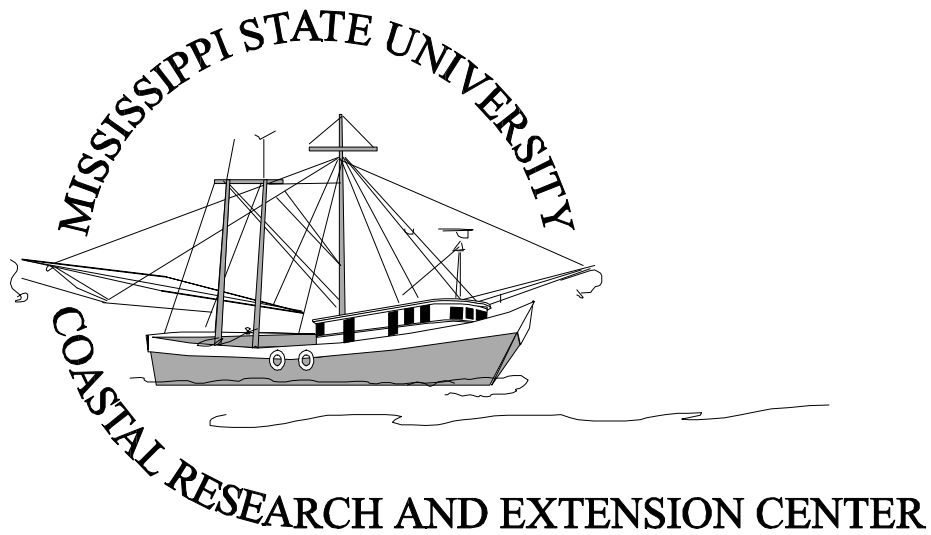


**Mississippi Coastal Recreational Boating Access:
Assessment and Projected Needs**



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December 1999

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I. Introduction:

The Mississippi Department of Marine Resources (DMR) is undertaking a long-range planning effort addressing public access issues within Mississippi's coastal zone. "Public access" in this context is a comprehensive term involving multiple uses and a panoply of groups competing for use of state and local government controlled public lands in Mississippi's three coastal counties. Examples of these public lands include the sand beach, water bottoms subject to the ebb and flow of the tide (more formally known as "tidelands"), coastal preserves, and wildlife sanctuaries. Competing uses include the harvesting and processing sectors of Mississippi's seafood industry, residential development, commercial development (particularly the dockside gaming industry), wildlife conservation, and recreation. Each of these broad categories can be further sub-divided into various user groups. For example, recreational users might include sunbathers, swimmers, fishermen, bird watchers, campers, and boaters. Some of these uses are compatible (e.g. boating and fishing) while others often conflict (e.g. personal watercraft operation and bird watching).

As part of this planning effort, the DMR requested assistance from Mississippi State University's Coastal Research and Extension Center (CREC) to provide information and guidance related to coastal recreational boating industry infrastructure facilities and needs. CREC personnel conducted research to determine demand profiles for recreational boating facilities and services and to compare existing price structures to facilities located in neighboring states. In addition, extensive field work was conducted in order to provide a detailed inventory of existing facilities and assessments of potential development sites.

II. Demand Profile:

Three methods were used to synthesize the demand for recreational boating access in the Mississippi coastal zone – 1) an examination of growth in coastal boat ownership based on time-series data, 2) a compilation of waiting lists for marina and dry storage facilities, and 3) use of the "Florida technique" (Bell, 1995) linking boat ownership to population growth and per capita income.

Boat ownership. Data on coastal boat registrations were collected for the six counties adjacent to Mississippi's marine coastline under the assumption that this comprised the primary "market area" for boating facilities and services. Total boat registration figures were obtained for the years 1992 and 1999 and are shown in Table 1 and Figure 1. Use (salt water vs. fresh water) and size category data were obtained for the year 1999 and are shown in Figures 2 and 3 and Table 2 respectively (MBWSC, 1999).

Table 1. Mississippi Coastal Boat Registrations by County

	1992	1999	% Change
Hancock	4,540	7,249	59.7
Harrison	17,002	24,207	42.4
Jackson	17,238	23,252	34.9
Pearl River	3,909	5,624	43.9
Stone	1,278	1,831	43.3
George	2,222	3,375	51.9
Total	46,189	65,538	41.9

Source:(Mississippi Department of Wildlife, Fisheries and Parks)

Figure 1.

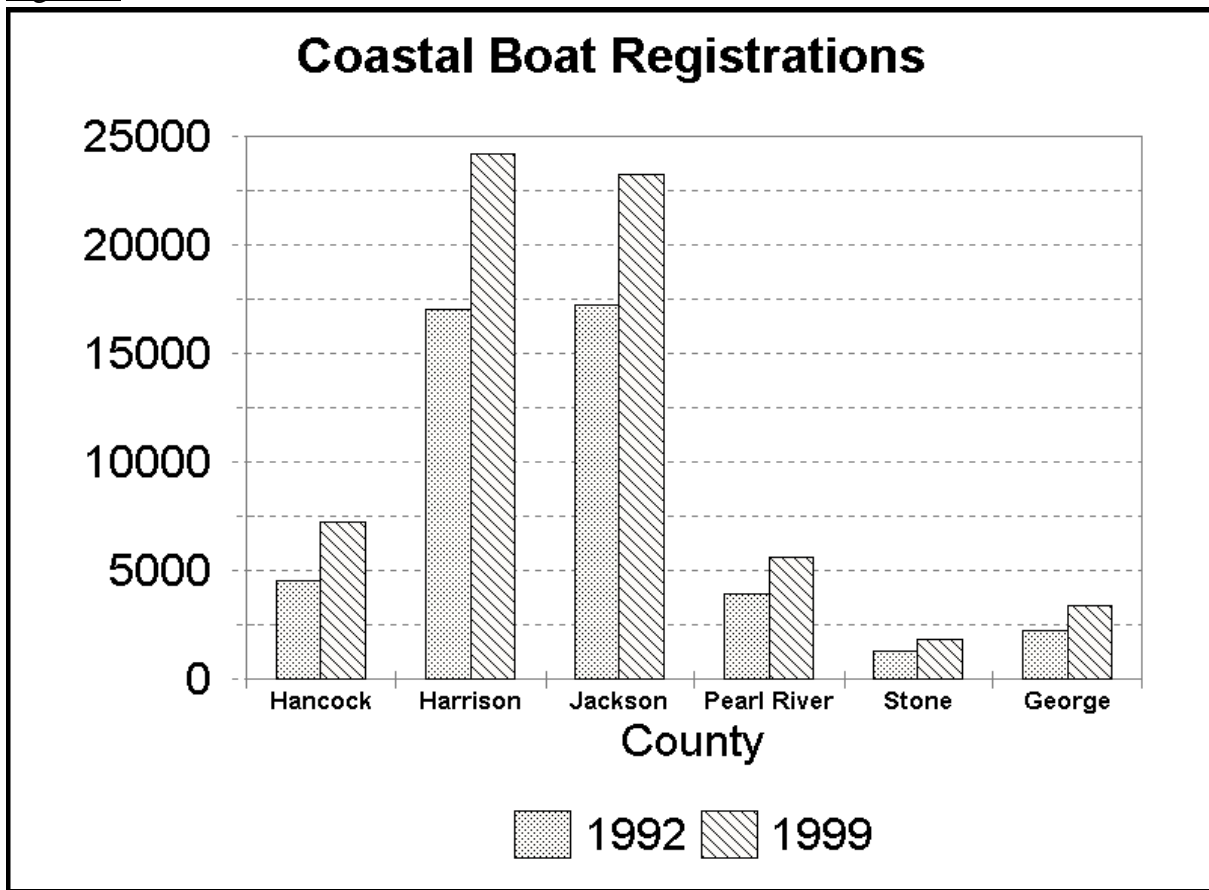


Figure 2.

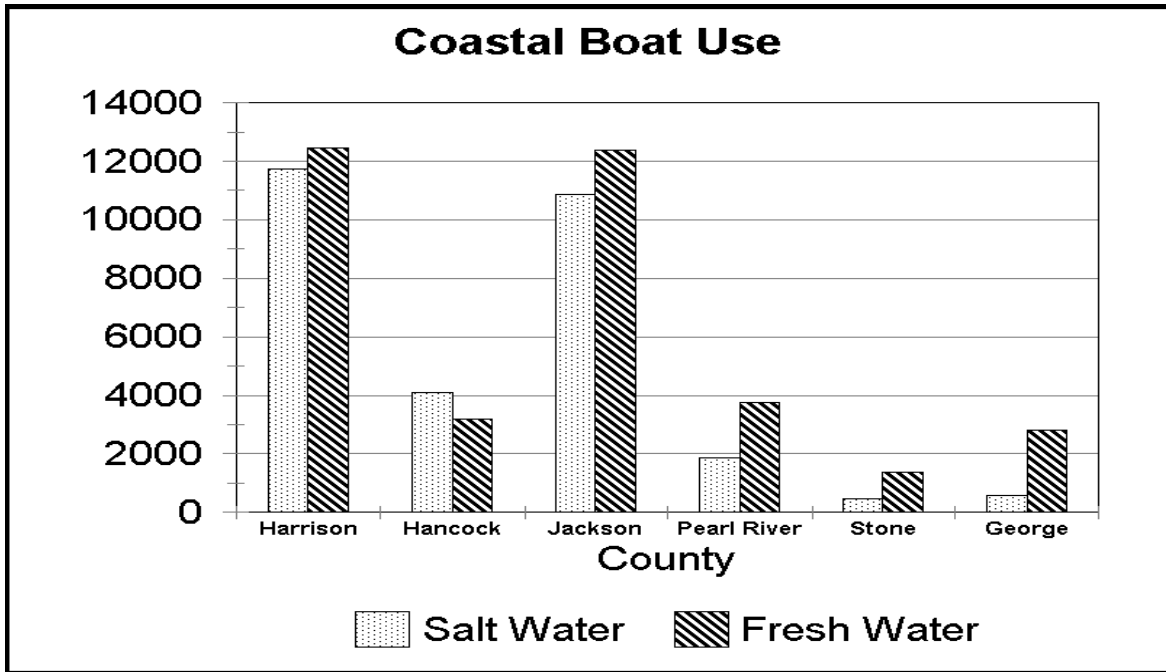


Figure 3.



