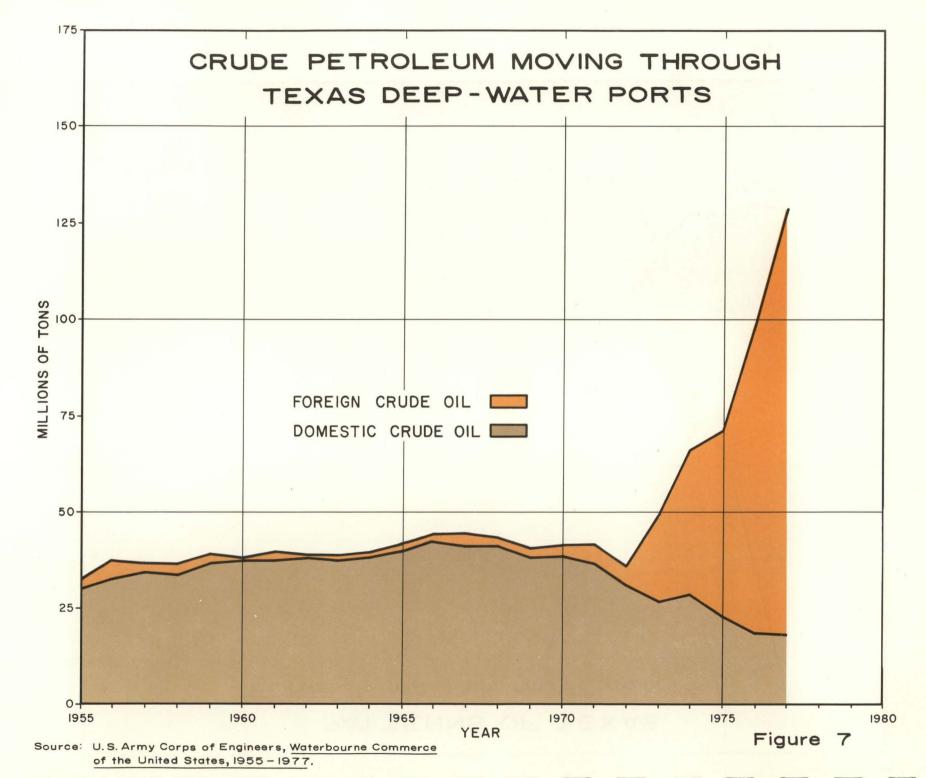
Only a quick glance at Figure 6 "The Patterns of Texas Foreign Marine Movements," is needed to explain where the major changes that effect Texas marine commerce movements have occurred. From 1955 through 1973, Texas exported more foreign goods than were imported. In 1974, 56 million tons were imported and only 34 million tons were exported. This new pattern has been maintained through the following years. From 1974 to 1977 the sudden influx of foreign imports dramatically increased until by 1977, a total of 162 million tons of foreign goods was moving throughout the Texas marine system. Of that total 79% was import traffic and only 21% export traffic.

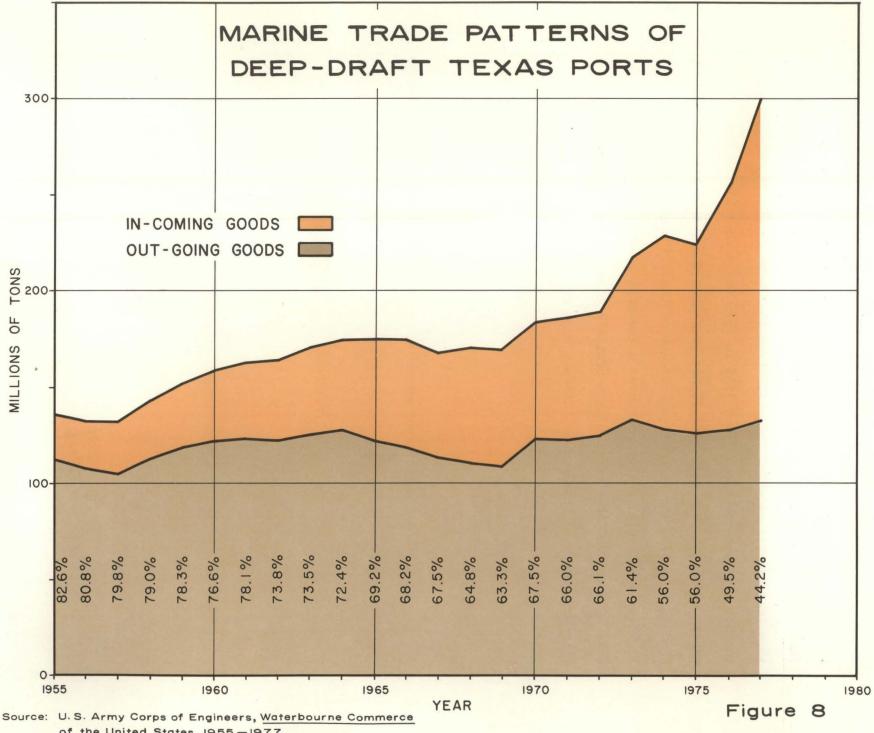
Investigations of the major commodities that are moved along the foreign waterway service point out one commodity that contributed most to the rapid rise of foreign imports. Figure 7 illustrates that from 1944 to 1972 the amount of crude petroleum moving through our deep water ports was predominantly domestic crude. Domestic petroleum movements in that period remained as a relatively stable volume, but had begun a steady decline since 1966. Beginning in 1972 the steady increase of foreign crude oil movements have dominated the crude petroleum market and far out-weigh the movement of domestic crude.

Collectively the totals for these three waterway systems culminate in Figure 8 which is a plot of the yearly totals of export and import movements on a statewide level. Percentages noted on the graph are the



of the United States, 1955–1977.





of the United States, 1955-1977.

percent of the total that is export or out-going movements through the Texas deep water ports. The year 1974 is the last year that records show that exports exceeded imports. From that year on the incoming tonnage has been dominant. From 1955 to 1975 the percentage decline of export was 26.6% or a rate of 2.7% per year over the twenty year period. From 1975 to 1977 the percentage increase of imports over exports is 11.8% or a rate of 5.9% per year over a two year period. As other later data becomes available it is highly probable that the percent import rate per year will continue to increase even more.

TABLE 7

	STATE	RECEIPTS	PERCENTAGE OF RECEIPTS		STATE	RECEIPTS	PERCENTAGE OF RECEIPTS
1.	Louisiana	1,057,889	21.17%	10.	Virginia	80,286	1.61%
2.	Florida	970,049	19.42%	11.	Georgia	71,715	1.43%
3.	Puerto Rico	825,614	16.52%	12.	Maryland	63,406	1.27%
4.	Alabama	441,139	8.83%	13.	Connecticut	15,851	0.32%
5.	New York	367,558	7.36%	14.	Washington	9,722	0.19%
6.	New Jersey	360,034	7.21%	15.	Delaware	4,535	0.09%
7.	Pennsylvania	334,137	6.69%	16.	Massachusetts	838	0.02%
8.	Virgin Islands	221,638	4.44%	17.	South Carolina	32	0.00%
9.	California	171,519	3.43%		TOTALS	4,995,962	100.00%

COASTAL DOMESTIC TRADE RECEIPTS (TONS)

SOURCE: U. S. Department of Commerce, Maritime Administration, 1977

TABLE 8

COASTAL DOMESTIC TRADE SHIPMENTS (TONS)

	STATE	SHIPMENTS	PERCENTAGE OF TOTAL SHIPMENTS	STATE	SHIPMENTS	PERCENTAGE OF TOTAL SHIPMENTS
1.	Florida	16,362,455	27.78%	13. Maine	1,115,750	1.89%
2.	New York	12,630,057	21,44%	14. Louisiana	899,260	1.53%
3.	Massachusetts	6,491,011	11.02%	15. California	897,159	1.52%
4.	Pennsylvania	3,112,365	5.28%	16. Delaware	400,538	0.68%
5.	New Jersey	2,959,806	5.03%	17. Puerto Rico	364,509	0.62%
6.	North Carolina	2,347,834	3.99%	18. New Hampshire	290,761	0.49%
7.	South Carolina	1,860,769	3.16%	19. District of (Columbia 269,656	0.46%
8.	Virginia	1,850,468	3.14%	20. Washington	220,781	0.37%
9.	Maryland	1,781,738	3.03%	21. Alabama	159,129	0.27%
10.	Georgia	1,714,175	2.91%	22. Michigan	44,515	0.08%
11.	Connecticut	1,637,163	2.78%	23. Oregon	13,233	0.02%
12.	Rhode Island	1,475,883	2.51%	TOTAL	58,899,015	100.00%

SOURCE: U. S. Department of Commerce, Maritime Administration, 1977.

	STATE	MOVEMENTS	PERCENTAGE OF TOTAL MOVEMENTS		STATE	MOVEMENTS	PERCENTAGE OF TOTAL MOVEMENTS
1.	Florida	17,332,504	27.13%	14.	Puerto Rico	1,190,123	1.86%
2.	New York	12,997,615	20.34%	15.	Maine	1,115,750	1.75%
3.	Massachusetts	6,491,849	10.16%	16.	California	1,068,678	1.67%
4.	Pennsylvania	3,446,502	5.39%	17.	Alabama	600,268	0.94%
5.	New Jersey	3,319,840	5.20%	18.	Delaware	405,073	0.63%
6.	North Carolina	2,347,834	3.67%	19.	New Hampshire	290,761	0.46%
7.	Louisiana	1,957,149	3.06%	20.	District of Columbia	269,656	0.42%
8.	Virginia	1,930,754	3.02%	21.	Washington	230,503	0.36%
9.	South Carolina	1,860,801	2.91%	22.	Virgin Islands	221,638	0.35%
10.	Maryland	1,845,144	2.89%	23.	Michigan	44,515	0.07%
11.	Georgia	1,785,890	2.80%	24.	Oregon	13,233	0.02%
12.	Connecticut	1,653,014	2.59%	TOTA	L	63,894,977	100.00%
13.	Rhode Island	1,475,883	2.31%				

TABLE 9

COASTAL DOMESTIC TRADE MOVEMENTS (TONS)

SOURCE: U. S. Department of Commerce, Maritime Administration, 1977.

TABLE 10

FOREIGN TRADE SHIPMENTS (TONS) FOREIGN TRADE RECEIPTS (TONS) PERCENTAGE PERCENTAGE PORT SHIPMENTS OF SHIPMENTS PORT RECEIPTS OF RECEIPTS 1. Houston 15,527,326 45.84% 35,513,520 1. Houston 27.61% 2. Galveston 5,923,305 17.49% 2. Corpus Christi 27,318,240 21.24% 3. Corpus Christi 4,292,684 12.67% 3. Beaumont 23,870,384 18.56% 4. Beaumont 2,934,493 8.66% 14,008,824 4. Port Arthur 10.89% Port Arthur 2,601,343 5. 7.68% Texas City 12,314,057 9.57% 5. Freeport 1,277,342 6. 3.77% Freeport 6. 10,139,892 7.88% Texas City 740,179 7. 2.19% 7. Port Lavaca 2,958,417 2.30% Brownsville 8. 287,667 0.85% 8. Galveston 1,653,236 1.29% 9. Port Lavaca 261,181 0.77% 9. Brownsville 849,359 0.66% 10. Orange 25,289 0.08% 10. Orange 145 0.00% 128,626,074 TOTALS 33,870,809 100.00% TOTALS 100.00%

TABLE 11

SOURCE: U. S. Army Corps of Engineers, Waterbourne Commerce of the United States, 1977

TABLE 12

TOTAL MARINE MOVEMENTS (TONS)

	PORT	SHIPMENTS	RECEIPTS	LOCAL	TOTALS	PERCENTAGE OF TOTAL MOVEMENTS
1.	Houston	48,585,963	50,476,198	5,052,058	104,114,219	32.64%
2.	Corpus Christi	24,269,781	28,904,191	1,107,062	54,281,034	17.02%
3.	Beaumont	17,809,051	31,558,493	397,917	49,765,461	15.60%
4.	Texas City	13,610,451	19,935,546	27,936	33,573,933	10.53%
5.	Port Arthur	13,952,396	17,014,130	42,119	31,008,645	9.72%
6.	Freeport	3,297,770	13,322,379	82,846	15,702,995	4.92%
7.	Galveston	7,766,193	2,788,385	62,987	10,617,565	3.33%
8.	Port Lavaca	638,740	3,439,619	-	4,078,359	1.28%
9.	Chocolate Bayou	635,935	1,931,280	-	2,567,215	0.80%
10.	Victoria Canal	2,033,480	512,074	-	2,545,554	0.80%
11.	Brownsville	811,035	1,319,506	-	2,130,541	0.67%
12.	Port O'Connor	1,557,562	285,082	-	1,842,644	0.58%
13.	Matagorda Bay	1,256,882	-	19,854	1,276,736	0.40%
14.	Orange	161,550	841,781	-	1,003,331	0.31%
15.	Port Aransas	723,379	189,031	22,214	934,624	0.29%
16.	Arroyo Colorado	17,403	690,452	1,499	709,354	0.22%
17.	Sabine Pass	532,264	18,260	-	550,524	0.17%
18.	Trinity River	393,730	41,834	-	435,564	0.14%
19.	Cedar Bayou	127,398	302,924	-	430,322	0.14%
20.	San Bernard River	298,494	112,328	-	410,822	0.13%
21.	Port Isabel	177,213	9,632	260	187,105	0.06%
22.	Rockport	3,349	22,069	116,576	141,994	. 0.04%
23.	High Island	68,489	50,809	-	119,298	0.04%
24.	Fulton Beach	97,588	16,555	-	114,143	0.04%
25.	Caplen	63,050	18,068	-	81,118	0.03%
26.	Clam Lake	64,914	8,873	-	73,787	0.02%
27.	Double Bayou	49,212	23,464	-	72,676	0.02%
28.	Trinity Bay	22,306	45,862	-	68,168	0.02%
29.	Port Mansfield	5,916	33,075	1,381	40,372	0.02%
30.	Star Lake	36,155	-	-	36,155	0.01%
31.	Laguna Madre	14,048	5,026	-	19,074	0.01%
32.	Port Bolivar	13,829	-	-	13,829	0.01%
33.	Brazos River	-	5,171	-	5,171	0.00%
	TOTALS	139,095,526	172,922,097	6,934,709	318,952,322	
		43.61%	54.22%	2.17%	100.00%	

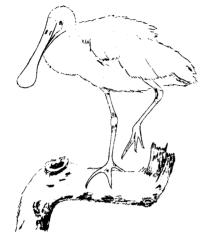
SOURCE: U.S. Army Corps of Engineers, Waterborne Commerce of the United States, 1977. U.S. Department of Commerce, Maritime Administration.

CHAPTER FOUR

THE FUTURE FOR NAVIGATION PROJECTS STILL CLOUDED

FRUJECIS STILL CLOUDE

THE FUTURE OF NAVIGATION PROJECTS STILL CLOUDED



Introduction

In the 1978 report, submitted to the sixty-sixth session of the Texas Legislature, it was felt necessary to include an entire chapter¹² devoted to the changing political environment that was affecting navigation

projects. This chapter traced the beginnings

of federal responsibility for navigation improvements, enumerated the various agencies involved in navigation regardless of the extent of their individual roles and gave a re'sume' of some of the many recommendations for changes to the existing authorization and funding processes that are currently in use. Finally, the chapter reviewed the events leading to and culminating in the first user-fee tax ever imposed on navigation at the federal level. The first stage of this tax, a four-cent tax on fuel used for commercial navigation on the inland navigation network went into affect on October 1, 1980. While this fuel-tax was not considered a cost recovery measure, due to the limited income that would be thereby produced, all revenues from the tax are required to be deposited in an open-ended navigation trust fund which shall be available for inland waterway projects. The creation of such a trust fund suggested that the battle for cost-recovery was not over.

¹²The Gulf Intracoastal Waterway in Texas, 1978, Chapter 3, The Changing Political Environment for Navigation Projects.

Sponsorship Responsibilities Challenged

While the failure of the Ninety-fifth U. S. Congress to enact the legislation that sought to amend Section 221(b) of the Flood Control Act of 1970, (Public Law 91-611), left the offending non-federal sponsorship requirement to hold the Federal Government free from damages still in effect, thus further negating any attempt to sign an official contract with the U. S. Army, Corps of Engineers, a sudden reversal of a longstanding agreement produced the next crisis. In March, 1979, the Corps of Engineers issued a revised ruling that all non-federal sponsors would henceforth be required to construct or pay for all levees, weirs and drainage ditches required for the containment of dredged material from navigation projects. While this requirement had been a part of all projects authorized after 1960, it had never been a requirement for projects authorized prior to that date.

Among the many federal navigation projects caught by this sudden reversal in policy was the maintenance dredging required on the GIWW. While certain small segments of this waterway in Louisiana were under state sponsorship, the majority of the waterway in both Louisiana and Texas had no sponsor other than the parishes or counties who had provided the original right-of-way and/or disposal areas which had been required when the original channel had been constructed. None of these local government bodies were prepared nor inclined to provide the funds or services required.

The situation in Texas was further complicated by the fact that through the Texas Coastal Waterway Act of 1975, the State of Texas was declared to be the non-federal sponsor for the main channel of the GIWW

4-2

in Texas. Thus, this act precludes any other government body from assuming the duties that go with such sponsorship responsibilities. However, no contract with the Corps of Engineers has been possible due to the conflict between federal statutes and the State Constitution, therefore there was no non-federal sponsor available or possible for the GIWW in Texas. Any strict interpretation of the new ruling would immediately jeopardize the required maintenance dredging on this vital waterway. Recognizing that without the necessary maintenance dredging the channel would soon become shoaled to the extent that navigation on the waterway would become hazardous or even impossible, the District Engineer responsible for keeping this waterway safe and navigable within the Texas borders decided to continue to provide the levees, weirs and drainage ditches required as in the past until such time as he was overruled by higher authority and ordered to cease maintenance of the channel in Texas.

While the future of the GIWW in Texas remained in jeopardy, other shallow or deep draft channels in Texas were also affected. These other channels were the responsibility of the various navigation districts or port authorities. Many projects were postponed due to the rising costs to the sponsors, while other projects proceeded with the sponsor assuming the new costs. Meanwhile efforts were begun to introduce and pass federal legislation that would force at least a three-year moratorium on enforcement of this new ruling. Finally, in the face of such opposition to its' revised interpretation of sponsorship responsibilities, the Corps of Engineers rescinded the ruling until the U. S. Congress had a chance to address the problem.

Federal Funding is Jeopardized

The next major blow to strike navigation projects occured on March 25, 1980.¹³ The rising costs of construction and maintenance projects due to higher fuel costs and other inflationary pressures led to a shortfall in funding available to the Corps of Engineers for the fiscal year 1980. In addition, there appeared to be reductions forthcoming in the appropriations anticipated for the fiscal year 1981. As a consequence, the Corps of Engineers ordered a temporary suspension of advertising of contracts, bid openings and contract awards. Only those contracts for projects having substantial impact on human lives would hereafter be considered for letting. The current shortfall was reported to be \$170 million for the fiscal year 1980 with funding cuts from \$100-\$165 million proposed for the fiscal year 1981 budget of \$414 million. Meanwhile, the Corps of Engineers had scheduled a record-setting \$37 million for maintenance dredging and structural repairs to navigation channels in Texas.¹⁴ How much of this needed work would have to be postponed due to the funding shortfall was uncertain.

Permitting Processes Delay Maintenance

Revisions to existing contracts and the federal funding problem were not the only problems to be encountered by navigation interests during this period. Strict environmental regulations concerning the disposal

¹³The Waterways Journal, May 10, 1980, page 8, <u>MRC President Explains</u> How Cuts Will Affect Corps Work.

¹⁴The Waterways Journal, May 3, 1980, page 8, Federal Spokesmen Address AWO Region 3 Membership.

of dredge materials have resulted in a lengthy permitting process, both state and federal, that endangers the viability of existing navigation projects. Such an example was the shoaling problem encountered in New York harbor. Necessary maintenance dredging had been postponed because no disposal area acceptable to the Environmental Protection Agency could be located so that the necessary dredging permit could be issued. The main obstacle to selection of a site was the requirement that all bioassay testing to determine the effect that the dredged material would have on the ecology of the disposal site must be completed before the permit could be issued. Meanwhile siltation continued until vessels could no longer reach their piers for docking. Shipping concerns threatened to shut-down all shipping into New York and then to sue the port authority for failure to fulfil their lease terms. Only an emergency permit forced through over the objections of the Environmental Protection Agency's objections prevented the closing of the Port of New York in May, 1980.¹⁵ Lake Charles, Louisiana was fighting a similar battle to secure a dredging permit from the Environmental Protection Agency to allow them to commence dredging a deeper channel to a new multi-million dollar natural gas unloading plant which was nearly complete and for which certain specified channel depths were a prerequisite to terms of the contract for locating the plant along the Lake Charles channel.¹⁶

It was not only the federal permitting process which was seriously delaying navigation projects, some states also require the issuance of

4-5

¹⁵Speech by Brigadier General Hugh Robinson, Deputy Director of Civil Works, to the Louisiana Intracoastal Seaway Assn., Lafayette, La., April 10, 1980.

¹⁶¹bid.

a state permit before any dredging projects can be initiated. Seemingly, those states that do require permits are also very slow in the processing of permit applications. As an example, the State of Florida requires the same water standards for both point-source pollution and the disposal of dredged material. The Corps of Engineers can not begin any maintenance dredging of the fifteen major ports, twenty-seven small harbors or the 2.583 miles of navigable waterways in Florida without receipt of the state permit. Between October 1, 1979 and May 24, 1980, the Corps of Engineers had applied for fifteen dredging permits but had only received four completed permits. Although these navigation facilities represent a federal capital investment of \$500 million and account for some \$6.9 billion in export and import business within the state, the maintenance dredging to protect these facilities is too often delayed which leads to groundings, light-loading of vessels and some accidents.¹⁷ Even the environment is endangered by pollution from accidents while the necessary permits are delayed. Because of the severity of the growing problem, the Corps of Engineers has threatened to impose the following alternatives to the State of Florida: (1) to deauthorize, at the State's request, all federal navigation channels within the state at enormous cost to the state's economy; or, (2) to take the State to court to seek an order requiring the State of Florida to remove all navigation obstacles (shoaling in channels) from federal waterways at their own expense. ¹⁸

¹⁷The Waterways Journal, July 12, 1980, Delays, Lack of Funding Threaten Dredging Work.

¹⁸U. S. Army Corps of Engineers presentation to the Gulf Intracoastal Canal Association Annual Meeting, August 8, 1980, Victoria, Texas.

