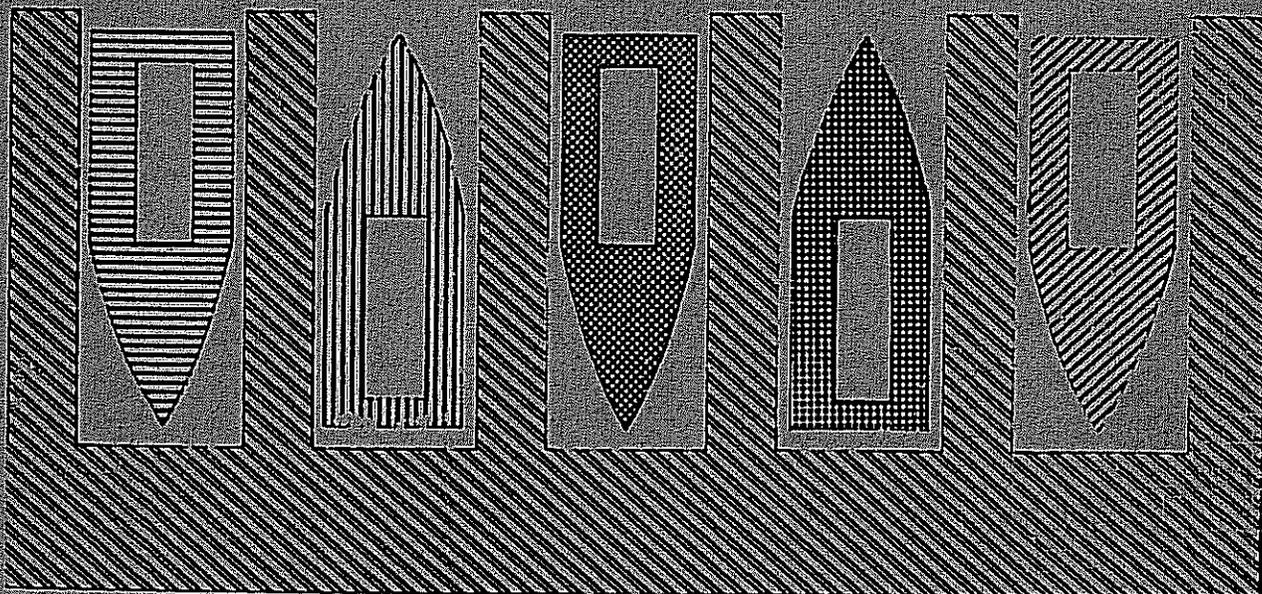


APPENDIX A

FEASIBILITY STUDY FOR WHITE BLUFF RESORT MARINA

**A FEASIBILITY STUDY FOR
WHITE BLUFF RESORT
MARINA ON LAKE WHITNEY**



**PREPARED BY
DEWAYNE HOLLIN
MARINE BUSINESS SPECIALIST**

FORWARD

The management of Double Diamond Companies requested that a feasibility study be conducted for the White Bluff Resort Marina, a proposed expansion of the existing White Bluff Yacht Club located in the White Bluff Resort. On Lake Whitney, TX. The study was designed to determine the feasibility of adding an additional 420 wet slips to the existing marina located in a cove on Lake Whitney and moving the marina to the main part of the lake.

The study covered the feasibility of building the additional wet slips and determining the market demand for those slips in the Lake Whitney boating area. Also covered by the report was the economic environment, competitive environment, and an analysis of the proposed White Bluff Resort Marina expansion.

The information contained in this report was taken from personal interviews with project developers, marina reports prepared by the author of this study, boating industry publications, special economic and market data reports prepared on the major boating market area, U.S. Corps of Engineers materials, and marina information published by the Sea Grant College Program at Texas A&M University.

Dates covered by the study were October 1, 2007 through November 10, 2007

Dewayne Hollin
Marine Business Specialist

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SUMMARY AND CONCLUSIONS

Based on our analysis of the Lake Whitney area marina industry and the expanding major boating market area around Lake Whitney, we are confident in projecting the expansion of White Bluff Yacht Club into a full service commercial marina as market justified. We recognize that there may be some temporary low vacancy levels in other commercial marinas on the lake as a result of the expansion, but feel the development of the project by phases outlined in this report will minimize the impact of the expansion on existing Lake Whitney marina projects.

The major boating market area around Lake Whitney represents a tremendous opportunity for the area's marina industry to step up and provide a new quality project that can attract more boaters to Lake Whitney and improve the economic impact of recreational boating in the Lake Whitney area. Based on Texas Parks & Wildlife Department (TPWD) Boater Registration data and projected population, household and effective buying income (EBI) growth over the next five years, we see an increasing demand for boat slips in the major boating market area represented by the surrounding twenty-two county area. By 2011 we project another 7,400 new boat registrations in the major boating market area surrounding Lake Whitney, and if we provide new and updated marina facilities on Lake Whitney we have a better chance of attracting these new boaters to the lake. The attractiveness of Lake Whitney is also enhanced by the lower boating carrying capacity of the lake. Improved facilities of a new modern marina can attract more boaters to the lake and increase the overall economic impact of the marina industry by increasing both the level of service and the amount of money boaters spend on their boating experience.

Economic Environment

Lake Whitney's recreational boating industry is located near the center of good potential growth over the next five years, near Dallas-Fort Worth, Waco and Austin areas. The twenty-county major boating market area will see the number of households grow by

over 123,500 over the five-year period from 2006 – 2011, and the average projected household income will reach over \$51,000 by 2011. Over 168,800 households in the market area will have EBI in excess of \$100,000 by 2011, providing even greater potential for boat sales, and increased buying power for significantly larger boats that would be the best candidates for marina slips. A recent study by Texas A&M University for TPWD shows that over 63% of boats over 26 feet in length are kept in public or private marinas.

Competitive Environment

Presently Lake Whitney has four commercial marinas and two major private marinas with about 525 wet slips and 350 dry storage units, or about 875 units of boat storage capacity, making Lake Whitney one of the lower level commercial marina boat storage lakes in Texas. Most of the four commercial marinas are older facilities with less than 100 slips and limited services, but at least two of these marinas are expanding their number of wet slips and adding larger slips. All of the private marinas have less than 100 wet slips and offer slips to only boaters using their resort facilities. White Bluff Yacht Club is one of these private marinas wanting to expand and become a public or commercial marina. Pricing and level of service varies among these commercial marinas, but the three most competitive marinas are Lake Whitney Marina @ Juniper Cove, Uncle Gus' Marina and White Bluff Yacht Club (private). All three have predominately covered wet slips from 20 ft. to 40-50 ft. in length.

Prospects for White Bluff Resort Marina Expansion

The present marina is basically located in a shallow water cove that cannot be dredged to deeper depths and frequently boaters find the cove inoperable during low water periods. The marina has a total of 67 wet slips and cannot expand in the present location. A master plan for a new commercial marina has been developed that includes a five- phase expansion from the 67 wet slips to 499 wet slips. The first two phases use existing docks, plus two additional docks that add 90 new slips for a total of 183 slips, and meet the

current demands of White Bluff resort members. Phase 3 thru phase five would add an additional 316 wet slips giving the marina a total of 499 wet slips. The project would be located in the main body of the lake and have a total of three wave attenuators with 42 total anchors built to protect the marina.

The White Bluff Yacht Club is currently a private membership marina, but if it is built as planned it will be converted to a commercial marina where member only status will no longer exist as it does today. A special fee structure will be created for nonmembers of White Bluff Resort to provide access to the marina and limited access to other resort facilities. The 4500 existing White Bluff Resort members represent a potential for almost 370 boats for the new marina's wet slips, and with the expanding major boating market for Lake Whitney the balance of the slips should not be difficult to fill, especially with the boating access problems in many other lakes in the Dallas-Fort Worth area. Many boaters will be attracted to Lake Whitney because it is not only a beautiful lake, but it has much to offer in marine recreational activities – boating, sailing, fishing and other water sports.

Economic Impact of the New White Bluff Resort Marina

One of the most important considerations to the White Bluff Resort Marina expansion is the increased economic impact this new marina will have on the Lake Whitney area. By using the economic impact model generated by the Recreational Marine Research Center (RMRC) located at Michigan State University, we can estimate the economic impact of a single marina on a local community. We used the model to look at the original 67 slip marina's economic impact and what an expanded White Bluff Resort Marina with 500 slips would have on the Lake Whitney area. The 67 slip marina generated a total economic impact of \$469,700 in sales, created 8.3 jobs with \$156,900 in labor income and \$253,700 in value added, The final phase of the marina expansion with 500 slips would create a total impact of \$3,513,900 in sales, creates 61.5 jobs with \$1,167,000 of labor income and \$1,895,200 of value added for the local community in the Lake

Whitney area. All of the estimated impacts relate to the local economy by creating jobs, local incomes and sales.

In addition to these economic incentives, the White Bluff Resort Marina will bring a new, modern and upscale project to Lake Whitney for those boaters who want something better than the existing facilities, and they are willing to pay more to get this additional quality and amenities that go with it.

ECONOMIC ENVIRONMENT

Lake Whitney Area Economy

Lake Whitney is one of the prettiest lakes in Texas. This combined with excellent public access and good fishing make it a popular destination. The long winding lake offers a variety of shoreline cover from gently sloping black-land banks with abundant cedar and hardwood timber to majestic limestone bluffs and rock points. The Lake Whitney area's current economic conditions do not compare as favorably when it comes to most small U. S. metropolitan areas, but prospects for future economic growth are good to excellent. The local area economy is best described by the six county area called the Heart of Texas (HOT) Region comprised of the following counties: Bosque, Falls, Freestone, Hill, Limestone and McLennan (Waco Metropolitan Statistical Area, MSA). Most of the boating statistics used in this report are however provided by Texas counties through the Texas Parks & Wildlife Department, TPWD), Boater Registration Statistics Report.

The most recent population forecasts prepared by the Heart of Texas Economic Development District and the Texas State Data Center at Texas A&M University show moderate growth of 29 percent in the HOT region through 2040. The state of Texas population is expected to grow by almost 68 percent during that same period. The six county HOT Region had a census population of 321,536 in 2000 and by 2020 the estimated population is expected to reach 380,185, or about 18.2% over the 2000 population figure. By 2040 the population of the region is expected to reach 431,692, or 34.3% more than in 2000. There are no income buying power indexes and household income figures available from the HOT Regional Data sources.

Trade Dimensions International, Inc. – Demographics USA 2006 – County Edition is a widely used source of annual population and buying power index data estimates for all U. S. counties. While these reports do not rank U.S. counties, they do provide population estimates, number of households, effective buying income indexes by county and a five-year projection of some of these indexes. The 2006 edition provides the most recent data

and projections for the year 2011. The Lake Whitney economic area is very small compared to Texas metropolitan areas such as Houston, Dallas and even Austin areas, but we feel the market area for boaters coming to Lake Whitney is an area that includes parts of the Dallas-Fort Worth Metro-plex and about twenty-two counties located within a sixty- mile radius of Lake Whitney. The reason for this sixty-mile radius is that existing records from White Bluff Resort, and other resorts in the area, indicate many landowners in these projects have their principal residence in counties included in this major boating market area. Some Lake Whitney marina projects also have boat owners from these areas as well.

Based on projections by Trade Dimensions International, Inc. – Demographics USA 2006 – County Edition, the twenty-two county market area covered by this report, there were 1,833,900 households with an average annual household Effective Buying Income (EBI) of \$46,098 in 2006. The five-year projection of this EBI and household growth over a five-year period showed the number of households in the twenty-two counties would grow to 1,957,400 and household EBI increasing to an annual average of \$51,116. Over this 5-year period the number of households was projected to grow by 123,500, or by over 6.7%, while the EBI would increase by about 10.9%.

To the recreational boating industry in the Lake Whitney area, all of these economic factors are very positive. Population growth translates into additional potential boat buyers with more money not only to buy more boats, but larger boats. With a projected average household income of over \$51,000, and over 168,858 total households with an EBI in excess of \$100,000, there should be greater potential for boat sales throughout the twenty-two county boating market area. This increase in buying power should significantly enlarge the market for both larger sail and powerboats.

Another important indicator of market potential and economic growth is retail sales. Total projected retail sales in 2011 for the Lake Whitney boating market area by Trade Dimensions International, Inc. – Demographics USA 2006 – County Edition is over

\$76,318.6 billion. The projected retail sales per household is also projected to increase over this same period, from a 2006 figure of \$29,619 to \$31,386 per household in 2011.

Lake Whitney Marina Industry

The Lake Whitney area has a small, but growing boating market and marina industry with four public marinas and at least two major private boating facilities, and about 525 total wet slips. Some of the public marinas have added slips to their projects and other marinas are looking to expand or restructure their slips to handle larger boats. Most of the expansion currently underway is to move from a smaller boat market to larger boats as boaters look to find larger slips in the local marinas. A more detailed description of marinas handling larger boats is in the Competitive Environment section of this report. Below is a history of Lake Whitney marinas from 1986 through 2006 as presented in the Texas Sea Grant Boating Facilities & Services Directories over those twenty years. Names of some marinas may be slightly different over that period.

Wet slip counts for each Lake Whitney marina listed

Name of Marina	1986	1990	1995	2000	2005	2006	2007 (estimated)
Cliffview Resort	20	20	42	50	42	42	42
HarborMaster	60	70	29	50	62	62	62
Juniper Cove	80	80	95	80	85	85	131
Lakeside Village	40	50	54	54	54	54	54
Uncle Gus' Marina	141	141	158	158	158	158	154
White Bluff Resort*	----	---	----	49	52	52	67
Totals	341	361	378	441	453	453	510

* White Bluff was not added to the directory until 1997.

The most common types of dock facilities that exist are covered floating and open floating with various sizes from 20 ft. slips up to 50 ft. slips in larger marinas. Waiting

lists exist at White Bluff Resort Marina for both large and small covered slips and there may be up to 100 names on these lists.

Lake Whitney Boating Markets – Major Market and Local Market

For several reasons we feel the major boating market for Lake Whitney is represented by an area at least sixty miles in radius of the lake. This is primarily due to personal residences of boaters currently using the lake extending well into the Dallas-Fort Worth Metro-plex area and into the twenty-two county area surrounding the lake. Boaters also have boats in slips at existing area marinas and own property in White Bluff Resort and other subdivisions in the Lake Whitney area. Several of the Lake Whitney marinas and boat dealers exhibit at the Dallas Boat Show and advertise in media from these areas to attract boaters to the Lake Whitney area.