Table 2. Coastal Boat Registrations by Size Category (Boat Length in Feet)

	<16	16 - 25	26 - 39	40 - 65	>65	Salt Water	Fresh Water	Total
Harrison	12,756	10,187	1,076	179	9	11,752	12,455	24,207
Hancock	3,165	3,631	355	48	0	4,083	3,166	7,249
Jackson	13,633	8,704	842	71	2	10,857	12,395	23,252
Pearl River	3,829	1,752	39	4	0	1,863	3,761	5,624
Stone	1,296	512	20	3	0	452	1,379	1,831
George	2,739	618	16	2	0	557	2,818	3,375
Total	37,418	25,404	2,348	307	11	29,564	35,974	65,538

There was an overall 42 percent increase in boat registrations between 1992 and 1999. Most (72 percent) of the 65.5 thousand boats registered in the six-county area were registered in Jackson and Harrison counties, in correspondence with the proportionate population base. About 96 percent of the boats registered in the six coastal counties were less than 26 feet in length, indicating that most boats in the region were capable of being stored or transported on a trailer. About 45 percent (29.6 thousand) of the boats in the region are used primarily in salt water. Because recreational boats over 5 net tons may be documented rather than state registered, the number of registered boats given for the larger size categories is less than the actual number of boats of that size in the region. In addition, the hailing port for documented vessels typically coincides with the city of residence of the owner rather than the actual physical location of the boat. Therefore, a better measure of demand associated with larger recreational vessels can be obtained by examining marina vessel characteristics and waiting lists.

Waiting lists. The CREC conducted a survey of coastal marinas in the winter of 1999 (see appendices). Information obtained during this survey was used to generate a marina waiting list profile for each of the three coastal counties. Six public and three private marinas in Harrison County indicated a total waiting list for boat slips of about 750 vessels. About 650 of these were for public facilities located in municipal marinas--most (400) in Biloxi followed by 145 in Gulfport, 65 in Long Beach and 50 in Pass Christian. Three private and two public facilities in Jackson County indicated a waiting list of about 300 vessels. Again, most of the demand was for public facilities with 165 on the waiting list for Ocean Springs Harbor and about 50 on the waiting list for Pascagoula's Inner Harbor. There are no public marinas for recreational boaters in Hancock County and five private facilities indicated a total waiting list of about 15-20 vessels.

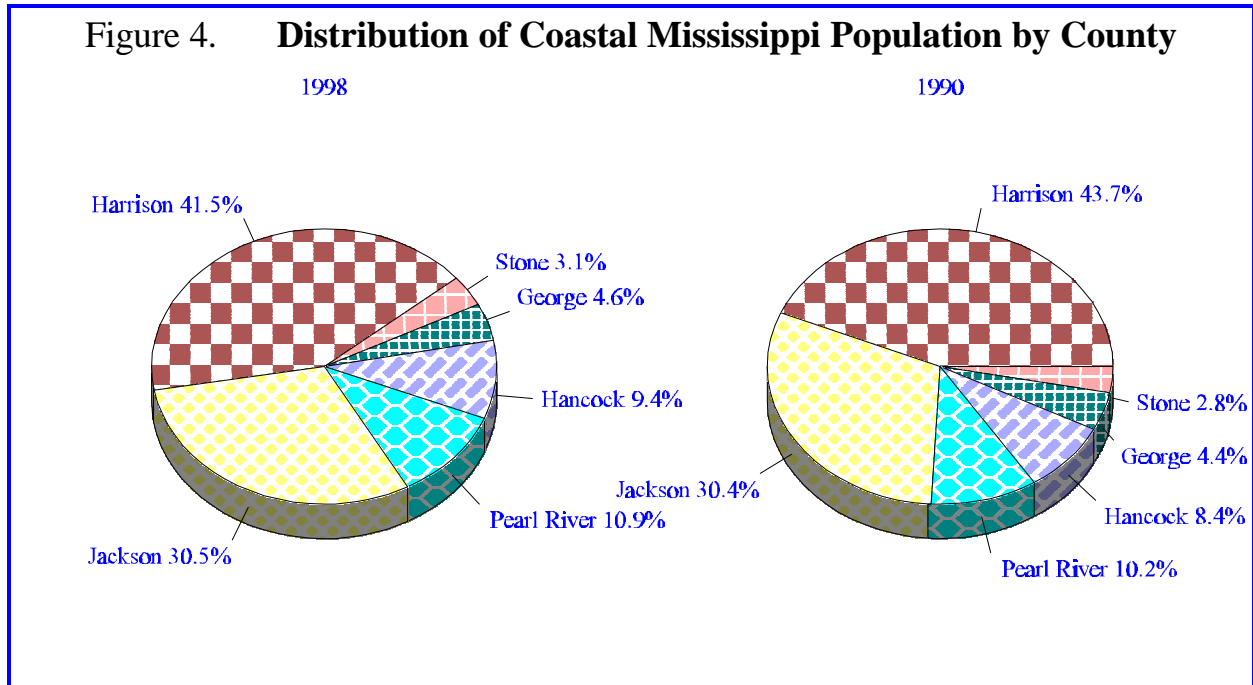
About 85 percent of the demand for slip space was generated by vessels between 26 and 65 feet in length. The waiting list profiles closely mirror county boat registration data and proximity to major population centers within the respective coastal counties. The relatively greater demand for public facilities was primarily due to differences in pricing between public and private facilities and secondarily due to facility location.

Population. The 1995 population in the three Mississippi coastal counties (Hancock, Harrison, Jackson) was about 342,000, and is expected to increase to about 400,000 by the year 2010 (Gulf South Economic Research Center, 1998). The majority (66 percent) of the population base within the six southeastern counties of the state lies within Harrison County and Jackson County.

Table 3. Coastal Mississippi Population Estimates by County

County	April 1, 1990	July 1, 1998	Percent change
Hancock	31,760	40,327	27.0%
Harrison	165,365	177,981	7.6%
Jackson	115,243	130,910	13.6%
Pearl River	38,714	46,862	21.0%
Stone	10,750	13,166	22.5%
George	16,673	19,645	17.8%
Total	411,468	464,867	.

Source: Population Estimates Program, Population Division, U.S. Bureau of the Census, Washington, D.C.

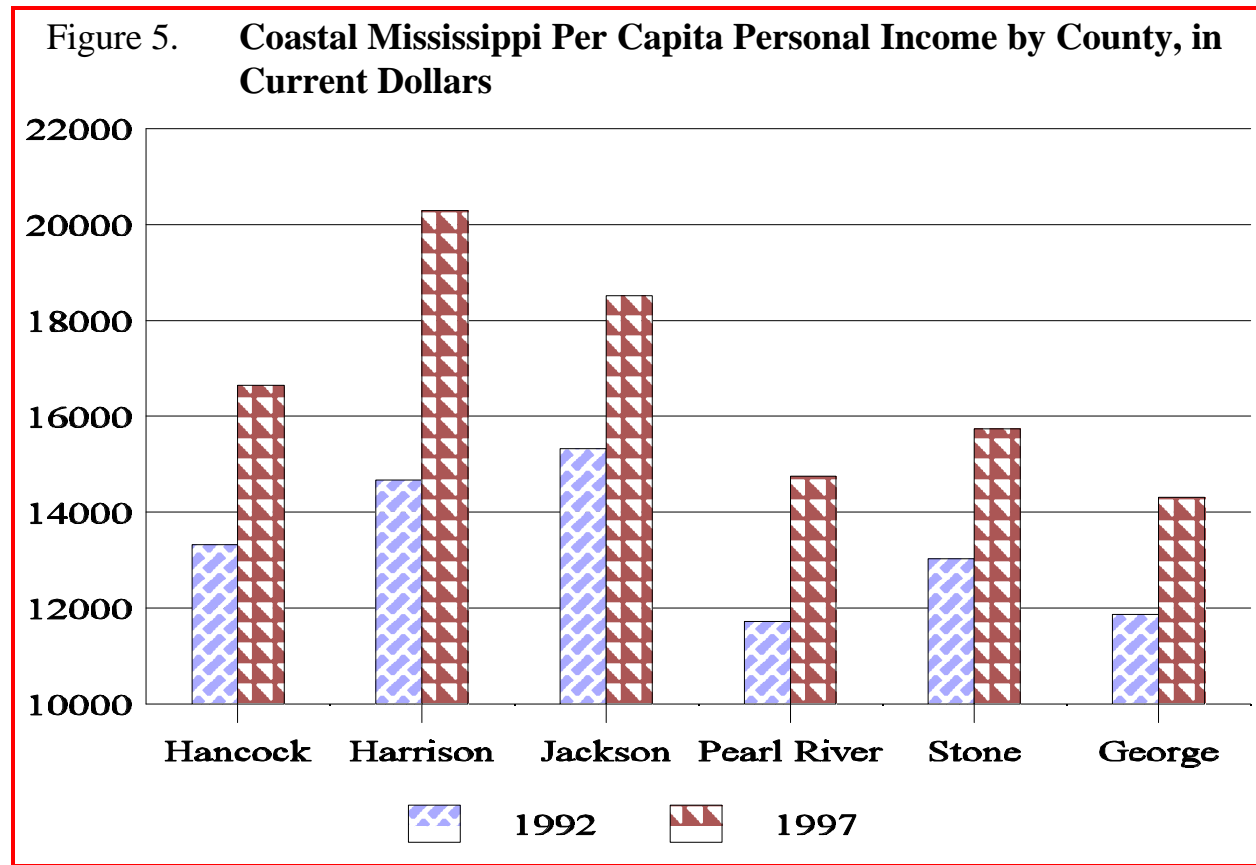


Per capita income. There has been consistent increase in per capita incomes (PCI) in coastal Mississippi counties between 1992 and 1997 (Table 4). Harrison County reported the highest PCI in 1997 followed by Jackson, Hancock, Stone, Pearl River and George counties (Figure 5).

Table 4. Coastal Mississippi Per Capita Income by County

County	1992	1997	Average Annual Percent change
	in constant 1992 dollars		
Hancock	13,333	14,559	1.4%
Harrison	14,674	17,732	3.6%
Jackson	15,332	16,192	1.3%
Pearl River	11,721	12,902	1.8%
Stone	13,027	13,765	1.3%
George	11,874	12,510	1.6%

Sources: Gulf South Economic Research Center and Bureau of Economic Analysis, Economics and Statistics Administration, U.S. Department of Commerce.



Projected demand for boat ramps. Using the two statistical methods (OLS and logit) applied by Bell (1995) to estimate demand and supply of boat ramps for the coastal regions of Florida, the projected demand for boat ramps in the three coastal counties of Mississippi was estimated. The coefficients of the models used in estimating projected demand for Escambia County, Florida for year 2000 were used to estimate projected demand in the three Mississippi coastal counties in year 2000.