It has been reported that permit delays and restrictions have cost the United States 25 million tons of commerce worth \$3.4 billion each year. Some navigation interests believe these losses are having a major impact on the U. S. economy and may accelerate the current recession. While such opinions may be speculative, there is no doubt that delays to maintenance projects, combined with the rising costs of such projects along with a funding crisis have forced increases in shipping costs due to traffic congestion, the light-loading of vessels due to channel shoaling and the increased risk of accidents due to navigation obstacles. Such increases in shipping costs are, as always, borne by the ultimate consumer, the general public.

Federal Studies Could Lead to Changes

It would be impossible to discuss the future for navigation projects without including the latest update on two very important studies currently underway. The preceding report, submitted to the Sixtysixth Session of the Texas Legislature, mentioned a federal study of inland waterway user fees that was required under Section 205 of the legislation that imposed the first federal tax on commercial navigation in U. S. history. The legislation required that the Secretaries of Transportation and Commerce conduct a full and complete study of inland waterway user charges, then make findings and policy recommendations to the U. S. Congress by September 30, 1981. While this study is still in progress and no preliminary results have been announced, there have been stern warnings that this study is oriented strictly from the national viewpoint and could produce recommendations that would adversely affect local or regional transportation facilities. In fact, Mr. John Nachtsheim, Assistant Administrator, Maritime Administration, U. S. Department of Commerce and an active participant in this study, while addressing the 1979 Annual Meeting of the National Waterways Commerce, Inc. in Nashville, Tennessee, called on all states or regional bodies affected by inland navigation to conduct studies of the impact of navigation user-fees at their own local level. The Section 205 Study will focus on the national impacts, but the states' input is essential if their interests are to be protected.

In recognition of Mr. Nachtsheim's warning and realizing the need for a strong, knowledgeable input into the recommendations that will be forthcoming from the Section 205 Study, this department, in cooperation with the Texas Transportation Institute, on September 1, 1980, began a study of the impact of navigation user-fees upon the economy of Texas. This study is scheduled to be completed by August 31, 1980, just one month before the Section 205 Study Recommendations are due to be presented to the U. S. Congress.

While some states had already done such studies, most had not; however, now more state or regional bodies saw that they would have to develop the facts needed to protect their own local interests. One of these was the Missouri River Marketing Office, a Nebraska state agency, which announced in September, 1980, that they were initiating a study to identify the economic impact of high-level user charges on Nebraska and other Missouri River states.¹⁹

¹⁹The Waterways Journal, October 4, 1980, page 26, <u>Marketing Office</u> to Study User Tax.

4-8

The second study that could have a strong impact on navigation in Texas is the National Waterways Study. This study was mandated under Section 158 of the Water Resources Development Act of 1976. The act directed the Corps of Engineers to identify and analyze alternative strategies for providing a navigation system to serve the nation's current and projected transportation needs. The study has been underway for three years and is due to be completed in 1981 and its' recommendations submitted to the U. S. Congress. To meet the study objectives the following tasks were performed:

- The nation's potential demand for water transportation was forecasted
- The capability of the nation's existing waterway system to meet both current and projected national needs was assessed
- 3) The relationship between the use of waterways for transportation as opposed to other purposes (e.g., hydropower, recreation, water supply, irrigation, flood-control) was examined
- 4) Alternative strategies to meet the projected national transportation needs were developed and evaluated.

Using a baseline year of 1977 and a twenty-five year projection to the year 2003, the study has forecast an increase in demand for domestic marine shipments of 48%, versus an increase in demand of 88% for rail transportation and 19% for pipeline transportation. The principal commodities causing these projected increases in marine transportation were identified as coal, up 126%-197%; farm products, up 115%-146%; and metallic ores, up 76%-112%. These increases were partially offset by projected decreases in demand for marine transportation for crude petroleum of 13% and petroleum products of 44%. These projected demands would not bode well for the future of domestic marine transportation in Texas where crude petroleum and petroleum products are major commodities presently being shipped to/ from Texas. Most of the commodities projected for substantial increases will not move in domestic marine commerce in Texas.

In addition to the bleak future marine shipping picture presented by these projections, another blow could be dealt to the Texas economy in the waterway classification system developed in this study. The nation's navigable waterways were classified into three classifications, (A, B and C), using the projected operation and maintenance costs $(0 \in M)$ divided by the projected ton-miles of use for the year 2003. Class A waterways, those having an O&M/TON-MILE ratio of less than 1.5 mills, included the GIWW from Mobile Bay, Alabama to Corpus Christi, Texas. The section of the GIWW from Mobile Bay, Alabama to St. Marks, Florida was classified as Class B, or those waterways having an O&M/TON-MILE ratio of 1.5 to 5 mills. The remaining section of the GIWW, from Corpus Christi to Brownsville, Texas, was classified as Class C, or those waterways having an O&M/TON-MILE ratio over 5 mills. Under some of the various funding strategies used for alternative analysis in this study, those waterways classified under the B or C category could be relegated to receiving minimum funds for operation and maintenance or could even be deauthorized as federal projects. Such actions could have a severe affect on the economy of South Texas and indirectly upon the entire state.

The introduction of a fuel-tax on the inland waterway system; the continuing clamor for further cost-recovery or cost-sharing on navigation projects; the federal funding crunch for marine transportation due to inflation and the rising costs to satisfy environmental concerns; and the apparent narrow orientation of the two major federal navigation studies; all seem to indicate that the trend to neglect or downgrade navigation projects will continue in the future at the federal level. State and regional interests will have to be active and alert to protect their local interests in maintaining a viable domestic navigation system, upon which much of their economy depends. BIBLIOGRAPHY

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BIBLIOGRAPHY

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APPENDIX A

CLASS A

POWERBOATS 1-20 FEET IN LENGTH

CLASS	LENGTH IN FEET
A-1	1-12
A-2	13-14
A-3	15-16
A-4	17-18
A-5	19-20

CLASS B

POWERBOATS 21 FEET AND OVER

CLASS	LENGTH IN FEET
B-1	21-22
B-2	23-24
B-3	25-26
B-4	27-28
B-5	29-30
в-6	31-32
B-7	33-34
B-8	35-36
B-9	37-38
B-10	39-40
B-11	40 and over

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CLASS C

SAILBOATS 1-20 FEET IN LENGTH

CLASS	LENGTH IN FEET
C-1	1-12
C-2	13-14
C-3	15-16
C-4	17-18
C-5	19-20

CLASS D

SAILBOATS 21 FEET AND OVER

CLASS	LENGTH IN FEET
D-1	21-22
D-2	23-24
D-3	25-26
D-4	27-28
D-5	29-30
D-6	31-32
D-7	33-34
D-8	35-36
D-9	37-38
D-10	39-40
D-11	40 and over

С	L	Α	S	S	Α	- 1

POWERBOATS OF 1'-12' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-1 BOATS	PERCENTAGE: CLASS A-1 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
JEFFERSON	15,338	1,175	7.66%	494
ORANGE	7,941	589	7.42%	256
REGION I TOTALS	23,279	1,764	7.58%	750
BRAZORIA	8,297	997	12.02%	67
CHAMBERS	1,008	118	11.71%	8
GALVESTON	7,805	851	10.90%	60
HARRIS	78,399	7,353	9.38%	615
REGION II TOTALS	95,509	9,319	9.78%	750
CALHOUN	1,317	71	5.39%	217
JACKSON	958	76	7.93%	158
MATAGORDA	1,745	176	10.09%	285
REFUGIO	559	46	8.23%	90
REGION III TOTALS	4,579	369	8.06%	750
NUECES	7,025	774	11.01%	547
SAN PATRICIO	2,625	291	11.08%	203
REGION IV TOTALS	9,650	1,065	11.04%	750
CAMERON	2,614	321	12.28%	545
KENEDY	14	5	35.71%	3
KLEBERG	637	37	5.81%	133
WILLACY	333	14	4.20%	69
REGION V TOTALS	3,598	377	10.48%	750
TIER I TOTALS	136,615	12,894	9.44%	3,750

NUMBER OF CLASS A-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
11	0.94%	6	54.55%	2	33.33%
2	0.34%	0	-	0	-
13	0.74%	6	46.15%	2	33.33%
0	_	0	_	0	_
0	_				
	-	0	-	0	-
0	-	0	-	0	-
2	0.03%	1	50.00%	0	-
2	0.02%	1	50.00%	0	-
2	2.82%	1	50.00%	1	100.00%
1	1.32%	0	_	0	-
1	0.57%	1	100.00%	1	100.00%
1	2.17%	0	_	0	-
5	1.36%	2	40.00%	2	100.00%
12	1.60%	8	66.67%	3	37.50%
2	0.69%	0	-	0	-
14	1.31%	18	57.14%	3	37.50%
20	0.31%	12	60.00%	10	83.33%
1	20.00%	1	100.00%	1	100.00%
1	2.70%	0	_	0	
0					_
		0	-	0	-
22	5.84%	13	59 .09%	11	84.62%
54	0.42%	30	55.56%	18	60.00%

CLASS A-1

POWERBOATS OF 1'-12' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-2 BOATS	PERCENTAGE: CLASS A-2 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
JEFFERSON	15,338	5,766	37.59%	494
ORANGE	7,941	3,107	39.13%	256
REGION I TOTALS	23,279	8,873	38.12%	750
BRAZORIA	8,297	2,376	28.64%	67
CHAMBERS	1,008	336	33.33%	8
GALVESTON	7,805	1,857	23.79%	60
HARRIS	78,399	16,414	20.94%	615
REGION II TOTALS	95,509	20,983	21.97%	750
CALHOUN	1,317	316	23.99%	217
JACKSON	958	225	23.49%	158
MATAGORDA	1,745	447	25.62%	285
REFUGIO	559	166	29.70%	90
REGION III TOTALS	4,579	1,154	25.20%	750
NUECES	7,025	1,627	23.16%	547
SAN PATRICIO	2,625	872	33.22%	203
REGION IV TOTALS	9,650	2,499	25.89%	750
CAMERON	2,614	620	23.72%	545
KENEDY	14	2	14.29%	3
KLEBERG	637	126	19.78%	133
WILLACY	333	57	17.12%	69
REGION V TOTALS	3,598	805	22.37%	750
TIER I TOTALS	136,615	34,314	25.12%	3,750

CLASS A-2

POWERBOATS OF 13'-14' LENGTH

NUMBER OF CLASS A-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
153	30.97%	56	36.60%	32	57.14%
87	33.98%	27	31.03%	15	55.56%
240	32.00%	83	34.58%	47	56.63%
18	26.87%	7	38.89%	4	57.14%
2	25.00%	1	50.00%	1	100.00%
14	23.33%	4	28.57%	3	75.00%
145	23.58%	58	40.00%	23	39.66%
179	23.87%	70	39.11%	31	44.29%
					0.1 0.07
66	30.41%	23	34.85%	21	91.30%
50	31.65%	14	46.81%	7	50.00%
92	32.28%	31	33.70%	24	77.42%
28	31.11%	13	46.43%	10	76.92%
236	31.47%	81	34.42%	62	76.54%
187	34.19%	69	36.90%	43	62.32%
96	47.29%	51	53.13%	22	43.14%
283	37.73%	120	42.40%	65	54.17%
141	25.87%	63	44.68%	50	79.37%
0	-	0	-	0	-
33	24.81%	11	33.33%	6	54.55%
11	15.94%	4	36.36%	3	75.00%
185	24.67	78	42.16%	59	75.64%
1,123	29.95%	432	38.47%	264	61.11%

CLASS A-	L.	С
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POWERBOATS OF 13'-14' LENGTH

С	L	Α	S	S	Α	- 3

POWERBOATS OF 15' - 16' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-3 BOATS	PERCENTAGE: CLASS A-3 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
JEFFERSON	15,338	5,885	38.37%	494
ORANGE	7,941	3,168	39.89%	256
REGION I TOTALS	23,279	9,053	38.76%	750
BRAZORIA	8,297	3,170	38.21%	67
CHAMBERS	1,008	339	33.63%	8
GALVESTON	7,805	2,994	38.36%	60
HARRIS	78,399	31,194	39.79%	615
REGION II TOTALS	95,509	37,697	39.47%	750
CALHOUN	1,317	655	49.73%	217
JACKSON	958	451	47.08%	158
MATAGORDA	1,745	704	40.34%	285
REFUGIO	559	232	41.50%	90
REGION III TOTALS	4,579	2,042	44.59%	750
NUECES	7,025	2,611	37.17%	547
SAN PATRICIO	2,625	967	36.84%	203
REGION IV TOTALS	9,650	3,578	37.08%	750
CAMERON	2,614	942	36.04%	545
KENEDY	14	5	35.71%	3
KLEBERG	637	248	38.93%	133
WILLACY	333	133	39.94%	69
REGION V TOTALS	3,598	1,328	36.91%	750
TIER I TOTALS	136,615	53,698	39.31%	3,750

NUMBER OF CLASS A-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
281	56.88%	118	41.99%	67	56.78%
133	51.95%	39	29.32%	26	66.67%
414	55.20%	157	37.92%	93	59.24%
41	61.19%	16	39.02%	13	81.25%
6	75.00%	5	83.33%	5	100.00%
40	66.67%	17	42.50%	10	58.82%
405	65.85%	143	35.31%	93	65.03%
492	65.60	181	36.79%	121	66.85%
112	51.61%	47	41.96%	40	85.11%
71	44.94%	29	40.85%	22	75.86%
126	44.21%	50	39.68%	35	70.00%
45	50.00%	21	46.67%	15	71.43%
354	47.20%	147	41.53%	112	76.19%
267	48.81%	87	32.58%	66	75.86%
85	41.87%	33	38.82%	26	78.79%
352	46.93%	120	34.09%	92	76.67%
239	43.85%	117	48.95%	85	72.65%
1	33.33%	1	100.00%	1	100.00%
56	42.11%	19	33.93%	14	73.68%
37	53.62%	20	54.05%	15	75.00%
333	44.40%	157	47.15%	115	73.25%
1,945	51.87%	762	39.18%	533	69.95%

<u>CLASS A-3</u>

POWERBOATS OF 15'-16' LENGTH

		· · · · ·		
	NUMBER OF REGISTERED		PERCENTAGE: CLASS A-4 BOATS	NUMBER OF CLASS
	CLASS A BOATS	CLASS A-4 BOATS	CLASS A BOATS	A BOATS SURVEYED
	15 000	1.005	10.05%	
JEFFERSON	15,338	1,895	12.35%	494
ORANGE	7,941	853	10.74%	256
REGION I TOTALS	23,279	2,748	11.80%	750
BRAZORIA	8,297	1,280	15.43%	67
CHAMBERS	1,008	160	15.87%	8
GALVESTON	7,805	1,563	20.03%	60
HARRIS	78,399	17,611	22.46%	615
REGION II TOTALS	95,509	20,614	21.58%	750
CALHOUN	1,317	207	15.72%	217
JACKSON	958	171	17.85%	158
MATAGORDA	1,745	322	18.45%	285
REFUGIO	559	90	16.10%	90
REGION III TOTALS	4,579	790	17.25%	750
NUECES	7,025	1,321	18.80%	547
SAN PATRICIO	2,625	340	12.95%	203
REGION IV TOTALS	9,650	1,661	17.21%	750
	a (1)			
CAMERON	2,614	563	21.54%	545
KENEDY	14	2	14.29%	3
KLEBERG	637	182	28.57%	133
WILLACY	333	92	27.63%	69
REGION V TOTALS	3,598	839	23,32%	750
TIER I TOTALS	136,615	26,652	19.51%	3,750

<u>CLASS A-4</u>

POWERBOATS OF 17'-18' LENGTH

A-10

NUMBER OF CLASS A-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
41	8.30%	18	43.90%	15	83.33%
31	12.11%	8	25.81%	4	50.00%
72	9.60%	26	36.11%	19	73.08%
6	8.96%	2	33.33%	0	_
0	_	0	_	0	-
6	10.00%	5	83.33%	2	40.00%
51	8.29%	22	43.14%	- 19	86.36%
63	8.40%	29	46.03%	21	72.41%
					, _ , , , , , , , , , , , , , , , , , ,
30	13.82%	11	36.67%	11	100.00%
32	20.25%	13	40.63%	11	84.62%
58	20.35%	22	37.93%	17	77.27%
15	16.67%	7	46.67%	6	85.71%
135	18.00%	53	39.26%	45	84.91%
70	12.80%	24	26 20%	16	66 679
			34.29%	16	66.67%
15	7.39%	5	33.33%	4	80.00%
85	11.33%	29	34.12%	20	68.97%
118	21.65%	54	45.76%	42	77.78%
1	33.33%	0	-	0	-
39	29.32%	13	33.33%	12	92.31%
17	24.64%	8	47.06%	5	62.50%
175	23.33%	75	42.86%	59	78.67%
530	14.13%	212	40.00%	164	77.36%
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<u>CLASS A-4</u>

POWERBOATS OF 17'-18' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS		PERCENTAGE: CLASS A-5 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
JEFFERSON	15,338	617	4.02%	494
ORANGE	7,941	224	2.82%	256
REGION I TOTALS	23,279	841	3.61%	750
BRAZORIA	8,297	474	5.71%	67
CHAMBERS	1,008	55	5.46%	8
GALVESTON	7,805	540	6.92%	60
HARRIS	78,399	5,827	7.43%	615
REGION II TOTALS	95,509	6,896	7.22%	750
CALHOUN	1,317	68	5.16%	217
JACKSON	958	35	3.65%	158
MATAGORDA	1,745	96	5.50%	258
REFUGIO	559	25	4.47%	90
REGION III TOTALS	4,579	224	4.89%	750
NUECES	7,025	692	9.85%	547
SAN PATRICIO	2,625	155	5.90%	203
REGION IV TOTALS	9,650	847	8.78%	750
CAMERON	2,614	168	6.43%	545
KENEDY	14	0	-	3
KLEBERG	637	44	6.91%	133
WILLACY	333	37	11.11%	69
REGION V TOTALS	3,598	249	6.92%	750
TIER I TOTALS	136,615	9,057	6.63%	3,750

<u>CLASS A-5</u> POWERBOATS OF 19'-20' LENGTH

NUMBER OF CLASS A-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
8	1.62%	3	37.05%	2	66.67%
3	1.17%	2	66.67%	0	-
11	1.47%	5	45.45%	2	40.00%
2	2.99%	0	_	0	-
0	_	0	_	0	_
0		0	_	0	_
	1 05%		50.00%		0.0
12	1.95%	6	50.00%	5	83.33%
14	1.87%	6	42.86%	5	83.33%
7	3.23%	3	42.86%	1	33.33%
4	3.53%	1	25.00%	1	100.00%
8	2.81%	4	50.00%	4	100.00%
1	1.11%	1	45.00%	1	100.00%
20	2.67%	9	77.78%	7	77.78%
	0.01%	-		-	<i></i>
11	2.01%	5	45.45%	3	60.00%
5	2.46%	0	-	0	-
16	2.13%	5	31.25%	3	60.00%
27	4.95%	10	37.04%	10	100.00%
0	-	0	-	0	-
4	3.01%	3	75.00%	2	66.67%
4	5.80%	3	75.00%	3	100.00%
35	4.76%	16	45.71%	15	93.75%
96	2.56%	41	42.71%	32	78.05%

CLASS A-5

POWERBOATS OF 19'-20' LENGTH

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	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-1 BOATS	PERCENTAGE CLASS B-1 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	238	36.06%	561
ORANGE	223	77	34.53%	189
REGION I TOTALS	883	315	35.67%	750
BRAZORIA	449	171	38.08%	50
CHAMBERS	43	14	32.56%	5
GALVESTON	693	239	34.49%	77
HARRIS	5,570	1,965	35.28%	618
REGION II TOTALS	6,755	2,389	35.37%	750
CALHOUN	65	24	36.92%	65
JACKSON	14	6	42.86%	14
MATAGORDA	89	42	47.19%	89
REFUGIO	9	5	55.56%	9
REGION III TOTALS	177	77	43.50%	177
NUECES	588	207	35.20%	588
SAN PATRICIO	159	54	33.96%	159
REGION IV TOTALS	747	261	34.94%	747
CAMERON	209	69	33.01%	209
KENEDY	2	1	50.00%	2
KLEBERG	32	16	50.00%	32
WILLACY	32	11	34.38%	32
REGION V TOTALS	275	97	35.27%	275
TIER I TOTALS	8,837	3,139	35.52%	2,699

CLASS B-1

POWERBOATS OF 21'-22' LENGTH

A-14

NUMBER OF CLASS B-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
209	37.25%	81	38.76%	70	86.42%
63	33.33%	27	42.86%	22	7.41%
272	36.27%	108	39.71%	92	85.19%
8	16.00%	2	25.00%	2	100.00%
1	20.00%	1	100.00%	0	_
16	20.78%	9	56.25%	7	77.78%
131	21.20%	47	35.88%	37	78.72%
156	20.80%	59	37.82%	46	77.97%
24	26 0.2%	10	50 00%	.,	01 (7%)
	36.92%	12	50.00%	11	91.67%
6	42.86%	2	33.33%	2	100.00%
42	47.19%	17	40.48%	16	94.12%
5	55.56%	1	20.00%	1	100.00%
77	43.50%	32	41.56%	30	93.75%
207	35.20%	82	39.61%	74	90.24%
54	33.96%	23	42.59%	19	82.61%
261	34.94%	105	40.23%	93	88.57%
69	33.01%	24	34.78%	20	83.33%
			54.70%		
1	50.00%	0	-	0	-
16	50.00%	7	43.75%	6	85.71%
11	34.38%	8	72.72%	8	100.00%
97	35.27%	39	40.21%	34	87.18%
863	39.75%	343	39.75%	295	86.00%

CLASS B-1

POWERBOATS OF 21'-22' LENGTH

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	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-2 BOATS	PERCENTAGE: CLASS B-2 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	213	32.27%	561
ORANGE	223	69	30.94%	189
REGION I TOTALS	883	282	31.94%	750
BRAZORIA	449	129	28.73%	50
CHAMBERS	43	12	27.91%	5
GALVESTON	693	202	29.15%	77
HARRIS	5,570	1,573	28.24%	618
REGION II TOTALS	6,755	1,916	28.36%	750
CALHOUN	65	20	30.77%	65
	14			14
JACKSON		6	42.86%	
MATAGORDA	89	22	24.72%	89
REFUGIO	9.	1	11.11%	9
REGION III TOTALS	177	49	27.68%	177
NUECES	588	167	28.40%	588
SAN PATRICIO	159	40	25.16%	159
REGION IV TOTALS	747	207	27.71%	747
CAMERON	209	55	26.32%	209
KENEDY	203	0	0.00%	209
KLEBERG	32	10	31.25%	32
WILLACY	32	6	18.75%	32
REGION V TOTALS	275	71	25.82%	275
TIER I TOTALS	8,837	2,525	28.57%	2,699