The twenty-two county area making up our major boating market includes all or parts of the following counties:

Bosque, Coryell, Dallas, Ellis, Erath, Falls, Freestone, Hamilton, Hill, Hood, Johnson, Kaufman, Lampasas, Limestone, McLennan, Milam, Navarro, Palo Pinto, Parker, Robertson, Somervell and Tarrant.

We have included economic data on these twenty-two counties in the Economic Environment section of this study and have provided a figure showing the sixty mile radius on a map in the appendix. This would represent the major boating market area for Lake Whitney, and the local market would include a much smaller area nearer the lake.

In the June 2007 Texas Parks and Wildlife Department (TPWD) Boater Registration Statistics Report there were 592,426 boats registered in Texas and another 10,049 boats registered outside the state. For our report we will focus only on the in-state registrations.

In the June 2007 report the Lake Whitney major boating market area had a total of 108,795 boats registered, or about 18.4% of the state total. Of these total, 65,067 boats were in the 16-26 ft. range, 2,881 were in the 26-40 ft. range and 520 were in the 40 ft.

and over range. The larger boats in the 20+ ft. length represent the bulk of marina storage vessels. Anything over 26 ft. would be difficult to trailer and launch at local boat ramp facilities. In this 2007 report data, we have estimated that about 20,000 boats in the large market area would be in the 20+ ft. category and be part of the marina storage market. With a little over 500 slips in commercial marinas and waterfront lodges on Lake Whitney, it should not be difficult to fill all the boat slips based on the size of this larger boating market.

Economic Impact of Commercial Marinas

Commercial marinas can have a significant economic impact on local communities. These local economic impacts include: sales, jobs, income, value added associated with boating use and service, trip spending by owners of boats of different types and sizes kept at the marina. Even a small marina can generate reasonable economic impacts on local communities. A marina economic impact model has been generated by the Recreational Marine Research Center (RMRC) located at Michigan State University.

The primary required input for the models is the number of boats with different types and sizes. The model applies national or regional averages for (1) the number of days the boats are used, (2) annual spending per boat on storage, accessories, insurance and other craft-related expenses and (3) the average spending per day of boaters on boating trips for meals, fuel, and other items. When reliable local spending and boating activity estimates are available, the default averages built into the model may be modified to fit a particular local application. For example, in the case of a marina, the marina's actual slip or storage fees can be substituted for the regional averages.

The boating economic impact model uses distinct spending profiles for different types of boats. The model estimates annual craft-related spending in eight categories and trip spending in ten categories. Employment and income effects are reported for a dozen economic sectors.

Economic impacts are estimated by applying the spending estimates to a set of multipliers representing the structure of the local region where a marina or boat access/launch site is located. Users of the model must select the type of region that best represents the local area where the marina or boating access/launch site is located. Users can select from among these three regions:

1. Rural areas with populations less than 100,000
2. Smaller metropolitan areas with populations of 100,000 - 500,000
3. Larger metropolitan regions with populations over 500,000

Multipliers come from input-output models of local economies estimated with the IMPLAN regional economic modeling system. The multipliers convert boater trip and craft spending in different sectors of the economy into the associated jobs, income, and value added in boat-related and tourism-related businesses. Multipliers also estimate the indirect and induced effects as boater spending flows throughout the local economy.

Spending averages in the model are based on the findings of two national boater surveys conducted in December 2005 and during the 2006 boating season. The surveys were conducted by the Recreation Marine Research Center. One survey of 12,000 boaters collected annual days of use and craft related spending. The other survey collected detailed information about spending on more than 8,000 boating trips.

The White Bluff Resort Marina is a good example of an inland commercial marina. It has 67 wet slips, 64 slips for powerboats and 3 for sail boats. All slips are 40 feet or less in length. The marina has fuel, ship's store, food services and marine supplies available in the resort. Using multipliers and spending averages created by the RMRC for the southern inland region of the United States, we are able to generate a report of economic impact results/tables for this marina example. The tables include:

Number of different type and size boats kept at the marina.

Average spending on boat trip by boats kept at the marina (\$ per boat day).

Average annual craft spending by boats kept at the marina (\$ per boat per year).

Total trip spending by different size and types of boat kept at the marina
(\$ thousands).

Total craft spending by different size and type boats kept at the marina
(\$ thousands).

Numbers of boats, boating days and trip spending by different size and type boats
kept at the marina.

Economic Impacts of trip spending by boats kept at the marina.

Economic Impacts of craft spending by boats kept at the marina.

Economic Impact of both craft and trip spending by boats kept at the marina.

In our White Bluff Resort Marina example, the total annual direct economic impacts from both craft and trip spending by boats kept at the 67 slip marina was \$353, 200 in sales; the marina created 6.8 jobs with \$121,500 in labor income, and \$191,400 in value added. Adding in the secondary effects, the marina had total economic impacts of \$469.700 in sales; 8.3 jobs; \$156,900 labor income and \$253,700 in value added. This is an annual economic impact of just one marina on Lake Whitney.

COMPETITIVE ENVIRONMENT

Lake Whitney Marina Industry

As stated earlier, the Lake Whitney marina industry has four commercial marina projects and two major private marinas with approximately 525 wet slips and about 350 dry boat storage units giving the lake about 875 units of storage capacity. Lake Whitney is one of the lowest commercial marina boat storage capacity lakes in Texas. If you look at the amount of surface acreage on the lake and compare the number of total wet slips in all the commercial marinas, then for every wet slip there is over 44 surface acres. If you add dry boat storage to the total slip count formula, you are still looking at about 30 surface acres per boat stored in the combined marina wet and dry storage.

Using the Corps April 2002 document “Water-Related Development Policy for Fort Worth District Lakes” as a guide for determining an appropriate physical carrying

capacity for Lake Whitney, and the Potential Lake Surface Boat Load Table for other Corps lakes, we find Lake Whitney to be well within the “appropriate physical carrying capacity” established for Lake Lewisville in the document. The full document is in the appendix of this report, but the document states in part:

This policy hereby establishes a goal of 22 acres of water per boat during peak use times as the District’s standard for resource protection and user enjoyment. This figure was derived from the more conservative (protective) extremity of the median range determined in the WRRUS. Some lakes are large enough to have definable zones of use, or are geographically configured in a way that results in distinct zones of boating use. In these cases, the 22 acre-per-boat rule would be applied to each zone. In other words, if a comprehensive boating use study indicates the existence of distinct use zones, each zone would be managed so as not to exceed 22 acres-per-boat. Using zone-based capacities will allow for some latitude when hard decisions about future development must be made.

Potential Lake Surface Boat Load Table

	1	2	3	4	5	6
	Conservation Pool Surface Acres	Wet Slips	Boat Ramps	Car/Trailer Parking Spaces	Potential # of Boats on Water	Acres of Water per Boat
Aquilla	3,280	0	2	80	80	41.0
Bardwell	3,558	44	7	330	335	10.6
Belton	12,423	524	21	541	593	20.9
Benbrook	3,770	130	17	242	255	14.8
Canyon	8,240	963	22	944	1,040	7.9
Cooper	19,305	0	5	383	383	50.4
Georgetown	1,310	0	3	155	155	8.5
Granger	4,400	0	5	194	194	22.7
Grapevine	7,380	1,472	17	487	634	12.6
Hords Creek	504	0	8	43	43	11.7
Joe Pool	7,470	701	7	417	488	15.3
Lake O' The Pines	19,780	278	34	600	628	31.5
Lavon	21,400	736	22	1,365	1,438	14.8
Navarro Mills	5,070	20	6	266	268	18.9
Proctor	4,610	0	6	112	112	41.2
Ray Roberts	29,350	476	11	616	663	44.2
Sam Rayburn	114,530	217	29	1,045	1,067	107.3
Somerville	11,460	84	12	398	406	28.2
Stillhouse Hollow	6,430	66	5	358	365	17.6
Town Bluff	13,700	0	13	324	324	42.3
Waco	7,237	574	9	282	339	21.3
Whitney	23,560	392	30	577	616	38.2
Wright Patman	33,750	127	22	503	516	65.4

NOTES:

Actual load can only be determined by a physical count. This table serves only to show the potential boat load, based on available facilities, on a peak use day and time. On many lakes even on peak days it is unlikely that all boat ramp parking spaces would be occupied. Conversely, some lakes have full parking areas at ramps and even use overflow parking. Also, the load contributed by marinas may not adhere to the 10 to 1 rule at all lakes – only a study would determine that. Column 1 includes “unboatable” surface acres. For accuracy, these would need to be estimated and subtracted before the math is done. Column 5 assumes 1 boat for every 10 marina slips, and that all car w/trailer spaces are occupied. The number could even be higher if overflow/unauthorized parking is included.

Marina Wet Slips in Lake Whitney Major Commercial Projects, 1981 thru 2006

Commercial Projects	1981	1985	2000	2005	2006
Harbor Master Marina	60 slips	60 slips	50 slips	62 slips	62 slips
Lakeside Village Marina	40 slips	40 slips	54 slips	54 slips	54 slips
Lake Whitney Marina @ Juniper Cove	80 slips	80 slips	80 slips	85 slips	85 slips
Uncle Gus' Marina	141 slips	141 slips	158 slips	158 slips	158 slips
TOTAL Wet Slips	321	321	342	359	359

Since 2006 several commercial marina owners have made changes in their marina slip mix, sizes and actual number of slips. The most dramatic changes have been at Lake Whitney Marina at Juniper Cove, which has grown from 85 wet slips to 131 wet slips by adding two new docks and larger covered slips. They now offer covered slips up to 60 feet. Uncle Gus' Lodge and Marina has sold 18 of their smaller slips to Lake Whitney Marina, but are in the process of adding one new 80 foot slip and have plans to add more large covered slips. To our knowledge no other commercial marina has plans to add new slips, but the floods of 2007 have left both of the two other commercial marinas, Lakeside Village and Harbor Master marinas with some damaged docks and a need to improve their docks and other facilities.

Lake Whitney Project Profiles

Commercial Marinas

Lake Whitney Marina at Juniper Cove is the fastest growing marina on Lake Whitney and the second largest marina on the lake with 131 wet slips, both covered and uncovered, for boats from 20 feet up to 60 feet in length. They can also provide dry storage for about 75 boats. This marina is a year round, full service marina that provides dockside service for fuel and oil purchases and a ship's store for bait, fishing gear, beverages, ice, grocery items and snacks. The marina also provides a certified, sanitary pump-out station and boat launch facilities, and is a certified Clean Texas Marina.

Covered and uncovered wet slips are available in 20 ft., 24 ft., 32 ft., 36 ft., 40 ft., 50 ft., and end tie-ups up to 60 ft. slips. Transient slips and tie-ups are available from 20 ft. to 40 ft. Covered dry storage slips are 30 ft. by 10 ft. by 9 ft. high. They completed the construction of two new docks this year and currently have wet slip vacancies for all size boats up to 50 ft.

Annual rents for covered slips vary by size from 20 ft. to 50 ft. are \$1,815 to \$4,675, and monthly rates are by size from 20 ft. to 50 ft. at \$165 to \$425. Uncovered wet slips are based on slip sizes starting at 20 ft. from \$135 to \$225 per month for 40 ft. and same size slips \$1,485 to \$2,475 annually. You must contact the marina for rates on the end of dock tie-up rate for larger slips. Dry storage lease terms are for 3-months, 6-months and 12-months and rates vary from \$125 for an uncovered 3-month lease to \$550 for a covered 12-month lease. Daily boat launch fees are \$10 per vehicle and an annual launch permits are \$125 per vehicle

Uncle Gus' Lodge & Marina is the largest marina on Lake Whiney with 154 wet slips, both covered and open from 20 ft. to 50 ft. They also have covered dry storage. They are the only marina providing both boat sales and boat repair on the lake. The marina has new owners and is adding two new docks, one 80 ft. dock for one vessel, and making repairs and upgrades to their facilities, including a new gas pump and sewage pump-out system to their gas dock.

The price of wet storage is based on monthly and annual leases and the yearly rate starts at \$1,270 for 20 ft. slips and the 50 ft slips go for \$4,443 a year. The monthly rates start at \$125 for the 20 ft. slips and go up to \$419 monthly for the 50 ft. slip. There was no rate quoted for the 80 ft. slip. Three and six month leases on wet storage might be considered subject to availability. Dry storage is a flat rate of \$499 annually, \$266 bi-annually and \$125 quarterly.

Lakeside Village Resort Marina is one of two small commercial marinas on the lake offering limited service and smaller slips. Lakeside Village Resort Marina is located

near Morgan Lakeside Park off FM 56 and has 54 wet slips and some limited dry boat storage. Covered wet slips are available starting at 20 ft. and up to 28 ft. No rates were available since the facility was closed for the season.

The Lakeside Village Resort Marina provides fuel and transient covered boat stalls when available for \$12.50 per night.

Harbor Master Marina is the other small marina on Lake Whitney, and it provides about 60 wet slips, mostly smaller open and covered slips. The marina is located near Lofers Bend Park just off SH 22 near Laguna Park. Much like the Lakeside Village Resort Marina, Harbor Master Marina needs upgrading and repairs to docks and gas pumps and storage facilities. Harbor Master does provide limited dry storage and services.

Private or Resort Marinas

White Bluff Resort Marina is the largest private marina on Lake Whitney with a total of 67 wet slips, mostly covered in sizes from 24 ft. up to 40 ft. Annual prices to White Bluff Resort members is \$1,080 for 24 ft. uncovered, \$1,500 for 24 ft. covered, and \$3,000 for 40 ft. covered. Currently the marina is full and has a waiting list of about 30 people who prefer 24 ft. slips, but some need larger slips as well. They also get about 3-4 calls per week for slips, but will not add these inquiries to the waiting list until new docks are built.

White Bluff Resort owners, Double Diamond Companies, are requesting a permit to build an additional 300 to 400 new slips, and plan to operate the new marina facility as a commercial marina.

Cliffview Resort Marina is located 1/2 mile west of the Whitney Dam on SH 22, and while they have about 40 covered and open wet slips, they only rent slips to people

renting cabins or rooms at the resort. They also rent boats, kayaks and canoes during daylight hours. The resort also provides fuel.