The procedure and coefficients of the ordinary least squares (OLS) model used to estimate the projected demand for each coastal Mississippi county are as follows:

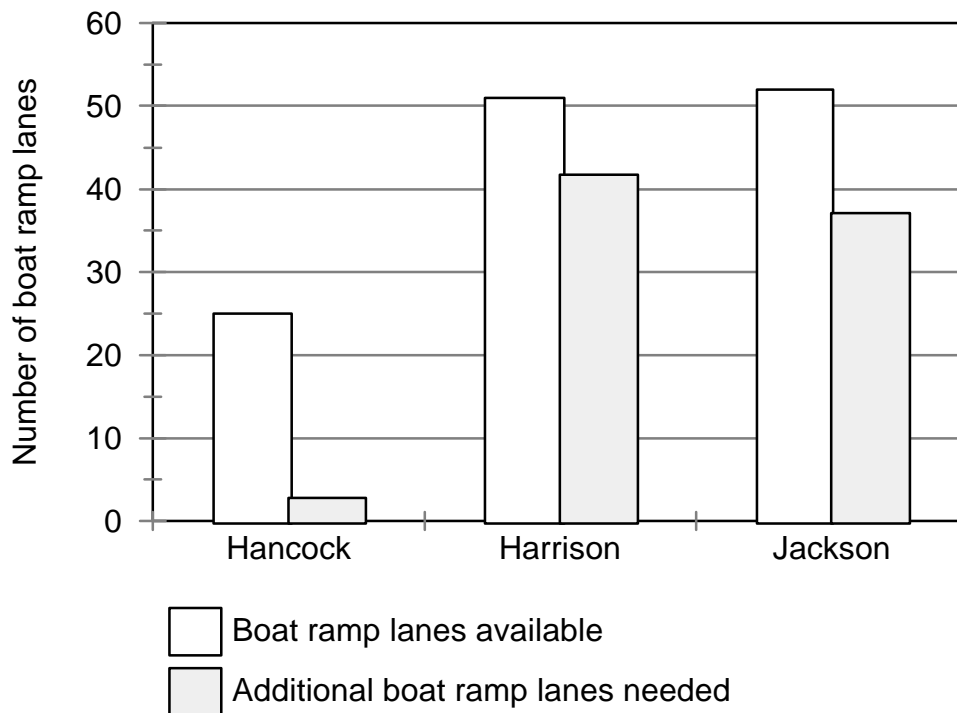
Eqn 1 Average boat ramp days per year in each county = [percent of boaters using boat ramps] x [boat registrations in each county per year] x [boating days per household per year]

For example, in Harrison County, the values are as follows:

$$\begin{aligned} \text{Average boat ramp days} &= 0.62019 \times 24,207 \times 27.52 \\ &= 413,156 \text{ days per year} \end{aligned}$$

Eqn 2 [Peak boat ramp demand per day ÷ boat ramp carrying capacity per day] = {[Percent peak boater demand days per year] x [average boat ramp days per year] ÷ [peak days per year]}

Figure 6.
Coastal Mississippi Boat Ramp Lanes



$$\div \{ [\text{number of boat launches per ramp per 12-hour-day using 30-minute scenario}] \times [\text{number of boat ramp lanes available in each county}] \}$$

In Harrison County, the estimating equation is as follows:

$$\begin{aligned} \text{Ratio of demand to carrying capacity} &= [0.59375 \times 413,156 \div 111] \div [24 \times 51] \\ &= 2,210 \div 1,224 = 1.8056 \end{aligned}$$

Eqn 3 Projected demand for additional boat ramps in each county = $\{ [\text{Peak boat ramp demand per day}] \div [\text{boat ramp carrying capacity per day}] \} \times \{ \text{number of boat ramp lanes available in each county} \} - [\text{number of boat ramps available in each county}]$

In Harrison County, the values used in the model are as follows:

$$\text{Projected demand} = 1.8056 \times 51 - 51 = 41 \text{ more boat ramps.}$$

The logit method of estimating projected demand used the probability of selecting a boat ramp which was estimated from a sample of boat owners. The probability of using a boat ramp was determined by household income (negative effect), age of the boat owner (negative effect) and the size of the boat (negative effect). The procedure and coefficients of the logit model used to estimate the projected demand for each coastal Mississippi county are as follows:

Eqn 1 Average boat ramp days per year in each county = $[\text{probability of boaters using boat ramps}] \times [\text{boat registrations in each county per year}] \times [\text{boating days per household per year}]$

For example, in Harrison County, the values used in the model are as follows:

$$\begin{aligned} \text{Average boat ramp days} &= 0.62875 \times 24,207 \times 27.52 \\ &= 418,859 \text{ days per year} \end{aligned}$$

Eqn 2 $[\text{Peak boat ramp demand per day} \div \text{boat ramp carrying capacity per day}] = \{ [\text{Percent peak boater demand days per year}] \times [\text{average boat ramp days per year}] \div [\text{peak days per year}] \} \div \{ [\text{number of boat launches per ramp per 12-hour-day using 30-minute scenario}] \times [\text{number of boat ramp lanes available in each county}] \}$

In Harrison County, the estimating equation is as follows:

$$\begin{aligned} \text{Ratio of demand to carrying capacity} &= [0.59375 \times 418,875 \div 111] \div [24 \times 51] \\ &= 2,241 \div 1,224 = 1.8305 \end{aligned}$$

Eqn 3 Projected demand for additional boat ramps in each county = $\{ [\text{Peak boat ramp demand per day}] \div [\text{boat ramp carrying capacity per day}] \} \times \{ \text{number of boat ramp lanes available in each county} \} - [\text{number of boat ramps available in each county}]$

In Harrison County, the values used in the estimating equation are as follows:

$$\begin{aligned} \text{Projected demand} &= 1.8305 \times 51 - 51 \\ &= 42 \text{ more boat ramps.} \end{aligned}$$

The projected need for boat ramp lanes in each county was finally computed by taking the average of the results of the two methods (OLS vs. logit). For Harrison County, it is equal to 41 which is the average of 41 (OLS method) and 42 (logit method) additional boat ramp lanes. The same procedures and coefficients were applied in estimating the projected boat ramp needs for Jackson and Hancock Counties. The projected demand in Jackson and Hancock Counties in year 2000 is 37 and 3 more boat ramp lanes, respectively (Figure 7).

It should be noted, however, that these results have certain limitations due to the nature of the predictive models used. These models did not take into consideration non-coastal residents from out-of-state and other counties who might be using these boat ramps. These estimates represent peak demand for boat ramps during weekends and holidays.

III. Description of Existing Facilities:

Boat Launches

CREC personnel conducted on-site surveys of all boat launches in the three coastal counties. Not included in this compilation are unimproved sites located along coastal rivers designed primarily for canoe and kayak access. Also not included are sites which are unavailable for use by the general public, such as those in private housing developments and on military bases. Both public ramps (no launch fee) and private ramps available to the general public for a minimal fee are included in the survey. Average water depths at the launch site as well as controlling water depths for the adjacent water body were recorded, and launch ramp slope, surface and maneuvering areas were noted in order to determine the size of boats which could be launched and retrieved at the facility. The design standard for boat ramp slope is 12 to 13 percent (Ramsey and Sleeper, 1994). However, most ramps along the Mississippi coast are sloped more gradually due to the minimal tidal range. As a general rule, any ramps steeper than 15 percent should only be used for very small lightweight boats. Ramps with slopes less than 6 or 7 percent should be avoided because it becomes necessary to contact the water with the tow vehicle in order to get the trailer into deep enough water to launch or retrieve the boat. Launch locations are given in terms of water body, latitude and longitude, and street location. Number and type of parking for vehicles with and without trailers is given, as well as information about amenities such as lighting, trash disposal, comfort facilities and loading/unloading docks designed to ease ramp congestion.

Table 5. Location and Characteristics of Boat Ramps in the Mississippi Gulf Coast: Hancock County

Map No.	Launch Name	Public	Private	Street Location	Water Location	Latitude (Deg. Min. Sec.)	Longitude (Deg. Min. Sec.)	No. of Ramps	Slope (%)	Ramp Surface
1	Rouchon House			Stennis Space Center	Pearl River	30 20 54.7	89 38 25.9	1	10	Corrugated Concrete
2	Curtis Johnson Waterfront Park	X		Napolean	Pearl River	30 19 43.6	89 37 54.6	1	12	Corrugated Concrete
3	Logtown	X		End of 1st dirt rd south of Hwy. 90 off Hwy. 607	Pearl River	30 16 49.0	89 37 50.9	1	4	Shell
4	Pearlington	X		End of Monroe St in downtown Pearlington	Pearl River	30 14 52.4	89 36 56.4	1	8	Corrugated Concrete
5	Bea and Woody's Marina		X	16463 Hwy. 90, Pearlington	Cowan Bayou	30 14 29.9	89 36 20.1	1	10	Corrugated Concrete
6	Port Bienville	X		End of road A inside Port Bienville Industrial Park	Mulatto Bayou	30 13 26.9	89 35 08.0	1	8	Corrugated Concrete
7	La France Fishing Camp		X	3200 Ansley Road, Bay St. Louis	Campbell Inside Bayou	30 12 28.4	89 29 59.0	1	8	Corrugated Concrete
8	Bordages Marina		X	6149 Central Ave. Bay St. Louis	Bayou Caddy	30 14 30.3	89 26 29.1	1	7	Corrugated Concrete
9	Hancock County Marina	X		Pleasant Street, Bay St. Louis	Bayou Caddy	30 14 23.1	89 25 56.1	2	8	Corrugated Concrete
10	Bayou Caddy	X		End of Beach Blvd., Bay St. Louis	Bayou Caddy	30 14 18.8	89 25 36.0	1	6	Corrugated Concrete
11	American Legion	X		End of Washington St., Bay St. Louis	Bay St. Louis	30 18 07.9	89 19 40.0	3	10	Corrugated Concrete
12	Bay-Waveland Yacht Club		X	North Beach Blvd. Bay St. Louis	Bay St. Louis	30 19 29.3	89 19 35.1	1	9	Corrugated Concrete
13	Cedar Point	X		End of North Beach Blvd., Bay St. Louis	Bay St. Louis	30 20 20.3	89 21 16.8	1	9	Corrugated Concrete
14	Casio Magic		X	711 Casio Magic Drive, Bay St. Louis	Bay St. Louis	30 20 06.9	89 21 23.9	2	9	Corrugated Concrete
15	Bay Marina		X	100 Bay Marina Dr., Bay St. Louis	Jourdan River	30 19 24.6	89 22 57.2	1	8	Corrugated Concrete
16	Bayou LaCroix		X	Hwy. 603 at Bayou LaCroix	Bayou LaCroix	30 19 45.7	89 25 24.0	1	5	Corrugated Concrete
17	McLeod State Park	X		Texas Flat Road, Kiln	Ox Bow to Jourdan River	30 23 09.9	89 27 25.6	1	6	Corrugated Concrete
18	Bayou Talla	X		End of Comanche St. Kiln	Bayou Talla	30 23 55.8	89 26 06.5	1	14	Corrugated Concrete
19	Diamondhead Marina		X	3400 Yacht Club Circle, Diamondhead	Canal to Jourdan River	30 21 56.0	89 22 25.3	1	10	Corrugated Concrete

Table 5. Cont.