<u>CLASS B-2</u>

POWERBOATS OF 23'-24' LENGTH

A-16

NUMBER OF CLASS B-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
176	36.36%	64	36.36%	54	84.38%
61	31.15%	19	31.15%	17	89.47%
237	31.60%	83		71	85.54%
8	16.00%	2	25.00%	2	100.00%
2	40.00%	0	_	0	_
11	14.29%	3	27.27%	1	33.33%
114	18.45%	37	32.47%	34	91.89%
135	18.00%	42	31.11%	37	88.10%
20		10	50.00%	2	00.00%
20	30.77%	10	50.00%	8	80.00%
6	42.86%	5	83.33%	5	100.00%
22	24.72%	15	68.18%	13	86.67%
1	11.11%	1	100.00%	1	100.00%
49	27.68%	31	63.27%	27	87.10%
167	28.40%	77	46.11%	71	92.21%
40	25.16%	13	32.50%	11	84.62%
207	27.71%	90	43.48%	82	91.11%
55	26.32%	25	45.45%	23	92.00%
0	20.52%	0		0	52.00%
	-		-		-
10	31.25%	4	40.00%	3	75.00%
6	18.75%	2	33.33%	2	100.00%
71	25.82%	31	43.66%	28	90.32%
699	25.90%	277	39.63%	245	88.45%

CLASS B-2

POWERBOATS OF 23'-24' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-3 BOATS	PERCENTAGE: CLASS B-3 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	84	12.73%	561
ORANGE	223	27	12.11%	189
REGION I TOTALS	883	111	12.57%	750
BRAZORIA	449	51	11.36%	50
CHAMBERS	43	11	25.58%	5
GALVESTON	693	94	13.56%	77
HARRIS	5,570	733	13.16%	618
REGION II TOTALS	6,755	889	13.16%	750
CALHOUN	65	11	1.69%	65
JACKSON	14	0	-	14
MATAGORDA	89	6	6.74%	89
REFUGIO	9	3	33.33%	9
REGION III TOTALS	177	20	11.30%	177
NUECES	588	92	15.65%	588
SAN PATRICIO	159	20	12.58%	159
REGION IV TOTALS	747	112	14.99%	747
CAMERON	209	35	16.75%	209
KENEDY	2	0	-	2
KLEBERG	32	1	3.13%	32
WILLACY	32	3	9.38%	32
REGION V TOTALS	275	39	14.18%	275
TIER I TOTALS	8,837	1,171	13.25%	2,699

<u>CLASS B-3</u>

POWERBOATS OF 25'-26' LENGTH

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NUMBER OF CLASS B-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
72	12.83%	28	38.89%	25	89.29%
21	11.11%	4	19.05%	3	75.00%
93	12.40%	32	34.41%	28	87.50%
12	24.00%	7	58.33%	5	71.43%
			20,33%		/1.43%
0	-	0	-	0	-
15	19.48%	2	1.33%	2	100.00%
98	15.86%	37	37.76%	32	86.49%
125	16.67%	46	36.80%	39	84.78%
11	16.92%	5	45.45%	3	60.00%
0	-	0	-	0	-
6	6.74%	3	50.00%	3	100.00%
3	33.33%	2	66.67%	2	100.00%
20	11.30%	10	50.00%	8	80.00%
92	15.65%	28	30.43%	25	89.29%
20	12.58%	11	55.00%	11	100.00%
112	14.99%	39	34.82%	36	92.31%
55	26.32%	17	30.91%	17	100.00%
0	-	0	-	0	-
1	3.13%	0	-	0	-
3	9.38%	2	66.67%	2	100.00%
59	21.45%	19	32.20%	19	100.00%
409	15.15%	146	35.70%	130	89.04%

CLASS B-3

POWERBOATS OF 25'-26' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-4 BOATS	PERCENTAGE: CLASS B-4 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	41	6.21%	561
ORANGE	223	19	8.52%	189
REGION I TOTALS	883	60	6.80%	750
BRAZORIA	449	34	7.57%	50
CHAMBERS	43	2	4.65%	5
GALVESTON	693	50	7.22%	77
HARRIS	5,570	501	8.99%	618
REGION II TOTALS	6,755	587	0.87%	750
CALHOUN	65	2	3.08%	65
JACKSON	14	2	14.29%	14
MATAGORDA	89	7	7.87%	89
REFUGIO	9	0	0.00%	9
REGION III TOTALS	177	11	6.21%	177
NUECES	588	43	7.31%	588
SAN PATRICIO	159	14	8.81%	159
REGION IV TOTALS	747	57	7.63%	747
CAMERON	209	18	8.61%	209
KENEDY	2	1	50.00%	2
KLEBERG	32	1	3.13%	32
WILLACY	32	4	12.50%	32
REGION V TOTALS	275	24	8.73%	275
TIER I TOTALS	8,837	739	8.36%	2,699

CLASS B-4

POWERBOATS OF 27'-28' LENGTH

NUMBER OF CLASS B-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
35	6.24%	10	28.57%	9	90.00%
16	8.47%	8	50.00%	7	87.50%
51	6.80%	18	35.29%	16	88.89%
8	16.00%	3	37.50%	3	100.00%
0	-	0	-	0	-
10	12.99%	3	30.00%	2	66.67%
80	12.94%	33	41.25%	28	84.85%
98	13.07%	39	39.80%	33	84.62%
2	3.08%	1	50.00%	1	100.00%
2	14.29%	1	50.00%	1	100.00%
7	7.87%	4	57.14%	3	75.00%
0	-	0	-	0	-
11	6.21%	6	54.55%	5	83.33%
43	7.31%	13	30.23%	- 11	84.62%
14	8.81%	2	14.29%	2	100.00%
57	7.63%	15	26.32%	13	86.66%
18	8.61%	9	50.00%	8	88.89%
1	50.00%	0	-	0	-
1	3.13%	0	-	0	-
4	12.50%	3	75.00%	3	100.00%
24	8.73%	12	50.00%	11	91.67%
241	8.93%	90	37.34%	78	86.67%

<u>CLASS B-4</u>

POWERBOATS OF 27'-28' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-5 BOATS	PERCENTAGE: CLASS B-5 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	26	3.94%	561
ORANGE	223	6	2.69%	189
REGION I TOTALS	883	32	3.62%	750
BRAZORIA	449	19	4.23%	50
CHAMBERS	43	1	2.33%	5
GALVESTON	693	32	4.62%	77
HARRIS	5,570	254	4.56%	618
REGION II TOTALS	6,750	306	4.53%	750
CALHOUN	65	3	4.62%	65
JACKSON	14	0		14
MATAGORDA	89	3	3.37%	89
REFUGIO	9	0	-	9
REGION III TOTALS	177	6	3.39%	177
NUECES	588	23	3.91%	588
SAN PATRICIO	159	6	3.77%	159
REGION IV TOTALS	747	29	3.88%	747
CAMERON	209	8	3.83%	209
KENEDY	2	0		2
KLEBERG	32	2	6.25%	32
WILLACY	32	4	12.50%	32
REGION V TOTALS	275	14	5.09%	275
TIER I TOTALS	8,837	387	4.38%	2,699

<u>CLASS B-5</u>

POWERBOATS OF 29'-30' LENGTH

NUMBER OF CLASS B-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
22	3.92%	10	45.45%	8	80.00%
6	3.17%	2	33.33%	1	50.00%
28	3.73%	12	42.86%	9	75.00%
4	8.00%	3	75.00%	3	100.00%
1	20.00%	0	_	0	_
5	6.49%	1	20.00%	0	-
49	7.93%	12	24.49%	11	91.67%
59	7.87%	16	27.12%	14	87.50%
3	4.62%	2	66.67%	2	100.00%
0	_	0	_	0	_
3	3.37%		22.22%		-
		1	33.33%	. 1	100.00%
0	-	0	-	0	-
6	3.39%	3	50 .00%	3	100.00%
23	3.91%	11	47.83%	9	81.82%
6	3.77%	4	66.67%	4	100.00%
29	3.88%	15	51.72%	13	86.67%
8	3.83%	3	37.50%	3	100.00%
0	_	0	-	0	_
2	6.25%	0	-	0	_
4	12.50%	2	50.00%	2	100.00%
14	5.09%	5	35.71%	5	100.00%
	2.09%	2	5 7 • 1 ± 10	2	100.00%
136	5.04%	51	37.50%	44	86.27%

POWERBOATS OF 29'-30' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-6 BOATS	PERCENTAGE: CLASS B-6 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	21	3.18%	561
ORANGE	223	7	3.14%	189
REGION I TOTALS	883	28	3.17%	750
BRAZORIA	449	12	2.67%	50
CHAMBERS	43	3	6.98%	5
GALVESTON	693	16	2.31%	77
HARRIS	5,570	162	2.91%	618
REGION II TOTALS	6,750	193	2.86%	750
CALHOUN	65	3	4.62%	65
JACKSON	14	0	-	14
MATAGORDA	89	4	4.49%	89
REFUGIO	9	0	-	9
REGION III TOTALS	177	7	3.95%	177
NUECES	588	22	3.74%	588
SAN PATRICIO	159	15	9.43%	159
REGION IV TOTALS	747	37	4.95%	747
CAMERON	209	11	5.26%	209
KENEDY	2	0	~	2
KLEBERG	32	0	-	32
WILLACY	32	0	-	32
REGION V TOTALS	275	11	4.00%	275
TIER I TOTALS	8,837	276	3.12%	2,699

POWERBOATS OF 31'-32' LENGTH

NUMBER OF CLASS B-6 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSES PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
17	3.03%	8	47.06%	8	100.00%
6	3.17%	3	50.00%	3	100.00%
23	3.07%	11	47.83%	11	100.00%
3	6.00%	2	66.67%	2	100.00%
1	20.00%	1	100.00%	1	100.00%
5	6.49%	1	20.00%	1	100.00%
47	7.61%	17	36.17%	16	94.12%
56	7.47%	21	37.50%	20	95.24%
50	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<i>4</i> 1	37 • 50%	20	55.24%
3	4.62%	1	33.33%	1	100.00%
0	-	0	-	0	-
4	4.49%	2	50.00%	1	50.00%
0	-	0	-	0	-
7	3.95%	3	42.86%	2	66.67%
22	3.74%	9	40.91%	7	77.78%
15	9.43%	7	46.67%	7	100.00%
37	4.95%	16	43.24%	, 14	87.50%
		10		14	07.50%
11	5.26%	4	36.36%	4	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
11	4.00%	4	36.36%	4	100.00%
134	48.73%	55	41.04%	51	92.73%

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<u>CLASS B-6</u>

POWERBOATS OF 31'-32' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-7 BOATS	PERCENTAGE: CLASS B-7 BOATS CLASS B BOATS	NUMBER OF CLASS <u>B BOATS SURVEYED</u>		
JEFFERSON	660	12	1.82%	561		
ORANGE	223	2	0.90%	189		
REGION I TOTALS	883	14	1.59%	750		
BRAZORIA	449	12	2.67%	50		
CHAMBERS	43	0	-	5		
GALVESTON	693	19	2.74%	77		
HARRIS	5,570	116	2.08%	618		
REGION II TOTALS	6,750	147	2.28%	750		
CALHOUN	65	1	1.54%	65		
JACKSON	14	0	-	14		
MATAGORDA	89	2	2.25%	89		
REFUGIO	9	0	-	9		
REGION III TOTALS	177	3	1.69%	177		
NUECES	588	15	2.55%	588		
SAN PATRICIO	159	1	0.63%	159		
REGION IV TOTALS	747	16	2.14%	747		
CAMERON	209	4	1.91%	209		
KENEDY	2	0	-	2		
KLEBERG	32	0	-	32		
WILLACY	32	2	6.25%	32		
REGION V TOTALS	275	6	2.18%	275		
TIER I TOTALS	8,837	186	2.10%	2,699		

<u>CLASS B-7</u>

POWERBOATS OF 33'-34' LENGTH

NUMBER OF CLASS B-7 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
10	1.78%	3	30.00%	2	66.67%
2	1.06%	1	50.00%	0	-
12	1.60%	4	33.33%	2	50.00%
1	2.00%	1	100.00%	1	100.00%
0	-	0	_	0	_
2	2.60%	0	_	0	_
34	5.50%	7	20.59%	7	100.00%
37	4.93%	8	21.62%	8	100.00%
1	1.54%	0	· –	0	-
0	-	0	-	0	-
2	2.25%	0	-	0	-
0	-	0	-	0	-
3	1.69%	0	-	0	-
15	2.55%	6	40.00%	6	100.00%
1	0.63%	0	_	0	_
16	2.14	6	37.50%	6	100.00%
4	1.91%	1	25.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
2	6.25%	1	50.00%	1	100.00%
6	2.18%	2	33.33%	2	100.00%
74	2.74%	20	27.03%	18	90.00%

POWERBOATS OF 33'-34' LENGTH

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POWERBOATS OF 35'-36' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-8 BOATS	PERCENTAGE: CLASS B-8 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	6	0.91%	561
ORANGE	223	6	2.69%	189
REGION I TOTALS	883	12	1.36%	750
BRAZORIA	449	3	0.67%	50
CHAMBERS	43	0	-	5
GALVESTON	693	5	0.72%	77
HARRIS	5,570	24	0.43%	618
REGION II TOTALS	6,750	32	0.47%	750
CALHOUN	65	1	1.54%	65
JACKSON	14	0	-	14
MATAGORDA	89	1	0.11%	89
REFUGIO	9	0	-	9
REGION III TOTALS	177	2	1.13%	177
NUECES	588	7	1.19%	588
SAN PATRICIO	159	7	4.40%	159
REGION IV TOTALS	747	14	1.87%	747
CAMERON	209	4	1.91%	209
KENEDY	2	0	-	2
KLEBERG	32	1	3.13%	32
WILLACY	32	2	6.25%	32
REGION V TOTALS	275	7	2.55%	275
TIER I TOTALS	8,837	67	0.76%	2,699

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NUMBER OF CLASS B-8 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
6	1.07%	2	33.33%	2	100.00%
6	3.17%	3	50.00%	2	66.67%
12	1.60%	5	41.67%	4	80.00%
3	6.00%	0	-	0	-
0	-	0	-	0	
5	6.49%	2	40.00%	2	100.00%
24	3.88%	15	62.50%	11	73.33%
32	4.27%	17	53.13%	13	76.47%
1	1.54%	0	-	0	-
0	-	0	-	0	-
1	1.12%	0	-	0	-
0	-	0	-	0	-
2	1.13%	0	-	0	-
7	1.19%	2	28.57%	2	100.00%
7	4.40%	2	28.57%	2	100.00%
14	1.87%	4	28.57%	4	100.00%
4	1.91%	2	50.00%	1	50.00%
0		0	-	0	-
1	3.13%	0	-	0	-
2	6.25%	2	100.00%	2	100.00%
7	2.55%	4	57.14%	3	75.00%
68	2.52%	30	44.12%	24	80.00%

POWERBOATS OF 35'-36' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-9 BOATS	PERCENTAGE: CLASS B-9 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	4	0.61%	561
ORANGE	223	1	0.45%	189
REGION I TOTALS	883	5	0.57%	750
BRAZORIA	449	7	1.56%	50
CHAMBERS	43	0	· _	5
GALVESTON	693	5	0.72%	77
HARRIS	5,570	57	1.02%	618
REGION II TOTALS	6,750	69	1.02%	750
CALHOUN	65	0	-	65
JACKSON	14	0	-	14
MATAGORDA	89	0	-	89
REFUGIO	9	0	-	9
REGION III TOTALS	177	0	-	177
NUECES	588	4	0.68%	588
SAN PATRICIO	159	0	-	159
REGION IV TOTALS	747	4	0.54%	747
CAMERON	209	1	0.48%	209
KENEDY	2	0	-	2
KLEBERG	32	1	3.13%	32
WILLACY	32	0	-	32
REGION V TOTALS	275	2	0.73%	275
TIER I TOTALS	8,837	80	0.91%	2,699

<u>CLASS B-9</u>

POWERBOATS OF 37'-38' LENGTH

NUMBER OF CLASS B-9 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
3	0.53%	0	-	0	-
6	3.17%	1	16.67%	1	100.00%
9	1.20%	1	11.11%	1	100.00%
3	6.00%	2	66.67%	1	50.00%
			00.07%		50.00%
0	-	0	-	0	-
1	1.30%	0	-	0	-
12	1.94%	5	41.67%	1	20.00%
16	2.13%	7	43.75%	2	28.57%
0	_	0	_	0	_
0		0	_	0	-
0	-	0	-	0	-
0	-	0	-	0	_
0	_	0	_	0	-
4	0.68%	1	25.00%	1	100.00%
0	-	0	-	0	-
4	0.54%	1	25.00%	1	100.00%
1	0.48%	1	100.00%	1	100.00%
0	_	0	_	0	_
1	3.13%	0			
			-	0	
0	-	0	-	0	-
2	0.73%	1	50.00%	1	100.00%
31	1.15%	10	32.26%	5	50.00%

POWERBOATS OF 37'-38' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-10 BOATS	PERCENTAGE: CLASS B-10 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	2	0.30%	561
ORANGE	223	2	0.90%	189
REGION I TOTALS	883	4	0.45%	750
BRAZORIA	449	2	0.45%	50
CHAMBERS	43	0	_	5
GALVESTON	693	8	1.15%	77
HARRIS	5,570	26	0.47%	618
REGION II TOTALS	6,750	36	0.53%	750
CALHOUN	65	0	-	65
JACKSON	14	0	-	14
MATAGORDA	89	1	1.12%	89
REFUGIO	9	0	-	9
REGION III TOTALS	177	1	0.56%	177
NUECES	588	3	0.51%	588
SAN PATRICIO	159	1	0.63%	159
REGION IV TOTALS	747	4	0.54%	747
CAMERON	209	2	0.96%	209
KENEDY	2	0	_	2
KLEBERG	32	0	-	32
WILLACY	32	0	-	32
REGION V TOTALS	275	2	0.73%	275
TIER I TOTALS	8,837	47	0.53%	2,699

<u>CLASS</u> B - 10

POWERBOATS OF 39'-40' LENGTH

NUMBER OF CLASS B-10 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	0.18%	0	-	0	-
1	0.53%	1	100.00%	1	100.00%
2	0.27%	1	50.00%	1	50.00%
0	-	0	-	0	-
0	-	0	-	0	
2	2.60%	0	-	0	-
13	2.10%	5	38.46%	3	60.00%
15	2.00%	5	33.33%	3	60.00%
0		0		0	
	-	0	-	0	-
0	-	0	-	0	-
1	1.12%	1	100.00%	1	100.00%
0	-	0	-	0	-
1	0.56%	1	100.00%	1	100.00%
3	0.51%	0	-	0	_
1	0.63%	0	-	0	
4	0.54%	0	_	0	-
2	0.96%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
2	0.73%	0	-	0	-
24	0.89%	7	29.17%	5	71.43%

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<u>CLASS B-10</u>

POWERBOATS OF 39'-40' LENGTH

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POWERBOATS OF 41' + LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-11 BOATS	PERCENTAGE: CLASS B-11 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
JEFFERSON	660	13	1.97%	561
ORANGE	223	7	3.14%	189
REGION I TOTALS	883	20	2.27%	750
BRAZORIA	449	4	0.89%	50
CHAMBERS	43	0	-	5
GALVESTON	693	14	2.02%	77
HARRIS	5,570	90	1.62%	618
REGION II TOTALS	6,750	108	1.60%	750
CALHOUN	65	0	-	65
JACKSON	14	0	-	14
MATAGORDA	89	. 1	1.12%	89
REFUGIO	9	0		9
REGION III TOTALS	177	1	0.56%	177
NUECES	588	5	0.85%	588
SAN PATRICIO	159	1	0.63%	159
REGION IV TOTALS	747	6	0.80%	747
CAMERON	209	2	0.96%	209
KENEDY	2	0	-	2
KLEBERG	32	0	-	32
WILLACY	32	0	-	32
REGION V TOTALS	275	2	0.73%	275
TIER I TOTALS	8,837	137	1.55%	2,699

NUMBER OF CLASS B-11 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
10	1.78%	7	70.00%	6	85.71%
6	3.17%	3	50.00%	2	66.67%
16	2. 13%	10	62.50%	8	80.00%
	2 00%	0		0	
1	2.00%	0	-	0	-
0	-	0	-	0	-
5	6.49%	3	60.00%	2	66.67%
16	2.59%	7	43.75%	5	71.43%
22	2.93%	10	45.45%	7	70.00%
0	_	0	-	0	-
0	_	0	-	0	-
1	1.12%	0	-	0	-
0	-	0	-	0	_
1	0.56%	0	-	0	-
5	0.85%	3	60.00%	3	100.00%
1	0.63%	0	_	0	-
6	0.80%	3	50.00%	3	100.00%
2	0.96%	0	_	0	_
0	_	0		0	
	_		-		-
0	-	0	-	0	-
0	-	0	-	0	-
2	0.73%	0	-	0	-
47	1.74%	23	48.94%	18	78.26%

<u>CLASS B-11</u>

POWERBOATS OF 41' + LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-1 BOATS	PERCENTAGE: CLASS C-1 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
JEFFERSON	63	4	6.35%	63
ORANGE	17	2	11.76%	17
REGION I TOTALS	80	6	7.50%	80
BRAZORIA	85	17	20.00%	85
CHAMBERS	8	2	25.00%	8
GALVESTON	56	10	17.86%	56
HARRIS	541	66	12.20%	541
REGION II TOTALS	690	95	13.77%	690
CALHOUN	14	1	7.14%	14
JACKSON	5	1	20.00%	5
MATAGORDA	17	. 7	41.18%	17
REFUGIO	1	1	100.00%	1
REGION III TOTALS	37	10	27.03%	37
NUECES	53	13	24.53%	53
SAN PATRICIO	21	3	14.29%	21
REGION IV TOTALS	74	16	21.62%	74
CAMERON	22	5	22.73%	22
KENEDY	0	0	-	0
KLEBERG	1	0	_	1
WILLACY	2	1	50.00%	2
REGION V TOTALS	25	6	24.00%	25
TIER I TOTALS	906	133	14.68%	906