Other Private Lake Whitney Marinas include Redwood Lodge Waterfront Resort, Cherokee Village Lakefront Resort, Rocky Creek Lodge, Arrowhead Resort, Little Rocky Lodge and possibly others. Most, if not all, of these resorts are similar to Cliffview Resort and provide slips only for boaters staying at the resort. They do not provide slips for rent except for overnight guests of the resort.

Lake Whitney Marina Project Vacancy, Pricing and Services

The project descriptions listed in the previous section provide basic information on pricing and services of both the commercial and some of the private marinas on Lake Whitney. Since the White Bluff Resort Marina expansion will result in becoming a commercial marina operation, the comparisons on vacancy, pricing and services will be for the four Lake Whitney commercial marinas and White Bluff Resort Marina only.

Vacancy Rates

Of the four commercial marinas and White Bluff Resort Marina, only White Bluff is completely full at this time. Lake Whitney Marina @ Juniper Cove has the most vacant wet slips because they just completed two new docks and are in the process of filling those slips this fall and winter. Based on the current demand for larger slips on Lake Whitney, most of the vacant slips should be occupied by next summer. Of the other three commercial marinas, only Uncle Gus's Marina has more than a few wet slips, and Uncle Gus is also expanding with new docks, plus they have the advantage of their boat sales operation to help fill their slips during boat shows and other promotions. The standard promotion of buy a boat from us and you get a year's free slip rental works every time.

Pricing

There is some difference in price on most slip sizes in the three largest marinas on Lake Whitney. The table below shows some comparisons for annual rental rates on covered slips.

Size Wet Slip	Juniper Cove	Uncle Gus	White Bluff
20 ft. covered	\$1,815	\$1,270	n/a
24-25 ft. covered	\$2,310	\$1,456	\$1,500
30 ft. covered	n/a	\$2,208	n/a
32 ft. covered	\$3,025	n/a	n/a
35-36 ft. covered	\$3,465	\$3,159	n/a
40 ft. covered	\$3,745	\$3,510	\$3,000
50 ft. covered	\$4,675	\$4,443	n/a

Services

Services listed in the 2006 Texas Marina Facilities & Services Directory for the largest marinas on Lake Whitney are provided below. Lake Whitney Marina @ Juniper Cove (JC), Uncle Gus' Marina (UC) and White Bluff Resort Marina (WB) are shown in the comparison. Basically, only Uncle Gus' Marina has boat sales and boat repair, but all three have a fuel dock, boat rentals, food services and lodging and/or RV spaces.

BOAT REPAIR	BOAT SALES	FUEL DOCK	PUMP OUT	BOAT RENTAL	CHARTER	BAIT TACKLE	FOOD SERVICES	LODGING/RV
UC	JC, UC	all	JC, UC	all	JC,UC	JC,WB	all	all

Impact of New Construction on Existing Marina Projects

New construction is already underway on Lake Whitney with the completed expansion at Lake Whitney Marina @ Juniper Cove adding almost 45 new wet slips in 2007, and the planned expansion at Uncle Gus' Marina is still unfolding. It is hard to forecast an absorption rate for small boating markets like Lake Whitney, but based on a potential White Bluff waiting list of 30 boats on the current list to as many as 100 boats based on

inquiries about boat storage facilities, it is safe to say a minimum of 100 boats will enter Lake Whitney marinas in the early part of 2008.

There are several reasons for continued growth of boating on Lake Whitney. Here are a few of those reasons.

Lake Whitney has much to offer in marine recreational activities, and it is a popular lake for boating, sailing, waterskiing, jet skiing, scuba diving, fishing and swimming. Lake Whitney has clear, blue water and a varied shoreline ranging from nice sandy beaches to steep bluffs. It is centrally located in the heart of Texas only 30 miles north of Waco, 65 miles southwest of Fort Worth and close enough for the Dallas/Fort Worth and Austin boaters to reach the lake in about one hour's time. With its central location in the heart of Texas, Lake Whitney is already referred to as "The Getaway Capital of Texas."

Based on the major boating market area surrounding Lake Whitney, where in June 2007 almost 109,000 Texas boats were registered and described in the earlier section of this report, the potential marina boat storage market at Lake Whitney is very large indeed. Some twenty-two counties make up this major boating market area, and many of these counties have the fastest growth rates in Texas and some of the highest effective buying income (EBI) projections. Most of these potential boaters are within an hours drive of Lake Whitney, and many live in areas where boating access is limited by overcrowded lakes and even more limited boat storage space available in commercial marinas.

This takes us to the true purpose of this report – to show the feasibility of building a new marina at White Bluff Resort, not only for the members of the resort, but for all boaters wanting to enjoy the beauty and recreational opportunities of Lake Whitney. The owners of White Bluff Resort, Double Diamond Companies, can build and operate a safe harbor marina for the boaters who want to enjoy the great marine recreational activities of one of the most beautiful lakes in Texas. We think the expansion from our present size of 67 wet slips to a first phase construction of 183 wet slips will meet the initial demand of our members and provide boating access to another 100 boaters or more. After evaluating this

initial phase of marina construction and finding that slips are being absorbed adequately into the boating market, we are prepared to continue to build another 316 wet slips in year 2010 or sooner.

Future Demand for Boat Slips on Lake Whitney

We think the demand for wet slips at public marinas on Lake Whitney is undersupplied. There are no proposed or planned new marinas on the lake. There is some potential for expansion among existing commercial marinas with only about 400 wet slips being provided currently, and there will be very few vacant slips available for long-term use after the market absorbs those recently constructed by Lake Whitney Marina @ Juniper Cove. Outside of the three larger marinas, none of the public or private marinas are providing updated and improved marina slips, and most of these marina slips are 30 – 40 years old. New boaters should not have to accept poorly maintained slips being provided by most of the smaller marinas on the lake. There has been little change in available slips on the lake over the past 25 years. See the earlier table: **Marina Wet Slips in Lake Whitney Major Commercial Projects, 1981 thru 2006.**

With the expanding major boating market covered by this study that exists in the twenty-two counties within a 60 mile radius of Lake Whitney, the demand for slips will continue to grow for several years. Boaters with vessels over 26 ft. and living within a 60 mile radius of the lake should be considered as a potential customer for a marina slip on the lake. We estimate this major boating area market represents a potential demand for more than 500 additional wet slips over the next two years. White Bluff Resort members alone represent at least half of this demand.

The majority of renters of wet slips on Lake Whitney are not residents of the area, but boat owners from outside the immediate area. They typically do not own property in the area, but travel about 50-75 miles from the lake to use their boat. They do reside in the major boat market area within the 60-mile radius of Lake Whitney, which is why we see

the market for slips increasing on the lake. If these boaters like boating on Lake Whitney, they may become second-home residents if property is available and they like the area.

We see in many areas of the state that there is a direct and existing ratio between the demand for wet slips and area households. Using the boat registration totals for 2007 and the number of households in our 22-county market area, we can estimate the ratio of boat registrations to the number of households. We had 1,833,900 households in our 22 county market area in 2006 and 108,795 boat registrations in that same period, giving us a ratio of about 6 %, or 6 boat registrations for every 100 households. By 2011 the number of households in our major boat market area is projected to grow by 123,500, or by over 6.7%, while the Effective Buying Income (EBI) is projected to grow by about 10.9%. Many of these households may become permanent residents or second-home residents of the Lake Whitney area, and increase demand for wet slips in the area. Using the same boat registrations to households ratio, the 123,500 new households in 2011 will produce about 7,400 new boat registrations in the market area, creating a demand for boating access and wet slips. If we provide new and updated facilities on Lake Whitney we have a better chance of attracting these boaters to the lake. The attractiveness of Lake Whitney is also enhanced by the lower boating carrying capacity of the lake. Improved facilities of a full-service (modern) marina can attract more boaters to the lake and increase the overall economic impact of the marina by increasing the level of service and amount of money the boater spends on their boating experience.

ANALYSIS OF PROPOSED WHITE BLUFF RESORT MARINA EXPANSION

Project description and future plans

Location and Facilities

The present White Bluff Resort Marina is located in a small cove just off the main body of the lake. We have about 6-8 ft. of water in the cove when the lake is full, but the small entry area that links the cove to the main body of the lake can be a major problem to navigate during low water periods. The cove has approximately eight surface acres and provides limited area for expanding the marina due to shallow water in most areas of the

cove. The cove is inoperable during low water periods and dredging the cove is not an option due to the fact that the cove has been dredged to the maximum depth possible. We have considered using the cove for non-motorized vessel use when the new marina can be built, including paddleboats, canoes and kayaks.

We presently have a total of 67 wet slips and 18 uncovered courtesy slips, which has a gas dock located on these open transient docks nearest the boat ramp. The marina has a total of 64 covered 24 ft. slips and three 40 ft. slips. Presently, all of our slips are full and we have a waiting list of about 30 people who want 24 ft. to 30 ft. slips and some who want larger slips. We get 3-4 inquiries per week for slips, but do not add these people to our waiting list until we start adding more slips.

The project also has limited dry storage for boats on the property about four miles from the marina, but additional dry storage is not feasible under present covenants and restrictions for White Bluff. We do not have the space required to build a dry storage facility large enough to expand the dry storage needed in the project, and construction of any dry storage facility that meets these guidelines would be cost prohibitive. Most of the public demand for boat storage is for wet storage facilities, and there is only minimal demand for dry storage.

Future Plans for Expansion

A master plan for the new commercial marina is included in the appendix of this report. The plan includes five phases of construction for the project with a total build out of ten docks. The project will be phased two docks at a time with a total of 406 new slips to be added to the present marina project. The current plan for the completed project includes a new ship's store and gas dock, 12 uncovered courtesy slips near the gas docks, 272 covered 11 ft. by 24 ft. slips, 28 covered 12 ft. by 24 ft, 160 covered 12 ft. by 30 ft. slips 4 covered 13 ft. by 40 ft, 32 covered 14 ft. by 40 ft and 3 covered 16 ft by 40 ft. This may change after we review the absorption rate for each of the construction phases and get

feedback from boaters on their needs for boat storage. This is one of the important benefits of building in phases.

In addition to the docks we have plans to build three wave attenuators to protect the marina project from wave and wind damage. The largest is the “west” attenuator at about 1950 ft., a second “north” attenuator of about 425 ft., and a third “south” attenuator of about 270 ft. There will be a total of 42 anchors on all three attenuators, 14 anchors on the north, 15 anchors on the west and 13 anchors on the south.

Here is what we have planned currently for each phase of the project.

Phase I:

Dock A – (22) 12 ft. by 30 ft. covered slips, (12) uncovered courtesy slips, (4) 13 ft. by 40 ft. covered slips, ship’s store and fuel docks.

Dock B – (22) 11 ft. by 24 ft. covered slips, (28) 12 ft by 24 ft. covered slips, (3) 16 ft. by 40 ft. covered slips.

Dock C – (14) 11 ft. by 24 ft. covered slips.

Total – 93 slips

Phase II:

Dock C – (36) 11 ft. by 24 ft. covered slips, (4) 17 ft. by 40 ft. covered slips.

Dock D - (46) 12 ft. by 30 ft. covered slips, (4) 17 ft. by 40 ft. covered slips.

Phase II total – 90 slips

Marina total – 183 slips

Phase III:

Dock E – (46) 12 ft. by 30 ft. covered slips, (4) 17 ft. by 40 ft. covered slips.

Dock F – (50) 11 ft. by 24 ft. covered slips, (4) 17 ft. by 40 ft. covered slips.

Phase III total – 104 slips

Marina total – 287 slips

Phase IV:

Dock G – (50) 11 ft. by 24 ft. covered slips, (4) 17 ft. by 40 ft. covered slips.

Dock H – (50) 11 ft. by 24 ft. covered slips, (4) 17 ft. by 40 ft. covered slips

Phase IV total – 108 slips

Marina total – 395 slips

Phase V:

Dock I – (50) 11 ft. by 24 ft. covered slips, (4) 17 ft. by 40 ft. covered slips.

Dock J - (46) 12 ft. by 30 ft. covered slips, (4) 17 ft. by 40 ft. covered slips.

Phase V total – 104 slips

Marina total – 499 slips

If the project is built in phases as mentioned earlier, then the mix and configuration of slips could be changed from the original plan. The first two phases might also be combined into one initial phase to use all the existing slips from the original marina. This would give the marina 183 initial slips with sizes in 24 ft., 30 ft. and 40 ft. lengths. This should meet the current demand from White Bluff Resort members and provide some additional slips for the first group of nonmembers to use the marina.

Public versus Private Marina

Currently White Bluff Resort Marina is a private membership operation known as the White Bluff Yacht Club with only members having access to the marina facilities. If the White Bluff Resort Marina is built as planned, the member only status will no longer exist as it does today. With more slips available on a first come, first serve basis the marina will provide two types of marina access – White Bluff Resort members will have a discounted marina use fee, which includes access to a slip at a lower than nonmember fee, and nonmembers will pay a slightly higher marina use fee, but still have a competitive slip rental fee. Nonmembers will also have access to other resort facilities, but on a limited basis, such as the ship's store and gas dock. Nonmembers will be

provided access to the resort property by a special entry permit that will be renewed on a quarterly basis.

This arrangement would be similar to a semi-private golf club where a member pays his dues monthly and doesn't pay a green fee to play. The nonmember pays his green fee each time he plays golf. In a private marina the resort fee is paid separately, but it usually allows some discount for the marina slip and other services. A comparison of current annual fees for a 40 ft. wet slip at both Lake Whitney Marina @ Juniper Cove and White Bluff Resort, illustrates the difference in member and nonmember fees for slip rental. White Bluff Resort charges members \$3,000 for a 40 ft. slip while Juniper Cove charges \$3,745, but the White Bluff Resort member also pays a membership fee. Using this same example for the new commercial marina, all nonmembers at the White Bluff Resort Marina might pay \$3,700 for a 40 ft. slip while the White Bluff Resort member might pay only \$3,200 annually for his 40 ft. slip. These same discounts could also apply to other costs in the commercial marina.

White Bluff nonmembers would have a specially marked resort entry pass for their vehicle use, probably a sticker or hang tag, and a "restricted" membership card for marina use only. The card could be a different color and/or a different prefix to the membership number that would designate a "full" member of the resort with full benefits and services, or a "restricted" member, such as a marina tenant member only, etc.