Map No.	Launch Name	Water Depth at Launch (ft.)	Charted Depth of Adjacent Waterbody (ft.)	Trailer Parking Spaces	Car Parking Spaces	Lighted?	Comfort Facilities?	Trash Receptacles?	Comments
1	Rouchon House	2.0	Not Charted	Approx. 9	Approx. 9	No	No	No	Must have permission to enter Stennis Space Center; launch is well sheltered
2	Curtis Johnson Waterfront Park	4.5	12	Approx. 12	Approx. 12	No	No	Yes	Difficult to access; rutted dirt road; launch is well sheltered
3	Logtown	1.5	12	Approx. 8	Approx. 8	No	No	No	No piers at launch site; mostly local use; no signs to locate facility
4	Pearlington	4.0	12	Approx. 7	Approx. 7	Yes	No	Yes	Located on main river channel, signage in town directing to launch
5	Bea and Woody's Marina	3.0	Not Charted	Approx. 15	Approx. 15	Yes	Yes	No	Family operated marina, mostly local use
6	Port Bienville	2.5	10	Approx. 12	Approx. 12	No	No	No	Located inside the Industrial Park. No piers at the launch site
7	La France Fishing Camp	3.5	Not Charted	Approx. 25	Approx. 25	Yes	Yes	Yes	Large facility; plenty of parking
8	Bordages Marina	5.0	Not Charted	Approx. 6	Approx. 6	Yes	No	No	Well protected; facility in disrepair
9	Hancock County Marina	5.0	7	Approx. 40	Approx. 40	Yes	Yes	Yes	New marina facility, well designated slips, caters to shrimp boats
10	Bayou Caddy	3.5	7	Approx. 25	Approx. 25	Yes	No	Yes	Very confined space for launching and loading. Tied and sunken shrimp boats next to ramp.
11	American Legion	3.5	7	Approx. 20	Approx. 20	Yes	Yes	Yes	Exposed to winds
12	Bay-Waveland Yacht Club	3.0	4	Approx. 10	Approx. 10	Yes	Yes	Yes	Must have membership
13	Cedar Point	3.5	10	None (roadside)	None (roadside)	No	No	No	Ramp has double slope surface. Underwater slope is steep; users often complain
14	Casio Magic	5.5	10	Approx. 20	Approx. 20	Yes	No	No	Exposed to northeast winds
15	Bay Marina	3.0	Not Charted	Approx. 5	Approx. 5	Yes	Yes	Yes	Launch is well sheltered
16	Bayou LaCroix	1.5	Not Charted	Approx. 25	Approx. 25	Yes	No	No	Launch is well sheltered
17	McLeod State Park	3.5	Not Charted	Approx. 8	Approx. 8	Yes	Yes	Yes	Launch is well sheltered
18	Bayou Talla	5.5	Not Charted	None (roadside)	None (roadside)	Yes	No	Yes	Not recommended for long trailers
19	Diamondhead Marina	4.0	Not Charted	Approx. 10	Approx. 10	Yes	Yes	Yes	Launch is well sheltered

Table 6. Location and Characteristics of Boat Ramps in the Mississippi Gulf Coast: Harrison County

Map No.	Launch Name	Public	Private	Street Location	Water Location	Latitude (Deg. Min. Sec.)	Longitude (Deg. Min. Sec.)	No. of Ramps	Slope (%)	Ramp Surface
1	Merlin Necaize	X		Southwest Side of Henderson Ave.	Wolf River	30 21 25.6	89 16 22.8	2	9	Corrugated Concrete
2	Discovery Bay		X	Discovery Bay Marina	Bayou Portage	30 20 49.5	89 15 27.1	1	7	Dirt/Gravel
3	Bayou Portage	X		Henderson Ave. at Clark St.	Bayou Portage	30 20 23.7	89 15 49.5	1	9	Concrete
4	Henderson Point	X		Foot of Bayview St.	Bay St. Louis	30 18 45.0	89 17 26.2	1	9	Corrugated Concrete
5	Pass Christian Harbor (West)	X		Highway 90 at Pass Christian Harbor	Mississippi Sound	30 18 46.3	89 14 57.6	2	8	Corrugated Concrete
6	Pass Christian Harbor (East)	X		Highway 90 at Pass Christian Harbor	Mississippi Sound	30 18 43.2	89 14 45.3	2	8	Concrete
7	Long Beach Harbor	X		Highway 90 at Long Beach Harbor	Mississippi Sound	30 20 43.8	89 08 30.4	6	8	Concrete
8	Gulfport Harbor	X		Highway 90 at Gulfport Harbor	Mississippi Sound	30 21 56.6	89 05 17.7	8	10	Corrugated Concrete
9	Gulfport Lake	X		Off Washington Ave. Near Tramark Golf Course	Bayou Bernard	30 25 28.4	89 03 37.1	3	9	Corrugated Concrete
10	Biloxi River		X	Lorraine Rd., Southeast Side of Bridge	Biloxi River	30 27 10.7	89 00 48.0	2	17	Sand/Gravel
11	M & M		X	Lorraine Rd.	Biloxi River	30 27 30.8	89 00 32.9	1	17	Concrete
12	Parker's Landing	X		Hwy. 67 at Interstate 10	Tchoutacabouffa River	30 27 33.8	88 57 54.8	1	10	Concrete
13	Cedar Lake		X	Cedar Lake Rd., Southeast Side of Bridge	Tchoutacabouffa River	30 27 32.7	88 56 18.3	1	7	Concrete
14	Handsboro	X		Switzer Rd. at Handsboro Ctr.	Bayou Bernard	30 24 28.5	89 01 00.8	2	17	Rough Concrete
15	Popp's Ferry Causeway	X		Causeway Dr.	Back Bay of Biloxi	30 25 10.1	88 58 43.1	2	12	Concrete
16	Popp's Ferry Fish Camp		X	Popp's Ferry Rd., Southeast Side of Bridge	Back Bay of Biloxi	30 24 50.6	88 58 32.0	1	17	Concrete
17	Hiller Park	X		Hiller Drive	Back Bay of Biloxi	30 24 38.9	88 57 14.0	2	6	Concrete
18	Forrest Avenue	X		North End of Forrest Avenue	Back Bay of Biloxi	30 24 43.6	88 54 16.7	3	7	Concrete
19	D'Iberville I - 110 Boat Launch	X		Bayshore Drive Under North End of I - 110	Back Bay of Biloxi	30 25 35.1	88 53 32.0	4	7	Corrugated Concrete
20	Lee Street	X		North End of Lee Street	Back Bay of Biloxi	30 24 39.6	88 52 43.2	2	9	Corrugated Concrete
21	Biloxi Small Craft Harbor	X		Highway 90 at Biloxi Small Craft Harbor	Mississippi Sound	30 23 31.7	88 53 0.3	2	10	Concrete
22	Kuhn Street	X		Highway 90 at Kuhn Street	Mississippi Sound	30 23 33.0	88 52 21.6	2	13	Concrete
23	Oak Street	X		Highway 90 at Oak Street	Mississippi Sound	30 23 31.0	88 52 04.9	2	12	Concrete

Table 6. Cont.

Map No.	Launch Name	Water Depth at Launch (ft.)	Charted Depth of Adjacent Waterbody (ft.)	Trailer Parking Spaces	Car Parking Spaces	Lighted?	Comfort Facilities?	Trash Receptacles?	Comments
1	Merlin Necaise	4.0	9	20 - 25 (Roadside)	Approx. 10 (Roadside)	Yes	No	Yes	Brand new ramp, very good
2	Discovery Bay	3.0	7	Approx. 15 (Dirt/Gravel Lot)	Approx. 7 (Dirt/Gravel Lot)	No	At Marina	No	Unimproved, in disrepair, difficult road access
3	Bayou Portage	4.0	7	Approx. 15 (Grass Lot)	Approx. 15 (Grass Lot)	No	No	No	Suitable only for small boats due to limited maneuvering area
4	Henderson Point	2.5	4	25 - 30 (Roadside)	Approx. 10 (Roadside)	Yes	No	Yes	Suitable only for small, shallow-draft boats
5	Pass Christian Harbor (West)	5.0	6	30	Approx. 30	Yes	Yes	Yes	No nearby parking, good wave protection
6	Pass Christian Harbor (East)	3.5	6	17	52	No	Yes	Yes	Good wave protection, very good ramp
7	Long Beach Harbor	3.5	8	65	15	Yes	Yes	Yes	Good wave protection, excellent ramp
8	Gulfport Harbor	6.0	8	2 acres of mixed parking	2 acres of mixed parking	Yes	Yes	Yes	Good wave protection, excellent ramp, congested on weekends
9	Gulfport Lake	6.5	9	28 designated	4	Yes	Yes	Yes	Excellent ramp for Back Bay access
10	Biloxi River	2.0	Not Charted	6 - 8	0	No	No	No	Suitable only for very small boats
11	M & M	1.5	Not Charted	3 - 4	4	No	No	No	Suitable only for very small boats
12	Parker's Landing	2.5	Not Charted	30	Approx. 12	No	No	No	Suitable only for very small boats due to depth of adjacent water
13	Cedar Lake	5.0	Not Charted	1/2 acre of mixed parking	1/2 acre of mixed parking	Yes	Yes	No	Located at Cedar Lake Fish Camp
14	Handsboro	3.5	8	Approx. 6	15	Yes	No	Yes	Suitable only for very small boats
15	Popp's Ferry Causeway	5.0	14	14	10	No	No	Yes	Open to main channel, wakes and winds problematic
16	Popp's Ferry Fish Camp	2.5	26	None designated	22	No	Yes	No	Suitable only for very small boats
17	Hiller Park	4.0	2	14	8	Yes	No	Yes	Depth of access channel limits use to shallow-draft boats
18	Forrest Avenue	2.0	3	8 (Across Street)	None designated	No	No	No	Suitable only for small, shallow-draft boats, site is being improved
19	D'Iberville I - 110 Boat Launch	5.0	12	35 designated	8	Yes	Yes	Yes	Excellent ramp for Back Bay access, congested on weekends
20	Lee Street	6.0	12	Approx. 28	12	Yes	No	No	Brand new ramp, very good
21	Biloxi Small Craft Harbor	7.0	10	44	24	Yes	No	Yes	Good wave protection, excellent ramp, congested on weekends
22	Kuhn Street	3.0	10	1/4 acre sand lot	1/4 acre sand lot	No	No	Yes	Ramp surface covered with sand, highway access problematic
23	Oak Street	3.5	10	No onsite parking	No onsite parking	No	No	No	Ramp essentially unusable due to lack of onsite parking and heavy traffic

