

growth in boat registration. In terms of total boats registered, Mississippi ranks 28th in the country.

These statistics are cited from a year-long study of boat ownership and marina use on the Mississippi Gulf Coast prepared for Mississippi's Bureau of Marine Resources by the University of Southern Mississippi's Department of Geography and Area Development. The recent (May, 1984) USM Marina study also draws the following general conclusions about recreational boating and berthing on the Mississippi Coast.

- 1) The demand for boat slips is **very** high.
 - 2) Marina users prefer accessible berthing locations for their boats.
 - 3) Most marina users reside on the Coast (about 75%).
 - 4) Most marina users berth power boats 16 to 25 feet in length while a large number own boats in the 26-39 feet range.
 - 5) Boats are used on the average of about 30 to 40 times a year.
 - 6) Lodging accommodations are used only occasionally by out-of-town marina users.
 - 7) Many users are interested in dry-stack storage.
 - 8) Marina users have concerns for cost and security, especially in private marinas.
 - 9) Barrier Islands are the most popular offshore destinations of marina users.
- The USM study states that 20% (about 23,000) of the State's 117,000-plus boats are registered in the three coastal counties. Almost half of these boats are large enough to require wet-slip storage.

USM geographers found that 45 marinas are located on the Mississippi Coast, providing an inventory of 2,768 wet slips. All of these slips are, for the most part, occupied. Waiting lists indicate that over 1,200 persons have recently applied for boat slips. The majority of the persons waiting for slips have applied for berthing space in public marinas.

In the Biloxi area, many people feel that for every boat that is in a slip, there is at least one and probably two boats waiting to get into a slip. It is also commonly believed that the lack of berthing space has depressed local boat sales.

The USM marina study reported that estimates of existing boat slip demand may be understated in that waiting lists do not accurately reflect actual demand. (Many people refuse to add their names to long lists.) The lists can only serve as a partial indicator. Also, as berthing opportunities (new marina spaces) increase, often does the demand for slips.

Projections by USM geographers of forecasted boat ownership and marina demand indicate even more pressure on available waterfront facilities during the next fifteen years. An anticipated demand for almost 3,000 new berthing spaces can be expected by the year 2000. In other words, about 190 new slips must be built each year over the next decade and a half to meet projections of the current demand level on the Mississippi Coast.

Only a few of the existing marinas in the three coastal counties were classified by USM as "full-service" marinas. About one-fourth have electricity, water and lighting available to slips. Only about one-fifth have environmentally-sound sewerage facilities.

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Desirable Marina Services & Facilities

Marina Services

Water Related	Land Related
Boat launching	Boat sales
Mooring service	Boat repairs
Water taxi service	Marina supply sales
Transient boat service	General supply sales
Waste collection	Trailer storage
Fueling	Parking
Boat towing	Overnight
Fire and rescue services	accommodations
Navigation and weather information	Food service
	Concessions
	Utility service
	Recreational services

Marina Facilities

Water Related	Land Related
Open and covered mooring	Boat building and repair
Boat launch ramp	Dry boat storage
Marine railway	Trailer storage
Crane lift	Restaurant
Drydock	Motel
Fueling pier	Picnic areas
Anchorage areas	Convenience store
Marine service station	Boat washing
Entrance and exit channels	Parking
Swimming area	Swimming pool
Water skiing course	Camping
Basin flushing system	Beach area
Storm and wave protection	Club room
	Marine supply sales
	Public toilets and showers
	Recreational facilities

Source: U.S. Environmental Protection Agency

Few marinas provide the convenience facilities and services needed to attract transient and "live-aboard" boaters. Inadequate parking and loading areas are problems that appear to plague most of the coastal marinas.

In the late 1970's, a survey of local boat owners was taken by the firm of Carter-Goble-Roberts as part of the planning for Gulfport's Harbor Square South. The firm surveyed 280 boat owners in the Gulfport Small Craft Harbor. About 44% (122 owners) responded. The survey focused on those features that boat-owners look for as support services at a marina. In order of priority, their responses included demand for these services:

- 1) shops and private services (35%);
- 2) recreation and entertainment facilities (33%);
- 3) restaurants (25%);
- 4) showers and restrooms (21%);
- 5) better public services/utilities (12%);
- 6) security (10%); and
- 7) boat repair, fuel, and maintenance (8%)

The Gulfport study, taken in 1978, also identified the typical pleasure boat owner as married, with children at home, earning over \$25,000 a year, living within 30 minutes travel time to the harbor, and using his boat an average of 59 times a year (most frequently in July). The typical boat was in the range of 26-40 feet in length. Findings of the more recent USM study tend to support responses to the Gulfport survey.

WATERFRONT DEVELOPMENT OPPORTUNITIES

Planning and Implementation

Waterfront Control and Coordination:

- Planned/Phased Development
- Design and Development Standards and Policies
- Public Agency Joint Ventures
- Targeted Private Investment
- Tax Base Enhancement

Public Access to the Waterfront:

- Promenades/Boardwalks
 - Piers/Pavilions
 - Open Space
 - Access Drives and Boat Ramps
 - Improved Parking
- Public Involvement:
- Civic Groups
 - Ethnic and Minority Groups
 - Educational Institutions
 - Cultural and Religious Organizations
 - Fraternal and Social Clubs
 - Business Organizations

Land and Resource Development

Mixed Use Waterfront Redevelopment:

- Point Cadet
- Central Beach
- West Beach

Industrial Waterfront Development:

- Rhodes Point
- Clay Point

Natural Preservation/Recreational Improvements:

- Popp's Ferry Causeway
- Sand Beaches
- Deer Island

Water Quality Management

Hurricane Protection

Housing Redevelopment:

- Enhanced Public Facilities

Historic and Cultural Awareness

Museums and Exhibits:

- Seafood Industry
- Nautical/Marine

- Ethnic/Cultural

- Natural Resources

Improved/Targeted Celebrations:

- Better Festival Facilities
- More and Longer Festivals

Local Crafts Apprenticeships:

- Net-making
- Boatbuilding

- Sailmaking

- Seamanship

Native Boat Restoration and Replicas:

- Schooners
- Catboats

- Luggers

Historic Preservation:

- Heritage Neighborhoods
- Architectural Review

Social and Economic Development

Retirement Opportunities:

- Housing
- Public Services

Housing Assistance:

- Rehabilitation
- New Construction

Economic Diversification:

- Industrial Development
- Tourism Development
- Retail/Service Concentration
- Small Business Assistance

Seafood Industry Support:

- Docking Facilities
- Support Services (fuel, ice, repair)
- Technical Assistance
- Venture Capital
- Research and Development

Enhanced Recreational Boating:

- Multipurpose Marinas
- Marine Supplies and Repair
- Dockside Services

OPPORTUNITIES

Needs/Potentials

Planned waterfront redevelopment and preservation can serve to unify local efforts in meeting community needs. The preceding factual analysis indicates a number of areas where a concerted effort is needed by both the public and private sectors in order to improve the overall quality of life in Biloxi. These include:

Economic Development - Industrial diversification and tourism development are needed to lessen the area's dependence on government as the major employer. Concentrated commercial development could serve to provide more public convenience and service, more efficient land use, more jobs and improved tax revenues. Improved support facilities for the seafood industry would do much to restore local fisheries to their original prominence. And, as seafood activities are often viewed as "attractions" to visitors, improved accessibility to the fisheries industry can serve to promote tourism.

Housing and Neighborhood Improvement - Sound, affordable housing is a major need in every community. Innovative efforts should be continued to provide for quality rehabilitation and new construction of housing. Waterfront projects in other communities have helped to generate pride in nearby neighborhoods and provide the economic incentives and resources needed for neighborhood revitalization.

Historic Preservation - An improved awareness of Biloxi's unique cultural and historic amenities would serve a number of community interests. Better information and cultural programming, especially festivals, like that initiated recently by the City, can meet many education, recreational, and entertainment needs of the local citizenry as well as Biloxi's visitors. Stepped-up historic preservation efforts would ensure that significant architecture, traditional boats and other artifacts would be available for future generations to experience and appreciate.

Conservation of Natural Resources - Biloxi's progress is a product of its natural environment. Environmental management efforts should be maintained and strengthened to protect irreplaceable resources, especially native vegetation, oysters and other marine wildlife. Creative ecological programs can also provide interesting educational and recreational outlets. (The Marine Education Center is a prime example).

Waterfront Orientation - It sometimes seems like the waterfront is taken for granted. Like many other communities Biloxians are "rediscovering" their shoreline. Space must be provided for those businesses and industries that depend on waterfrontage for their livelihood. All waterside facilities—private and public—should be encouraged to orient structures toward the water to capitalize on view, access and climatic features. All new shoreline construction should be planned and controlled to provide complete enjoyment of our most valuable natural resource.

Constraints

Every problem presents an opportunity and vice versa. Before waterfront opportunities can be pursued, a clear understanding of limiting factors must be gained. The major constraints that must be addressed in the preparation and implementation of this plan for waterfront redevelopment include:

Environmental Protection - All waterfront proposals must be thoroughly investigated as to their ecological sensitivity and soundness. This is especially important in regard to water quality management and wildlife habitat preservation.

Hurricane and Storm Protection - Since the Mississippi Gulf Coast is susceptible to periodic wind and storm-surge damage, stringent construction standards must be developed to reduce danger to life and property. No buildings are completely "hurricane-proof," but the technology is available to significantly minimize damage.

Heritage Preservation - As technology improves and the nation becomes more homogenous, there is some risk that some historical and cultural traditions will be forgotten. Design and development guidelines for waterfront and nearby projects should reflect Biloxi's unique heritage and folkways. Progress and preservation can go hand in hand through intelligent planning and good judgment.

Limited Public Resources - A major challenge of the waterfront improvement process will be to keep taxes low and private investment high. The challenge here is to create the environment for generating as much private investment as possible while keeping public expenditures to a strategic minimum and enhancing the local tax base. Biloxians must avail themselves of as many public and private resources as possible, and where necessary, seek state legislation and federal assistance for innovative financing of waterfront projects.

Limited Land - Geographically, a large part of this waterfront plan will deal with preservation of natural areas like the sand beach, Deer Island, and enhancing the shorelines adjacent to residential areas. Very limited land resources remain for planned urban development. Where major shoreline redevelopment opportunities do exist, like Point Cadet and Rhodes Point, proposals must be long-range, comprehensive, and in the public interest.

Legal Questions - Since the waterfront is governed by a number of overlapping jurisdictions, all conflicting legal issues must be successfully investigated and resolved. Among these are riparian rights, and federal covenants on state and local property.

The Public Interest - The planning process must have concern for public access, aesthetics, citizen involvement and equal opportunity. The waterfront plan should be directed to benefit the community as a whole and not a select few. Ample opportunity should be given to the entire Biloxi citizenry for waterfront investment, job creation, housing aid, business assistance, and utilization of public facilities.

Feasibility - To happen, waterfront proposals must be practical and realistic. Once specific waterfront projects are identified and agreed upon, the next step is to research their economic, environmental, financial, political and technical merit and marketability.