White Bluff Membership Boating Market

At present there are between 4500 and 4800 White Bluff Resort members. Not all of these members have boats or plan to buy boats for use in the new marina, but they do represent a big part of the boating market potential since about 70 percent have permanent residences in Texas, and many are within a 60-mile radius of Lake Whitney. Many of these members also live within the 22 county area we have designated as the major boating market for Lake Whitney. The thing that is important about these White Bluff members is they already participate in recreational activities on Lake Whitney or in

the area. They also represent a ready market for services provided at the new expanded marina facility, and using the boating to household ratio of 6 % we discussed earlier, approximately 285 of these households already have a registered boat. Add these 285 potential boats to the 67 boats in the existing marina and you have over 350 potential boats for the marina slips.

Nonmember Boating Market

We have touched on this before in the Lake Whitney Boating Markets section, but essentially there can be as many as 7,500 new boat registrations in the major boating area of Lake Whitney over the next five years, and with a new marina facility available on Lake Whitney and a good promotional effort, we have a good chance of attracting them to the White Bluff Resort Marina. Other lakes in the area have problems with boater overcrowding, lack of boating access in many cases, and poorly maintained marina facilities. Corps lakes inside or near the Dallas-Fort Worth Metro-plex with fewer than 20 surface acres per boat include Lavon, Bardwell, Grapevine, Lewisville, Joe Pool, and others. Lake Whitney has a lot to offer in recreational activities and is a very popular lake for boating, sailing, fishing and other water sports.

Economic Impact of New White Bluff Resort Marina

Earlier in this report we used the White Bluff Resort Marina as an example of an inland commercial marina. The current marina has 67 wet slips, 63 slips for powerboats and 3 for sail boats. All slips are 40 feet or less in length. The marina has fuel, ship's store, food services and marine supplies available in the resort. Using multipliers and spending averages created by the RMRC for the southern inland region of the United States, we were able to generate a report of economic impact results/tables for this marina example.

In our original White Bluff Resort Marina example the total annual direct economic impacts from both craft and trip spending by boats kept at the 67 slip marina was \$353, 200 in sales; the marina created 6.8 jobs with \$121,500 in labor income, and \$191,400 in

value added. Adding in the secondary effects, the marina had total economic impacts of \$469,700 in sales; 8.3 jobs; \$156,900 labor income and \$253,700 in value added. This is the annual economic impact of the current White Bluff Yacht Club marina on Lake Whitney.

Using the expansion phases to determine wet slip totals and boats that use these slips we can generate an economic impact growth pattern for the marina. We have provided the baseline impact with the existing marina, now we can take the marina through stages of development starting with the addition of Phase I and Phase II with the addition of 90 new slips, making the marina a 183 slip facility. For the example we are assuming the marina in all cases to be full.

With the additional 90 slips we have 183 total wet slips in the following slip counts: 72 covered wet slips in the 24 ft. by 11 ft. size; 15 covered wet slips in the 40 ft. by 17 ft. size; 28 covered wet slips in the 24 ft. by 12 ft. size; 68 covered wet slips in the 30 ft. by 12 ft. size and 12 open courtesy slips. Assuming the marina is full of boats, the marina has a total economic impact, including direct and secondary impacts, of \$1,398,800 in sales; creates 24.4 jobs; has \$463,100 of labor income, and creates \$754,500 of value added.

Taking the marina expansion to Phase III, the marina would have a total of 287 wet slips made up the following numbers of slips: 122 covered wet slips in the 24 ft. by 11 ft. size; 114 covered wet slips in the 30 ft. by 12 ft. size; 23 slips in the 40 ft. by 17 ft. size, 28 covered wet slips in the 12 ft. by 24 ft. size, and 12 open slips. Assuming the marina was full of boats again, the marina has a total economic impact, including direct and secondary impacts, of \$2,059,000 in sales; creates 36.1 jobs, with \$683,700 of labor income, and creates \$1,110,700 of value added.

Taking the marina expansion to Phase IV, the marina would have a total of 395 wet slips made up the following numbers of slips: 222 covered wet slips in the 24 ft. by 11 ft. size; 114 covered wet slips in the 30 ft. by 12 ft. size; 31 slips in the 40 ft. by 17 ft. size, and

12 open slips. Assuming the marina was full of boats again, the marina has a total economic impact, including direct and secondary impacts, of \$2,798,000 in sales; creates 49 jobs, with \$929,200 of labor income, and creates \$1,509,200 of value added.

In the proposed final phase of expansion Phase V, the marina would have a total of 499 wet slips made up of the following numbers of slips: 272 covered wet slips in the 24 ft. by 11 ft. size; 160 covered wet slips in the 30 ft. by 12 ft. size; 39 slips in the 40 ft. by 17 ft. size; 28 covered slips in the 12 ft. by 24 ft. size, and 12 open slips. Assuming the marina was full of boats again, the marina has a total economic impact, including direct and secondary impacts, of \$3,513,900 in sales; creates 61.5 jobs, with \$1,167,000 of labor income, and creates \$1,895,200 of value added.

Keep in mind these multipliers come from input-output models of local economies estimated with the IMPLAN regional economic modeling system. The multipliers convert boater trip and craft spending in different sectors of the economy into the associated jobs, income, and value added in boat-related and tourism-related businesses. Multipliers also estimate the indirect and induced effects as boater spending flows throughout the local economy. All of the estimated impacts relate to the local economy creating local jobs, local incomes and sales.

Impact of White Bluff Resort Marina Expansion on Lake Whitney's Marina Industry

The only marinas on Lake Whitney to be impacted by the White Bluff expansion will be the other four commercial marinas on the lake – Harbor Master Marina, Lakeside Village Marina, Lake Whitney Marina @ Juniper Cove and Uncle Gus' Marina. The impact will be basically from competition with another commercial marina being added to the marina complex, but none of the private marinas will be impacted from the expansion. At present the four commercial marinas have a total of about 400 wet slips, and basically less than 20 percent of these slips are vacant now. If it takes a year to build the first two or three phases of the White Bluff Marina project, this will allow most of the 400 slips to be filled by new boats on the lake. Lake Whitney Marina @ Juniper Cove has predominately

larger covered slips to offer and will find larger boats that will not be moving into the White Bluff project. Uncle Gus' Marina has older slips that may see some boats moving to new slips with more service, but the prices for these new slips will be higher than what current Uncle Gus' Marina customers are paying for slips, so the impact might be small.

I see the initial flow of boats coming into the White Bluff Resort Marina from White Bluff members who have been waiting for boat slips. If we build the first two phases the first year, we would have 183 wet slips available to rent, and virtually all of these will come from members either on a waiting list or who have recently checked with White Bluff about slips in the past and have not been added to the waiting list by project management. This represents about 100 members.

After Phase I and II are completed and during the first year of operations, the need for Phase III will generate additional construction for expanding the project to 287 slips or more. Not until the second phase of construction will there be any empty slips in the White Bluff project for nonmembers. At this point the other marinas may begin to see some movement of boats into the White Bluff project, and this will be only from boaters who are willing to pay more for a new slip in a new marina. Based on current prices for slips this may involve only the smaller slips (24 ft. – 25 ft.), and not the larger 40 ft. slips.

Overall, the White Bluff Resort Marina will bring a new, modern and upscale project to Lake Whitney for those boaters who want something better than exists today, and are willing to pay more to get these additional qualities and amenities that go with it.

Appendices



US Army Corps of Engineers
 Fort Worth District

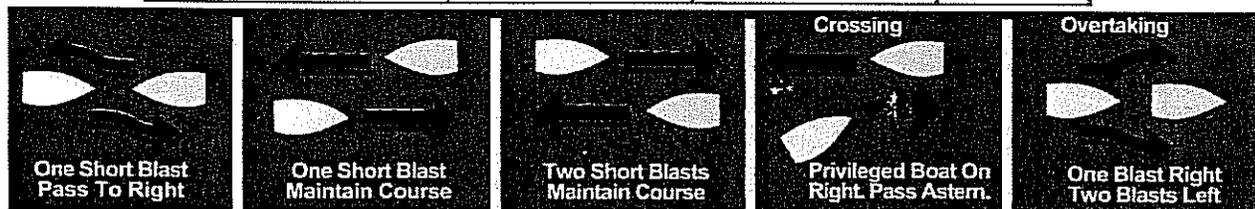
U.S. Army Corps of Engineers
 Fort Worth District
 819 Taylor Street
 P.O. Box 17300
 Fort Worth, TX 76102
 Phone: (817)986-1326
 Email: PublicAffairs.usace.army.mil
 Internet: www.swf.usace.army.mil

Home / Recreation / Boating / U.S. Army Corps of Engineers - Boat Ramps

Boat ramps at Whitney Lake

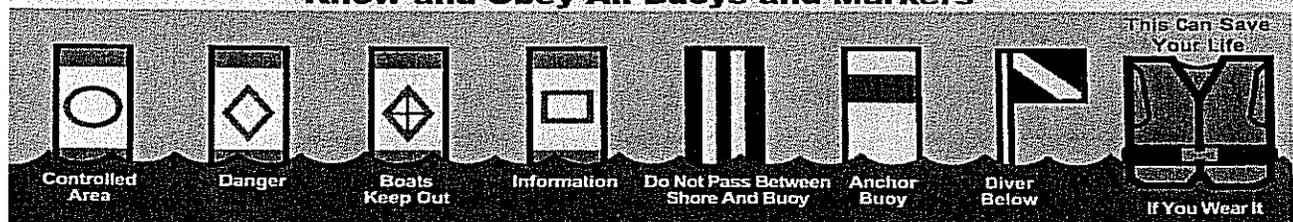
Boat Ramp Information

Boat Ramp Name	Boat Ramp Description	Agency	Fee
Cedar Creek Park	1 double lane ramp	US ARMY CORP OF ENGINEERS	None
Cedron Creek Park	1 double lane ramp	US ARMY CORP OF ENGINEERS	\$3.00
Ham Creek Access	1 double lane ramp	US ARMY CORP OF ENGINEERS	None
Kimball Bend Park	1 double lane ramp	US ARMY CORP OF ENGINEERS	None
Lofers Bend Park - Day Use	1 double lane ramp	US ARMY CORP OF ENGINEERS	\$3.00
Lofers Bend Park - East	1 double lane ramp	US ARMY CORP OF ENGINEERS	\$3.00
Lofers Bend Park - West	1 single lane ramp	US ARMY CORP OF ENGINEERS	\$3.00
McCown Valley Park	1 triple lane ramp	US ARMY CORP OF ENGINEERS	\$3.00
Plowman Creek Park	1 double lane ramp	US ARMY CORP OF ENGINEERS	\$3.00
Steele Creek Park	1 double lane ramp and 1 single lane ramp	US ARMY CORP OF ENGINEERS	None
Walling Bend Park	1 double lane ramp	US ARMY CORP OF ENGINEERS	None



US Army Corps of Engineers

Know and Obey All Buoys and Markers



US Army Corps of Engineers

This site last updated on April 24, 2007

WATER-RELATED DEVELOPMENT POLICY FOR FORT WORTH DISTRICT LAKES

CESWF-OD-R/CESWF-RE-M

April 2002

SUBJECT: Enactment of a Policy for Water-Related Recreational Development on Federal Lands and Waters Within the Fort Worth District

1. **PURPOSE:** To establish a development policy for water-related facilities on all Fort Worth District Lakes. This policy applies the criteria and principles gained from the recently completed Water-Related Recreation Use Study (WRRUS) at Lewisville Lake to any lake at which new water-related development is contemplated or planned.

2. **APPLICABILITY:** This policy applies to the Corps of Engineers and all entities and/or leaseholders having rights and responsibilities, now or in the future, for development of Federally-owned land and water areas at any Fort Worth District lake (except Lewisville Lake), as of the date of this policy. Lewisville Lake is currently covered by a water-related development policy in effect since February 1999.

3. **BACKGROUND:** In response to requests for new marina developments on Lewisville Lake, the Corps initiated an effort in the fall of 1997 to facilitate a comprehensive lake use study. The Corps partnered with the North Central Texas Council of Governments (NCTCOG), acting on behalf of eleven governmental entities and several leaseholders agreeing to share half the cost of the lake use study. These governmental entities and leaseholders shared an interest in the future development of the lake and participated both materially and financially in the study effort. The effort consisted of two phases - a water-related recreation use study and a lake-wide programmatic environmental assessment (PEA). The WRRUS provided base level information necessary for the Corps to determine and prudently allocate facilities and services required for new water-related development, including marinas. After completion of the WRRUS, the effort moved into the second phase wherein stakeholders submitted water-related recreation and other land use development plans for inclusion in the PEA. The PEA has now been completed and a water-related development policy for Lewisville Lake has been published. The policy states that the Corps will manage the number of boat slips and boat ramp parking spaces so that on peak-use days, the number of vessels on the lake will rarely exceed 1112. In simple terms, the policy regulates development of facilities which increase boating use of the lake. More information is available on the District website at <http://www.swf.usace.army.mil>.

4. **DISCUSSION:**

a. Lewisville Lake is not alone in the need for prudent allocation of water-related recreation facilities. To some degree, all of the District's lakes experience increasing demand for space on the lake surface. While some lakes do not necessarily have the same boating use characteristics as Lewisville, there are common factors that contribute to water surface congestion at all lakes. These factors include the presence of Corps' and outgranted boat ramp parking spaces, wet slips and dry stack slips at marinas, yacht clubs, private docks, etc. Our main concerns are resource protection, water safety and user enjoyment as affected by the number of vessels on a lake during peak use hours on peak use days.

b. The US Army Corps of Engineers is the steward of the lands and waters at our lakes. Our mission is to manage and conserve those natural resources, consistent with ecosystem management principles, while providing quality public outdoor recreation experiences to serve the needs of present and

future generations. In line with this management responsibility, we have routinely evaluated proposed actions and visitor use patterns for their affect on natural resources and/or the quality of the recreation experience for our visitors. These efforts have resulted in constraints on visitor use such as requiring campers to use only designated sites, or limiting the size of parking lots at beaches and picnic areas to reduce crowding. At some lakes, the numbers of hunters are limited as needed to improve hunter safety and user enjoyment. However, until recently, little consideration had been given to the affect proposed actions might have on use of the lake surface during peak use days. We would be remiss to ignore this factor in future decisions. The absence of a marina on a lake does not negate the potential for lake surface congestion.