SAILBOATS OF 1'-12' LENGTH

NUMBER OF CLASS C-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
4	6.35%	1	25.00%	0	-
2	11.76%	0	-	0	-
6	7.50%	1	16.67%	0	-
17	20.00%	9	52.94%	5	55.56%
2	25.00%	0	-	0	-
10	17.86%	3	30.00%	2	66.67%
66	12.20%	25	37.88%	8	32.00%
95	13.70%	37	38.95%	15	40.54%
1	7.14%	0	_	0	-
1	20.00%	1	100.00%	1	100.00%
7	41.18%	1	14.29%	1	100.00%
1	100.00%	1	100.00%	1	100.00%
10	27.03%	3	30.00%	3	100.00%
13	24.53%	5	38.46%	4	80.00%
3	14.29%	1	33.33%	1	100.00%
16	21.62%	6	37.50%	5	83.33%
5 '	22.73%	0	-	0	-
0	-	0	-	0	-
0	-	0	_	0	-
1	50.00%	0	-	0	-
6	24.00%	0	-	0	-
133	14.68%	47	35.34%	23	48.94%

С	L	А	S	S	С	- 1

SAILBOATS OF 1'-12' LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OR REGISTERED CLASS C-2 BOATS	PERCENTAGE: CLASS C-2 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
JEFFERSON	63	24	38.10%	63
ORANGE	17	4	23.53%	17
REGION I TOTALS	80	28	35.00%	80
BRAZORIA	85	14	16.47%	85
CHAMBERS	8	2	25.00%	8
GALVESTON	56	13	23.21%	56
HARRIS	541	54	9.98%	541
REGION II TOTALS	690	83	12.03%	690
CALHOUN	14	2	14.29%	14
JACKSON	5	1	20.00%	5
MATAGORDA	17	. 1	5.88%	17
REFUGIO	1	0	-	1
REGION III TOTALS	37	4	10.81%	37
NUECES	53	7	13.21%	53
SAN PATRICIO	21	3	14.29%	21
REGION IV TOTALS	74	10	13.51%	74
CAMERON	22	3	13.64%	22
KENEDY	0	0	-	0
KLEBERG	1	0	-	1
WILLACY	2	1	50.00%	2
REGION V TOTALS	25	4	16.00%	25
TIER I TOTALS	906	129	14.24%	906

SAILBOATS OF 13'-14' LENGTH

NUMBER OF CLASS C-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
24	38.10%	12	50.00%	4	33.33%
4	23.53%	1	25.00%	0	-
28	35.00%	13	54.17%	4	30.77%
14	16.47%	6	42.86%	4	66.67%
2	25.00%	1	50.00%	1	100.00%
13	23.21%	6	46.15%	5	83.33%
54	9.98%	23	42.59%	13	56.52%
83	12.03%	36	43.37%	23	63.89%
2	1/ 20%			1	100 00%
2	14.29%	1	50.00%	1	100.00%
1	20.00%	0	-	0	-
1	5.88%	0	-	0	-
0	-	0	-	0	-
4	10.81%	1	25.00%	1	100.00%
7	13.21%	1	14.29%	1	100.00%
3	14.29%	0	-	0	-
10	13.51%	1	10.00%	1	50.00%
3	13.64%	2	66.67%	1	100.00%
0	-	0	-	0	_
0	-	0		0	-
1	50.00%	1	100.00%	1	100.00%
4	16.00%	3	75.00%	2	66.67%
129	14.24%	54	41.86%	31	57.41%

SAILBOATS OF 13'-14' LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-3 BOATS	PERCENTAGE: CLASS C-3 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
JEFFERSON	63	18	28.57%	63
ORANGE	17	2	11.76%	17
REGION I TOTALS	80	20	25.00%	80
BRAZORIA	85	35	41.18%	85
CHAMBERS	8	2	25.00%	8
GALVESTON	56	13	23.32%	56
HARRIS	541	202	37.34%	541
REGION II TOTALS	690	252	36.52%	690
CALHOUN	14	8	57.14%	14
JACKSON	5	3	60.00%	5
MATAGORDA	17	6	35.29%	17
REFUGIO	1	0	-	1
REGION III TOTALS	37	17	45.95%	37
NUECES	53	18	33.96%	53
SAN PATRICIO	21	9	42.86%	21
REGION IV TOTALS	74	27	36.49%	74
CAMERON	22	9	40.91%	22
KENEDY	0	0	-	0
KLEBERG	1	0	-	1
WILLACY	2	0	-	2
REGION V TOTALS	25	9	36.00%	25
TIER I TOTALS	906	325	35.87%	906

SAILBOATS OF 15'-16' LENGTH

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NUMBER OF CLASS C-3 BOATS SURVEYED	PERCENT SYRVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
18	28.57%	9	50.00%	5	55.56%
2	11.76%	1	50.00%	1	100.00%
20	25.00%	10	50.00%	6	60.00%
35	41.18%	13	37.14%	13	100.00%
2	25.00%	0	_	0	-
13	23.21%	7	53.85%	6	85.71%
202	37.34%	63	、 31.19%	49	77.78%
252	36.52%	83	32.94%	68	81.93%
8	57.14%	3	37.50%	3	100.00%
3	60.00%	0	-	0	-
6	35.29%	3	50.00%	2	66.67%
0	-	0	-	0	-
17	45.95%	6	35.29%	5	83.33%
18	33.96%	8	44.44%	8	100.00%
9	42.86%	4	44.44%	4	100.00%
27	36.49%	12	44.44%	12	100.00%
9	40.91%	5	55.56%	5	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	_	0	-
9	36.00%	5	55.56%	5	100.00%
325	35.87%	116	35.69%	96	82.76%

<u>CLASS C-3</u>

SAILBOATS OF 15'-16' LENGTH

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SAILBOATS OF 17'-18' LENGTH							
	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-4 BOATS	PERCENTAGE: CLASS C-4 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED			
JEFFERSON	63	11	17.46%	63			
ORANGE	17	8	47.06%	17			
REGION I TOTALS	80	19	23.75%	80			
BRAZORIA	85	15	17.65%	85			
CHAMBERS	8	2	25.00%	8			
GALVESTON	56	17	30.36%	56			
HARRIS	541	173	31.98%	541			
REGION II TOTALS	690	207	30.00%	690			
CALHOUN	14	3	21.43%	14			
JACKSON	5	0	-	5			
MATAGORDA	17	1	5.88%	17			
REFUGIO	1	0	-	1			
REGION III TOTALS	37	4	10.81%	37			
NUECES	53	9	16.98%	53			
SAN PATRICIO	21	2	9.52%	21			
REGION IV TOTALS	74	11	14.86%	74			
CAMERON	22	2	9.09%	22			
KENEDY	0	0	-	0			
KLEBERG	1	1	100.00%	1			
WILLACY	2	0	-	2			
REGION V TOTALS	25	3	12.00%	25			
TIER I TOTALS	906	244	26.93%	906			

NUMBER OF CLASS C-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
11	17.46%	3	27.27%	3	100.00%
8	47.06%	3	37.50%	1	33.33%
19	23.75%	6	31.58%	4	66.67%
1 5	17 (5%)	7		,	05 71%
15	17.65%	7	46.67%	6	85.71%
2	25.00%	2	100.00%	2	100.00%
17	30.36%	5	29.41%	5	100.00%
173	31.98%	52	30.06%	35	67.31%
207	30.00%	66	31.88%	48	72.73%
3	21.43%	1	33.33%	1	100.00%
0	_	0		0	2001007
			-		-
1	5.88%	0	-	0	-
0		0	-	0	-
4	10.81%	1	25.00%	1	100.00%
9	16.98%	3	33.33%	3	100.00%
2	9.52%	1	50.00%	1	100.00%
11	14.86%	4	36.36%	4	100.00%
2	9.09%	0		0	
			-	0	-
0	-	0		0	-
1	100.00%	0	-	0	-
0	-	0	-	0	-
3	12.00%	0	-	0	-
244	26.93%	77	31.56%	57	74.03%

SAILBOATS OF 17'-18' LENGTH

A-43

	NUMBER OF REGISTERED	NUMBER OF REGISTERE	PERCENTAGE: UMBER OF REGISTERED CLASS C-5 BOATS		
	CLASS C BOATS	CLASS C-5 BOATS	CLASS C BOATS	C BOATS SURVEYED	
JEFFERSON	63	6	9.52%	63	
ORANGE	17	1	5.88%	17	
REGION I TOTALS	80	7	8.75%	80	
BRAZORIA	85	4	4.71%	85	
CHAMBERS	8	0	-	8	
GALVESTON	56	3	5.36%	56	
HARRIS	541	46	8.50%	541	
REGION II TOTALS	690	53	7.68%	690	
CALHOUN	14	0	-	14	
JACKSON	5	0	-	5	
MATAGORDA	17	2	11.76%	17	
REFUGIO	1	0	-	1	
REGION III TOTALS	37	2	6.25%	37	
NUECES	53	6	11.32%	53	
SAN PATRICIO	21	4	19.50	21	
REGION IV TOTALS	74	10	13.51%	74	
CAMERON	22	3	13.64%	22	
KENEDY	0	0	-	0	
KLEBERG	1	0	-	1	
WILLACY	2	0	-	2	
REGION V TOTALS	25	3	12.00%	25	
TIER I TOTALS	906	75	8.28%	906	

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CLASS C-5

SAILBOATS OF 19'-20' LENGTH

A-44

NUMBER OF CLASS C-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
6	9.52%	5	83.33%	5	100.00%
1	5.88%	0	-	0	-
7	8.75%	5	71.43%	5	100.00%
4	4.71%	1	25.00%	1	100.00%
0	-	0	-	0	-
3	5.36%	1	33.33%	1	100.00%
46	8.50%	19	41.30%	9	47.37%
53	7.68%	21	39.62%	11	52.38%
0	_	0	-	0	-
0	_	0	_	0	-
2	11.76%	0	_	0	-
0	_	0	-	0	-
2	6.25%	0	-	0	-
6	11.32%	2	33.33%	2	100.00%
4	19.05%	3	75.00%	3	100.00%
10	13.51%	5	50.00%	5	100.00%
3	13.64%	3	100.00%	3	100.00%
0	-	0	_	0	-
0	-	0	_	0	_
0	-	0	-	0	-
3	12.00%	3	100.00%	3	100.00%
75	8.28%	34	45.33%	24	70.59%

<u>CLASS C-5</u>

SAILBOATS OF 19'-20' LENGTH

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	SAILBOA	TS OF 21' - 22'	LENGTH	
	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-1 BOATS	PERCENTAGE: CLASS D-1 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	4	30.77%	13
ORANGE	1	0	-	1
REGION I TOTALS	14	4	28.57%	14
BRAZORIA	4	1	25.00%	4
CHAMBERS	1	1	100.00%	1
GALVESTON	12	5	41.67%	12
HARRIS	103	43	41.75%	103
REGION II TOTALS	120	50	41.67%	120
CALHOUN	2	2	100.00%	2
JACKSON	1	0	-	1
MATAGORDA	3	.1	33.33%	3
REFUGIO	1	1	100.00%	1
REGION III TOTALS	7	4	57.14%	7
NUECES	27	12	44.44%	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	12	41.38%	29
CAMERON	12	4	33.33%	12
KENEDY	0	0	-	0
KLEBERG	4	2	50.00%	4
WILLACY	1	1	100.00%	1
REGION V TOTALS	17	7	41.18%	17
TIER I TOTALS	187	77	41.18%	187

A-46

NUMBER OF CLASS D-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
4	30.00%	4	100.00%	3	75.00%
0	-	0	-	0	-
4	28.57%	4	100.00%	3	75.00%
1	25.00%	1	100.00%	· 1	100.00%
1	100.00%	0	-	0	-
			-		_
5	41.67%	3	60.00%	3	100.00%
43	41.75%	14	32.56%	8	57.14%
50	41.67%	18	36.00%	12	66.67%
2	100.00%	0	-	0	-
0	_	0	-	0	-
1	33.33%	0	-	0	0
1	100.00%	1	100.00%	1	100.00%
4	57.14%	1	25.00%	1	100.00%
12	44.44%	7	58.33%	7	100.00%
0	-	0	_	0	-
12	41.38%	7	58.33%	7	100.00%
4	33.33%	4	100.00%	4	100.00%
0	-	0	-	0	-
2	50.00%	0	-	0	-
1	100.00%	1	100.00%	1	100.00%
7	41.18%	5	71.43%	5	100.00%
77	41.18%	35	45.45%	28	80.00%

SAILBOATS OF 21'-22' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-2 BOATS	PERCENTAGE: CLASS D-2 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED	
JEFFERSON	13	6	46.15%	13	
ORANGE	1	1	100.00%	1	
REGION I TOTALS	14	7	50.00%	14	
ALGION I TOTALS	1	,	50.00%	14	
BRAZORIA	4	1	25.00%	4	
CHAMBERS	1	0	-	1	
GALVESTON	12	2	16.67%	12	
HARRIS	103	27	26.21%	103	
REGION II TOTALS	120	30	25.00%	120	
		-			
CALHOUN	2	0	-	2	
JACKSON	1	1	100.00%	1	
MATAGORDA	3	2	66.67%	3	
REFUGIO	1	0	-	1	
REGION III TOTALS	7	3	42.86%	7	
NUECES	27	9	33.33%	27	
SAN PATRICIO	2	0	-	2	
REGION IV TOTALS	29	9	31.03%	29	
CAMERON	12	4	33.33%	12	
KENEDY	0	0	-	0	
KLEBERG	4	1	25.00%	4	
WILLACY	1	0	-	1	
REGION V TOTALS	17	5	29.41%	17	
TIER I TOTALS	187	54	28.88%	187	

SAILBOATS OF 23'-24' LENGTH

NUMBER OF CLASS D-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
6	46.15%	2	33.33%	2	100.00%
1	100.00%	0	-	0	-
7	50.00%	2	28.57%	2	100.00%
1	25.00%	0	-	0	
0	-	0	-	0	_
2	16.67%	2	100.00%	2	100.00%
27	26.21%	13	48.15%	9	69.23%
30	25.00%	15	50.00%	11	73.33%
0	_	0		0	_
1	100.00%	0	-	0	-
2	66.67%	2	100.00%	. 1	50.00%
0	-	0	-	0	-
3	42.86%	2	66.67%	1	50.00%
9	33.33%	8	88.89%	8	100.00%
0	_	0	-	0	-
9	31.03%	8	88.89%	8	100.00%
4	33.33%	1	25.00%	1	100.00%
0	_	0	_	0	-
1	25.00%	0	· _	0	-
0		0	-	0	-
5	29.41%	1	20.00%	1	100.00%
54	28.88%	28	51.85%	23	82.14%

SAILBOATS OF 23'-24' LENGTH

A-49

		10 01 20 20		
	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-3 BOATS	PERCENTAGE: CLASS D-3 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
TEFEFOCON	13	3	23.08%	13
JEFFERSON				
ORANGE	1	0	-	1
REGION I TOTALS	14	3	21.43%	14
BRAZORIA	4	0	-	4
CHAMBERS	1	0	-	1
GALVESTON	12	2	16.67%	12
HARRIS	103	17	16.50%	103
REGION II TOTALS	120	19	15.83%	120
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0	- ,	1
REGION III TOTALS	7	0	-	7
NUECES	27	2	7.41%	27
SAN PATRICIO	2	1	50.00%	2
REGION IV TOTALS	29	3	10.34%	29
CAMERON	12	4	22.22%	10
			33.33%	12
KENEDY	0	0	-	0
KLEBERG	4	1	25.00%	4
WILLACY	1	0	-	1
REGION V TOTALS	17	5	29.41%	17
TIER I TOTALS	187	30	16.04%	187

SAILBOATS OF 25'-26' LENGTH

NUMBER OF CLASS D-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
3	23.08%	0	_	0	-
0	-	0	_	0	-
3	21.43%	0	. –	0	_
<u>,</u>		0		2	
0	-	0	-	0	-
0	-	0	-	0	
2	16.67%	2	100.00%	2	100.00%
17	16.50%	8	47.06%	6	75.00%
19	15.83%	10	52.63%	8	80.00%
0		0		0	
	-	0	-		-
0	-	0	-	0	-
0	-	0	-	0	-
0		0	-	0	-
0	-	0	-	0	-
2	7.41%	. 0	_	0	_
1	50.00%	1	100.00%	1	100.00%
3	10.34%	1	33.33%	1	100.00%
4	33.33%	2	50.00%	2	100.00%
0	-	0	-	0	-
1	25.00%	0	-	0	-
0	-	0	-	0	-
5	29.41%	2	40.00%	2	100.00%
30	16.04%	13	43.33%	11	84.62%

<u>CLASS D-3</u>

SAILBOATS OF 25'-26' LENGTH

A-51

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-4 BOATS	PERCENTAGE: CLASS D-4 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	-	13
ORANGE	1	0	-	1
REGION I TOTALS	14	0	-	14
BRAZORIA	4	0	-	4
CHAMBERS	1	0	-	1
GALVESTON	12	0	-	12
HARRIS	103	8	7.77%	103
REGION II TOTALS	120	8	6.67%	120
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0	-	1
REGION III TOTALS	7	0	-	7
NUECES	27	1	3.70%	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	1	3.45%	29
CAMERON	12	0	-	12
KENEDY	0	0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	-	1
REGION V TOTALS	17	0	-	17
TIER I TOTALS	187	9	4.81%	187

<u>CLASS D-4</u>

SAILBOATS OF 27' - 28' LENGTH

NUMBER OF CLASS D-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	· _	0	-	0	-
<u>,</u>		0			
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
8	7.77%	4	50.00%	3	75.00%
8	6.67%	4	50.00%	3	75.00%
0	_	0	-	0	-
0	_	0		0	
					_
0	-	0	-	0	÷
0.	-	0	-	0	-
0	-	0	. –	0	-
1	3.70%	0	-	0	-
0	-	0	-	0	-
1	3.45%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
9	4.81%	4	44.44%	3	75.00%

SAILBOATS OF 27'-28' LENGTH

A-53

	NUMBER OF REGISTERED CLASS_D_BOATS	NUMBER OF REGISTERED CLASS D-5 BOATS	PERCENTAGE: CLASS D-5 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	-	13
ORANGE	1	0	-	1
REGION I TOTALS	14	0	-	14
BRAZORIA	4	0	-	4
CHAMBERS	1	0	-	1
GALVESTON	12	1	8.33%	12
HARRIS	103	5	4.85%	103
REGION II TOTALS	120	6	5.00%	120
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0	-	1
REGION III TOTALS	7	0	-	7
NUECES	27	1	100.00%	27
SAN PATRICIO	2	1	100.00%	2
REGION IV TOTALS	29	2	100.00%	29
CAMERON	12	0	-	12
KENEDY	0	0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	-	1
REGION V TOTALS	17	0	-	17
TIER I TOTALS	187	8	4.28%	187

CLASS D-5

SAILBOATS OF 29'-30' LENGTH

NUMBER OF CLASS D-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	8.33%	0	-	0	-
5	4.85%	1	20.00%	1	100.00%
6	5.00%	1	5.00%	1	100.00%
0	-	0	_	0	-
0	-	0	-	0	-
0	-	0	-	. 0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	100.00%	0	-	0	_
1	100.00%	1	100.00%	1	100.00%
2	100.00%	1	50.00%	1	100.00%
0	-	0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
8	4.28%	2	25.00%	2	100.00%

SAILBOATS OF 29'-30' LENGTH

A-55

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	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-6 BOATS	PERCENTAGE: CLASS D-6 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	_	13
ORANGE	1	0	_	1
REGION I TOTALS	14	0	_	14
	_ /	Ŭ		14
BRAZORIA	4	0	-	4
CHAMBERS	1	0	-	1
GALVESTON	12	1	8.33%	12
HARRIS	103	0	-	103
REGION II TOTALS	120	1	0.83%	120
	<u>^</u>	_		
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0		1
REGION III TOTALS	7	0	-	7
NUECES	27	0	-	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	0	-	29
CAMERON	12	0		10
KENEDY	0		-	12
		0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	-	1
REGION V TOTALS	17	0	-	17
TIER I TOTALS	187	1	0.53%	187

SAILBOATS OF 31'-32' LENGTH

A-56

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NUMBER OF CLASS D-6 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	· _	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	8.33%	0	-	0	-
0	-	0	-	0	-
0	0.83%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	_	0	_	0	-
0	_	0	_	0	_
				0	
0	-	0	-		-
0	-	0	-	0	-
0	-	0	-	0	-
1	0.53%	0	-	0	-

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<u>CLASS D-6</u>

SAILBOATS OF 31'-32' LENGTH

A-57

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-7 BOATS	PERCENTAGE: CLASS D-7 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	-	13
ORANGE	1	0	-	1
REGION I TOTALS	14	0	-	14
BRAZORIA	4	1	25.00%	4
CHAMBERS	1	0	-	1
GALVESTON	12	0	-	12
HARRIS	103	0	-	103
REGION II TOTALS	120	1	0.83%	120
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0	- <u>-</u>	1
REGION III TOTALS	7	0	-	7
NUECES	27	0	-	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	0	-	29
CANEDON	10	0		10
CAMERON	12	0	· <u> </u>	12
KENEDY		0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	-	1
REGION V TOTALS	17	0	-	1
TIER I TOTALS	187	1	0.53%	187

SAILBOATS OF 33'-34' LENGTH

NUMBER OF CLASS D-7 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	25.00%	0	-	0	_
0	_	0	-	0	
0	-	0	-	0	-
0	-	0	_	0	-
1	0.83%	0	_	0	-
0		0		<u>_</u>	
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	· -
0	-	0	_	0	-
		0		0	
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	0.53%	0	-	0	-

SAILBOATS OF 33'-34' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-8 BOATS	PERCENTAGE: CLASS D-8 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	-	13
ORANGE	1	0	-	1
REGION I TOTALS	14	0	-	14
BRAZORIA	4	0	-	4
CHAMBERS	1	0	-	1
GALVESTON	12	1	8.33%	12
HARRIS	103	1	0.97%	103
REGION II TOTALS	120	2	1.67%	120
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0	-	1
REGION III TOTALS	7	0	-	7
NUECES	27	0	-	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	0	-	29
CAMERON	12	0	-	12
KENEDY	0	0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	-	1
REGION V TOTALS	17	0	-	17
TIER I TOTALS	187	2	1.07%	187

SAILBOATS OF 35'-36' LENGTH

A-60

NUMBER OF CLASS D-8 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	· _	0	-	0	-
0	_	0	_	0	_
	-		-		_
0	-	0	-	0	_
1	8.33%	0	-	0	-
1	0.97%	1	100.00%	1	100.00%
2	1.67%	1	50.00%	1	100.00%
				<u>^</u>	
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	
0	-	0	-	0	-
^		0		0	
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
2	1.07%	1	50.00%	1	100.00%