Table 7. Location and Characteristics of Boat Ramps in the Mississippi Gulf Coast: Jackson County

Map No.	Launch Name	Public	Private	Street Location	Water Location	Latitude (Deg. Min. Sec.)	Longitude (Deg. Min. Sec.)	No. of Ramps	Slope (%)	Ramp Surface
1	St. Martin	X		Brittany Rd., Southeast Side of Bridge	St. Martin Bayou	30 26 01.4	88 52 50.3	1	9	Concrete
2	Old Fort Bayou	X		Washington Ave., Northeast Side of Bridge	Old Fort Bayou	30 25 10.8	88 49 42.8	2	11	Concrete
3	Ocean Springs Harbor	X		Front Beach Drive at Ocean Springs Harbor	Mississippi Sound	30 24 12.7	88 49 25.2	8	10	Concrete
4	Gulf Islands Seashore		X	Gulf Islands National Seashore Park	Davis Bayou	30 23 45.4	88 47 36.0	2	16	Concrete
5	Blue Heron Marina	X		Beachview Drive, Northwest Side of Bridge	Simmons Bayou	30 22 27.6	88 45 36.8	1	16	Concrete
6	Graveline	X		North End of Octavia Street	Graveline Bayou	30 21 45.9	88 41 41.2	1	7	Concrete
7	Shepard State Park Boat Launch		X	Shepard State Park	Pascagoula River	30 22 22.1	88 37 36.5	1	12	Concrete
8	Indian Point Preserve Boat Launch		X	1600 Indian Point Parkway	Pascagoula River	30 24 25.6	88 37 42.9	2	8	Concrete
9	Shimps Time-Out Marina		X	700 Roy's Road	Pascagoula River	30 25 22.7	88 37 16.8	1		Concrete
10	Paige Bayou Marina		X	Rouse's Marina Road	Pascagoula River	30 29 11.1	88 39 42.5	2	8	Concrete
11	San Juan Fishing Camp		X	John's Bayou Road	Pascagoula River	30 29 32.9	88 38 30.4	1	10	Concrete
12	John's Bayou Marina		X	John's Bayou Marina Road	Pascagoula River	30 29 55.7	88 38 31.3	1	10	Concrete
13	Poticaw Fishing Camp		X	Poticaw Landing Road	Pascagoula River	30 30 45.8	88 37 07.5	1	15	Concrete
14	Pascagoula River Game Management Headquarters Launch	X		Vancleave-Wade Road	Pascagoula River	30 38 01.4	88 35 55.5	1	15	Concrete
15	Cumbest Bluff Boat Launch	X		Cumbest Bluff Road	Pascagoula River	30 35 04.7	88 34 11.0	1	20	Concrete
16	Riverbend RV Resort		X	10707 Hwy. 613	Pascagoula River	30 28 50.1	88 33 45.0	1	10	Concrete
17	The Boat Rental		X	Frank Griffin Road	Pascagoula River	30 26 37.1	88 32 59.1	1	15	Concrete
18	I-10 Boat Launch	X		Frank Griffin Road	Pascagoula River	30 26 16.7	88 33 19.1	1	10	Concrete
19	Riverfront Boat Launch	X		McInnis Avenue	Escatawpa River	30 24 50.5	88 32 14.0	2	8	Concrete
20	Choctaw Marina		X	3301 Hemlock Avenue	Pascagoula River	30 24 00.6	88 33 19.1	1	12	Concrete
21	Spanish Fort Boat Launch	X		Hickory Street	Pascagoula River	30 22 49.8	88 33 22.1	1	5	Concrete

Table 7. Cont.

Map No.	Launch Name	Public	Private	Street Location	Water Location	Latitude (Deg. Min. Sec.)	Longitude (Deg. Min. Sec.)	No. of Ramps	Slope (%)	Ramp Surface
22	Pascagoula River Park Boat Launch	X		Pascagoula River Park	Pascagoula River	30 22 32.7	88 33 55.7	1	6	Concrete
23	Jaycee Boat Launch	X		Adjacent to Pascagoula River Park	Pascagoula River	30 22 28.2	88 34 07.3	3	5	Concrete
24	Old Coast Guard Station Boat Launch	X		Beach Boulevard	Mississippi Sound	30 20 42.0	88 33 45.0	4	5	Concrete
25	Hwy 63 Boat Launch	X		Cowart Street	Escatawpa River	30 22 19.6	88 31 14.5	2	8	Concrete
26	Bayou Cassotte Boat Launch	X		Ladnier Avenue	Bayou Cassotte	30 21 09.0	88 30 31.3	2	8	Concrete
27	Shingle Mill Landing Boat Launch		X	6105 Shingle Mill Landing Road	Escatawpa River	30 25 53.9	88 27 52.1	2	15	Concrete
28	Bayou Cumbest Boat Launch		X	Bayou Cumbest Road	Bayou Cumbest	30 23 20.4	88 26 57.6	1	12	Concrete
29	Point O'Pines Fish Camp		X	Grand Bature Road	Bang's Lake	30 23 04.5	88 26 22.9	2	11	Sand/Gravel
30	Bayou Heron Boat Launch-A	X		Bayou Heron Road	Bayou Heron	30 24 45.0	88 24 14.8	1	10	Sand/Gravel
31	Bayou Heron Boat Launch-B	X		Bayou Heron Road	Bayou Heron	30 24 47.0	88 24 12.4	1	10	Sand/Gravel

Table 7. Cont.

Map No.	Launch Name	Water Depth at Launch (ft.)	Charted Depth of Adjacent Waterbody (ft.)	Trailer Parking Spaces	Car Parking Spaces	Lighted?	Comfort Facilities?	Trash Receptacles?	Comments
1	St. Martin	2.0	2	1.5 acre sand/gravel lot	1.5 acre sand/gravel lot	Yes	No	Yes	Suitable only for small, shallow-draft boats
2	Old Fort Bayou	6.0	7	Approx. 15	Approx. 10	Yes	No	Yes	Strong lateral tidal current makes launching/retrieving difficult
3	Ocean Springs Harbor	4.5	10	Approx. 35	Approx. 25	Yes	Yes	Yes	Good wave protection, excellent ramp, congested on weekends
4	Gulf Islands Seashore	4.0	3	12	10	No	No	Yes	Suitable only for very small boats, park closes at 10:00 p.m. except for registered campers
5	Blue Heron Marina	5.0	3	Approx. 6	Approx. 4	Yes	No	Yes	Suitable only for small boats due to steep ramp, limited maneuvering room and water depth
6	Graveline	4.0	5	Approx. 6	Approx. 6	No	No	Yes	Depth of access channel limits use to shallow-draft boats
7	Shepard State Park Boat Launch	2.0	3	Approx. 6	Approx. 6	Yes	Inside office	Yes	Suitable only for small, shallow-draft boats
8	Indian Point Preserve Boat Launch	4.0	Not Charted	Approx. 15	Approx. 15	Yes	Inside office	Yes	Pay park entrance fee, fishing pier available
9	Shimps Time-Out Marina	2.0	Not Charted	Approx. 10	Approx. 10	Yes	Inside office	Yes	Marina slips available
10	Paige Bayou Marina	6.1	Not Charted	Approx. 20	Approx. 20	Yes	Inside store	Yes	Marina slips available
11	San Juan Fishing Camp	3.0	Not Charted	Approx. 6	Approx. 4	No	Inside office	No	Marina slips available
12	John's Bayou Marina	5.5	Not Charted	Approx. 12	Approx. 6	Yes	Inside store	Yes	Marina slips available
13	Poticaw Fishing Camp	2.0	Not Charted	Approx. 15	Approx. 10	Yes	Inside office	Yes	For members only, visitors must check in and out, marina slips available
14	Pascagoula River Game Management Headquarters Launch	3.5	Not Charted	Approx. 20	Approx. 10	Yes	Inside office	Yes	Steep, long and narrow ramp
15	Cumbest Bluff Boat Launch	4.0	Not Charted	Approx. 15	Approx. 5	Yes	No	No	Pascagoula River Wildlife Management Area
16	Riverbend RV Resort	6.3	Not Charted	Approx. 15	Approx. 15	Yes	Inside store	Yes	Marina slips available
17	The Boat Rental	6.0	Not Charted	Approx. 15	Approx. 5	Yes	Inside store	Yes	
18	I-10 Boat Launch	4.2	9	Approx. 24	Approx. 12	No	No	No	Handicapped parking, trans-continental cable crossing
19	Riverfront Boat Launch	5.7	19	12	6	Yes	Inside store	Yes	
20	Choctaw Marina	6.0	Not Charted	Approx. 15	Approx. 10	Yes	Inside office	Yes	Marina slips available
21	Spanish Fort Boat Launch	3.0	8	Approx. 10	Approx. 5	Yes	No	Yes	Pier closes and gates closed at sundown

Table 7. Cont.

Map No.	Launch Name	Water Depth at Launch (ft.)	Charted Depth of Adjacent Waterbody (ft.)	Trailer Parking Spaces	Car Parking Spaces	Lighted?	Comfort Facilities?	Trash Receptacles?	Comments
22	Pascagoula River Park Boat Launch	4.2	13	.5 acre sand/gravel lot	.5 acre sand/gravel lot	Yes	Yes	Yes	Fishing pier available, near Pascagoula River drawbridge
23	Jaycee Boat Launch	7.2	3	Approx. 20	Approx. 15	Yes	Inside store	Yes	Near Pascagoula River drawbridge
24	Old Coast Guard Station Boat Launch	4.5	6	Approx. 20	Approx. 10	Yes	No	Yes	Fishing piers available, handicapped parking
25	Hwy 63 Boat Launch	6.1	12	Approx. 12	Approx. 15	No	No	No	
26	Bayou Cassotte Boat Launch	7.4	26	Approx. 15	Approx. 5	Yes	Inside store	Yes	Fishing pier available
27	Shingle Mill Landing Boat Launch	6.0	Not Charted	Approx. 50	Approx. 50	Yes	Inside store	Yes	
28	Bayou Cumbest Boat Launch	3.0	3	Approx. 10	Approx. 10	Yes	Inside store	Yes	Near Port of Pascagoula
29	Point O'Pines Fish Camp	5.0	3	Approx. 50	Approx. 10	Yes	Inside store	Yes	
30	Bayou Heron Boat Launch-A	3.0	Not Charted	Approx. 10	Approx. 5	No	No	No	Suitable only for small, shallow-draft boats
31	Bayou Heron Boat Launch-B	3.0	Not Charted	Approx. 15	Approx. 10	No	No	No	Suitable only for small, shallow-draft boats

Coastal Marinas

CREC personnel designed a survey form for Mississippi coastal marinas (see appendices) and conducted the survey in late 1999. All prices given are based on 1999 seasonal rates. Not included were private yacht clubs which require memberships or residence within specific communities. Also not included are facilities located on military installations and available only to military personnel or dependents. These are not considered true “public access” facilities in the context of this report.