5. **POLICY:** Based on the data provided in the WRRUS, dated December 1998, and, in an effort to insure that use of the lake surface is considered in all actions, the Fort Worth District hereby enacts the following policy regarding water-related development:

a. Nothing herein may be inferred to approve development requests or imply future approval of development requests. National Environmental Policy Act (NEPA) compliance will be required for any new development. The NEPA process could prescribe that this policy be adjusted for environmental reasons.

b. Existing written authorization (as of the date of this policy) for development of water-related recreational facility development issued to leaseholders will be honored, even if actual construction has not yet begun. No authorization(s) will be revoked as a result of issuance of this policy. This policy is not intended to cause removal of any existing, or currently authorized facilities.

c. The Corps, in cooperation with its water purveyor partners and recreational leaseholders, will oversee and monitor water-related development programs involving wet slips, dry stack slips, boat ramps and boat ramp parking spaces. Requests for authorizations for these facilities will be evaluated by the Corps for impacts to use of the lake surface, natural resources, water safety, and user enjoyment.

d. In determining an appropriate physical carrying capacity for the lake surface at Lewisville Lake, the WRRUS designated three levels of resource protection/user enjoyment: maximum, median, and minimum. These levels equate to acres of usable water surface per boat - having a high number of acres of water per boat tends to maximize resource protection/user enjoyment while a low number would tend to threaten the resource and reduce user satisfaction. The formula to determine the level is to divide the number of boatable acres of water surface (at normal pool) by the number of acres required for each type of boat (a figure determined by previous research), then multiply the result by the actual percent of each type of boat on the lake simultaneously (determined by an actual count on 6 high-use weekend days). [NOTE: Boatable acres would not include areas that are densely covered with dead timber, extremely shallow, or restricted.] The WRRUS determined that, at Lewisville, the **maximum** resource protection/user enjoyment level requires 27 acres of water per boat, the **median** level requires 18 acres of water per boat, and the **minimum** level requires approximately 14 acres of water per boat. The Lewisville Lake development policy sets the median protection level of 18 acres of water per boat as its standard. All other lakes in the Fort Worth District will adopt a more conservative standard. **This policy hereby establishes a goal of 22 acres of water per boat during peak use times as the District's standard for resource protection and user enjoyment. This figure was derived from the more conservative (protective) extremity of the median**

range determined in the WRRUS. Some lakes are large enough to have definable zones of use, or are geographically configured in a way that results in distinct zones of boating use. In these cases, the 22 acre-per-boat rule would be applied to each zone. In other words, if a comprehensive boating use study indicates the existence of distinct use zones, each zone would be managed so as not to exceed 22 acres-per-boat. Using zone-based capacities will allow for some latitude when hard decisions about future development must be made.

6. POLICY APPLICATION:

a. An inarguably accurate determination of a lake's existing resource protection/user enjoyment level would require an in-depth study similar to the WRRUS wherein actual counts were made on a series of peak use days. (The WRRUS accounted for types of boats, activities, and which sections of the lake were being used and also included face-to-face visitor interviews and mail out surveys.) It is possible to get a thumbnail estimate of a lake's current resource protection/user enjoyment level on peak use days, without performing an in-depth study, by counting "on-water" boats originating from marinas, boat ramps, campsites and any other known significant source. At Lewisville, the WRRUS revealed that marinas contributed 1 boat to the lake surface for every 10 occupied wet slips or dry stack slots in the facility. Dry storage on trailers was found to be negligible in terms of contributing to boats on the lake surface. At boat ramps, each occupied car with trailer parking space (including unauthorized parking) equates to a boat on the lake surface. Boats can originate from other sources such as campsites.

b. It is highly desirable, although not mandatory, that each lake's **current** resource protection/user enjoyment level be estimated to provide a baseline from which this policy can be applied. Operations Managers are responsible for determining which lakes require this estimate. Lakes where an estimation survey should be considered include: a) those which compute to less than 27 acres of water per boat on the Potential Lake Surface Boat Load Table; b) those where major development requests are likely to occur; c) those where there is a current perception of water surface crowding; and/or d) those which are perceived to experience high levels of pleasure boating (as opposed to fishing). The estimation work should be done by a contractor. CESWF-OD-R staff is available to advise on methodology and/or assist in the estimation effort. Requests for major development which would increase the use of the lake surface on any lake which shows less than 27 acres of water per boat on the Potential Lake Surface Boat Load Table will not be processed by CESWF-OD-R until a peak use thumbnail estimate is in hand, unless there are mitigating circumstances.

c. Specific applications of this policy in response to proposed development actions known to increase boating traffic (adding marina slips, expanding boat ramp parking, etc.) are as follows:

(1) At lakes with current estimated resource protection level above 27 acres of water per boat, determine the resulting change in the protection level. [NOTE: 27 surface acres per boat is the threshold for the maximum protection level]. If the protection level estimate remains above 27 acres of water per boat, the proposal is not in opposition to this policy and can be processed accordingly. If the estimate is at or below 27 acres of water per boat, the action **may require** an in-depth water-related recreation use study before approval is issued. The necessity of a study will be determined by the Operations element on a case-by-case basis.

(2) At lakes with current estimated resource protection level at or below 27 acres of water per boat, an in-depth water-related recreation use study and an environmental assessment **will be required** prior to approval of

any new development. If the study verifies that the development will cause the protection level to fall **below** 22 acres of water per boat, the development will be disapproved unless it is altered to result in 22 or more acres of water per boat. It may then proceed to the environmental assessment phase.

(3) Lakes with current estimated resource protection level at or below 22 acres of water per boat will be considered to have exceeded the District's standard for resource protection/user enjoyment. Generally, no further development actions will be favorably considered. A possible exception would be a relatively large lake that has distinct use zones with some zones being overcrowded while other zones receive only light use. Although it is theoretically possible to remove certain types of facilities to facilitate placement of other types of facilities, such measures are discouraged. A particular concern is that proponents may opt to remove a boat ramp or several parking spaces as a trade-off for an equivalent number of marina slips. An action of this type will most likely require an environmental assessment, to include extensive public involvement, and must be shown to be in the public interest.

d. Requesting entities are responsible for the cost of any study, research effort or NEPA requirement in conjunction with application of this policy.

7. POLICY EXCEPTIONS: Approval of water-related development which results in a level of protection below the District standard may be considered at the discretion of the Chief, Operations Division and the Chief, Real Estate Division on a case-by-case basis.

8. IMPLEMENTATION: This policy will be implemented by the Operations and Real Estate elements. The term of this policy is indefinite. This policy becomes effective immediately upon the date of signature of the Chief, Operations Division and the Chief, Real Estate Division.

_____ Date: _____
Dwight L. Quarles
Chief, Operations Division

_____ Date: _____
Hyla J. Head
Chief, Real Estate Division

POTENTIAL LAKE SURFACE BOAT LOAD TABLE

1 2 3 4 5 6

	Conservation Pool Surface Acres	Wet Slips	Boat Ramps	Car/Trailer Parking Spaces	Potential # of Boats on Water	Acres of Water per Boat
Aquilla	3,280	0	2	80	80	41.0
Bardwell	3,558	44	7	330	335	10.6
Belton	12,423	524	21	541	593	20.9
Benbrook	3,770	130	17	242	255	14.8
Canyon	8,240	963	22	944	1,040	7.9
Cooper	19,305	0	5	383	383	50.4
Georgetown	1,310	0	3	155	155	8.5
Granger	4,400	0	5	194	194	22.7
Grapevine	7,380	1,472	17	487	634	12.6
Hords Creek	504	0	8	43	43	11.7
Joe Pool	7,470	701	7	417	488	15.3
Lake O' The Pines	19,780	278	34	600	628	31.5
Lavon	21,400	736	22	1,365	1,438	14.8
Navarro Mills	5,070	20	6	266	268	18.9
Proctor	4,610	0	6	112	112	41.2
Ray Roberts	29,350	476	11	616	663	44.2
Sam Rayburn	114,530	217	29	1,045	1,067	107.3
Somerville	11,460	84	12	398	406	28.2
Stillhouse Hollow	6,430	66	5	358	365	17.6
Town Bluff	13,700	0	13	324	324	42.3
Waco	7,237	574	9	282	339	21.3
Whitney	23,560	392	30	577	616	38.2
Wright Patman	33,750	127	22	503	516	65.4

NOTES:

Actual load can only be determined by a physical count. This table serves only to show the potential boat load, based on available facilities, on a peak use day and time. On many lakes even on peak days it is unlikely that all boat ramp parking spaces would be occupied. Conversely, some lakes have full parking areas at ramps and even use overflow parking. Also, the load contributed by marinas may not adhere to the 10 to 1 rule at all lakes - only a study would determine that.

Column 1 includes "unboatable" surface acres. For accuracy, these would need to be estimated and subtracted before the math is done.

Column 5 assumes 1 boat for every 10 marina slips, and that all car w/trailer spaces are occupied. The number could even be higher if overflow/unauthorized parking is figured in.

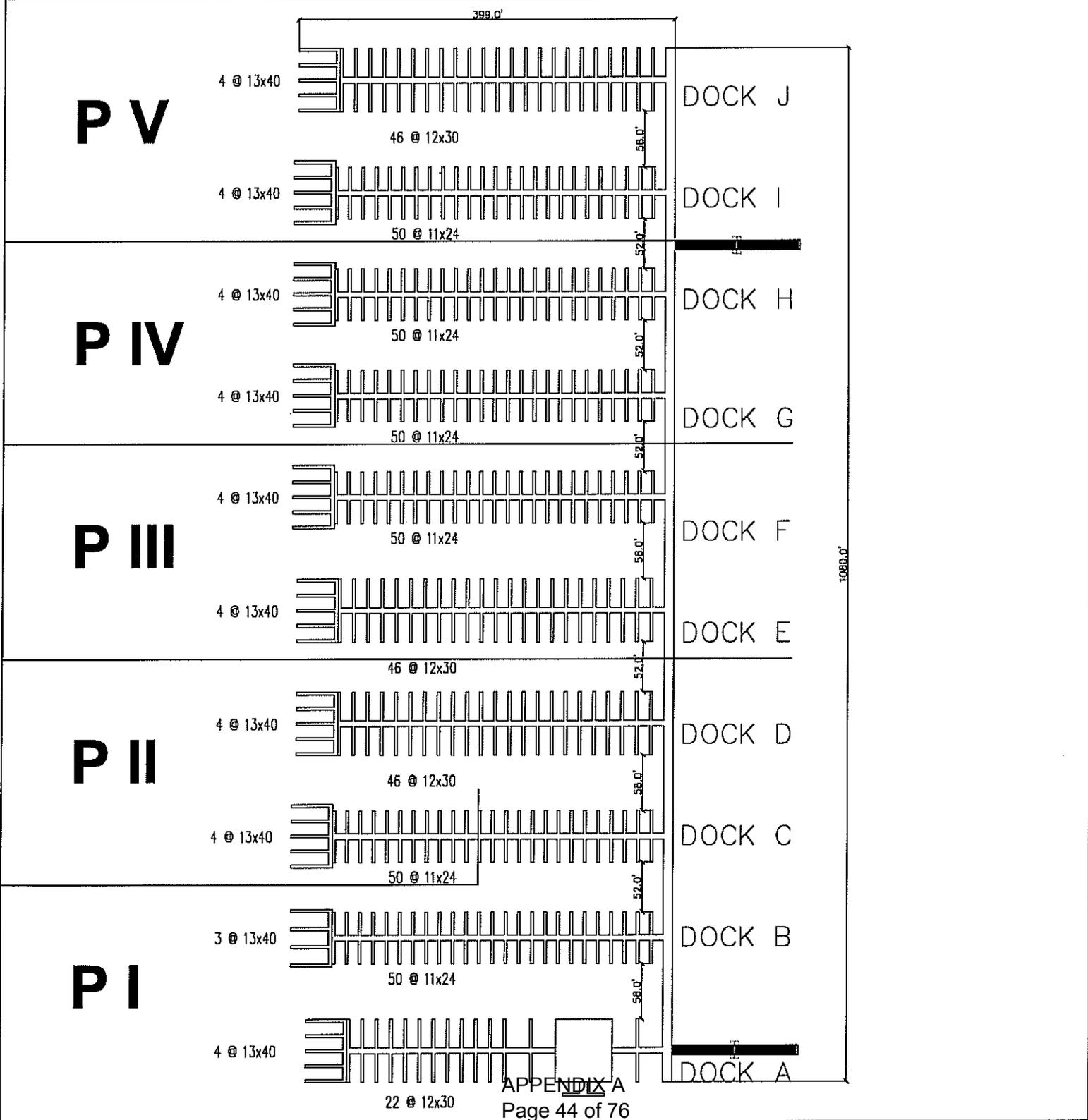
PHASE I
 DOCK A (22) 12'x30' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 COURTESY SLIPS
 SHIP STORE
 FUEL PUMPS
 DOCK B (22) 11'x24' SLIPS, COVERED
 (28) 12'x24' SLIPS, COVERED
 (3) 17'x40' SLIPS, COVERED
 DOCK C (14) 11'x24' SLIPS COVERED
 TOTAL - 93 SLIPS
 PHASE 1 WILL INCORPORATE THE (3) 40'
 SLIPS AND (64) 24' SLIPS WHICH ARE
 PART OF THE CURRENT MARINA