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SAILBOATS OF 35'-36' LENGTH

A-61

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	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-9 BOATS	PERCENTAGE: CLASS D-9 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	-	13
ORANGE	1	0	-	1
REGION I TOTALS	14	0	-	14
BRAZORIA	4	0	-	4
CHAMBERS	1	0	-	1
GALVESTON	12	0	-	12
HARRIS	103	0	-	103
REGION II TOTALS	120	0	-	120
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	Q	-	3
REFUGIO	1	0	-	1
REGION III TOTALS	7	0	-	7
NUECES	27	0	-	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	0	-	29
CAMERON	12	0	-	12
KENEDY	0	0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	-	1
REGION V TOTALS	17	0	-	17
TIER I TOTALS	187	0	-	187

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SAILBOATS OF 37'-38' LENGTH

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NUMBER OF CLASS D-9 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	_	0	-	0	-
0	· _	0	-	0	-
0	_	0	_	0	_
0	-	0	_	0	_
0	-	0	_	0	_
0	-	0	_	0	-
0	-	0	_	0	_
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	_	0	-
0	-	0	_	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
•		0			
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-

SAILBOATS OF 37'-38' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-10 BOATS	PERCENTAGE: CLASS D-10 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	-	13
ORANGE	1	0	-	1
REGION I TOTALS	14	0	-	14
BRAZORIA	4	I	25.00%	4
CHAMBERS	1	0	-	1
GALVESTON	12	0	-	12
HARRIS	103	0		103
REGION II TOTALS	120	1	0.83%	120
CALHOUN	2	0	~	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0	-	1
REGION III TOTALS	7	0	-	7
NUECES	27	0	· _	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	0	-	29
CAMERON	12	0	-	12
KENEDY	0	0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	-	1
REGION V TOTALS	17	0	_	17
TIER I TOTALS	187	1	0.53%	187

<u>CLASS</u> D - 10

SAILBOATS OF 39'-40' LENGTH

SAILBOATS OF 39'-40' LENGTH

NUMBER OF CLASS D-10 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	-
1	25.00%	1	100.00%	1	100.00%
0	-	0	-	0	_
0	-	0	-	0	-
0	-	0	-	0	-
1	0.83%	1	100.00%	1	100.00%
0	_	0	-	0	
0	_	0	-	0	-
0	-	0	-	0	_
0	-	0	-	0	-
0	-	0	-	0	-
0	_	0	_	0	
0					-
	-	0	-	0	-
0	-	0	-	0	
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	0.53%	1	100.00%	1	100.00%

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-11 BOATS	PERCENTAGE: CLASS D-11 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
JEFFERSON	13	0	_	13
ORANGE	1	0	-	1
REGION I TOTALS	14	0	-	14
BRAZORIA	4	0	-	4
CHAMBERS	1	0	-	1
GALVESTON	12	0	-	12
HARRIS	103	1	0.97%	103
REGION II TOTALS	120	0	-	120
CALHOUN	2	0	-	2
JACKSON	1	0	-	1
MATAGORDA	3	0	-	3
REFUGIO	1	0	-	1
REGION III TOTALS	7	0	-	7
NUECES	27	2	7.41%	27
SAN PATRICIO	2	0	-	2
REGION IV TOTALS	29	2	6.90%	29
CAMERON	12	0	-	12
KENEDY	0	0	-	0
KLEBERG	4	0	-	4
WILLACY	1	0	. –	1
REGION V TOTALS	17	0	-	17
TIER I TOTALS	187	3	1.60%	187

SAILBOATS OF 41' + LENGTH

NUMBER OF CLASS D-11 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	_	0		0	
	-		-		-
0	-	0	-	0	-
0	-	0	-	0	-
1	0.97%	0	-	0	-
0	-	0	-	0	-
0	_	0	_	0	
			_		-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	
2	7.41%	0	_	0	
	1.41%				-
0	-	0	-	0	-
2	6.90%	0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	_
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-

0

1.60% 0 -

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<u>CLASS D-11</u>

SAILBOATS OF 41' + LENGTH

A-67

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UMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-1 BOATS	PERCENTAGE: CLASS A-1 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
657	85	12.94%	23
90	2	2.22%	3
3,155	274	8.68%	108
159	26	16.35%	5
3,345	321	9.60%	115
2,476	269	10.86%	85
2,455	166	6.76%	84
928	107	11.53%	32
2,640	397	15.04%	91
505	85	16.83%	17
743	98	13.19%	26
3,048	261	8.56%	104
1,673	165	9.86%	57
21.874	2,256	10.31%	750
	657 90 3,155 159 3,345 2,476 2,455 928 2,640 505 743 3,048	CLASS A BOATSCLASS A-1 BOATS657859023,155274159263,3453212,4762692,4551669281072,64039750585743983,0482611,673165	NUMBER OF REGISTERED CLASS A BOATSNUMBER OF REGISTERED CLASS A -1 BOATSCLASS A -1 BOATS6578512.94%9022.22%3,1552748.68%1592616.35%3,3453219.60%2,47626910.86%2,4751666.76%92810711.53%2,64039715.04%5058516.83%7439813.19%3,0482618.56%1,6731659.86%

CLASS A-1

POWERBOATS OF 1'-12' LENGTH

NUMBER OF CLASS A-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
1	0.93%	1	100.00%	. 0	-
1	20.00%	1	100.00%	0	-
5	4.35%	3	60.00%	1	33.33%
0	-	0	_	0	-
2	2.38%	1	50.00%	0	-
2	6.25%	1	50.00%	1	100.00%
1	1.10%	1	100.00%	0	-
0	-	0	-	0	-
0	_	0	_	0	-
2	1.92%	1	50.00%	0	-
1	1.75%	1	100.00%	1	100.00%
15	2.00%	10	66.67%	3	30.00%

CLASS A-1

POWERBOATS OF 1'-12' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-2 BOATS	PERCENTAGE: CLASS A-2 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
BEE	657	185	28.16%	23
BROOKS	90	16	17.78%	3
FORT BEND	3,155	709	22.47%	108
GOLIAD	159	55	34.59%	5
HARDIN	3,345	1,513	45.23%	115
HIDALGO	2,476	456	18.42%	85
JASPER	2,455	1,077	43.87%	84
JIM WELLS	928	208	22.41%	32
LIBERTY	2,640	955	36.17%	91
LIVE OAK	505	182	36.04%	17
NEWTON	743	374	50.34%	26
VICTORIA	3,048	845	27.72%	104
WHARTON	1,673	404	24.15%	57
TIER II TOTAL	21,874	6,979	31.91%	750

CLASS A-2

POWERBOATS OF 13'-14' LENGTH

A-70

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NUMBER OF CLASS A-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
15	65.22%	4	26.67%	0	- .
2	66.27%	1	50.00%	1	100.00%
53	49.07%	17	32.08%	10	58.82%
1	20.00%	0	_	0	-
48	41.74%	21	43.75%	5	23.81%
21	24.71%	3	14.29%	1	33.33%
47	55.95%	22	46.81%	2	9.09%
9	28.13%	3	33.33%	0	-
31	34.07%	11	35.48%	2	18.18%
9	52.94%	5	55.56%	0	-
15	57.69%	5	33.33%	0	-
33	31.73%	13	39.39%	10	76.92%
12	21.05%	4	33.33%	3	75.00%
296	39.47%	109	36.82%	34	31.19%

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CLASS A-2

POWERBOATS OF 13'-14' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-3 BOATS	PERCENTAGE: CLASS A-3 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
BEE	657	288	43.84%	23
BROOKS	90	35	38.89%	3
FORT BEND	3,155	1,295	41.05%	108
GOLIAD	159	48	30.19%	5
HARDIN	3,345	1,174	35.10%	115
HIDALGO	2,476	923	37.28%	85
JASPER	2,455	978	39.84%	84
JIM WELLS	928	329	35.45%	32
LIBERTY	2,640	866	32.80%	91
LIVE OAK	505	160	31.68%	17
NEWTON	743	220	29.61%	26
VICTORIA	3,048	1,252	41.08%	104
WHARTON	1,673	668	39.93%	57
TIER II TOTAL	21,874	8,236	37.65%	750

CLASS A-3

POWERBOATS OF 15'-16' LENGTH

NUMBER OF CLASS A-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
7	30.43%	4	57.14%	2	50.00%
0	-	0	-	0	-
47	43.52%	16	34.04%	12	75.00%
2	40.00%	1	50.00%	1	100.00%
46	40.00%	17	36.96%	5	29.41%
49	57.65%	20	40.82%	15	75.00%
28	33.33%	10	35.71%	2	20.00%
18	56.25%	10	55.56%	4	40.00%
46	50.55%	17	36.96%	7	41.18%
6	35.29%	3	50.00%	0	-
7	26.92%	1	14.29%	0	-
62	59.62%	25	40.32%	20	80.00%
37	64.91%	15	40.54%	12	80.00%
355	47.33%	139	39.15%	80	57.55%

CLASS A-3

POWERBOATS OF 15'-16' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-4 BOATS	PERCENTAGE: CLASS A-4 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
BEE	657	118	17.96%	23
BROOKS	90	28	31.11%	3
FORT BEND	3,155	673	21.33%	108
GOLIAD	159	26	16.35%	5
HARDIN	3,345	270	8.07%	115
HIDALGO	2,476	613	24.76%	85
JASPER	2,455	202	8.23%	84
JIM WELLS	928	222	23.92%	32
LIBERTY	2,640	321	12.16%	91
LIVE OAK	505	61	12.08%	17
NEWTON	743	42	5.65%	26
VICTORIA	3,048	554	18.18%	104
WHARTON	1,673	330	19.73%	57
TIER II TOTAL	21,874	3,460	15.82%	750

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POWERBOATS OF 17'-18' LENGTH

NUMBER OF CLASS A-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	4.35%	1	100.00%	1	100.00%
1	33.33%	0	_	0	_
4	3.70%	1	25.00%	0	-
1	20.00%	1	100.00%	0	-
13	11.30%	7	53.85%	3	42.86%
12	14.12%	7	58.33%	4	57.14%
7	8.33%	3	42.86%	1	33.33%
3	9.38%	2	66.67%	1	50.00%
10	10.99%	4	40.00%	2	50.00%
2	11.76%	1	50.00%	1	100.00%
3	11.54%	0	-	0	_
7	6.73%	3	42.86%	2	66.67%
5	8.77%	3	60.00%	3	100.00%
69	9.20%	33	47.83%	18	54.55%

CLASS A-4

POWERBOATS OF 17'-18' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-5 BOATS	PERCENTAGE: CLASS A-5 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
BEE	657	41	6.24%	23
BROOKS	90	9	10.00%	3
FORT BEND	3,155	204	6.47%	108
GOLIAD	159	4	2.52%	5
HARDIN	3,345	67	2.00%	115
HIDALGO	2,476	215	8.68%	85
JASPER	2,455	32	1.30%	84
JIM WELLS	928	62	6.68%	32
LIBERTY	2,640	101	3.83%	91
LIVE OAK	505	17	3.37%	17
NEWTON	743	9	1.21%	26
VICTORIA	3,048	136	4.46%	104
WHARTON	1,673	106	6.34%	57
TIER II TOTAL	21,874	1,003	4.59%	750

<u>CLASS A-5</u>

POWERBOATS OF 19'-20' LENGTH

NUMBER OF CLASS A-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	_	0	_	0	_
0	-	0	-	0	
3	2.78%	2	66.67%	2	100.00%
0	-	0	-	0	_
3	2.61%	1	33.33%	1	100.00%
3	3.53%	2	66.67%	1	50.00%
0	-	0		0	-
0	-	0	-	0	-
3	3.30%	0	-	0	-
0	-	0	-	0	-
1	3.85%	0	-	0	-
0	-	0	-	0	-
2	3.51%	2	100.00%	1	50.00%
15	2.00%	7	46.67%	5	71.43%

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POWERBOATS OF 19'-20' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-1 BOATS	PERCENTAGE: CLASS B-1 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	10	40.00%	25
BROOKS	1	0	_	1
FORT BEND	167	74	44.31%	167
GOLIAD	3	1	33.33%	3
HARDIN	47	25	53.19%	47
HIDALGO	160	68	42.50%	160
JASPER	18	9	50.00%	18
JIM WELLS	36	10	27.78%	36
LIBERTY	51	19	37.25%	51
LIVE OAK	15	5	33.33%	15
NEWTON	4	1	25.00%	4
VICTORIA	131	51	38.91%	131
WHARTON	73	25	34.25%	73
TIER II TOTALS	731	298	40.77%	731

POWERBOATS OF 21'-22' LENGTH

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NUMBER OF CLASS B-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
10	10 00%	0	20.00%		50.00%
10	40.00%	2	20.00%	1	50.00%
0	-	0	-	0	
74	44.31%	34	45.95%	30	88.24%
1	33.33%	1	100.00%	1	100.00%
25	53.19%	13	52.00%	6	46.15%
68	42.50%	34	50.00%	31	91.18%
9	50.00%	6	66.67%	2	33.33%
10	27.78%	7	70.00%	4	57.14%
19	37.25%	7	36.84%	6	85.71%
5	33.33%	3	60.00%	2	66.67%
1	25.00%	1	100.00%	0	-
51	38.91%	23	45.10%	22	95.65%
25	35.25%	14	56.00%	13	92.86%
298	40.77%	145	48.66%	118	81.38%

CLASS B-1

POWERBOATS OF 21'-22' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-2 BOATS	PERCENTAGE: CLASS B-2 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	9	36.00%	25
BROOKS	1	0	-	1
FORT BEND	167	53	31.74%	167
GOLIAD	3	1	33.33%	3
HARDIN	47	13	27.66%	47
HIDALGO	160	43	26.88%	160
JASPER	18	2	11.11%	18
JIM WELLS	36	17	47.22%	36
LIBERTY	51	23	45.10%	51
LIVE OAK	15	4	26.67%	15
NEWTON	4	1	25.00%	4
VICTORIA	131	40	30.53%	131
WHARTON	73	34	46.58%	73
TIER II TOTALS	731	240	32.83%	731

CLASS B-2

POWERBOATS OF 23'-24' LENGTH

NUMBER OF CLASS B-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
9	36.00%	4	44.44%	4	100.00%
0	-	0	_	0	-
53	31.74%	20	37.74%	20	100.00%
1	33.33%	0	_	0	-
13	27.66%	7	53.85%	6	85.71%
43	26.88%	19	44.19%	18	94.74%
2	11.11%	0	_	0	-
17	47.22%	8	47.06%	4	36.36%
23	45.10%	11	47.83%	11	100.00%
4	26.67%	2	50.00%	1	50.00%
1	25.00%	0	-	0	-
40	30.53%	20	50.00%	19	95.00%
34	46.58%	18	52.94%	18	100.00%
240	32.83%	109	45.42%	101	92.66%

POWERBOATS OF 23'-24' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-3 BOATS	PERCENTAGE: CLASS B-3 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED		
BEE	25	3	12.00%	25		
BROOKS	1	1	100.00%	1		
FORT BEND	167	16	9.58%	167		
GOLIAD	3	1	33.33%	3		
HARDIN	47	5	10.64%	47		
HIDALGO	160	29	18.13%	160		
JASPER	18	1	5.56%	18		
JIM WELLS	36	3	8.33%	36		
LIBERTY	51	4	7.84%	51		
LIVE OAK	15	0	-	15		
NEWTON	4	0	-	4		
VICTORIA	131	18	13.74%	131		
WHARTON	73	3	4.11%	73		
	701		11 / 0%	701		
TIER II TOTALS	731	84	11.49%	731		

CLASS B-3

POWERBOATS OF 25'-26' LENGTH

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POWERBOATS OF 25'-26' LENGTH

NUMBER OF CLASS B-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
3	12.00%	1	33.33%	1	100.00%
1	100.00%	1	100.00%	1	100.00%
16	9.58%	6	37.50%	4	66.67%
1	33.33%	1	100.00%	1	100.00%
5	10.64%	1	20.00%	0	-
29	18.13%	11	37.93%	9	81.82%
1	5.56%	0	-	0	-
3	8.33%	2	66.67%	1	50.00%
4	7.84%	3	75.00%	2	66.67%
0	-	0	-	0	-
0	-	0	-	Ö	-
18	13.74%	7	38.89%	5	71.43%
3	4.11%	1	33.33%	1	100.00%
84	11.49%	34	40.48%	25	73.53%

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	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-4 BOATS	PERCENTAGE: CLASS B-4 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	1	4.00%	25
BROOKS	1	0	-	1
FORT BEND	167	10	5.99%	167
GOLIAD	3	0	_	, 3
HARDIN	47	1	2.13%	47
HIDALGO	160	9	5.63%	160
JASPER	18	2	11.11%	18
JIM WELLS	36	5	13.89%	36
LIBERTY	51	2	3.92%	51
LIVE OAK	15	4	26.67%	15
NEWTON	4	1	25.00%	4
VICTORIA	131	8	6.11%	131
WHARTON	73	5	6.85%	73
TIER II TOTALS	7 31	48	6 57%	731
HIDALGO JASPER JIM WELLS LIBERTY LIVE OAK NEWTON VICTORIA	160 18 36 51 15 4 131	9 2 5 2 4 1 8	5.63% 11.11% 13.89% 3.92% 26.67% 25.00% 6.11%	160 18 36 51 15 4 131

<u>CLASS</u> B-4

POWERBOATS OF 27'-28' LENGTH

A-84

NUMBER OF CLASS B-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	4.00%	1	100.00%	0	-
0	-	0	-	0	-
10	5.99%	6	60.00%	4	66.67%
0	-	0	-	0	-
1	2.13%	1	100.00%	1	100.00%
9	5.63%	5	55.56%	5	100.00%
2	11.11%	1	50.00%	0	-
5	13.89%	2	40.00%	1	50.00%
2	3.92%	1	50.00%	1	100.00%
4	26.67%	1	25.00%	0	-
1	25.00%	0	-	0	-
8	6.11%	6	75.00%	6	100.00%
5	6.85%	4	80.00%	4	100.00%
48	6.57%	28	58.33%	22	78.57%

POWERBOATS OF 27'-28' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-5 BOATS	PERCENTAGE: CLASS B-5 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	0	-	25
BROOKS	1	0	-	1
FORT BEND	167	5	2.99%	167
GOLIAD	3	0	-	3
HARDIN	47	1	2.13%	47
HIDALGO	160	2	1.25%	160
JASPER	18	2	11.11%	18
JIM WELLS	36	1	2.78%	36
LIBERTY	51	0	-	51
LIVE OAK	15	0	-	15
NEWTON	4	0	-	4
VICTORIA	131	8	6.11%	131
WHARTON	73	1	1.37%	73
TIER II TOTALS	731	20	2.74%	731

CLASS B-5

POWERBOATS OF 29'-30' LENGTH

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NUMBER OF CLASS B-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0		0	-
5	2.99%	1	20.00%	1	100.00%
0	-	0	-	0	-
1	2.13%	1	100.00%	0	_
2	1.25%	2	100.00%	1	50.00%
2	11.11%	1	50.00%	0	-
1	2.78%	1	100.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	
8	6.11%	3	37.50%	3	100.00%
1	1.37%	0	-	0	-
20	0 7 /9	0	45 00 [%]	6	66 679
20	2.74%	9	45.00%	6	66.67%

POWERBOATS OF 29'-30' LENGTH

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	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-6 BOATS	PERCENTAGE: CLASS B-6 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	2	8.00%	25
BROOKS	1	0	-	1
FORT BEND	167	3	1.80%	167
GOLIAD	3	0	-	3
HARDIN	47	0	-	47
HIDALGO	160	3	1.88%	160
JASPER	18	0	-	18
JIM WELLS	36	0	_	36
LIBERTY	51	0	-	51
LIVE OAK	15	1	6.67%	15
NEWTON	4	0	-	4
VICTORIA	131	3	2.29%	131
WHARTON	73	1	1.37%	73
TIER II TOTALS	731	13	1.78%	731

POWERBOATS OF 31'-32' LENGTH

NUMBER OF CLASS B-6 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
2	8.00%	1	50.00%	1	100.00%
0	-	0	-	0	_
3	1.80%	1	33.33%	1	100.00%
0	-	0	- ·	0	-
0	-	0	-	0	-
3	1.88%	1	33.33%	0	-
0	-	0	_	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	6.67%	0	-	0	-
0	-	0	-	0	-
3	2.29%	1	33.33%	0	-
1	1.37%	1	100.00%	1	100.00%
13	1.78%	5	38.46%	3	60.00%

POWERBOATS OF 31'-32' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-7 BOATS	PERCENTAGE: CLASS B-7 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	0	_	25
BROOKS	1	0	_	1
FORT BEND	167	2	1.20%	167
GOLIAD	3	0	-	3
HARDIN	47	0	-	47
HIDALGO	160	2	1.25%	160
JASPER	18	0	-	18
JIM WELLS	36	0	-	36
LIBERTY	51	2	1.25%	51
LIVE OAK	15	0	-	15
NEWTON	4	0	-	4
VICTORIA	131	1	0.76%	131
WHARTON	73	1	1.37%	73
TIER II TOTALS	731	8	1.09%	731

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CLASS B-7

POWERBOATS OF 33'-34' LENGTH

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NUMBER OF CLASS B-7 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0		0	-	0	-
2	1.20%	1	50.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
2	1.25%	1	50.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
2	1.25%	1	50.00%	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	0.76%	1	100.00%	0	-
1	1.37%	1	100.00%	1	100.00%
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8	1.09%	5	62.50%	3	60.00%

POWERBOATS OF 33'-34' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-8 BOATS	PERCENTAGE: CLASS B-8 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	0	-	25
BROOKS	1	0	-	1
FORT BEND	167	0	-	167
GOLIAD	3	0	-	3
HARDIN	47	1	2.13%	47
HIDALGO	160	2	1.25%	160
JASPER	18	0	-	18
JIM WELLS	36	0	-	36
LIBERTY	51	0	-	51
LIVE OAK	15	1	6.67%	15
NEWTON	4	1	25.00%	4
VICTORIA	131	2	1.53%	131
WHARTON	73	3	4.11%	73
TIER II TOTALS	731	10	1.37%	731

POWERBOATS OF 35'-36' LENGTH

A-92

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NUMBER OF CLASS B-8 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	2.13%	0	-	0	-
2	1.25%	1	50.00%	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	
1	6.67%	1	100.00%	1	100.00%
1	25.00%	0	-	0	-
2	1.53%	0	-	0	· _
3	4.11%	3	100.00%	3	100.00%
10	1.37%	5	50.00%	4	80.00%