Hancock County Marinas

1. Bea & Woodys Marina
16463 Hwy. 90
Pearlington, MS 39572
Phone: (228) 533-0006

Located on Cowan Bayou (30° 14' 30"N./89° 36' 20"W.) Room to tie alongside bulkhead for approximately 6 boats. Marina services include fuel/oil, restaurant, bait/tackle/fishing license, public restrooms, fish cleaning facilities and a boat ramp. Slip utilities include 120 V. power. Rates are \$30.00/month.

2. La France Fishing Camp
3200 Ansley Rd.
Bay St. Louis, MS 39520
Phone: (228) 467-9180

Located on Campbell Inside Bayou (30° 12' 28"N./89° 29' 59"W.) Fifteen covered lift slips, 58 covered dry storage, RV parking. Wet slip rate \$722/year, dry slip rate \$465/year. Power (120 V. and water included in slip rental. Marina services include fuel/oil, groceries, hauling, bait & tackle, public restrooms, fish cleaning facilities and a boat ramp. Caters primarily to smaller boats (<25').

3. Bordages Marina
6149 Central Ave.
Bay St. Louis, MS 39520
Phone: (228) 467-0650

Located on Bayou Caddy (30° 14' 30"N./89° 26' 29"W.) Forty-three wet slips and dry storage for 30 boats. Services include fuel/oil, charter fishing, snacks, hauling, bait & tackle, public restrooms, fish cleaning facilities and a boat ramp. Power (120 V. only) and water included in slip rental fees. Fees are \$80 per month for wet slips and \$32 per month for dry storage. Caters primarily to smaller boats.

4. Bay Marina RV Park & Lodging
100 Bay Marina Dr.
Bay St. Louis, MS 39520
Phone: (228) 466-4970

Located on Bay St. Louis (30° 19' 25"N./89° 22' 57"W.) Full-service marina with 85 wet slips and inside dry storage for 40 boats. Slip utilities are 30 amp. 120 V. and 50 amp. 240 V. power, water, cable TV, (telephone available). Water included with slip rental. Slip fees range from \$4.00-\$5.50/ft./month. Dry storage rates are \$75.00/month. Six slips available for transients. Marina services include fuel/oil, on-site mechanic, sewage pump-out, restaurant, ship's store, groceries, lodging, liveboards, sport fishing, frozen bait, public restrooms, shower facilities, laundry facilities, fish cleaning facilities, and a boat ramp.

5. Casino Magic Marina
711 Casino Magic Dr.
Bay St. Louis, MS 39520
Phone: (228) 467-9257 ext. 4802

Located on in basin on Bay St. Louis (30° 20' 07"N./89° 21' 24"W.) Twenty-five wet slips for boats to 40'. Limited dry land storage for vehicles on trailers in casino parking lot. Slip rates \$3.00/ft./month w/30' minimum. Location adjacent to casino provides access to restrooms, restaurants. Slip utilities include 120 V. power and water included with rent.

Harrison County Marinas

1. Pelican Cove Marina
103 West Bayview St.
Pass Christian, MS 39571
Phone: (228) 452-7390

Located on Bay St. Louis at Henderson Point (30° 18' 30"N./89° 17' 26"W.) This is a dry stack facility with capacity for 160 boats less than 25' and 30 boats between 26'-30'. Rates are based on rack storage length and range from \$128.00/month for boats up to 18' to \$225.00/month for boats up to 30'. Rates are payable three months in advance and a minimum one-year contract is required. Marina services include fuel/oil, boat and engine repair for tenants, ship's store, sport fishing, bait & tackle, public restrooms and fish cleaning facilities for tenants. Marina operates at full capacity in peak season.

2. Pepper's Discovery Bay
24616 Yacht Club Dr.
Pass Christian, MS 39571
Phone: (228) 452-9441

Located on Bayou Portage (30°20' 49"N./89° 15' 27"W.) Fifty slips available for boats up to 40' in length, three slips available for boats over 65'. Monthly slip rates are \$2.50/ft. based on boat length. Two to three slips available for transients at a rate of \$15/night. There is room for open dry land storage for 10-15 boats. Slip utilities included with rent are power (120 V./30 amp. and 220 V./50 amp.) and water. Marina services include a restaurant, public restrooms, shower facilities, laundry facilities, and a boat ramp. Liveboards are permitted. Due to somewhat difficult access from land, this facility appeals primarily to the boat owner who wants to “get away from it all.”

3. Pass Christian Harbor
P.O. Box 368
Pass Christian, MS 39571
Phone: (228) 452-3315

Located on Mississippi Sound (30°18' 43"N./89°14' 58"W.) Municipal marina owned by the City of Pass Christian. Services available include fuel/oil, boat rental/charter, sewage pump-out, sportfishing, bait/tackle/license, public restrooms, 4 boat ramps, parks and seafood dealers. Fifty slips for boats up to 25', 200 slips for boats 26'-39', 100 slips for boats 40'-65'. Note that there is a waiting list for slips in the 40'-65' range. Slip rates are \$2.50/ft. Slip utilities included with rent are power (120 V./30 amp. and 220 V./50 amp.) and water. Telephone is available at extra charge. Four slips are available for transients.

4. Long Beach Harbor
P.O. Box 929
Long Beach, MS 39560
Phone: (228) 863-4795

Located on Mississippi Sound (30°20' 23"N./89°08' 22"W.) Municipal marina owned by the city of Long Beach. Services available include fuel/oil, boat rental/charter, sewage pump-out, full-scale grocery store, public restrooms, 3 boat ramps, harbor shop, 24 hour security, public fishing piers, and a privately-owned towing service. 232 slips of various sizes. Slip rental rates range from \$2.00 to \$4.00/ft. based on owner's residence (Harrison County, state, out-of-state). Eight transient slips available for \$10.00/day. Slip utilities included with rent are power (120 V./20-30 amp.) and water. There is a waiting list for permanent slips.

5. Bert Jones Yacht Basin
400 20th Avenue
P.O. Box 1780
Gulfport, MS 39532
Phone: (228) 868-5713

Located on Mississippi Sound (30°21' 18"N./89°04' 53"W.) Municipal marina owned by the City of Gulfport. Services available include fuel/oil, charter fishing, sewage pump-out,

restaurant, limited ship's store, limited groceries, lodging, sportfishing, bait/tackle/license, public restrooms, shower facilities, laundry facilities, 8 boat ramps, 24-hour operation and security, continuous monitoring of VHF channel 16. Ten slips designated for boats up to 25', 181 slips for boats 26'-39', 90 slips for boats 40'-65' and 9 for boats over 65'. Slip rental rates are \$2.50/ft. (\$1.50/ft. for Gulfport residents). There are 15 transient slips available for \$.50/ft./night. Slip utilities included with rental are power (120 V./30 amp. and 240 V./50 amp.) and water. This is a very popular marina with about 150 boats on the waiting list for slips of all sizes.

6. Rivers Bend Marina
1400 Mill Road
Gulfport, MS 39507
Phone: (228) 896-8300

Located on Bernard Bayou (30°24' 32"N./89°02' 15"W.) Combination dry stack/wet slip marina. Dry stack storage for 60 boats up to 25' in length at \$5.50/ft./month. Eighteen wet slips for boats up to 40'. Slip rates are \$25.00/day, \$50.00/week, and \$100.00/month. Slip utilities included with rental are power (120 V./30 amp.) and water. Marine services include fuel/oil, boat/engine repair, boat/engine sales, ships store, hauling to 38'. Planned expansions include bait/tackle/license sales, public restrooms, shower facilities, and laundry facilities.

7. Kremer Marine, Inc.
1408 Cowan Road
Gulfport, MS 39507
Phone: (228) 896-1629

Located on Bernard Bayou (30°24' 20"N./89°01' 38"W.) Marina services include boat/engine repair, boat/engine sales, ships store, liveaboards, hauling, and bait/tackle/license sales. Ten slips for boats up to 40', 36 slips for boats 40'-65' and 12 slips for boats over 65'. Slip fees average \$100.00 per month. Slip utilities include power (120 V./30 amp. and 220 V./50 amp.), water, telephone and cable TV. Only water is included with slip rental.

8. D'Iberville Marina
P.O. Box 6327
D'Iberville, MS 39532
Phone: (228) 392-2310

Located on Back Bay of Biloxi (30°25' 28"N./88°53' 38"W.) Sixteen slips for boats up to 40' in length. Slip rentals are \$60.00/month minimum (boats over 30' pay \$2.00 additional/ft.) Two transient slips available for boats under 35' at \$15.00/day. Slip utilities include 120 V./30 amp. power and water. Only water is included with slip rental. Services include a sewage pump-out, fish cleaning facilities and two boat ramps.

9. President Broadwater Marina
2110 West Beach Boulevard
Biloxi, MS 39531
Phone: (228) 385-4097
(800) 647-3964

Located on Mississippi Sound (30°23' 21"N./88°57' 51"W.) Full-service casino resort marina offers fuel/oil, charter boats, sewage pump-out, restaurant, groceries, lodging, liveaboards, sportfishing, public restrooms, shower facilities, and laundry facilities. Slip utilities included with rent are power (120 V./30 amp. and 220 V./50 amp.) and water. Telephone and cable TV are also available at extra charge. Marina has 27 slips for boats up to 25', 30 slips for boats 26'-39', 55 slips for boats 40'-65', and 6 slips for boats larger than 65'. Most of the slips are covered, so the marina appeals primarily to power boats. There is a waiting list of 75 boats for slips at this facility with most demand coming from the 40'-65' sector. Ten to twelve transient slips are available at \$1.25/ft./night. Other slip fees range from \$8.00/ft./month in the winter to \$10.00/ft./month in the summer. A limited number of permanent slips are offered at \$6.50/ft./month.