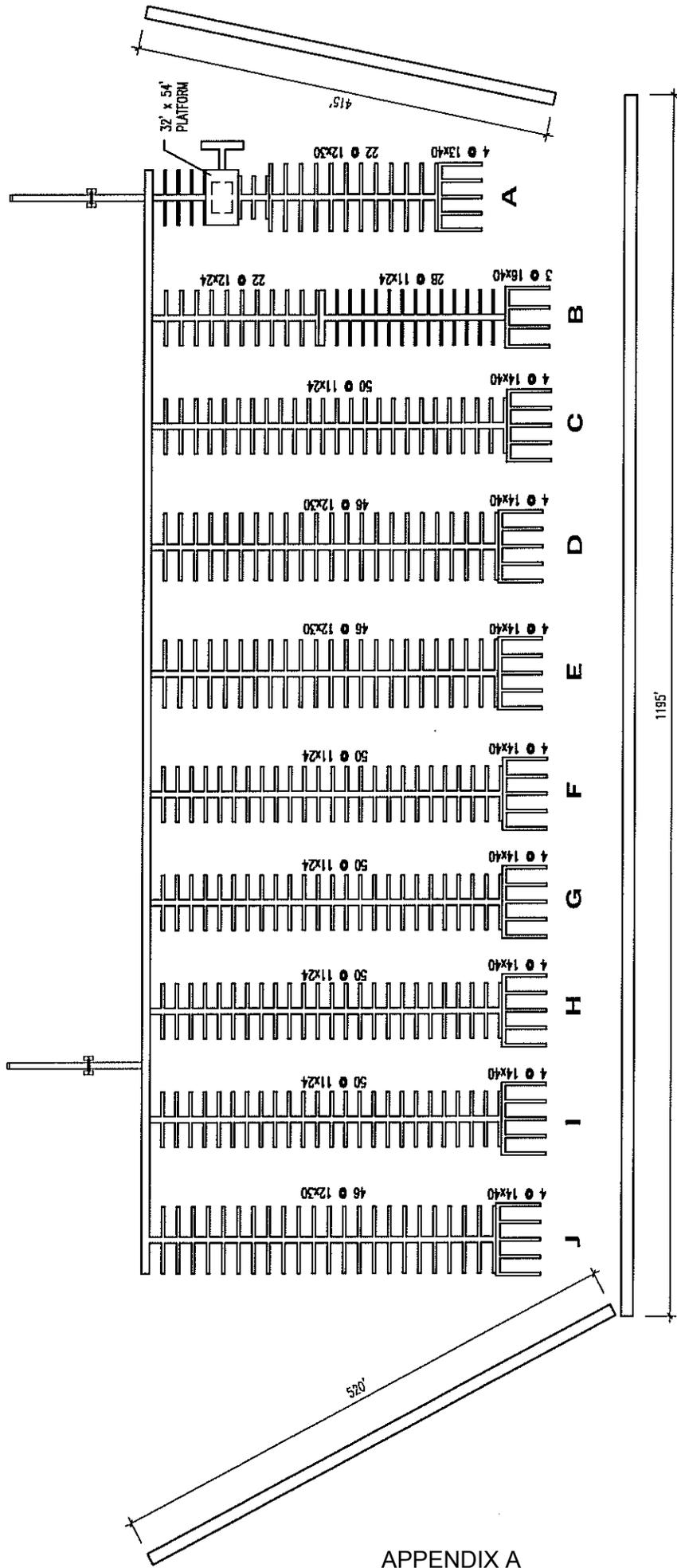
PHASE II
 DOCK C (36) 11'x24' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 DOCK D (46) 12'x30' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 TOTAL - 90 SLIPS

PHASE IV
 DOCK G (50) 11'x24' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 DOCK H (50) 11'x24' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 TOTAL - 108 SLIPS

PHASE III
 DOCK E (46) 12'x30' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 DOCK F (50) 11'x24' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 TOTAL - 104 SLIPS

PHASE V
 DOCK I (50) 11'x24' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 DOCK J (46) 12'x30' SLIPS, COVERED
 (4) 17'x40' SLIPS, COVERED
 TOTAL - 104 SLIPS





APPENDIX A
Page 45 of 76

HARBOR PLAN
WHITE BLUFF MARINA
LAKE WHITNEY, TX

FILE NAME: 32B3A-SITE	PLAN # 32B3A
DRAWN BY: S.M.L.	JOB #
CHECKED BY:	DATE: 8/24/07 SHEET SITE
SCALE: 1" = 1.00'-0"	

ATLANTIC MEECO
THE MARINING COMPANY
1501 E. ELECTRIC AVE.
MCALISTER, OKLAHOMA, USA 74601
Phone: (918) 433-8033
Fax: (918) 433-3215

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NO.	REVISION DESCRIPTION	BY	DATE

Name of the Marina: WHITE BLUFF

Type of the Marina: Privately owned/commercial marina

Types of Slips Rented: Seasonal, Annual or Condominium Slips

Region of the country: Inland

Type of Economy: Rural Area. (Regions with populations less than 100,000.)

Date: 10/15/2007

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The Inputs to the Model

TABLE 1 - Number of Different Type and Size Boats Kept at the Marina

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	75	29	2,187
Power 40'+	-	-	-
Sail <40'	7	31	219
Sail 40'+	-	-	-
Total	82	29	2,406

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Spending Profiles By Boats Kept at the Marina

TABLE 1 - Average Spending on Boat Trip by Boats Kept at the Marina (\$ Per Boat Day)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Lodging	0.9	0.3	1.5	2.2
Marina services	17.3	25.6	10.3	18.3
Restaurant	24.4	36.7	16.4	30.7
Groceries	19.9	32.6	14.7	24.6
Boat fuel	41.1	61.6	3.6	8.0
Auto fuel	9.2	8.6	5.8	6.6
Repair & Maintenance	-	-	-	-
Marine supplies	-	-	-	-
Recreation & Entertainment	3.7	4.4	2.0	6.6

Shopping	2.9	6.3	2.9	5.2
Other services	-	-	-	-
Other goods	2.5	1.8	2.0	2.9
Total	122	178	59	105

TABLE 2 - Average Annual Craft Spending by Boats Kept at the Marina (\$ Per Boat Per Year)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Slip	1,366.3	4,590.0	1,423.1	3,403.6
Loan Payments	1,326.4	10,149.4	796.1	5,348.3
Motors	26.3	38.9	11.0	13.8
Trailers	14.8	8.6	7.1	6.1
Insurance	387.4	2,143.3	339.9	1,976.2
Repairs	834.0	4,175.8	838.9	3,833.9
Accessories	544.9	3,223.5	815.3	3,770.8
Taxes	150.6	1,131.2	110.0	728.9
Total	4,651	25,461	4,341	19,082

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Estimates of Total Spending by Boats Kept at the Marina

TABLE 1 - Total Trip Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Lodging	1.97	-	0.33	-	2.30	1%
Marina services	37.84	-	2.25	-	40.09	14%
Restaurant	53.36	-	3.59	-	56.95	20%
Groceries	43.52	-	3.22	-	46.74	17%
Boat fuel	89.89	-	0.79	-	90.67	32%
Auto fuel	20.12	-	1.27	-	21.39	8%
Repair & Maintenance	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-
Recreation & Entertainment	8.09	-	0.44	-	8.53	3%
Shopping	6.34	-	0.63	-	6.98	2%
Other services	-	-	-	-	-	-
Other goods	5.47	-	0.44	-	5.91	2%

Total	800	-	39	-	280	100%
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TABLE 2 - Total Craft Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Slip	102.47	-	9.96	-	112.43	30%
Loan Payments	99.48	-	5.57	-	105.05	28%
Motors	1.97	-	0.08	-	2.05	1%
Trailers	1.11	-	0.05	-	1.16	0%
Insurance	29.06	-	2.38	-	31.43	8%
Repairs	62.55	-	5.87	-	68.42	18%
Accessories	40.87	-	5.71	-	46.57	12%
Taxes	11.30	-	0.77	-	12.07	3%
Total	349	-	30	-	379	100%

TABLE 3 - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size and Type Boats Kept at the Marina

CATEGORY	Boat Type and Size				Total
	Power <40'	Power 40'+	Sail <40'	Sail 40'+	
Number of boats	75	-	7	-	82
Annual craft spending per boat	\$4,651	\$25,461	\$4,341	\$19,082	-
Total craft spending (\$ Thousands)	\$349	-	\$30	-	\$379
Average days per boat	29	51	31	50	-
Total boat days	2,187	-	219	-	2,406
Average trip spending per boat day	\$122	\$178	\$59	\$105	-
Total trip spending per boat per year	\$3,555	\$9,010	\$1,851	\$5,231	-
Total trip spending (\$ Thousands)	\$267	-	\$13	-	\$280
Total craft&trip spending per boat per year	\$8,205	\$34,471	\$6,193	\$24,313	-
Total craft&trip spending (\$ Thousands)	\$615	-	\$43	-	\$659
Pct of spending by boats	93%	-	7%	-	100%
Pct of boats	91%	-	9%	-	100%
Pct of boat days by boats	91%	-	9%	-	100%
Pct of spending on trips by boats	43%	-	30%	-	42%

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Economic Impact Result/Tables

TABLE 1 - Economic Impacts of Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Lodging	2.3	0.1	1.0	1.6
Marina Services	40.1	0.9	14.6	24.3
Restaurant	57.0	1.5	21.9	24.7
Recreation & Entertainment	8.5	0.2	3.1	5.2
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin&Sales)	11.8	0.3	4.7	6.2
Gas Service Stations (Margin&Sales)	25.0	0.3	9.4	12.2
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins&Sales)	4.4	0.1	2.1	2.9
Wholesale Trade (Margins&Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	149.1	3.3	56.7	77.1
Secondary Effects	52.7	0.7	15.7	28.0
Total Effects	201.8	4.0	72.4	105.1

TABLE 2 - Economic Impacts of Craft Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	112.4	2.5	40.8	68.2
Repairs	68.4	0.5	13.1	30.1
Insurance	3.1	0.1	1.5	2.7
Credit Intermediaries	0.7	0.0	0.3	0.5
Retail Margins	19.4	0.5	9.1	12.7
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	204.1	3.5	64.8	114.3
Secondary Effects	63.8	0.8	19.7	34.3
Total Effects	267.9	4.4	84.5	148.6

TABLE 3 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
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Direct Effects				
Lodging	2.3	0.1	1.0	1.6
Marina Services	152.5	3.3	55.4	92.6
Restaurant	57.0	1.5	21.9	24.7
Recreation & Entertainment	8.5	0.2	3.1	5.2
Repair & Maintenance	68.4	0.5	13.1	30.1
Insurance&Credit	3.8	0.1	1.8	3.3
Gas Service	25.0	0.3	9.4	12.2
Other Retail Trade	35.7	0.9	15.8	21.8
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	353.2	6.8	121.5	191.4
Secondary Effects	116.5	1.5	35.4	62.2
Total Effects	469.7	8.3	156.9	253.7

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 Run New Model

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 Webmaster: [Aurora Custodia](#)

On-line Boating Economic Impact Model

Economic Impact Report

This page provides a series of ten tables showing both the inputs and the results of the economic impact analysis of the marina. The information provided in the tables includes:

1. Preliminary data that identifies the marina and person conducting the economic impact analysis.
2. The numbers of different size and types of boats renting seasonal and annual slips in the marina, their estimated number of boating days, and transient rental nights.
3. Average trip and craft spending for different size and types of boats kept at the marina.
4. Total estimated trip and craft spending by different size and type boats kept at the marina.
5. A summary of the number of boats, and boating days and annual craft and trip spending by boats of different types and sizes kept at the marina.
6. The economic impacts (sales, jobs, Labor Income and value added) associated with annual craft and trip spending by boats kept at the marina.
7. The combined economic impacts (sales, jobs, Labor Income and value added) of both craft and trip spending by boats kept at the marina.

You can produce a customized report for the marina(s). The report is generated using information submitted by the users and tables generated as part of the analysis. The report (Word Document) can be edited and further customized to represent the marina. You can add photographs and maps along with additional information concerning the marina. Save the document to a folder (e.g., Desk Top) open it, and then view it in PRINT LAYOUT (Click on View on your toolbar and then Print Layout). It is important that you review and edit the report. The report is based on the information that you provided and after you see it in the report you may wish to do some editing.

If you are performing this analysis for more than one marina you will have to adjust the report to reflect that fact.

[Print Report](#)

Information Concerning the Marina

Name of the Marina: WHITE BLUFF 184

Type of the Marina: Privately owned/commercial marina

Types of Slips Rented: Seasonal, Annual or Condominium Slips

Region of the country: Inland

Type of Economy: Rural Area. (Regions with populations less than 100,000.)

Date: 10/26/2007

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The Inputs to the Model

TABLE 1 - Number of Different Type and Size Boats Kept at the Marina

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	150	29	4,374
Power 40'+	24	51	1,216
Sail <40'	10	31	313
Sail 40'+	-	-	-
Total	184	32	5,902

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Spending Profiles By Boats Kept at the Marina

TABLE 1 - Average Spending on Boat Trip by Boats Kept at the Marina (\$ Per Boat Day)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Lodging	0.9	0.3	1.5	2.2
Marina services	17.3	25.6	10.3	18.3
Restaurant	24.4	36.7	16.4	30.7
Groceries	19.9	32.6	14.7	24.6
Boat fuel	41.1	61.6	3.6	8.0
Auto fuel	9.2	8.6	5.8	6.6
Repair & Maintenance	-	-	-	-
Marine supplies	-	-	-	-
Recreation & Entertainment	3.7	4.4	2.0	6.6

Shopping	2.9	6.3	2.9	5.2
Other services	-	-	-	-
Other goods	2.5	1.8	2.0	2.9
Total	122	178	59	105

TABLE 2 - Average Annual Craft Spending by Boats Kept at the Marina (\$ Per Boat Per Year)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Slip	1,366.3	4,590.0	1,423.1	3,403.6
Loan Payments	1,326.4	10,149.4	796.1	5,348.3
Motors	26.3	38.9	11.0	13.8
Trailers	14.8	8.6	7.1	6.1
Insurance	387.4	2,143.3	339.9	1,976.2
Repairs	834.0	4,175.8	838.9	3,833.9
Accessories	544.9	3,223.5	815.3	3,770.8
Taxes	150.6	1,131.2	110.0	728.9
Total	4,651	25,461	4,341	19,082

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Estimates of Total Spending by Boats Kept at the Marina

TABLE 1 - Total Trip Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Lodging	3.94	0.36	0.47	-	4.77	1%
Marina services	75.67	31.12	3.22	-	110.01	14%
Restaurant	106.73	44.61	5.13	-	156.46	20%
Groceries	87.04	39.63	4.60	-	131.27	17%
Boat fuel	179.77	74.88	1.13	-	255.77	33%
Auto fuel	40.24	10.45	1.81	-	52.51	7%
Repair & Maintenance	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-
Recreation & Entertainment	16.18	5.35	0.63	-	22.16	3%
Shopping	12.68	7.66	0.91	-	21.25	3%
Other services	-	-	-	-	-	-
Other goods	10.94	2.19	0.63	-	13.75	2%

Total	1,600	649	56	-	768	100%
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TABLE 2 - Total Craft Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Slip	204.95	110.16	14.23	-	329.34	24%
Loan Payments	198.96	243.59	7.96	-	450.51	33%
Motors	3.95	0.93	0.11	-	4.99	0%
Trailers	2.22	0.21	0.07	-	2.50	0%
Insurance	58.11	51.44	3.40	-	112.95	8%
Repairs	125.10	100.22	8.39	-	233.71	17%
Accessories	81.74	77.36	8.15	-	167.25	12%
Taxes	22.59	27.15	1.10	-	50.84	4%
Total	698	611	43	-	1,352	100%

TABLE 3 - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size and Type Boats Kept at the Marina