POWERBOATS OF 35'-36' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-9 BOATS	PERCENTAGE: CLASS B-9 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	0	-	25
BROOKS	1	0	-	1
FORT BEND	167	3	1.80%	167
GOLIAD	3	0	-	3
HARDIN	47	0	-	47
HIDALGO	160	0	-	160
JASPER	18	0	-	18
JIM WELLS	36	0	-	36
LIBERTY	51	0	-	51
LIVE OAK	15	0	-	15
NEWTON	4	0	-	4
VICTORIA	131	0	-	131
WHARTON	73	0	-	73
TIER II TOTALS	731	3	0.41%	731

CLASS B-9		
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POWERBOATS OF 37'-28' LENGTH

NUMBER OF CLASS B-9 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0		0	-	0	. –
0	-	0	-	0	-
3	1.80%	2	66.67%	2	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
3	0.41%	2	66.67%	2	100.00%

POWERBOATS OF 37'-38' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-10 BOATS	PERCENTAGE: CLASS B-10 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	0	-	25
BROOKS	1	0	-	1
FORT BEND	167	0	-	167
GOLIAD	3	0	-	3
HARDIN	47	1	2.13%	47
HIDALGO	160	0	-	160
JASPER	18	1	5.56%	18
JIM WELLS	36	0	-	36
LIBERTY	51	1	1.96%	51
LIVE OAK	15	0	-	15
NEWTON	4	0	-	4
VICTORIA	131	0	-	131
WHARTON	73	0	_	73
TIER II TOTALS	731	3	0.41%	731

POWERBOATS OF 39'-40' LENGTH

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NUMBER OF CLASS B-10 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	2.13%	1	100.00%	1	100.00%
0	-	0	_	0	-
1	5.56%	0	_	0	-
0	-	0	-	0	-
1	1.96%	0	_	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	_	0	
0	-	0	-	0	-
3	0.41%	1	33.33%	1	100.00%

POWERBOATS OF 39'-40' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-11 BOATS	PERCENTAGE: CLASS B-11 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
BEE	25	0	-	25
BROOKS	1	0	-	1
FORT BEND	167	1	0.60%	167
GOLIAD	3	0	-	3
HARDIN	47	0	-	47
HIDALGO	160	2	1.25%	160
JASPER	18	1	5.56%	18
JIM WELLS	36	0	-	36
LIBERTY	51	0	-	51
LIVE OAK	15	0	-	15
NEWTON	4	0		4
VICTORIA	131	0	-	131
WHARTON	73	0	-	73
TIER II TOTALS	731	4	0.55%	731

POWERBOATS OF 41' + LENGTH

A-98

NUMBER OF CLASS B-11 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
1	0.60%	1	100.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
2	1.25%	1	50.00%	1	100.00%
1	5.56%	1	100.00%	0	_
0	-	0	-	0	-
0	-	0	-	0	-
0		0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	_	0	-
4	0.55%	3	75.00%	2	66.67%

POWERBOATS OF 41' + LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-1 BOATS	PERCENTAGE: CLASS C-1 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
BEE	6	3	50.00%	6
BROOKS	1	1	100.00%	1
FORT BEND	19	2	10.53%	19
GOLIAD	0	0	-	0
HARDIN	3	1	33.33%	3
HIDALGO	37	4	10.81%	37
JASPER	7	4	57.14%	7
JIM WELLS	4	3	75.00%	4
LIBERTY	16	6	37.50%	16
LIVE OAK	0	0	_	0
NEWTON	1	1	100.00%	1
VICTORIA	11	2	18.18%	11
WHARTON	4	1	25.00%	4
TIER II TOTALS	109	28	25.69%	109

<u>CLASS C-1</u> SAILBOATS OF 1'-12' LENGTH

NUMBER OF CLASS C-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
3	50.00%	1	33.33%	1	100.00%
1	100.00%	0	-	0	_
2	10.53%	2	100.00%	1	50.00%
0	-	0	-	0	-
1	33.33%	1	100.00%	0	-
4	10.81%	0	-	0	-
4	57.14%	3	75.00%	0	-
3	75.00%	0	-	0	ء —
6	37.50%	1	16.67%	0	-
0	-	0	-	0	-
1	100.00%	1	100.00%	1	100.00%
2	18.18%	0	-	0	-
1	25.00%	1	100.00%	1	100.00%
28	25.69%	10	35.71%	4	40.00%

CLASS C-1

SAILBOATS OF 1'-12' LENGTH

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	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-2 BOATS	PERCENTAGE: CLASS C-2 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
BEE	6	1	16.67%	6
BROOKS	1	0	-	1
FORT BEND	19	3	15.79%	19
GOLIAD	0	0	-	0
HARDIN	3	0	-	3
HIDALGO	37	4	10.81%	37
JASPER	7	2	28.57%	7
JIM WELLS	4	1	25.00%	4
LIBERTY	16	6	37.50%	16
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	11	1	9.09%	11
WHARTON	4	0	-	4
TIER II TOTALS	109	18	16.51%	109

CLASS C-2

SAILBOATS OF 13'-14' LENGTH

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NUMBER OF CLASS C-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
	·				
1	16.67%	0	-	0	-
0	-	0	-	0	-
3	15.79%	2	66.67%	2	100.00%
0	-	0	-	0	-
0	-	0	-	0	_
4	10.81%	3	75.00%	3	100.00%
2	28.57%	0	-	0	
1	25.00%	0	-	0	-
6	37.50%	3	50.00%	0	-
0	-	0	-	0	-
0	-	0	-	0	_
1	9.09%	0	-	0	
0	_	0	_	0	_
18	16.51%	8	44。44%	5	62.50%

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CLASS C-2

SAILBOATS OF 13'-14' LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-3 BOATS	PERCENTAGE: CLASS C-3 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
BEE	6	0	-	6
BROOKS	1	0	-	1
FORT BEND	19	8	42.11%	19
GOLIAD	0	0	-	0
HARDIN	3	1	33.33%	3
HIDALGO	37	11	29.73%	37
JASPER	7	1	14.29%	7
JIM WELLS	4	0	-	4
LIBERTY	16	2	12.50%	16
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	11	3	27.27%	11
WHARTON	4	3	75.00%	4
TIER II TOTALS	109	29	26.61%	109

<u>CLASS C-3</u> SAILBOATS OF 15'-16' LENGTH

С	L	А	S	S	С-	3

NUMBER OF CLASS C-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
8	42.11%	2	25.00%	2	100.00%
0	-	0	-	0	-
1	33.33%	1	100.00%	0	-
11	29.73%	4	36.36%	4	100.00%
1	14.29%	0	-	0	-
0	-	0	-	0	-
2	12.50%	1	50.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
3	27.27%	3	100.00%	2	66.67%
3	75.00%	2	66.67%	2	100.00%
29	26.61%	13	44.83%	11	84.62%

SAILBOATS OF 15'-16' LENGTH

.

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-4 BOATS	PERCENTAGE: CLASS C-4 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
BEE	6	2	33.33%	6
BROOKS	1	0	-	1
FORT BEND	19	3	15.79%	19
GOLIAD	0	0	-	0
HARDIN	3	1	33.33%	3
HIDALGO	37	14	37.84%	37
JASPER	7	0	-	7
JIM WELLS	4	0	~	4
LIBERTY	16	2	12.50%	16
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	11	4	36.36%	11
WHARTON	4	0	-	4
TIER II TOTALS	109	26	23.85%	109

CLASS C-4

SAILBOATS OF 17'-18' LENGTH

			-		
NUMBER OF CLASS C-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
2	33.33%	1	50.00%	1	100.00%
0	_	0	_	0	_
3	15.79%	1	33.33%	1	100.00%
0	_	0	_	0	-
1	33.33%	1	100.00%	0	-
14	37.84%	5	35.71%	3	60.00%
0	-	0	-	0	-
0	-	0	-	0	-
2	12.50%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
4	36.36%	1	25.00%	1	100.00%
0	-	0	-	0	-
26	23.85%	9	34.62%	6	66.67%

CLASS C-4

SAILBOATS OF 17'-18' LENGTH

.

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-5 BOATS	PERCENTAGE: CLASS C-5 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
BEE	6	0	-	6
BROOKS	1	0	-	1
FORT BEND	19	3	15.79%	19
GOLIAD	0	0	-	0
HARDIN	3	0	-	3
HIDALGO	37	4	10.81%	37
JASPER	7	0	-	7
JIM WELLS	4	0	-	4
LIBERTY	16	0	-	16
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	11	1	9.09%	11
WHARTON	4	0	-	4
TIER II TOTALS	109	8	7.34%	109

<u>CLASS C-5</u>

SAILBOATS OF 19'-20' LENGTH

			·		
NUMBER OF CLASS C-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
3	15.79%	2	66.67%	2	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
4	10.81%	1	25.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	
0	-	0	-	0	-
1	9.09%	0	-	0	-
0	-	0	-	0	-
8	7.34%	3	37.50%	3	100.00%

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CLASS C-5

SAILBOATS OF 19'-20' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-1 BOATS	PERCENTAGE: CLASS D-1 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0		0
FORT BEND	1	1	100.00%	1
GOLIAD	1	1	100.00%	1
HARDIN	1	0	-	1
HIDALGO	5	3	60.00%	5
JASPER	1	0	-	1
JIM WELLS	2	1	50.00%	2
LIBERTY	1	1	100.00%	1
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	4	1	25.00%	4
WHARTON	2	2	100.00%	2
TIER II TOTALS	20	10	50.00%	20

SAILBOATS OF 21'-22' LENGTH

			•		
NUMBER OF CLASS D-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
1	100.00%	0	-	0	-
1	100.00%	1	100.00%	0	-
0	-	0	-	0	-
3	60.00%	2	66.67%	2	100.00%
0	-	0	-	0	-
1	50.00%	0	-	0	-
1	100.00%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1 .	25.00%	1	100.00%	1	100.00%
2	100.00%	2	100.00%	1	50.00%
10	50.007	<i>,</i>	60.00 <i>%</i>	,	
10	50.00%	6	60.00%	4	66.67%

SAILBOATS OF 21'-22' LENGTH

.

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-2 BOATS	PERCENTAGE: CLASS D-2 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	_	1
BROOKS	0	0	_	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	1	20.00%	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	1	100.00%	. 1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
TIER II TOTALS	20	2	10.00%	20

SAILBOATS OF 23'-24' LENGTH

A-112

NUMBER OF CLASS D-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	_	0	-	0	-
0	-	0	-	0	-
0	_	0	-	0	-
0	_	0	-	0	-
0	-	0	-	0	-
1	20.00%	0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	-
0	_	0	-	0	-
0	-	0	-	0	-
1	100.00%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	_
2	10.00%	0	-	0	-

SAILBOATS OF 23'-24' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-3 BOATS	PERCENTAGE: CLASS D-3 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	1	20.00%	5
JASPER	1	1	100.00%	1
JIM WELLS	2	1	50.00%	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	0	· _	1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
TIER II TOTALS	20	3	15.00%	20

SAILBOATS OF 25'-26' LENGTH

NUMBER OF CLASS D-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	_
0	-	0	-	0	-
0	_	0	-	0	-
0	-	0	-	0	-
0	-	0	-	O	-
1	20.00%	1	100.00%	1	100.00%
1	100.00%	1	100.00%	0	-
1	50.00%	1	100.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	Ο	-
0	-	0	-	0	_
0	-	0	-	0	-
0		0	-	0	-
3	15.00%	3	100.00%	2	66.67%

SAILBOATS OF 25' - 26' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-4 BOATS	PERCENTAGE: CLASS D-4 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	1	100.00%	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0		1
HIDALGO	5	0	-	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	0		1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
TIER II TOTALS	20	1	5.00%	20

SAILBOATS OF 27'-28' LENGTH

CLASS D-4

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NUMBER OF CLASS D-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	100.00%	1	100.00%	1	100.00%
0	-	0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	: -
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	_	0	-	0	-
0	-	0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	5.00%	1	100.00%	1	100.00%

SAILBOATS OF 27'-28' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-5 BOATS	PERCENTAGE: CLASS D-5 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	0	-	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	4	2	50.00%	4
WHARTON	2	0	-	2
TIER II TOTALS	20	2	10.00%	20

SAILBOATS OF 29'-30' LENGTH

NUMBER OF CLASS D-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	_	0	_	0	_
			_		
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
2	50,00%	1	50.00%	1	100.00%
0	_	0	-	0	-
2	10.00%	1	50.00%	1	100.00%

CLASS D-5

SAILBOATS OF 29'-30' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-6 BOATS	PERCENTAGE: CLASS D-6 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	1	100.00%	1
HIDALGO	5	0	-	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
TIER II TOTALS	20	1	5.00%	20

SAILBOATS OF 31'-32' LENGTH

NUMBER OF CLASS D-6 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	_	0	-
0	-	0	-	0	-
0	-	0	_	0	-
0	-	0	_	0	-
1	100.00%	1	-	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	5.00%	1	100.00%	1	100.00%

SAILBOATS OF 31'-32' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-7 BOATS	PERCENTAGE: CLASS D-7 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	0	-	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
TIER II TOTALS	20	0	-	20

SAILBOATS OF 33'-34' LENGTH

CLASS D-7

NUMBER OF CLASS D-7 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0		0		0	
U	-	U	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	<u> </u>	0	-
0	-	0	-	0	-
0	-	0	_	0	_

SAILBOATS OF 33'-34' LENGTH

.

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-8 BOATS	PERCENTAGE: CLASS D-8 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	_	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	0	-	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
		_		
TIER II TOTALS	20	0	-	20

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CLASS D-8

SAILBOATS OF 35'-36' LENGTH

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NUMBER OF CLASS D-8 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	_
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-

SAILBOATS OF 35'-36' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-9 BOATS	PERCENTAGE: CLASS D-9 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	0	_	5
JASPER	1	0	-	. 1
JIM WELLS	2	0	-	2
LIBERTY	1	0		1
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
TIER II TOTALS	20	0	-	20

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CLASS D-9

SAILBOATS OF 37'-38' LENGTH

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NUMBER OF CLASS D-9 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	_	0	_	0	_
0	_	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	- ,
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-

SAILBOATS OF 37'-38' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-10 BOATS	PERCENTAGE: CLASS D-10 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	0	-	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0	-	0
NEWTON	1	0	-	1
VICTORIA	4	0	-	4
WHARTON	2	0	-	2
TIER II TOTALS	20	0	-	20

<u>CLASS D-10</u>

SAILBOATS OF 39'-40' LENGTH

NUMBER OF CLASS D-9 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	_ .
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0		0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	

CLASS D-10

SAILBOATS OF 39'-40' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-11 BOATS	PERCENTAGE: CLASS D-11 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
BEE	1	0	-	1
BROOKS	0	0	-	0
FORT BEND	1	0	-	1
GOLIAD	1	0	-	1
HARDIN	1	0	-	1
HIDALGO	5	0	-	5
JASPER	1	0	-	1
JIM WELLS	2	0	-	2
LIBERTY	1	0	-	1
LIVE OAK	0	0		0
NEWTON	1	0	_	1
VICTORIA	4	1	25.00%	4
WHARTON	2	0	-	2
TIER II TOTALS	20	1	5.00%	20

<u>CLASS D-11</u> SAILBOATS OF 41' + LENGTH

A-130

NUMBER OF CLASS D-11 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	_	0	_	0	_
U	-	U	-	U	_
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	25.00%	0	-	0	-
0	-	0	- <u>-</u>	0	-
		-			
1	5.00%	0	-	0	-

CLASS D-11

SAILBOATS OF 41' + LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-1 BOATS	PERCENTAGE: CLASS A-1 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
ANGELINA	5,300	356	6.72%	58
BELL	5,404	771	14.27%	60
BEXAR	20,580	2,374	11.54%	228
BRAZOS	2,431	408	16.78%	27
GREGG	7,023	405	5.77%	77
MONTGOMERY	6,496	667	10.27%	75
SMITH	7,574	567	7.49%	84
TRAVIS	12,339	1,297	10.51%	136
WEBB	487	58	11.91%	5
TIER III TOTALS	67,634	6,903	10.21%	750

POWERBOATS OF 1'-12' LENGTH

NUMBER OF CLASS A-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
4	6.90%	2	50.00%	0	-
3	5.00%	1	33.33%	0	-
1	0.44%	0	_	0	-
0	-	0	-	0	-
4	5.19%	1	25.00%	0	- ·
1	1.33%	1	100.00%	0	-
6	7.14%	1	33.33%	0	-
3	2.21%	2	66.67%	0	-
0	-	0	_	0	-
22	2.93%	9	40.91%	0	-

POWERBOATS OF 1'-12' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-2 BOATS	PERCENTAGE: CLASS A-2 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
ANGELINA	5,300	2,421	45.68%	58
BELL	5,404	1,517	28.07%	60
BEXAR	20,580	4,632	22.51%	228
BRAZOS	2,431	714	29.37%	27
GREGG	7,023	2,236	31.84%	77
MONTGOMERY	6,496	1,662	25.58%	75
SMITH	7,574	2,631	34.74%	84
TRAVIS	12,339	3,262	26.44%	136
WEBB	487	125	25.67%	5
TIER III TOTALS	67,634	19,200	28.39%	750

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CLASS A-2

POWERBOATS OF 13'-14' LENGTH

NUMBER OF CLASS A-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
39	67.24%	14	35.90%	0	-
39	65.00%	18	46.15%	0	÷
91	39.91%	55	60.44%	10	18.18%
12	44.44%	3	25.00%	1	33.33%
45	58.44%	18	40.00%	0	_
26	34.67%	9	34.62%	1	11.11%
35	41.67%	16	45.71%	1	6.25%
71	52.21%	34	47.89%	5	14.71%
3	60.00%	1	33.33%	0	-
361	48.13%	168	46.54%	18	10.71%

<u>CLASS A-2</u>

POWERBOATS OF 13'-14' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-3 BOATS	PERCENTAGE CLASS C-3 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
ANGELINA	5,300	2,070	39.06%	58
BELL	5,404	2,301	42.58%	60
BEXAR	20,580	8,067	39.20%	228
BRAZOS	2,431	886	36.45%	27
GREGG	7,023	3,697	52.64%	77
MONTGOMERY	6,496	2,729	42.01%	75
SMITH	7,574	3,436	45.37%	84
TRAVIS	12,339	4,589	37.19%	136
WEBB	487	175	35.93%	5
TIER III TOTALS	67,634	27,950	41.33%	750

POWERBOATS OF 15'-16' LENGTH

NUMBER OF CLASS A-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
14	24.14%	4	28.57%	0	-
16	26.67%	11	68.75%	0	-
123	53.95%	52	42.28%	22	42.31%
12	44.44%	7	58.33%	1	14.29%
27	35.06%	13	48.15%	0	-
41	54.67%	12	29.27%	1	8.33%
38	45.24%	18	47.37%	2	11.11%
46	33.82%	18	39.13%	5	27.78%
2	40.00%	1	50.00%	0	-
319	42.53%	136	42.63%	31	22.79%

POWERBOATS OF 15'-16' LENGTH

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	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-5 BOATS	PERCENTAGE: CLASS A-5 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
ANGELINA	5,300	67	1.26%	58
BELL	5,404	144	2.66%	60
BEXAR	20,580	1,329	6.46%	228
BRAZOS	2,431	66	2.71%	27
GREGG	7,023	96	1.37%	77
MONTGOMERY	6,496	300	4.62%	75
SMITH	7,574	222	2.93%	84
TRAVIS	12,339	784	6.35%	136
WEBB	487	29	5.95%	5
TIER III TOTALS	67,634	3,037	4.49%	750

<u>CLASS A-4</u>

POWERBOATS OF 17'-18' LENGTH

NUMBER OF CLASS A-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	_	0	-
1	0.44%	0	_	0	-
1	3.70%	0	_	0	-
0	-	0	-	0	-
1	1.33%	0	-	0	-
1	1.19%	1	100.00%	0	-
5	3.68%	1	20.00%	1	100.00%
0	-	0	-	0	-
9	1.20%	2	22.22%	1	50.00%

POWERBOATS OF 17'-18' LENGTH

POWERBOATS OF 19'-20' LENGTH

	NUMBER OF REGISTERED CLASS A BOATS	NUMBER OF REGISTERED CLASS A-4 BOATS	PERCENTAGE: CLASS A-4 BOATS CLASS A BOATS	NUMBER OF CLASS A BOATS SURVEYED
ANGELINA	5,300	386	7.28%	58
BELL	5,404	671	12.42%	60
BEXAR	20,580	4,178	20.30%	228
BRAZOS	2,431	357	14.69%	27
GREGG	7,023	589	8.39%	77
MONTGOMERY	6,496	1,138	17.52%	75
SMITH	7,574	718	9.48%	84
TRAVIS	12,339	2,407	19.51%	136
WEBB	487	100	20.53%	5
TIER III TOTALS	67,634	10,544	15.59%	750

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NUMBER OF CLASS A-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	1.72%	0	_	0	-
2	3.33%	1	50.00%	0	-
· 12	5.26%	5	41.67%	1	20.00%
2	7.41%	2	100.00%	1	50.00%
1	1.30%	1	100.00%	0	_
6	8.00%	2	33.33%	1	50.00%
4	4.76%	1	25.00%	1	100.00%
11	8.09%	6	54.55%	2	33.33%
0	-	0	-	0	-
39	5.20%	18	46.15%	6	33.33%

POWERBOATS OF 19'-20' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-1 BOATS	PERCENTAGE: CLASS B-1 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	16	28.57%	15
BELL	152	62	40.79%	40
BEXAR	1,090	482	44.22%	286
BRAZOS	50	23	46.00%	13
GREGG	90	24	26.67%	24
MONTGOMERY	301	129	42.86%	79
SMITH	291	99	34.02%	76
TRAVIS	813	320	39.36%	213
WEBB	14	6	42.86%	4
TIER III TOTALS	2,857	1,161	40.64%	750

POWERBOATS OF 21'-22' LENGTH

NUMBER OF CLASS B-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
5	33.33%	3	60.00%	2	66.67%
11	27,50%	5	45.45%	1	20.00%
108	37.76%	45	41.67%	33	73.33%
2	15.38%	2	100.00%	1	50.00%
3	12.50%	1	33.33%	0	-
32	40.51%	13	40.63%	6	46.15%
23	30.26%	5	21.74%	0	-
57	26.76%	25	43.86%	8	32.00%
2	50.00%	0	-	0	-
243	32.40%	99	40.74%	51	51.52%