10. Beau Rivage Marina
875 Beach Boulevard
Biloxi, MS 39530
Phone: (228) 386-7580

Located on Mississippi Sound (30°23' 34"N./88°53' 39"W.) Full-service casino resort marina offers fuel/oil, boat rental/charter, sewage pump-out, restaurant, lodging, sportfishing, public restrooms, shower facilities, fish cleaning facilities, and laundry facilities. Forty slips will accommodate boats up to 100' in length. There is currently a waiting list for 65' slips. Slip utilities included with rent are power (240-208 volts/30-50-100 amps.), water, telephone and cable TV. The marina caters to transients and tries to keep 20 slips available at \$2.50/ft./night. Monthly rates are based on slip size and are currently \$500.00 for a 50' slip, \$720.00 for a 65' slip and \$1,500.00 for a 100' slip. This is an upscale facility targeting larger vessels.

11. Biloxi Small Craft Harbor
P.O. Box 1908
Biloxi, MS 39533
Phone: (228) 374-6600

Located on Mississippi Sound (30°23' 31"N./88°53' 05"W.) Full-service municipal owned by the City of Biloxi. Services include fuel/oil, boat rental/charter, sewage pump-out, restaurant, ships store, liveaboards, sportfishing bait/tackle/license, public restrooms, shower facilities, one boat ramp, and a 1-4 ton hoist. Marina is fully utilized with over 200 boats on the waiting list for permanent slips. Ten slips are available for transients at \$.50/ft./night. Monthly slip rental rates are \$2.50/ft. There are 14 slips for boats up to 25', 34 slips for boats 26'-39' and 103 slips for boats 40'-65'. Power (125 V./30-50 amp. and 250 V./50-100 amp.), water, telephone and cable TV are all available slip utilities. Only water is included in the slip rental fee.

12. Bay Point High & Dry
165 5th Street
Biloxi, MS 39530
Phone: (228) 374-7766

Located at the entrance of Back Bay of Biloxi (30°24' 04"N./88°51' 33"W.) This is primarily a dry-stack facility with 100' feet of dock space used for transient boats (\$1.00/ft./day). Dry stack capacity for boats under 25' is 110 boats. Monthly dry-stack storage are \$6.00/ft. based on the size of the boat. Dockside utilities included with rent for transients are power (120 V./30 amp. and 220 V./50 amp.) and water. Marine services include fuel/oil, boat/engine repair, boat rental/charter, used boat broker, public restrooms, and fish cleaning facilities. A restaurant, ships store, groceries, and lodging are all available nearby.

13. Point Cadet Marina
P.O. Box 1908
Biloxi, MS 39533
Phone: (228) 374-6600

Located on Mississippi Sound (30°23' 23"N./88°51' 28"W.) Full-service municipal marina owned by the City of Biloxi. Services include fuel/oil, boat rental/charter, sewage pump-out, restaurant, ships store, lodging, liveaboards, sportfishing bait/tackle/license, public restrooms, shower facilities, laundry facilities, and fish cleaning facilities. Marina is fully utilized with over 200 boats on the waiting list for permanent slips. Twenty slips are available for transients at \$.50/ft./night. Monthly slip rental rates are \$3.00/ft. There are 47 slips for boats up to 25', 126 slips for boats 26'-39' and 115 slips for boats 40'-65', and 16 slips for boats larger than 65'. Power (125 V./30-50 amp. and 250 V./50-100 amp.), water, telephone and cable TV are all available slip utilities but only water is included in the slip rental fee.

Jackson County Marinas

1. Ocean Springs Small Craft Harbor
6912 North Washington Avenue
Ocean Springs, MS 39564
Phone: (228) 872-5754

Located on Mississippi Sound (30°24' 13"N./88°49' 25"W.) Municipal marina services include sewage pump-out, liveaboards, sportfishing, fish cleaning facilities, and four boat ramps. Slip utilities included with rent are power (120 V./30 amp.) and water. Slip rates are \$3.50/ft./month. There are 178 slips available for boats of all sizes but boaters are advised that there is currently a two-year waiting list for permanent slips and no slips are available on a transient basis.

2. Harbor Pointe
2421 Beachview Drive
Ocean Springs, MS 39564
Phone: (228) 875-8801

Located on Simmons Bayou (30°22' 28"N./88°45' 37"W.) Marina has 110 slips for boats up to 40'. Boaters should be advised that shallow draft of Simmons Bayou (3' nominal) limits access to smaller or shallow-draft boats. Power (120 V./30 amp.) and water are included with slip rentals. Rates are \$3.00/ft./month based on boat size.

3. John's Bayou Marina
John's Bayou Marina Road
Vanceleave, MS 39565
Phone: (228) 826-4482

Located on the Pascagoula River (30°29' 56"N./88°38' 31"W.) Upriver location caters primarily to small boats. Marina services include fuel/oil, bait/tackle/license, public restrooms, fish cleaning facilities, and one boat ramp. There are 50 slips for boats up to 25' in length. Dockside power is 120 V./20 amp. There is off-season dry storage capacity for 10 boats (\$35-\$40/month). Slip rates average \$25-\$30/month.

4. Paige Bayou Marina
Rouses Marina Road
Vanceleave, MS 39565
Phone: (228) 826-4444

Located on the Pascagoula River (30°29' 11"N./88°38' 42"W.) Upriver location caters primarily to small boats. Marina services include fuel/oil, sewage pump-out, groceries, liveaboards, bait/tackle, public restrooms, fish cleaning facilities, and two boat ramps. The facility also rents out camper spots with full hook-ups for \$150/month. There are 25 slips for boats up to 25' in length and 10 slips for boats 26'-39' in length. Dockside power (120 V./20 amp.) and water are included in slip rental. Other slip utilities available at extra charge are telephone and cable TV. There is off-season dry storage capacity for 5 boats (\$40-\$45/month). Slip rates average \$25-\$40/month for smaller boats and \$75/month for large boats.

5. Mary Walker Marina
3308 Mary Walker Drive
Gautier, MS 39553
Phone: (228) 497-3141

Located on Mary Walker Bayou just off the West Pascagoula River (30°23' 22"N./88°36' 56"W.) Marina services include fuel/oil, sewage pump-out, ship's store, liveaboards, sportfishing, hauling for boats up to 27' in length, bait/tackle/license, public restrooms, fish cleaning facilities, two boat ramps and bottom painting. There are 30 slips for boats up to 25' in length, 40 slips for

boats 26'-39', 30 slips for boats 40'-65' and dry stack storage for 60 boats up to 27' in length. Three slips are available for transients at \$.50/ft./night. Permanent slip rentals range from \$65-\$175/month based on the slip size. Water is provided but slip renters must arrange for any additional utilities individually. There is a waiting list for this facility as it operates at capacity year-round.

6. Tucei's Fishing Camp
3300 Oak Street
Gautier, MS 39553
Phone: (228) 497-6743

Located on the Pascagoula River (30° 23' 21"N./88° 36' 45"N.) Marina services include fuel/oil, sewage pump-out, lodging, liveaboards. bait/tackle/license, public restrooms, laundry facilities, two boat ramps and 20 camper hook-ups. Four slips are available for transients at \$5.00/day. There are 28 permanent slips for boats up to 40'. Slip rentals range from \$100/month for smaller boats up to \$3.75/ft./month for boats over 28' with a one-year lease. Slip utilities include power (120 V./30 amp. and 220 V./50 amp.) and water (water is included in rent). There is outside dry storage for 28 boats in the 30' range for \$100/month.

7. Choctaw Marina
3301 Hemlock Avenue
Moss Point, MS 39563
Phone: (228) 475-6100

Located on the Pascagoula River (30° 24' 01"N./88° 33' 19"W.) Marina services include fuel/oil, restaurant, hauling, bait/tackle/license, public restrooms, fish cleaning facilities, and two launch ramps. Forty slips are available for smaller boats only (<25'), about four of these are kept for daily rental. Slip rates are \$5.00/day and \$35.00/month.

8. Pascagoula Inner Harbor
P.O. Drawer 908
Pascagoula, MS 39568
Phone: (228) 938-6600

Located on Mississippi Sound at the mouth of the Pascagoula River (30° 20' 52"N./88° 33' 26"W.) Municipal marina with sewage pump-out and a handicap accessible berth. Slip utilities included with rent are power (120 V./30 amp. and 240 V./50 amp.) and water. There are 60 slips for boats up to 40' in length and several moorings for larger boats. Rental rates are \$2.50/ft./month. There is a 1-2 year waiting list for slips. One transient slip is kept available free of charge.

IV. Comparative Pricing Structure:

CREC personnel conducted a survey of marinas located within the northern Gulf of Mexico boating region (east side of the Mississippi river through the Florida panhandle) to provide comparison slip rental rates. With the exception of marinas located in the New Orleans metropolitan area operated by the New Orleans Levee Board, all facilities in surrounding states are privately operated. Mississippi, with many public marinas, is at the very bottom of the price scale. For example, slip rental rates in the Gulf Shores/Orange Beach area of Alabama range from \$8.00-\$14.00/ft./month and do not include power. Public marinas in Louisiana have comparable or slightly higher rates than Mississippi but most of these facilities do not provide slip-side power. Private marina slip rates in Louisiana range from about \$4.00-\$8.00/ft./month and do not include power. Rates in the Florida panhandle range from \$4.00-\$14.00/ft./month (including all utilities).

The difference in slip rental rates between public and private facilities in Mississippi and the difference between facilities in surrounding states and those in Mississippi is likely a contributing factor to the demand for dock space at Mississippi public marinas. Additionally, below-market pricing at public facilities in Mississippi makes it extremely difficult for potential private sector marina operators to compete in the Mississippi market. As an example of what essentially amounts to public subsidy of recreational boat ownership in Mississippi, consider the following scenario: A Gulfport resident can keep a 40' boat in the Bert Jones Yacht Basin for \$60.00/month and use \$40.00/month in power at no charge, essentially making the slip rental rate \$20.00/month. It is even conceivable if the boat owner chooses to run the vessel air conditioner continuously, that the power bill for the slip paid by the marina could exceed the slip rental rate! Certainly, no privately owned facility could operate in this manner or they would soon be out of business. The Biloxi Port Commission has installed meters on the slips at its two marinas in order to address this issue, but other publicly-owned marinas along the coast from Pascagoula to Pass Christian continue to include power in the slip rental fee.

V. Site Considerations and Recommendations for Future Recreational Boating Access:

Site Selection Criteria

- Access to sheltered navigable water. Site should provide protection for moored vessels from waves, wakes and currents and be near deep water to minimize dredging requirements.
- Competing/compatible uses. Site should follow coastal wetlands use plan guidelines specified in the Mississippi Coastal Program, and be compatible with projected regional growth patterns. Upland property requirements, ownership and zoning should also be considered. Water-dependent uses should be categorized separately from water-enhanced uses.