CATEGORY	Boat Type and Size				Total
	Power <40'	Power 40'+	Sail <40'	Sail 40'+	
Number of boats	150	24	10	-	184
Annual craft spending per boat	\$4,651	\$25,461	\$4,341	\$19,082	-
Total craft spending (\$ Thousands)	\$698	\$611	\$43	-	\$1,352
Average days per boat	29	51	31	50	-
Total boat days	4,374	1,216	313	-	5,902
Average trip spending per boat day	\$122	\$178	\$59	\$105	-
Total trip spending per boat per year	\$3,555	\$9,010	\$1,851	\$5,231	-
Total trip spending (\$ Thousands)	\$533	\$216	\$19	-	\$768
Total craft&trip spending per boat per year	\$8,205	\$34,471	\$6,193	\$24,313	-
Total craft&trip spending (\$ Thousands)	\$1,231	\$827	\$62	-	\$2,120
Pct of spending by boats	58%	39%	3%	-	100%
Pct of boats	82%	13%	5%	-	100%
Pct of boat days by boats	74%	21%	5%	-	100%
Pct of spending on trips by boats	43%	26%	30%	-	36%

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Economic Impact Result/Tables

TABLE 1 - Economic Impacts of Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Lodging	4.8	0.1	2.1	3.4
Marina Services	110.0	2.4	39.9	66.8
Restaurant	156.5	4.0	60.2	67.9
Recreation & Entertainment	22.2	0.5	8.0	13.4
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin&Sales)	33.2	0.7	13.1	17.5
Gas Service Stations (Margin&Sales)	68.7	0.9	25.8	33.5
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins&Sales)	12.0	0.3	5.6	7.9
Wholesale Trade (Margins&Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	407.4	9.0	154.8	210.3
Secondary Effects	144.0	1.9	42.9	76.4
Total Effects	551.4	10.8	197.7	286.8

TABLE 2 - Economic Impacts of Craft Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	329.3	7.2	119.5	199.9
Repairs	233.7	1.7	44.9	102.8
Insurance	11.3	0.2	5.4	9.8
Credit Intermediaries	2.9	0.0	1.2	2.3
Retail Margins	68.8	1.8	32.2	44.8
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trainers, Accessories	-	-	-	-
Total Direct Effects	646.0	10.9	203.2	359.7
Secondary Effects	201.3	2.7	62.2	108.0
Total Effects	847.4	13.5	265.4	467.7

TABLE 3 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
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Direct Effects

Lodging	4.8	0.1	2.1	3.4
Marina Services	439.3	9.6	159.5	266.7
Restaurant	156.5	4.0	60.2	67.9
Recreation & Entertainment	22.2	0.5	8.0	13.4
Repair & Maintenance	233.7	1.7	44.9	102.8
Insurance&Credit	14.2	0.2	6.6	12.1
Gas Service	68.7	0.9	25.8	33.5
Other Retail Trade	114.0	2.8	50.9	70.2
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	1,053.4	19.8	358.0	570.1
Secondary Effects	345.4	4.5	105.0	184.4
Total Effects	1,398.8	24.4	463.1	754.5

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 Run New Model

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On-line Boating Economic Impact Model

Economic Impact Report

This page provides a series of ten tables showing both the inputs and the results of the economic impact analysis of the marina. The information provided in the tables includes:

1. Preliminary data that identifies the marina and person conducting the economic impact analysis.
2. The numbers of different size and types of boats renting seasonal and annual slips in the marina, their estimated number of boating days, and transient rental nights.
3. Average trip and craft spending for different size and types of boats kept at the marina.
4. Total estimated trip and craft spending by different size and type boats kept at the marina.
5. A summary of the number of boats, and boating days and annual craft and trip spending by boats of different types and sizes kept at the marina.
6. The economic impacts (sales, jobs, Labor Income and value added) associated with annual craft and trip spending by boats kept at the marina.
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You can produce a customized report for the marina(s). The report is generated using information submitted by the users and tables generated as part of the analysis. The report (Word Document) can be edited and further customized to represent the marina. You can add photographs and maps along with additional information concerning the marina. Save the document to a folder (e.g., Desk Top) open it, and then view it in PRINT LAYOUT (Click on View on your toolbar and then Print Layout). It is important that you review and edit the report. The report is based on the information that you provided and after you see it in the report you may wish to do some editing.

If you are performing this analysis for more than one marina you will have to adjust the report to reflect that fact.

[Print Report](#)

Information Concerning the Marina

Name of the Marina: WHITE BLUFF 288

Type of the Marina: Privately owned/commercial marina

Types of Slips Rented: Seasonal, Annual or Condominium Slips

Region of the country: Inland

Type of Economy: Rural Area. (Regions with populations less than 100,000.)

Date: 10/27/2007

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The Inputs to the Model

TABLE 1 - Number of Different Type and Size Boats Kept at the Marina

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	264	29	7,698
Power 40'+	24	51	1,216
Sail <40'	10	31	313
Sail 40'+	-	-	-
Total	298	31	9,227

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Spending Profiles By Boats Kept at the Marina

TABLE 1 - Average Spending on Boat Trip by Boats Kept at the Marina (\$ Per Boat Day)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Lodging	0.9	0.3	1.5	2.2
Marina services	17.3	25.6	10.3	18.3
Restaurant	24.4	36.7	16.4	30.7
Groceries	19.9	32.6	14.7	24.6
Boat fuel	41.1	61.6	3.6	8.0
Auto fuel	9.2	8.6	5.8	6.6
Repair & Maintenance	-	-	-	-
Marine supplies	-	-	-	-
Recreation & Entertainment	3.7	4.4	2.0	6.6

Shopping	2.9	6.3	2.9	5.2
Other services	-	-	-	-
Other goods	2.5	1.8	2.0	2.9
Total	122	178	59	105

TABLE 2 - Average Annual Craft Spending by Boats Kept at the Marina (\$ Per Boat Per Year)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Slip	1,366.3	4,590.0	1,423.1	3,403.6
Loan Payments	1,326.4	10,149.4	796.1	5,348.3
Motors	26.3	38.9	11.0	13.8
Trailers	14.8	8.6	7.1	6.1
Insurance	387.4	2,143.3	339.9	1,976.2
Repairs	834.0	4,175.8	838.9	3,833.9
Accessories	544.9	3,223.5	815.3	3,770.8
Taxes	150.6	1,131.2	110.0	728.9
Total	4,651	25,461	4,341	19,082

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Estimates of Total Spending by Boats Kept at the Marina

TABLE 1 - Total Trip Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Lodging	6.93	0.36	0.47	-	7.76	1%
Marina services	133.18	31.12	3.22	-	167.52	14%
Restaurant	187.84	44.61	5.13	-	237.58	20%
Groceries	153.20	39.63	4.60	-	197.42	17%
Boat fuel	316.40	74.88	1.13	-	392.40	33%
Auto fuel	70.82	10.45	1.81	-	83.09	7%
Repair & Maintenance	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-
Recreation & Entertainment	28.48	5.35	0.63	-	34.46	3%
Shopping	22.33	7.66	0.91	-	30.89	3%
Other services	-	-	-	-	-	-
Other goods	19.25	2.19	0.63	-	22.06	2%

Total	2,815	649	56	-	1,173	100%
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TABLE 2 - Total Craft Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Slip	360.70	110.16	14.23	-	485.09	26%
Loan Payments	350.17	243.59	7.96	-	601.72	32%
Motors	6.94	0.93	0.11	-	7.99	0%
Trailers	3.91	0.21	0.07	-	4.18	0%
Insurance	102.27	51.44	3.40	-	157.11	8%
Repairs	220.18	100.22	8.39	-	328.78	17%
Accessories	143.85	77.36	8.15	-	229.37	12%
Taxes	39.76	27.15	1.10	-	68.01	4%
Total	1,228	611	43	-	1,882	100%

TABLE 3 - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size and Type Boats Kept at the Marina

CATEGORY	Boat Type and Size				Total
	Power <40'	Power 40'+	Sail <40'	Sail 40'+	
Number of boats	264	24	10	-	298
Annual craft spending per boat	\$4,651	\$25,461	\$4,341	\$19,082	-
Total craft spending (\$ Thousands)	\$1,228	\$611	\$43	-	\$1,882
Average days per boat	29	51	31	50	-
Total boat days	7,698	1,216	313	-	9,227
Average trip spending per boat day	\$122	\$178	\$59	\$105	-
Total trip spending per boat per year	\$3,555	\$9,010	\$1,851	\$5,231	-
Total trip spending (\$ Thousands)	\$938	\$216	\$19	-	\$1,173
Total craft&trip spending per boat per year	\$8,205	\$34,471	\$6,193	\$24,313	-
Total craft&trip spending (\$ Thousands)	\$2,166	\$827	\$62	-	\$3,055
Pct of spending by boats	71%	27%	2%	-	100%
Pct of boats	89%	8%	3%	-	100%
Pct of boat days by boats	83%	13%	3%	-	100%
Pct of spending on trips by boats	43%	26%	30%	-	38%

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Economic Impact Result/Tables

TABLE 1 - Economic Impacts of Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Lodging	7.8	0.2	3.4	5.5
Marina Services	167.5	3.7	60.8	101.7
Restaurant	237.6	6.1	91.5	103.1
Recreation & Entertainment	34.5	0.8	12.5	20.9
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin&Sales)	49.9	1.1	19.7	26.3
Gas Service Stations (Margin&Sales)	106.0	1.3	39.8	51.6
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins&Sales)	18.2	0.5	8.5	11.9
Wholesale Trade (Margins&Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	621.5	13.7	236.2	321.0
Secondary Effects	219.7	2.9	65.4	116.6
Total Effects	841.2	16.5	301.6	437.6

TABLE 2 - Economic Impacts of Craft Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	485.1	10.6	176.1	294.5
Repairs	328.8	2.4	63.1	144.7
Insurance	15.7	0.3	7.5	13.7
Credit Intermediaries	3.9	0.0	1.6	3.1
Retail Margins	94.8	2.5	44.4	61.8
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	928.3	15.7	292.7	517.7
Secondary Effects	289.6	3.8	89.4	155.4
Total Effects	1,217.9	19.5	382.1	673.0

TABLE 3 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
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Direct Effects				
Lodging	7.8	0.2	3.4	5.5
Marina Services	652.6	14.3	236.9	396.1
Restaurant	237.6	6.1	91.5	103.1
Recreation & Entertainment	34.5	0.8	12.5	20.9
Repair & Maintenance	328.8	2.4	63.1	144.7
Insurance&Credit	19.6	0.3	9.1	16.8
Gas Service	106.0	1.3	39.8	51.6
Other Retail Trade	162.9	4.0	72.6	100.0
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	1,549.8	29.4	528.9	838.7
Secondary Effects	509.3	6.7	154.8	272.0
Total Effects	2,059.0	36.1	683.7	1,110.7

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 Run New Model

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On-line Boating Economic Impact Model

Economic Impact Report

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1. Preliminary data that identifies the marina and person conducting the economic impact analysis.
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If you are performing this analysis for more than one marina you will have to adjust the report to reflect that fact.

[Print Report](#)

Information Concerning the Marina

Name of the Marina: WHITE BLUFF 396

Type of the Marina: Privately owned/commercial marina

Types of Slips Rented: Seasonal, Annual or Condominium Slips

Region of the country: Inland

Type of Economy: Rural Area. (Regions with populations less than 100,000.)

Date: 10/27/2007

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The Inputs to the Model

TABLE 1 - Number of Different Type and Size Boats Kept at the Marina

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	364	29	10,614
Power 40'+	32	51	1,621
Sail <40'	10	31	313
Sail 40'+	-	-	-
Total	406	31	12,548

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Spending Profiles By Boats Kept at the Marina

TABLE 1 - Average Spending on Boat Trip by Boats Kept at the Marina (\$ Per Boat Day)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Lodging	0.9	0.3	1.5	2.2
Marina services	17.3	25.6	10.3	18.3
Restaurant	24.4	36.7	16.4	30.7
Groceries	19.9	32.6	14.7	24.6
Boat fuel	41.1	61.6	3.6	8.0
Auto fuel	9.2	8.6	5.8	6.6
Repair & Maintenance	-	-	-	-
Marine supplies	-	-	-	-
Recreation & Entertainment	3.7	4.4	2.0	6.6

Shopping	2.9	6.3	2.9	5.2
Other services	-	-	-	-
Other goods	2.5	1.8	2.0	2.9
Total	122	178	59	105

TABLE 2 - Average Annual Craft Spending by Boats Kept at the Marina (\$ Per Boat Per Year)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Slip	1,366.3	4,590.0	1,423.1	3,403.6
Loan Payments	1,326.4	10,149.4	796.1	5,348.3
Motors	26.3	38.9	11.0	13.8
Trailers	14.8	8.6	7.1	6.1
Insurance	387.4	2,143.3	339.9	1,976.2
Repairs	834.0	4,175.8	838.9	3,833.9
Accessories	544.9	3,223.5	815.3	3,770.8
Taxes	150.6	1,131.2	110.0	728.9
Total	4,651	25,461	4,341	19,082

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Estimates of Total Spending by Boats Kept at the Marina

TABLE 1 - Total Trip Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Lodging	9.55	0.49	0.47	-	10.51	1%
Marina services	183.63	41.49	3.22	-	228.34	14%
Restaurant	258.99	59.48	5.13	-	323.60	20%
Groceries	211.23	52.83	4.60	-	268.66	17%
Boat fuel	436.25	99.83	1.13	-	537.21	34%
Auto fuel	97.65	13.94	1.81	-	113.40	7%
Repair & Maintenance	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-
Recreation & Entertainment	39.27	7.13	0.63	-	47.03	3%
Shopping	30.78	10.21	0.91	-	41.90	3%
Other services	-	-	-	-	-	-
Other goods	26.54	2.92	0.63	-	30.08	2%

Total	3,882	865	56	-	1,601	100%
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TABLE 2 - Total Craft Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Slip	497.33	146.88	14.23	-	658.44	26%
Loan Payments	482.81	324.78	7.96	-	815.55	32%
Motors	9.57	1.24	0.11	-	10.93	0%
Trailers	5.39	0.28	0.07	-	5.73	0%
Insurance	141.01	68.59	3.40	-	213.00	8%
Repairs	303.58	133.63	8.39	-	445.59	17%
Accessories	198.34	103.15	8.15	-	309.65	12%
Taxes	54.82	36.20	1.10	-	92.12	4%
Total	1,693	815	43	-	2,551	100%