POWERBOATS OF 21'-22' LENGTH

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	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-2 BOATS	PERCENTAGE: CLASS B-2 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	13	23.21%	15
BELL	152	42	27.63%	40
BEXAR	1,090	343	31.47%	286
BRAZOS	50	16	32.00%	13
GREGG	90	30	33.33%	24
MONTGOMERY	301	82	27.24%	79
SMITH	291	128	43.99%	76
TRAVIS	813	211	25.95%	213
WEBB	14	6	42.86%	4
TIER III TOTALS	2,857	871	30.49%	750

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CLASS B-2

POWERBOATS OF 23'-24' LENGTH

NUMBER OF CLASS B-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
				_	
3	20.00%	2	66.67%	0	-
15	37.50%	5	33.33%	1	20.00%
84	29.37%	44	52.38%	30	68.18%
8	61.54%	2	25.00%	1	50.00%
11	45.83%	6	54.55%	0	-
22	27.85%	6	27.27%	5	83.33%
33	43.42%	14	42.42%	1	7.14%
42	19.72%	20	47.62%	4	20.00%
2	50.00%	1	50.00%	0	-
220	29.33%	100	45.45%	42	42.00%

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CLASS B-2

POWERBOATS OF 23'-24' LENGTH

	POWERBOA	TS OF 25' - 26'	LENGTH	
	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-3 BOATS	PERCENTAGE: CLASS B-3 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	6	10.71%	15
BELL	152	19	12.50%	40
BEXAR	1,090	129	11.83%	286
BRAZOS	50	6	12.00%	13
GREGG	90	7	7.78%	24
MONTGOMERY	301	29	9.63%	79
SMITH	291	21	7.22%	76
TRAVIS	813	98	12.05%	213
WEBB	14	0	-	4
TIER III TOTALS	2,857	315	11.03%	750

NUMBER OF CLASS B-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
6	15.00%	1	16.67%	0	-
40	13.99%	19	47.50%	13	68.42%
2	15.38%	1	50.00%	0	-
1	4.17%	1	100.00%	0	-
7	8.86%	2	28.57%	1	50.00%
7	9.21%	4	57.14%	0	-
35	16.43%	16	45.71%	2	12.50
0	-	0	-	0	-
98	13.07%	44	44.90%	16	36.36%

POWERBOATS OF 25'-26' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-4 BOATS	PERCENTAGE: CLASS B-4 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	5	8.93%	15
BELL	152	9	5.92%	40
BEXAR	1,090	53	4.86%	286
BRAZOS	50	, 1	2.00%	13
GREGG	90	13	14.14%	24
MONTGOMERY	301	31	10.30%	79
SMITH	291	25	8.59%	76
TRAVIS	813	68	8.36%	213
WEBB	14	0	-	4
TIER III TOTALS	2,857	205	7.18%	750

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CLASS B-4

POWERBOATS OF 27'-28' LENGTH

NUMBER OF CLASS B-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
. 1	6.67%	0	_	0	-
3	7.50%	1	33.33%	0	-
17	5.94%	7	41.18%	2	28.57%
1	7.69%	0	-	0	-
4	16.67%	4	100.00%	1	25.00%
4	5.06%	3	75.00%	1	33.33%
4	5.26%	1	25.00%	0	-
23	10.80%	14	60.87%	1	7.14%
0	-	0	-	0	-
57	7.60%	30	52.63%	5	16.67%

POWERBOATS OF 27'-28' LENGTH

	POWERBOA	TS OF 29'-30'	LENGTH	
	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-5 BOATS	PERCENTAGE: CLASS B-5 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	4	7.14%	15
BELL	152	4	2.63%	40
BEXAR	1,090	30	2.75%	286
BRAZOS	50	0	-	13
GREGG	90	5	5.56%	24
MONTGOMERY	301	4	1.33%	79
SMITH	291	8	2.75%	76
TRAVIS	813	24	2.95%	213
WEBB	14	1	7.14%	4
TIER III TOTALS	2,857	80	2.80%	750

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POWERBOATS OF 29'-30' LENGTH

NUMBER OF CLASS B-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
2	13.33%	1	50.00%	0	-
1	2.50%	0	-	0	-
9	3.15%	5	55.56%	4	80.00%
0	-	0	-	0	-
2	8.33%	0	-	0	-
1	1.27%	1	100.00%	1	100.00%
4	5.26%	0	-	0	-
11	5.16%	4	36.36%	0	-
0		0	-	0	-
30	4.00%	11	36.67%	5	45.45%

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-6 BOATS	PERCENTAGE: CLASS B-6 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	2	3.57%	15
BELL	152	3	1.97%	40
LEXAR	1,090	18	1.65%	286
BRAZOS	50	0	-	13
GREGG	90	3	3.33%	24
MONTGOMERY	301	9	2.99%	79
SMITH	291	2	0.69%	76
TRAVIS	813	33	4.06%	213
WEBB	14	0	-	4
TIER III TOTALS	2,857	70	2.45%	750

POWERBOATS OF 31'-32' LENGTH

A-152

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POWERBOATS OF 31'-32' LENGTH

NUMBER OF CLASS B-6 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
1	2.50%	0	-	0	-
10	3.50%	6	60.00%	4	66.67%
0	-	0	-	0	-
0	-	0	-	0	-
4	5.06%	1	25.00%	1	100.00%
1	1.32%	0	-	0	-
15	7.04%	7	46.67%	2	28.57%
0	-	0	-	0	-
31	4.13%	14	45.16%	7	50.00%

	POWERBOA	T S O F 33' - 34'	LENGTH	
	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-7 BOATS	PERCENTAGE: CLASS B-7 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	3	5.36%	15
BELL	152	3	1.97%	40
BEXAR	1,090	9	0.83%	286
BRAZOS	50	0	-	13
GREGG	90	4	4.44%	24
MONTGOMERY	301	2	0.66%	79
SMITH	291	3	1.03%	76
TRAVIS	813	13	1.60%	213
WEBB	14	0	_	4
TIER III TOTALS	2,857	37	1.30%	750

NUMBER OF CLASS B-7 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	6.67%	0	-	0	-
1	2.50%	0	-	0	-
5	1.75%	4	80.00%	2	50.00%
0	-	0	-	0	-
2	8.33%	1	50.00%	0	-
1	1.27%	1	100.00%	0	-
3	3.95%	1	33.33%	0	-
6	2.82%	4	66.67%	1	25.00%
0	-	0	-	0	-
19	2.53%	11	57.89%	3	27.27%

POWERBOATS OF 33'-34' LENGTH

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	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-8 BOATS	PERCENTAGE: CLASS B-8 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	4	7.14%	15
BELL	152	4	2.63%	40
BEXAR	1,090	15	1,38%	286
BRAZOS	50	1	2.00%	13
GREGG	90	2	2.22%	24
MONTGOMERY	301	3	1.00%	79
SMITH	291	4	1.37%	76
TRAVIS	813	14	1.72%	213
WEBB	14	0	-	4
TIER III TOTALS	2,857	47	1.65%	750

POWERBOATS OF 35'-36' LENGTH

NUMBER OF CLASS B-8 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
2	13.33%	0	-	0	-
0	-	0	-	0	- :
6	2.10%	3	50.00%	2	66.67%
0	-	0	-	0	-
1	4.17%	1	100.00%	1	100.00%
2	2.53%	1	50.00%	0	-
1	1.32%	0	-	0	-
7	3.29%	3	42.86%	0	-
0	-	0	-	0	-
19	2.53%	8	42.11%	3	37.50%

POWERBOATS OF 35'-36' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-9 BOATS	PERCENTAGE: CLASS B-9 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	0	-	15
BELL	152	0	-	40
BEXAR	1,090	2	0.18%	286
BRAZOS	50	0	-	13
GREGG	90	1	1.11%	24
MONTGOMERY	301	1	0.33%	79
SMITH	291	1	0.34%	76
TRAVIS	813	5	0.62%	213
WEBB	14	0		4
TIER III TOTALS	2,857	10	0.35%	750

<u>CLASS B-9</u>

POWERBOATS OF 37'-38' LENGTH

NUMBER OF CLASS B-9 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
1	0.35%	1	100.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
1	1.27%	0	-	0	-
0	-	0	-	0	-
4	1.88%	3	75.00%	0	-
0	-	0	-	0	-
6	0.80%	4	66.67%	1	25.00%

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CLASS B-9

POWERBOATS OF 37'-38' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-10 BOATS	PERCENTAGE: CLASS B-10 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	1	1.79%	15
BELL	152	4	2.63%	40
BEXAR	1,090	2	0.18%	286
BRAZOS	50	1	2.00%	13
GREGG	90	0	-	24
MONTGOMERY	301	0	-	79
SMITH	291	0	-	76
TRAVIS	813	10	1.23%	213
WEBB	14	0	-	4
TIER III TOTALS	2,857	18	0.63%	750

<u>CLASS B-10</u>

POWERBOATS OF 30'-40' LENGTH

NUMBER OF CLASS B-10 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	6.67%	1	100.00%	0	_
2	5.00%	1	50.00%	0	-
1	0.35%	1	100.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
5	2.35%	3	60.00%	0	-
0	-	0	-	0	-
9	1.20%	6	66.67%	1	16.67%

POWERBOATS OF 39'-40' LENGTH

	NUMBER OF REGISTERED CLASS B BOATS	NUMBER OF REGISTERED CLASS B-11 BOATS	PERCENTAGE: CLASS B-11 BOATS CLASS B BOATS	NUMBER OF CLASS B BOATS SURVEYED
ANGELINA	56	2	3.57%	15
BELL	152	2	1.32%	40
BEXAR	1,090	7	0.64%	286
BRAZOS	50	2	4.00%	13
GREGG	90	1	1.11%	24
MONTGOMERY	301	11	3.65%	79
SMITH	291	0	-	76
TRAVIS	813	17	2.09%	213
WEBB	14	1	7.14%	4
TIER III TOTALS	2,857	43	1.51%	750

<u>CLASS B-11</u>

POWERBOATS OF 41' + LENGTH

A-162

<u>CLASS B-11</u>

POWERBOATS OF 41' + LENGTH

NUMBER OF CLASS B-11 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
5	1.85%	1	20.00%	1	100.00%
0	-	0	-	0	-
0	-	0	-	0	-
5	6.33%	3	60.00%	2	66.67%
0	-	0	-	0	-
8	3.76%	3	37.50%	2	66.67%
0	-	0	-	0	-
18	2.40%	7	38.89%	5	71.43%

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-1 BOATS	PERCENTAGE: CLASS C-1 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
ANGELINA	3	1	33.33%	3
BELL	53	9	16.98%	53
BEXAR	114	25	21.93%	114
BRAZOS	9	2	22.22%	9
GREGG	72	54	75.00%	72
MONTGOMERY	31	5	16.13%	31
SMITH	37	14	37.84%	37
TRAVIS	165	30	18.18%	165
WEBB	2	1	50.00%	2
TIER III TOTALS	486	141	29.01%	486

CLASS C-1

SAILBOATS OF 1'-12' LENGTH

NUMBER OF CLASS C-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	33.33%	0	-	0	-
9	16.98%	2	22.22%	1	50.00%
25	21.93%	11	44.00%	0	, _
2	22.22%	1	50.00%	- 0	-
54	75.00%	18	33.33%	1	5.56%
5	16.13%	3	60.00%	0	-
14	37.84%	7	50.00%	0	_
30	18.18%	14	46.67%	3	21.43%
1	50.00%	1	100.00%	0	-
141	29.01	57	40.43%	5	8.77%

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CLASS C-1

SAILBOATS OF 1'-12' LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-2 BOATS	PERCENTAGE: CLASS C-2 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
ANGELINA	3	0	-	3
BELL	53	3	5.66%	53
BEXAR	114	11	9.65%	114
BRAZOS	9	1	11.11%	9
GREGG	72	5	6.94%	72
MONTGOMERY	31	7	22.58%	31
SMITH	37	2	5.41%	37
TRAVIS	165	16	9.70%	165
WEBB	2	0	-	2
TIER III TOTALS	486	45	9.26%	486

CLASS C-2

SAILBOATS OF 13'-14' LENGTH

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NUMBER OF CLASS C-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	_	0	-
3	5.66%	0	-	0	-
11	9.65%	3	27.27%	1	33.33%
1	11.11%	0	-	0	-
5	6.94%	2	40.00%	0	-
7	22.58%	3	42.86%	0	_
2	5.41%	2	100.00%	0	-
16	9.70	5	31.25%	2	40.00%
0	-	0	-	0	-
45	9.26%	15	33.33%	3	20.00%

<u>CLASS C-2</u>

SAILBOATS OF 13'-14' LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-3 BOATS	PERCENTAGE: CLASS C-3 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
	2		00 00 <i>%</i>	
ANGELINA	3	1	33.33%	3
BELL	53	15	28.30%	53
BEXAR	114	29	25.44%	114
BRAZOS	9	1	11.11%	9
GREGG	72	1	1.39%	72
MONTGOMERY	31	5	16.13%	31
SMITH	37	7	18.92%	37
TRAVIS	165	46	27.88%	165
WEBB	2	1	50.00%	2
TIER III TOTALS	486	106	21.81%	486

CLASS C-3

SAILBOATS OF 15'-16' LENGTH

NUMBER OF CLASS C-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
1	33.33%	0	_	0	-
15	28.30%	7	46.67%	0	-
29	25.44%	11	37.93%	7	63.64%
1	11.11%	0	-	0	-
1	1.39%	1	100.00%	0	-
5	16.13%	0	_	0	-
7	18.92%	5	71.43%	0	-
46	27.88%	9	19.57%	4	44.44%
1	50.00%	0	-	0	-
106	21.81%	33	31.13%	11	33.33%

<u>CLASS C-3</u>

SAILBOATS OF 15' - 16' LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-4 BOATS	PERCENTAGE: CLASS C-4 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
ANGELINA	3	1	33.33%	3
BELL	53	21	39.62%	53
BEXAR	114	37	32.46%	114
BRAZOS	9	4	44.44%	9
GREGG	72	9	12.50%	72
MONTGOMERY	31	9	29.03%	31
SMITH	37	8	21.62%	37
TRAVIS	165	58	35.15%	165
WEBB	2	0	-	2
TIER III TOTALS	486	147	30.25%	486

CLASS C-4

SAILBOATS OF 17'-18' LENGTH

NUMBER OF CLASS C-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
_		2			
1	33.33%	0	-	0	-
21	39.62%	10	47.62%	2	20.00%
37	32,46%	15	40.54%	6	40.00%
4	44.44%	1	25.00%	0	-
9	12.50%	7	77.78%	0	-
9	29.03%	3	33.33%	1	33.33%
8	21.62%	5	62.50%	• 0	-
58	35.15%	23	39.66%	2	8.70%
0	-	0	-	0	-
147	30,25%	64	43.54%	11	17.19%

CLASS C-4

SAILBOATS OF 17'-18' LENGTH

	NUMBER OF REGISTERED CLASS C BOATS	NUMBER OF REGISTERED CLASS C-5 BOATS	PERCENTAGE: CLASS C-5 BOATS CLASS C BOATS	NUMBER OF CLASS C BOATS SURVEYED
ANGELINA	3	0	_	3
BELL	53	5	9.43%	53
BEXAR	114	12	10.53%	114
BRAZOS	9	1	11.11%	9
GREGG	72	3	4.17%	72
MONTGOMERY	31	5	16.13%	31
SMITH	37	6	16.22%	37
TRAVIS	165	15	9.09%	165
WEBB	2	0	-	2
TIER III TOTALS	486	47	9.67%	486

CLASS C-5

SAILBOATS OF 19'-20' LENGTH

A-172

NUMBER OF CLASS C-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	_	0	-	0	_
5	9.43%	1	20.00%	0	-
12	10.53%	5	41.67%	1	20.00%
1	11.11%	0	-	0	-
3	4.17%	2	66.67%	1	50.00%
5	16.13	3	60.00%	0	-
6	16.22%	3	50.00%	0	-
15	9.09%	5	33.33%	2	40.00%
0	-	0	-	0	-
47	9.67%	19	40.43%	4	21.05%

<u>CLASS C-5</u>

SAILBOATS OF 19'-20' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-1 BOATS	PERCENTAGE: CLASS D-1 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	7	43.75%	16
BEXAR	53	21	39.62%	53
BRAZOS	1	1	100.00%	1
GREGG	1	1	100.00%	1
MONTGOMERY	2	0	-	2
SMITH	4	3	75.00%	4
TRAVIS	59	29	49.15%	59
WEBB	0	0	-	0
TIER III TOTALS	136	62	45.59%	136

SAILBOATS OF 21'-22' LENGTH

NUMBER OF CLASS D-1 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
7	43.75%	1	14.29%	0	-
21	39.62%	11	52.38%	2	18.18%
1	100.00%	1	100.00%	0	-
1	100.00%	1	100.00%	0	-
0	-	0	-	0	-
3	75.00%	1	33.33%	0	-
29	49.15%	15	51.72%	3	20.00%
0	-	0	-	0	-
62	45.59%	30	48.39%	5	16.67%

SAILBOATS OF 21'-22' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-2 BOATS	PERCENTAGE: CLASS D-2 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	4	25.00%	16
BEXAR	53	19	35.85%	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	1	50.00%	2
SMITH	4	1	25.00%	4
TRAVIS	59	17	28.81%	59
WEBB	0	0	-	0
TIER III TOTALS	136	42	30.88%	136

SAILBOATS OF 23'-24' LENGTH

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SAILBOATS OF 23'-24' LENGTH

NUMBER OF CLASS D-2 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	_	0	-
4	25.00%	2	50.00%	0	-
19	35.85%	6	31.58%	2	33.33%
0	-	0	-	0	-
0	-	0	-	0	-
1	50.00%	1	100.00%	1	100.00%
1	25.00%	1	100.00%	1	100.00%
17	28.81%	8	47.06%	3	37.50%
0	-	0	-	0	-
42	30.88%	18	42.86%	7	43.75%

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-3 BOATS	PERCENTAGE: CLASS D-3 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
		,		
ANGELINA	0	0	-	0
BELL	16	2	12.50%	16
BEXAR	53	9	16.98%	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	-	2
SMITH	4	0	-	4
TRAVIS	59	9	15.25%	59
WEBB	0	0	-	0
TIER III TOTALS	136	20	14.71%	136

SAILBOATS OF 25'-26' LENGTH

NUMBER OF CLASS D-3 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
2	12.50%	1	50.00%	0	-
9	16.98%	3	33.33%	1	33.33%
0	-	0	-	0	-
0		0	-	0	
0	-	0	-	0	-
0	-	0	_	0	-
9	15.25%	4	44.44%	0	-
0	-	0	-	0	-
20	14.71%	8	40.00%	1	12.50%

SAILBOATS OF 25'-26' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-4 BOATS	PERCENTAGE: CLASS D-4 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	0	-	16
BEXAR	53	4	7.55%	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	1	50.00%	2
SMITH	4	0	-	4
TRAVIS	59	1	1.69%	59
WEBB	0	0	-	0
TIER III TOTALS	136	6	4.41%	136

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<u>CLASS D-4</u>

SAILBOATS OF 27'-28' LENGTH

NUMBER OF CLASS D-4 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	_	0	-	0	-
0	-	0	-	0	-
4	7.55%	3	75.00%	1	33.33%
0	-	0	-	0	-
0	-	0	-	0	-
1	50.00%	1	100.00%	1	100.00%
0	-	0	-	0	-
1	1.69%	1	100.00%	0	-
0	-	0	-	0	-
6	4.41%	5	83.33%	2	40.00%

CLASS D-4

SAILBOATS OF 27'-28' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-5 BOATS	PERCENTAGE: CLASS D-5 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	1	6.25%	16
BEXAR	53	0	-	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	-	2
SMITH	4	0	-	4
TRAVIS	59	1	1.69%	59
WEBB	0	0	-	0
TIER III TOTALS	136	2	1.47%	136

SAILBOATS OF 29'-30' LENGTH

NUMBER OF CLASS D-5 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
1	6.25%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	1.69%	0	-	0	-
0	-	0	-	0	-
2	1.47%	0	-	0	-

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CLASS D-5

SAILBOATS OF 29'-30' LENGTH

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	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-6 BOATS	PERCENTAGE: CLASS D-6 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	0	-	16
BEXAR	53	0	-	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	-	2
SMITH	4	0	-	4
TRAVIS	59	0		59
WEBB	0	0	-	0
TIER III TOTALS	136	0	-	136

SAILBOATS OF 31'-32' LENGTH

A-184

NUMBER OF CLASS D-6 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	_	0	-
0	-	0	-	0	-
0		0	-	0	-
0	-	0	-	0	_
0	_	0	_	Â	_

SAILBOATS OF 31'-32' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-7 BOATS	PERCENTAGE: CLASS D-7 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	1	6.25%	16
BEXAR	53	0	-	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	-	2
SMITH	4	0	-	4
TRAVIS	59	0	-	59
WEBB	0	0	_	0
TIER III TOTALS	136	1	0.74%	136

SAILBOATS OF 33'-34' LENGTH

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NUMBER OF CLASS D-7 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
1	6.25%	1	100.00%	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	_	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	0.74%	1	100.00%	0	-

SAILBOATS OF 33'-34' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-8 BOATS	PERCENTAGE: CLASS D-8 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	0	-	16
BEXAR	53	0	-	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	-	2
SMITH	4	0	-	4
TRAVIS	59	0	-	59
WEBB	0	0	-	0
TIER III TOTALS	136	0	-	136

SAILBOATS OF 35'-36' LENGTH

A-188

NUMBER OF CLASS D-8 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	_	0	-	0	-
0	_	0	_	0	_
0	_	0	-	0	_
0	_	0	_	0	_
·	_	-	_	0	_
0	-	0	-	0	-
0	-	0	-	0	-

SAILBOATS OF 35'-36' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-9 BOATS	PERCENTAGE: CLASS D-9 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	0	-	16
BEXAR	53	0	-	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	-	2
SMITH	4	0	-	4
TRAVIS	59	0	-	59
WEBB	0	0	-	0
TIER III TOTALS	136	0	-	136

SAILBOATS OF 37'-38' LENGTH

A-190

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NUMBER OF CLASS D-9 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	_
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	_
0	-	0	-	0	-
0	-	0	-	0	_
0	-	0	-	0	-
0	_	0	_	0	-
0	-	0	-	0	-

SAILBOATS OF 37'-38' LENGTH

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	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-10 BOATS	PERCENTAGE: CLASS D-10 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	1	6.25%	16
BEXAR	53	0	-	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	_	2
SMITH	4	0	-	4
TRAVIS	59	1	1.69%	59
WEBB	0	0	-	0
TIER III TOTALS	136	2	1.47%	136