- Road access. Site should be near existing highways and roads capable of handling traffic associated with facility construction and operation.
- Proximity to areas of highest recreational boating demand. Current needs and projected needs should be incorporated in facility design capacity. A “phased” approach to allow for future expansion should be considered.
- Environmental sensitivity. Sites selected for recreational boating access should avoid or minimize to the greatest extent possible adverse impacts on wetland and submerged aquatic vegetation as well as other important habitats such as oyster reefs. Dredge and fill requirements should be minimized by proper site selection/orientation. “Clustering” of facility infrastructure should be used to maximize green space, preserve and enhance viewsheds, and protect areas of natural and historical significance (e.g. live oak groves, shell middens).

Site Recommendations

In reviewing the previous section on demand, it becomes readily apparent that the highest demand for additional recreational boating access is in Harrison County followed closely by Jackson County. Hancock County is unique among the coastal counties in that it has no publicly owned and operated marinas for recreational boaters at this time.

The figures generated for boat ramp lane needs using the “Florida method” are somewhat misleading in that the figures represent what is needed for peak demand periods such as weekends and holidays during the boating season. These figures are also based on a “zero wait time” for ramp use. Further, because the model incorporates data for county boat registrations, there is no way to account for non-resident boater demand. This is particularly problematic for Hancock County where many Louisiana residents have summer homes and contribute significantly to facility demand during the boating season. A more realistic approach to avoid overbuilding of ramps might be to start with one quarter of the indicated lane needs for Harrison and Jackson counties and to double the amount indicated for Hancock county. These estimates are subjective and based on observations of existing ramp utilization along the coast during peak and non-peak periods. Following this line of reasoning, there is an immediate need for 6 ramp lanes in Hancock County, 10 in Harrison County and 9 in Jackson County.

Hancock County has about 175 wet slips that can be classified as “public” (i.e. no club membership, military affiliation or subdivision residence is required for access). There are currently about 400 boats registered in Hancock County over 26' in length (these are boats that most probably would require wet slips as opposed to being stored on trailers). The current waiting list for slips in Hancock County is 15-20 boats which is about 10 percent of the existing capacity. Harrison County has about 1,630 public wet slips, 1,264 boats over 26' in length and a waiting list for wet slips of about 750 boats (46 percent of existing capacity). Jackson County has about 600 public wet slips, 915 boats over 26' in length and a waiting list for wet slips of about 300 boats (50 percent of existing capacity).

Based on information generated during the CREC survey of Mississippi coastal recreational boating infrastructure, it appears that significant gains could be made by enhancing/expanding existing facilities. For example, many boat ramps have no designated parking areas, forcing boaters to park their vehicles on the roadside near the ramp. The addition of a simple parking lot could increase ramp capacity. Slips could be added to existing marinas in a seaward direction thus minimizing dredging requirements and negating the need for linear expansion along the shoreline. In general, unused sites along the Mississippi coast suitable for the development of water-dependent industry are scarce. In Harrison and Hancock counties, those sites that are available have become prohibitively expensive during the current era of dockside gaming development. This is particularly true in the City of Biloxi where an industry that is only water-dependent by legislation has displaced industries that are truly water-dependent. There are potential marina development sites that may be relatively free of environmental constraints, but would not be favored by the recreational boating community due to non-compatible nearby development and long travel times to reach offshore waters (e.g. Gulfport Lake). Given these realities and the above site selection criteria, suggested areas deemed suitable for new recreational boating infrastructure are presented in a general manner for each of the three coastal counties. Site-specific assessments are beyond the scope of this document, but examples are included in the appendices.

Hancock County

There is no apparent immediate need for recreational wet storage facilities, but new and/or expanded ramp facilities are needed. Hancock County has recently upgraded facilities for commercial boats in Bayou Caddy and has plans to expand the same facility to accommodate recreational boats in the future. This may not be the best course of action because of the relatively remote location and the fact that infrastructure needs of a working waterfront are not necessarily compatible with recreational facility development. Commercial boats need space to store and work on fishing gear, need unloading facilities such as conveyor belts and thaw tanks, and have operational support needs that exceed recreational boating requirements. Chief among the latter are fuel, ice and used oil disposal. On the other hand, recreational facilities usually put more emphasis on amenities such as parking, security and access to nearby restaurants and shopping.

Two general areas in Hancock County that could be considered for additional recreational boating facility development are the Cedar Point area at the mouth of the Jordan River and the downtown Bay St. Louis waterfront. Downtown facilities could possibly tie into existing infrastructure such as fishing piers/jetties and the railroad bridge.

Harrison County

Ironically, the county with the greatest need for additional recreational boating access development has the fewest available spaces to develop. This is particularly true in Biloxi where sites zoned and legal for dockside gaming development have essentially put waterfront property out of the market for all other purposes. The two best ways for Harrison County to achieve

additional recreational boating capacity are through the expansion of existing facilities and requiring any new casino development to provide public boating access facilities as an offset to coastal impacts on water-dependent industry. There is precedent for requiring this type of gaming development mitigation. Grand Casino in Gulfport built new docks for commercial vessels displaced by casino development in Gulfport Harbor.

Other sites that may bear closer examination in Harrison County are the Clay Point area in Biloxi, and Shipyard Point in D'Iberville. A private developer is currently proposing to build a 102-slip recreational marina in the Clay Point area. In general, any new development in the Back Bay of Biloxi should be sited to the east of the Popp's Ferry bridge in order to minimize conflicts between boat and vehicle traffic caused by bridge openings for sailboats and larger power vessels. There has been some interest recently in developing new recreational boating access sites along the Harrison County sand beach. Because of the non-protected nature of these sites and existing shallow water conditions, these facilities will be costly to develop and maintain (see appendices).

Jackson County

Jackson County voters decided not to support gaming development within their county. As a result, development of commercial and industrial waterfront for water-dependent use is still feasible in many areas. In addition, the relative lack of municipal and county owned wet slips has caused Jackson County to be viewed more favorably than Harrison County by private-sector marina developers. Currently, private sector developers have tentative plans for three sites within Jackson County: 1) between the railroad and Old Highway 90 bridge in Ocean Springs at the mouth of Back Bay of Biloxi; 2) in Marsh Lake between Pascagoula River and West Pascagoula River; and 3) just north of Highway 90 on the east bank of the Pascagoula River. Work is currently underway to replace the Pascagoula River Highway 90 drawbridge with a high rise fixed span. This will be of great benefit to both vehicular traffic on Highway 90 and marine traffic using the busy Pascagoula River waterway. Another area in Jackson County suitable for recreational boating access development is along the Escatawpa River in Moss Point.

VI. Summary:

There is an immediate need for additional recreational boating access infrastructure on the Mississippi Gulf Coast. The shortage of boat ramps and marina space will become more acute as the coastal population and per capita income of coast residents continue to increase in the future.

Private sector development to meet the demands of Mississippi recreational boaters will likely not occur as long as public sector facilities continue to provide services at below-market prices. Waterfront property suitable for boating facility development is scarce due to competing uses for water-dependent property, environmental constraints, and the coastal regulatory/zoning regime. Currently, the most cost-effective means of meeting the demand for additional recreational boating capacity appears to be through the expansion/enhancement of existing facilities and requiring new waterfront development to include boating access facilities where appropriate.

If the primary emphasis is serving the needs of Mississippi boaters, all public marinas should consider adopting the tiered-fee mechanism which is already in place at some facilities. Under this scheme, non-resident boaters pay a higher fee for slip rentals which effectively increases space available for residents. Finally, some of the needed expansion at public facilities could be funded by slip fee increases more in line with the regional average.

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Appendix I.

Coastal Boat Launch Assessment Form

Launch Site Name: _____ Date: _____

County: Hancock Harrison Jackson

Latitude: _____ Longitude: _____

Ownership: Public Private

If privately owned: launch fee? Yes No

Number of ramps: _____

Slope of ramp(s) _____% _____degrees

Ramp surface: _____

Depth of water at end of ramp(s): _____ft.

Charted depth of adjacent water body: _____ft.

Are there loading/unloading facilities to ease congestion? Yes No

Number of trailer parking spaces: _____

Number of car parking spaces: _____

Parking are surface: asphalt concrete shell sand other: _____

Comfort facilities? Yes No If yes, describe: _____

Is the are lighted? Yes No If yes, describe: _____

Are there trash receptacles? Yes No If yes, describe: _____

Comments: (protected from waves/currents? other boat traffic? adequate signage on water/land? etc.)

Appendix II.

MISSISSIPPI COASTAL MARINA SURVEY

1. Name of Marina _____
Contact Person _____
Address _____

County _____ Phone _____
Water Location _____
Lat. _____ Long. _____

2. Would you classify your marina as (may check more than one):
 - a. Private/Members Only _____
 - b. Private/Open to the Public _____
 - c. Publicly Owned _____

3. How long has there been a marina at this site? _____
4. How long have the present owners owned this marina? _____

5. Do you consider your business a:
marina _____ boatyard _____ combination _____
dry land marina _____ yacht club _____ other _____

6. Which services does your marina provide?
fuel/oil _____
repair boats/engines _____
boat rental/charter _____
boat/engine sales _____
sewage pump-out _____
restaurant _____
ships store _____
groceries _____
lodging _____
liveaboards _____
sportfishing _____
hauling _____
bait/tackle/license _____
public restrooms _____
shower facilities _____
laundry facilities _____
fish cleaning facilities _____
boat ramp(s) (indicate number) _____
other (please list) _____

7. Which slip utilities does your marina provide?
 Power: _____ volts _____ amps; _____ volts _____ amps
 Water _____ Telephone _____ Cable TV _____
 Included with rent?
 Power _____ Water _____ Telephone _____ Cable TV _____

8. What is the dry land acreage of this marina? _____

9. What is the capacity of this marina and how much of this capacity was utilized during the past year?

	Number				% Utilized	
	<25'	26-39'	40-65'	>65'	Peak Season	Off Season
slips	_____	_____	_____	_____	_____	_____
dry stack	_____	_____	_____	_____	_____	_____

10. What percentage of these boats are sail _____ and power _____?

11. Is there a waiting list for your marina? _____

(if "yes" please indicate number)

	<25'	26-39'	40-65'	>65'
slips	_____	_____	_____	_____
dry stack	_____	_____	_____	_____

12. What is your off season (dry) boat storage capacity?

	Number	% Utilized	Average Length	Rates
inside (not dry stack)	_____	_____	_____	_____
outside	_____	_____	_____	_____

13. What is the marina's rate schedule for slip rentals (not including utilities)?

Rate per foot (or slip size)

daily	_____
weekly	_____
monthly	_____
yearly/seasonal	_____
permanent	_____

14. What is the marina's rate schedule for dry stack storage? (attach schedule)

15. How many slips are available on a daily rental/transient basis? _____

16. What are your major business problems? (rank by importance)