TABLE 3 - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size and Type Boats Kept at the Marina

CATEGORY	Boat Type and Size				Total
	Power <40'	Power 40'+	Sail <40'	Sail 40'+	
Number of boats	364	32	10	-	406
Annual craft spending per boat	\$4,651	\$25,461	\$4,341	\$19,082	-
Total craft spending (\$ Thousands)	\$1,693	\$815	\$43	-	\$2,551
Average days per boat	29	51	31	50	-
Total boat days	10,614	1,621	313	-	12,548
Average trip spending per boat day	\$122	\$178	\$59	\$105	-
Total trip spending per boat per year	\$3,555	\$9,010	\$1,851	\$5,231	-
Total trip spending (\$ Thousands)	\$1,294	\$288	\$19	-	\$1,601
Total craft&trip spending per boat per year	\$8,205	\$34,471	\$6,193	\$24,313	-
Total craft&trip spending (\$ Thousands)	\$2,987	\$1,103	\$62	-	\$4,152
Pct of spending by boats	72%	27%	1%	-	100%
Pct of boats	90%	8%	2%	-	100%
Pct of boat days by boats	85%	13%	2%	-	100%
Pct of spending on trips by boats	43%	26%	30%	-	39%

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Economic Impact Result/Tables

TABLE 1 - Economic Impacts of Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Lodging	10.5	0.3	4.6	7.4
Marina Services	228.3	5.0	82.9	138.6
Restaurant	323.6	8.4	124.6	140.4
Recreation & Entertainment	47.0	1.0	17.1	28.5
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin&Sales)	68.0	1.5	26.8	35.8
Gas Service Stations (Margin&Sales)	145.1	1.8	54.4	70.7
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margin&Sales)	24.7	0.6	11.6	16.1
Wholesale Trade (Margin&Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	847.2	18.6	321.9	437.7
Secondary Effects	299.5	3.9	89.2	159.0
Total Effects	1,146.7	22.5	411.1	596.6

TABLE 2 - Economic Impacts of Craft Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	658.4	14.4	239.0	399.7
Repairs	445.6	3.2	85.6	196.1
Insurance	21.3	0.4	10.2	18.5
Credit Intermediaries	5.3	0.0	2.2	4.2
Retail Margins	128.0	3.3	59.9	83.4
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	1,258.7	21.3	396.9	701.9
Secondary Effects	392.6	5.2	121.2	210.6
Total Effects	1,651.3	26.5	518.1	912.5

TABLE 3 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
--------------------------	-------------------------	------	--------------------------------	-------------------------------

Direct Effects				
Lodging	10.5	0.3	4.6	7.4
Marina Services	886.8	19.4	321.9	538.3
Restaurant	323.6	8.4	124.6	140.4
Recreation & Entertainment	47.0	1.0	17.1	28.5
Repair & Maintenance	445.6	3.2	85.6	196.1
Insurance&Credit	26.6	0.4	12.4	22.7
Gas Service	145.1	1.8	54.4	70.7
Other Retail Trade	220.7	5.5	98.3	135.4
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	2,105.9	39.9	718.8	1,139.5
Secondary Effects	692.2	9.1	210.4	369.6
Total Effects	2,798.0	49.0	929.2	1,509.2

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On-line Boating Economic Impact Model

Economic Impact Report

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[Print Report](#)

Information Concerning the Marina

Name of the Marina: WHITE BLUFF 500

Type of the Marina: Privately owned/commercial marina

Types of Slips Rented: Seasonal, Annual or Condominium Slips

Region of the country: Inland

Type of Economy: Rural Area. (Regions with populations less than 100,000.)

Date: 10/27/2007

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The Inputs to the Model

TABLE 1 - Number of Different Type and Size Boats Kept at the Marina

Boats Type and Size	Number of Boats	Average Days Per Boat	Total Boat Days
Power <40'	460	29	13,414
Power 40'+	40	51	2,026
Sail <40'	10	31	313
Sail 40'+	-	-	-
Total	510	31	15,752

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Spending Profiles By Boats Kept at the Marina

TABLE 1 - Average Spending on Boat Trip by Boats Kept at the Marina (\$ Per Boat Day)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Lodging	0.9	0.3	1.5	2.2
Marina services	17.3	25.6	10.3	18.3
Restaurant	24.4	36.7	16.4	30.7
Groceries	19.9	32.6	14.7	24.6
Boat fuel	41.1	61.6	3.6	8.0
Auto fuel	9.2	8.6	5.8	6.6
Repair & Maintenance	-	-	-	-
Marine supplies	-	-	-	-
Recreation & Entertainment	3.7	4.4	2.0	6.6

Shopping	2.9	6.3	2.9	5.2
Other services	-	-	-	-
Other goods	2.5	1.8	2.0	2.9
Total	122	178	59	105

TABLE 2 - Average Annual Craft Spending by Boats Kept at the Marina (\$ Per Boat Per Year)

CATEGORY	Boat Type and Size			
	Power <40'	Power 40'+	Sail <40'	Sail 40'+
Slip	1,366.3	4,590.0	1,423.1	3,403.6
Loan Payments	1,326.4	10,149.4	796.1	5,348.3
Motors	26.3	38.9	11.0	13.8
Trailers	14.8	8.6	7.1	6.1
Insurance	387.4	2,143.3	339.9	1,976.2
Repairs	834.0	4,175.8	838.9	3,833.9
Accessories	544.9	3,223.5	815.3	3,770.8
Taxes	150.6	1,131.2	110.0	728.9
Total	4,651	25,461	4,341	19,082

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Estimates of Total Spending by Boats Kept at the Marina

TABLE 1 - Total Trip Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Lodging	12.07	0.61	0.47	-	13.15	1%
Marina services	232.06	51.86	3.22	-	287.14	14%
Restaurant	327.30	74.35	5.13	-	406.77	20%
Groceries	266.93	66.04	4.60	-	337.57	17%
Boat fuel	551.30	124.79	1.13	-	677.22	34%
Auto fuel	123.41	17.42	1.81	-	142.64	7%
Repair & Maintenance	-	-	-	-	-	-
Marine supplies	-	-	-	-	-	-
Recreation & Entertainment	49.63	8.91	0.63	-	59.17	3%
Shopping	38.90	12.76	0.91	-	52.57	3%
Other services	-	-	-	-	-	-
Other goods	33.53	3.65	0.63	-	37.81	2%

Total	4,905	1,081	56	-	2,014	100%
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TABLE 2 - Total Craft Spending by Different Size and Type Boats Kept at the Marina (\$ Thousands)

CATEGORY	Boat Type and Size				Total	PCT
	Power <40'	Power 40'+	Sail <40'	Sail 40'+		
Slip	628.50	183.60	14.23	-	826.33	26%
Loan Payments	610.14	405.98	7.96	-	1,024.08	32%
Motors	12.10	1.56	0.11	-	13.76	0%
Trailers	6.81	0.34	0.07	-	7.22	0%
Insurance	178.20	85.73	3.40	-	267.34	8%
Repairs	383.64	167.03	8.39	-	559.06	17%
Accessories	250.65	128.94	8.15	-	387.75	12%
Taxes	69.28	45.25	1.10	-	115.62	4%
Total	2,139	1,018	43	-	3,201	100%

TABLE 3 - Numbers of Boats, Boating Days and Craft and Trip Spending by Different Size and Type Boats Kept at the Marina

CATEGORY	Boat Type and Size				Total
	Power <40'	Power 40'+	Sail <40'	Sail 40'+	
Number of boats	460	40	10	-	510
Annual craft spending per boat	\$4,651	\$25,461	\$4,341	\$19,082	-
Total craft spending (\$ Thousands)	\$2,139	\$1,018	\$43	-	\$3,201
Average days per boat	29	51	31	50	-
Total boat days	13,414	2,026	313	-	15,752
Average trip spending per boat day	\$122	\$178	\$59	\$105	-
Total trip spending per boat per year	\$3,555	\$9,010	\$1,851	\$5,231	-
Total trip spending (\$ Thousands)	\$1,635	\$360	\$19	-	\$2,014
Total craft&trip spending per boat per year	\$8,205	\$34,471	\$6,193	\$24,313	-
Total craft&trip spending (\$ Thousands)	\$3,774	\$1,379	\$62	-	\$5,215
Pct of spending by boats	72%	26%	1%	-	100%
Pct of boats	90%	8%	2%	-	100%
Pct of boat days by boats	85%	13%	2%	-	100%
Pct of spending on trips by boats	43%	26%	30%	-	39%

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Economic Impact Result/Tables

TABLE 1 - Economic Impacts of Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Lodging	13.1	0.3	5.7	9.3
Marina Services	287.1	6.3	104.2	174.3
Restaurant	406.8	10.5	156.6	176.5
Recreation & Entertainment	59.2	1.3	21.5	35.9
Repair & Maintenance	-	-	-	-
Grocery Stores (Margin&Sales)	85.4	1.9	33.7	45.0
Gas Service Stations (Margin&Sales)	182.8	2.3	68.6	89.0
Sporting Goods/Equipment Retail Margins	-	-	-	-
Other Retail Trade (Margins&Sales)	31.0	0.8	14.5	20.3
Wholesale Trade (Margins&Sales)	-	-	-	-
Local Production of Goods	-	-	-	-
Total Direct Effects	1,065.5	23.4	404.9	550.4
Secondary Effects	376.7	4.9	112.2	199.9
Total Effects	1,442.2	28.3	517.0	750.3

TABLE 2 - Economic Impacts of Craft Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
Direct Effects				
Boat Manufacture	-	-	-	-
Slip	826.3	18.0	300.0	501.6
Repairs	559.1	4.0	107.3	246.0
Insurance	26.7	0.4	12.8	23.3
Credit Intermediaries	6.7	0.0	2.7	5.3
Retail Margins	160.3	4.1	75.0	104.5
Wholesale Trade	-	-	-	-
Manufacture: Motors, Trailers, Accessories	-	-	-	-
Total Direct Effects	1,579.1	26.7	497.9	880.6
Secondary Effects	492.6	6.5	152.1	264.3
Total Effects	2,071.7	33.2	650.0	1,144.9

TABLE 3 - Economic Impact of both Craft and Trip Spending by Boats Kept at the Marina

Sector/Spending category	Sales (\$ Thousands)	Jobs	Labor Income (\$ Thousands)	Value Added (\$ Thousands)
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Direct Effects				
Lodging	13.1	0.3	5.7	9.3
Marina Services	1,113.5	24.3	404.2	675.9
Restaurant	406.8	10.5	156.6	176.5
Recreation & Entertainment	59.2	1.3	21.5	35.9
Repair & Maintenance	559.1	4.0	107.3	246.0
Insurance&Credit	33.4	0.5	15.6	28.5
Gas Service	182.8	2.3	68.6	89.0
Other Retail Trade	276.8	6.9	123.3	169.8
Wholesale Trade	-	-	-	-
Other Local Production of Goods	-	-	-	-
Total Direct Effects	2,644.6	50.1	902.8	1,431.0
Secondary Effects	869.3	11.4	264.2	464.2
Total Effects	3,513.9	61.5	1,167.0	1,895.2

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**Texas Recreation Facilities
Data Base 2006**

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Number of Texas Marinas

	<u>1986</u>	<u>2006</u>	<u>1986-2006 Difference</u>
Coastal Marinas	125	104	-21
Inland Marinas	184	252	+68
Total State	309	356	+47

Average Size of Texas Marinas

1986

	<u>Number</u>	<u>Total Wet Slips</u>	<u>Average Size</u>
Coastal Marinas	125	13,026	105 wet slips
Inland Marinas	184	22,449	122 wet slips
Total State	309	35,475	115 wet slips

2006

	<u>Number</u>	<u>Total Wet Slips</u>	<u>Average Size</u>
Coastal Marinas	104	12,937	124 wet slips
Inland Marinas	252	30,422	121 wet slips
Total State	356	43,359	122 wet slips

Size Distribution of Texas Marinas

	<u>Total No. of Wet Slips</u>		<u>Percent of Marinas</u>	
	<u>1986</u>	<u>2006</u>	<u>1986</u>	<u>2006</u>
Less than 50	159	160	51.5%	44.94%
50-99	52	68	16.8%	19.10%
100-199	47	61	15.2%	17.14%
200-499	35	49	11.3%	13.76%
500-999	13	17	4.2%	4.78%
1,000 or more	3	1	1.0%	0.28%
Total State	309	356	100%	100%

**2006 Total Boat Storage Capacity for Top 10
Texas Marina/Boating Areas**

<u>Area by Total Boat Storage Capacity</u>	<u>No. of Marinas</u>	<u>Total Wet Slips</u>	<u>Total Dry Boat Storage</u>	<u>Total Storage Capacity</u>
Clear Lake/Galveston Bay	37	8,209	1,965	10,174
(Clear Lake only)	(22)	(6,295)	(1,240)	(7,535)
Lake Travis	40	4,179	2,121	6,300
Lake Conroe	15	2,592	2,211	4,803
Lake Texoma	14	4,149	387	4,536
Lake Ray Hubbard	7	2,624	1,245	3,869
Lake Lewisville	6	2,572	896	3,468
Corpus Christi/Port Aransas/				
Aransas Pass/Rockport	31	2,499	513	3,012
Eagle Mountain Lake	8	1,690	401	2,091
Lake Grapevine	3	1,479	557	2,036
Canyon Lake	4	908	258	1,166
Totals	165	30,901	10,554	41,455
% of State Totals	(46.35%)	(71.27%)	(69.89%)	(70.90%)

2006 Services Provided by Texas Marinas

	<u>1986 (309)</u>		<u>2006 (356)</u>	
	<u># Marinas Providing Services</u>	<u>% of State Total</u>	<u># Marinas Providing Services</u>	<u>% of State Total</u>
Haulout Facilities	109	35.3%	88	24.7%
Retail Sales/Boats/ Motor/Equipment	107	34.6%	87	24.4%
Boat/Engine/Hull Repairs	116	37.5%	101	28.4%
Fuel Dock	218	71.0%	207	58.1%
Sewer Pump Out Service	70*	22.6%	109	30.6%
Boat Rentals and/or Charter Service	120	38.8%	149	41.9%
Sell Bait or Tackle	188	60.8%	182	51.1%
Food Service/Grocery/ Restaurant/Snack Bar	188	60.8%	202	56.7%
Lodging/RV Park	120	38.8%	177	49.7%

*Estimated Figure

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