SAILBOATS OF 39'-40' LENGTH

NUMBER OF CLASS D-10 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0		0	_	0	-
1	6.25%	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0		0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
1	1.69%	0	-	0	-
0	-	0	~	0	-
2	1.47%	0	-	0	- -

SAILBOATS OF 39'-40' LENGTH

	NUMBER OF REGISTERED CLASS D BOATS	NUMBER OF REGISTERED CLASS D-11 BOATS	PERCENTAGE: CLASS D-11 BOATS CLASS D BOATS	NUMBER OF CLASS D BOATS SURVEYED
ANGELINA	0	0	-	0
BELL	16	0	-	16
BEXAR	53	0	-	53
BRAZOS	1	0	-	1
GREGG	1	0	-	1
MONTGOMERY	2	0	-	2
SMITH	4	0	-	4
TRAVIS	59	1	1.69%	59
WEBB	0	0	-	0
TIER III TOTALS	136	1	0.74%	136

SAILBOATS OF 41' + LENGTH

SAILBOATS OF 41' + LENGTH

NUMBER OF CLASS D-11 BOATS SURVEYED	PERCENT SURVEYED	NUMBER OF RESPONSES	TOTAL RESPONSE PERCENTAGE	NUMBER OF COASTAL USER RESPONSES	PERCENTAGE OF COASTAL USER RESPONSES
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	-
0	-	0	-	0	
0	-	0	-	0	
1	1.69%	1	100.00%	0	-
0	-	0	-	0	_
1	0.74%	1	100.00%	0	-

APPENDIX B

BOAT CLASS 1 - TIER 1

COUNTY	EXPANSION FACTOR
JEFFERSON	76.3
ORANGE	104.5
BRAZORIA	331.8
CHAMBERS	168.0
GALVESTON	300.1
HARRIS	340.8
CALHOUN	15.5
JACKSON	16.8
MATAGORDA	16.1
REFUGIO	13.3
NUECES	36.4
SAN PATRICIO	29.5
CAMERON	10.2
KENEDY	7.0
KLEBERG	13.8
WILLACY	9.5

BOAT CLASS 1 - TIER 2

COUNTY	EXPANSION FACTOR
BEE	73.0
BROOKS	90.0
FORT BEND	85.3
GOLIAD	53.0
HARDIN	68.3
HIDALGO	77.4
JASPER	68.2
JIM WELLS	58.0
LIBERTY	80.0
LIVE OAK	56.1
NEWTON	123.8
VICTORIA	72.6
WHARTON	66.9
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BOAT CLASS 1 - TIER 3

COUNTY	EXPANSION FACTOR
ANGELINA	265.0
BELL	174.3
BEXAR	183.8
BRAZOS	202.6
GREGG	212.8
MONTGOMERY	270.7
SMITH	199.3
TRAVIS	202.3
WEBB	243.5

BOAT CLASS 2 - TIER 1

COUNTY	EXPANSION FACTOR
JEFFERSON	3.1
ORANGE	3.1
BRAZORIA	20.4
CHAMBERS	21.5
GALVESTON	28.9
HARRIS	25.1
CALHOUN	2.1
JACKSON	1.8
MATAGORDA	2.1
REFUGIO	2.3
NUECES	2.5
SAN PATRICIO	2.6
CAMERON	2.4
KENEDY	*
KLEBERG	2.9
WILLACY	1.6

*There were no surveys returned from this county and boat class, therefore, no expansion factor was necessary.

BOAT CLASS 2 - TIER 2

COUNTY	EXPANSION FACTOR
BEE	2.8
BROOKS	1.0
FORT BEND	2.3
GOLIAD	1.5
HARDIN	2.0
HIDALGO	2.1
JASPER	2.0
JIM WELLS	1.8
LIBERTY	2.2
LIVE OAK	2.1
NEWTON	4.0
VICTORIA	2.1
WHARTON	1.7

BOAT CLASS 2 - TIER 3

COUNTY	EXPANSION FACTOR
ANGELINA	8.0
BELL	11.7
BEXAR	8.0
BRAZOS	10.0
GREGG	6.4
MONTGOMERY	9.7
SMITH	11.6
TRAVIS	8.0
WEBB	14.0

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BOAT CLASS 3 - TIER 1

COUNTY	EXPANSION FACTOR
JEFFERSON	2.1
ORANGE	3.4
BRAZORIA	2.4
CHAMBERS	2.7
GALVESTON	2.5
HARRIS	3.0
CALHOUN	2.8
JACKSON	5.0
MATAGORDA	4.3
REFUGIO	1.0
NUECES	2.8
SAN PATRICIO	2.3
CAMERON	1.8
KENEDY	*
KLEBERG	*
WILLACY	2.0

BOAT CLASS 3 - TIER 2

COUNTY	EXPANSION FACTOR
BEE	3.0
BROOKS	.*
FORT BEND	2.1
GOLIAD	*
HARDIN	1.0
HIDALGO	2.8
JASPER	2.3
JIM WELLS	4.0
LIBERTY	3.2
LIVE OAK	*
NEWTON	1.0
VICTORIA	2.8
WHARTON	1.3

BOAT CLASS 3 - TIER 3

COUNTY	EXPANSION FACTOR
ANGELINA	*
BELL	2.7
BEXAR	2.5
BRAZOS	4.5
GREGG	2.4
MONTGOMERY	2.6
SMITH	1.7
TRAVIS	2.9
WEBB	2.0

*There were no surveys returned from this county and boat class, therefore, no expansion factor was necessary.

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BOAT CLASS 4 - TIER 1

COUNTY	EXPANSION FACTOR
JEFFERSON	2.2
ORANGE	*
BRAZORIA	2.0
CHAMBERS	*
GALVESTON	1.7
HARRIS	2.5
CALHOUN	*
JACKSON	*
MATAGORDA	1.5
REFUGIO	1.0
NUECES	1.8
SAN PATRICIO	1.0
CAMERON	1.7
KENE DY	*
KLEBERG	*
WILLACY	1.0

BOAT CLASS 4 - TIER 2

COUNTY	EXPANSION FACTOR
BEE	1.0
BROOKS	*
FORT BEND	*
GOLIAD	1.0
HARDIN	1.0
HIDALGO	1.7
JASPER	1.0
JIM WELLS	2.0
LIBERTY	*
LIVE OAK	*
NEWTON	*
VICTORIA	2.0
WHARTON	1.0

BOAT CLASS 4 - TIER 3

COUNTY	EXPANSION FACTOR
ANGELINA	*
BELL	3.2
BEXAR	2.3
BRAZOS	1.0
GREGG	1.0
MONTGOMERY	1.0
SMITH	2.0
TRAVIS	2.0
WEBB	*

APPENDIX C

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AVERAGE GIWW MILEAGE PER TRIP BY

BEGINNING COUNTY

BOAT CLASS 1

BEGINNING COUNTY	AVERAGE NUMBER OF WATER MILES TRAVELED ON THE INTRACOASTAL WATERWAY							
		2-5	6-10	11-15	16-25	26-50	51-200	201-400
JEFFERSON	24,354	22,023	31,470	23,285	23,258	18,231	3,490	1,848
ORANGE	13,684	4,217	45,530	23,183	4,201	10,101	0	0
MATAGORDA	47,754	22,244	19,955	44,057	23,642	22,145	6,837	0
CALHOUN	6,820	24,669	16,495	2,509	8,160	6,550	1,830	0
ARANSAS	620	12,335	17,341	12,106	17,306	17,331	2,805	0
NUECES	1,112	9,071	25,827	19,078	17,420	29,442	1,816	487
KENEDY	0	321	70	528	0	2,622	306	0
SAN PATRICIO	67	6,877	4,419	2,803	2,539	3,065	894	487
GALVESTON	5,519	27,049	86,901	32,544	30,127	6,790	0	1,848
CHAMBERS	69,708	49,186	45,166	10,765	17,565	12,553	0	1,848
HARRIS	15,234	61,788	80,025	54,525	38,908	45,809	3,488	0
BRAZORIA	3,318	52,295	45,839	51,550	8,522	31,416	16,423	0
JACKSON	77	2,711	4,180	1,739	941	2,154	0	0
REFUGIO	0	1,628	4,368	1,666	982	0	306	0
KLEBERG	0	8,521	2,386	1,244	1,432	2,980	1,430	0
WILLACY	219	2,441	2,879	6,967	6,075	2,966	95	0
CAMERON	1,659	2,442	10,857	11,363	26,684	6,815	11,883	0
TOTALS	190,145	309,818	443,708	299,912	227,762	220,970	51,603	6,518

AVERAGE GIWW MILEAGE PER TRIP BY

BEGINNING COUNTY

BOAT CLASS 2

BEGINNING COUNT	<u>Y</u>	AVERAGE NUMBER OF WATER MILES TRAVELED ON THE INTRACOASTAL WATERWAY							
	1	2-5	6-10	11-15	16-25	25-50	51-200	201-40	• •
JEFFERSON	1,232	696	1,246	736	1,840	2,260	1,389	680	
ORANGE	0	162	257	547	455	501	1,078	139	
MATAGORDA	405	563	423	905	3,563	313	957	0	
CALHOUN	122	694	2,196	105	228	198	348	0	
ARANSAS	3,178	829	909	1,623	1,891	3,279	2,181	616	
NUECES	537	3,157	1,032	1,608	2,257	4,014	2,819	532	
KENEDY	0	25	41	0	47	26	0	0	
SAN PATRICIO	117	2,113	923	1,394	1,255	655	346	320	
GALVESTON	3,091	4,584	2,288	3,430	6,544	7,854	4,769	44	
CHAMBERS	6,003	2,270	695	809	2,717	1,069	1,630	0	
HARRIS	13,058	3,578	5,073	2,626	9,260	7,642	14,068	1,291	
BRAZORIA	3,955	1,481	7,376	2,298	3,887	4,403	9,208	0	
JACKSON	0	63	9	0	516	97	269	0	
REFUGIO	0	0	29	0	14	0	0	0	
KLEBERG	0	414	51	52	12	103	198	0	
WILLACY	132	94	269	324	364	596	579	80	
CAMERON	359	1,658	1,169	721	1,219	1,081	933	168	
TOTALS	32,189	22,381	23,986	17,178	36,069	34,091	40,772	3,870	

AVERAGE GIWW MILEAGE PER TRIP BY

BEGINNING COUNTY

BOAT CLASS 3

BEGINNING COUNTY	AVERAGE NUMBER OF WATER MILES TRAVELED ON THE INTRACOASTAL WATERWAY							
	1	2-5	6-10	11-15	16-25	26-50	51-200	201-400
JEFFERSON	55	76	431	0	49	78	0	0
ORANGE	0	33	0	0	7	0	0	0
MATAGORDA	150	237	424	147	168	324	15	0
CALHOUN	57	433	312	493	163	108	0	0
ARANSAS	61	306	79	74	43	56	0	0
NUECES	57	755	66	306	252	178	0	0
KENEDY	54	0	0	0	0	28	0	0
SAN PATRICIO	0	88	399	154	48	46	0	0
GALVESTON	620	380	201	120	143	103	0	0
CHAMBERS	153	180	56	46	72	45	87	0
HARRIS	364	476	283	446	417	212	102	0
BRAZORIA	303	798	498	421	190	365	85	0
JACKSON	0	20	0	19	0	0	0	0
REFUGIO	0	35	0	0	0	0	0	0
KLEBERG	0	3	0	2	28	0	0	0
WILLACY	14	3	152	18	266	56	14	0
CAMERON	32	25	144	212	181	92	14	0
TOTALS	1,920	3,848	3,045	2,458	2,027	1,691	317	0

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AVERAGE GIWW MILEAGE PER TRIP BY

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BEGINNING COUNTY

BOAT CLASS 4

BEGINNING COUNTY				MILES TRAVELE				
		2-5	6-10	11-15	16-25	26-50	51-200	201-400
JEFFERSON	0	0	66	36	22	0	22	0
ORANGE	0	0	0	36	0	0	0	0
MATAGORDA	0	30	0	2	0	0	0	0
CALHOUN	50	25	140	2	0	5	0	0
ARANSAS	0	5	23	24	46	0	17	120
NUECES	60	36	375	258	82	347	106	0
KENEDY	0	0	0	0	10	0	0	0
SAN PATRICIO	0	36	0	0	0	0	0	0
GALVESTON	10	195	56	56	0	62	56	0
CHAMBERS	0	8	0	34	0	0	85	0
HARRIS	999	112	108	108	75	395	100	0
BRAZORIA	0	0	80	0	0	0	0	0
JACKSON	0	0	0	2	0	0	0	0
REFUGIO	0	0	0	0	0	0	0	0
KLEBERG	0	0	0	0	10	0	0	0
WILLACY	0	0	0	0	37	0	0	0
CAMERON	17	328	17	36	0	204	204	119
TOTALS	1,136	775	865	594	282	1,013	590	239

BOAT CLASS 1

Reported Mileage Per Trip	Reported Trips on GIWW	Nu 	umber of Miles Traveled on GIWW
(1 mile)	(190,145 trips)	=	190,145 miles
(3 miles)	(309,818 trips)	=	929,454 miles
(8 miles)	(443,708 trips)	=	3,549,664 miles
(13 miles)	(299,912 trips)	=	3,898,856 miles
(20 miles)	(227,762 trips)	=	4,555,240 miles
(38 miles)	(220,970 trips)	=	8,396,860 miles
(125 miles)	(51,603 trips)		6,450,375 miles
(300 miles)	(6,518 trips)	=	1,955,400 miles

Yearly GIWW mileage of Boat Class 1 - 27,970,594 miles Coastal boat trips of Boat Class 1 using GIWW* = 1,382,052 trips

Average: 20.24 miles per trip

*See Appendix D-3 for Boat Class totals of trips that use the GIWW.

BOAT CLASS 2

Reported Mileage Per Trip	Reported Trips on GIWW	Nu	umber of Miles Traveled on GIWW
(1 mile)	(32,189 trips)	=	32,189 miles
(3 miles)	(22,381 trips)	=	67,143 miles
(8 miles)	(23,986 trips)	=	191,888 miles
(13 miles)	(17,178 trips)	=	223,314 miles
(20 miles)	(36,069 trips)	=	721,380 miles
(38 miles)	(34,091 trips)	=	1,295,458 miles
(125 miles)	(40,772 trips)	=	5,096,500 miles
(300 miles)	(3,870 trips)	=	1,161,000 miles

Yearly GIWW mileage of Boat Class 2 = 8,788,872 miles Coastal boat trips of boat Class 2 using $GIWW^* = 178,457$ trips

Average: 49.25 miles per trip

*See Appendix D-3 for Boat Class totals of trips that use the GIWW.

BOAT	CLASS	3

Reported Mileage Per Trip	Reported Trips On GIWW	Nu	mber of Miles Traveled on GIWW
(1 mile)	(1,920 trips)	=	1,920 miles
(3 miles)	(3,848 trips)	=	11,544 miles
(8 miles)	(3,045 trips)	=	24,360 miles
(13 miles)	(2,458 trips)	=	31,954 miles
(20 miles)	(2,027 trips)	=	40,540 miles
(38 miles)	(1,691 trips)	=	64,258 miles
(125 miles)	(317 trips)	=	39,625 miles
(300 miles)	(0 trips)	=	0 miles

Yearly GIWW mileage of Boat Class 3 = 214,201 miles Coastal boat trips of Boat Class 3 Using GIWW* = 14,154 trips

Average: 15.13 miles per trip

 $^{*}\textsc{See}$ Appendix D-3 for Boat Class totals of trips that use the GIWW.

BOAT CLASS 4

Reported Mileage Per Trip	Reported Trips on GIWW	Nu 	mber of Miles Traveled on GIWW
(1 mile)	(1,136 trips)	=	1,136 miles
(3 miles)	(775 trips)	=	2,325 miles
(8 miles)	(865 trips)	=	6,920 miles
(13 miles)	(594 trips)	=	7,722 miles
(20 miles)	(282 trips)	=	5,640 miles
(38 miles)	(1,013 trips)	=	38,494 miles
(125 miles)	(590 trips)	=	73,750 miles
(300 miles)	(239 trips)	=	71,700 miles

Yearly GIWW mileage of Boat Class 4 = 207,687 miles Coastal boat trips of Boat Class 4 using GIWW^{*} = 4,501 trips

Average: 46.14 miles per trip

*See Appendix D-3 for Boat Class totals of trips that use the GIWW.

APPENDIX D

NUMBER OF TRIPS BEGUN BY BODY OF WATER

BEGINNING BODY OF WATER	POWERBOATS	POWERBOATS	SAILBOATS 1'-20'	SAILBOATS
SABINE RIVER	70,860	3,726	26	22
NECHES RIVER	46,249	3,999	164	66
SABINE LAKE	130,477	4,544	365	88
EAST BAY	185,019	6,462	393	132
GALVESTON BAY	333,140	91,117	3,656	2,253
WEST BAY	165,302	19,191	1,093	67
BRAZOS RIVER	21,846	4,743	240	25
SAN BERNARD RIVER	38,690	3,062	310	0
CANEY CREEK	53,997	1,604	668	0
EAST MATAGORDA BAY	58,952	725	514	0
COLORADO RIVER	40,077	3,621	367	0
MATAGORDA BAY	72,773	4,919	925	247
ESPIRITU SANTO BAY	15,077	309	656	16
SAN ANTONIO BAY	23,513	2,024	341	0
ARANSAS BAY	58,981	12,861	664	222
CORPUS CHRISTI BAY	69,902	16,087	1,211	1,103
BAFFIN BAY	17,294	820	99	10
UPPER LAGUNA MADRE	47,407	5,880	387	164
LOWER LAGUNA MADRE	83,254	7,334	1,034	927
OTHER	229,250	17,148	1,865	149

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NUMBER OF TRIPS BEGUN BY COUNTY

BEGINNING COUNTY	POWERBOATS 1'-20'	POWERBOATS	SAILBOATS 1'-20'	SAILBOATS 21'+
JEFFERSON	152,077	10,141	689	146
ORANGE	102,643	3,139	40	36
MATAGORDA	186,674	7,229	1,465	32
CALHOUN	67,988	3,991	1,566	222
ARANSAS	79,844	14,562	619	235
NUECES	109,822	16,101	1,614	1,264
KENEDY	3,847	139	82	10
SAN PATRICIO	21,151	7,232	735	36
GALVESTON	191,073	34,534	1,567	435
CHAMBERS	214,024	15,544	639	127
HARRIS	307,393	59,206	2,368	1,897
BRAZORIA	209,363	32,708	2,660	80
JACKSON	11,970	954	39	2
REFUGIO	8,950	43	35	0
KLEBERG	17,993	830	33	10
WILLACY	21,642	2,438	523	37
CAMERON	71,959	7,428	700	925

NUMBER OF TRIE	S BEGUN	BY NAVIG	ATION CHA	ANNEL
BEGINNING NAVIGATION CHANNEL	POWERBOATS	POWERBOATS	SAILBOATS	SAILBOATS
SABINE-NECHES WATERWAY	233,939	12,216	746	266
HOUSTON SHIP CHANNEL	277,415	68,569	1,444	1,433
TEXAS CITY SHIP CHANNEL	128,557	17,271	2,018	223
GALVESTON CHANNEL	333,471	48,077	1,718	744
MATAGORDA SHIP CHANNEL	90,322	7,382	1,590	230
ARANSAS PASS CHANNEL	62,676	19,919	1,161	322
CORPUS CHRISTI SHIP CHANNEL	83,231	18,013	1,095	1,074
ARROYO COLORADO CHANNEL	39,945	2,413	617	124
PORT MANSFIELD CHANNEL	40,561	4,212	516	200
BROWNSVILLE SHIP CHANNEL	25,295	4,295	581	373
GULF INTRACOASTAL WATERWAY	1,382,052	178,457	14,154	4,501

A P P E N D I X E

DETERMINING SURVEY SAMPLE SIZE

<u>SAMPLING THEORY</u> Historically, required sample sizes for travel surveys are related to the following four variables:

- The desired level of precision of survey estimates expressed in terms of (a) an acceptable difference between the sample mean and the actual mean of the entire population of data and (b) a level of confidence.
- The variance of the data being sampled expressed in terms of variation about the population mean (standard deviation.)
- The size of the population to be sampled expressed in terms of available samples to choose from.
- 4. The sampling procedure whether simple random, stratified random, stratified systematic, etc.

Accordingly the required sample size for an areawide recreational boat survey can be mathematically estimated using the following formula for stratified random samples:

$$n = \frac{\frac{z^2 \cdot s^2}{d^2}}{1 + \frac{1}{N} \frac{z^2 \cdot s^2}{d^2}}$$

WHERE:

n = Number of completed samples required to estimate the mean of the samples within a specified level of precision

E-1

Z = Value of the normal variate used to express confidence level.

Confidence	Z
Level	Value
90%	1.65

- d = Allowable range of error or the acceptable difference between the sample mean and the actual mean estimated boat trips (\tilde{x}) of the survey data (d = 0.10 · mean) for 10% tolerance. The mean \tilde{x} is assumed equal to the standard deviation (s).
- N = Total number of available samples in tier one, which requires the most intensive sampling.
- S = Sample standard deviation (For thie study, S = 15)

$$n = \frac{\frac{Z^2 \cdot S^2}{d^2}}{1 + \frac{1}{N} \frac{Z^2 \cdot S^2}{d^2}}$$

$$n = \frac{\frac{(1.65)^2 \cdot (15)^2}{(0.10 \cdot 15)^2}}{1 + \frac{1}{23,279}} \cdot \frac{(1.65)^2 \cdot (15)^2}{(0.10 \cdot 15)^2}$$

 $n = \frac{272.25}{1.01} = 270$

Therefore, a required sample size of 270 completed questionnaires would be required for the individual stratum of Tier 1, Region 1, Motor-

boats, 1-20 feet to estimate mean boat trips to coastal waters within $\frac{1}{2}$ 0.10 of the true mean with 90% confidence. Then assuming 40% return of questionnaires, the required mailout can be calculated as follows:

Required Mailout = Required Completed Samples Estimated Return

$$= \frac{270}{0.40} = 675$$

The 675 maximum sample within any stratum was increased to 750 required mailouts (where permitted by the availability of samples) as a margin of safety for the statistical reliability of all questions asked in the survey. Where there was less than 750 available samples within a stratum, the mailout sample size was set to 100%.

SOURCE: <u>Guidelines for Designing Travel Surveys for Statewide Trans</u>portation Planning, May 1974, Pages 5.3-5.5