



Source: Rebecca McCarthy

Issue: Missing Facilities Hurricane Katrina took out most of the facilities such as picnic areas along the beach. Both residents and tourists have expressed a strong desire to bring back these facilities, especially restrooms. As more and more visitors return to the beach it will be necessary to provide an increasing number of facilities.

Chapter 2. Context

THE SAND BEACH STORY

The Gulf Coast of Harrison County and its 26 miles of Sand Beach is a destination to be treasured by visitors and residents alike. The Sand Beach, its history, heritage, leisure activities, and host of resources, strikes a chord in the mind of those who call the area home and to those visitors it welcomes. From the beach, visitors can view breathtaking sunrises and sunsets, enjoy the sounds of gentle waves lapping at the beach, feel the sun's rays warming their skin, and waft the briny breezes. This combination of sensations creates a unique experience for the visitor and is an important part of the County's identity as a major vacation destination. Creating a unique and positive experience for visitors and residents will ensure high quality tourism environment for years to come.

The Sand Beach has many amenities, a diverse range of activities, a unique history, interesting natural features, as well as significant visual appeal along US Highway 90 and the beach front. Emphasizing the draw of the water, the crisp white sands, and the Harrison County Sand Beach's beauty will give the beach a sense of place. The unique identity of the Sand Beach, its diverse activities, and its adjacent communities will assure that it becomes a premier vacation destination.

1986 Sand Beach Master Plan

In 1984, at the request of the Harrison County Board of Supervisors, the Sand Beach underwent a master planning process under the direction of the Mississippi Department of Wildlife Conservation, Bureau of Marine Resources. Under the guidance of an Executive Policy Council and Technical Advisory Council, a consortium of design and research professionals addressed key issues by creating policy strategies. These strategies addressed directions in shore line protection and erosion control, maintenance, recreational development, traffic and parking, access, and helped in the establishment of a funding and capital improvements program.

The development of management category units was also established to delineate beach activity and to determine levels of development appropriate within each unit. Area specific proposals were included to further define policy strategies and proposed development actions. The 1986 Master Plan was responsible in the founding of the Harrison County Sand Beach Authority, an Erosion Control Task Force, and the establishment of administrative positions and partnerships for the management of the 26 miles of beach. The plan included a three phase implementation program that identified project timelines and

organization of priorities for immediate, intermediate and long term actions. At the conclusion of this largely successful master plan, the 2008 *Sand Beach Master Plan* picks up, addressing the issues that will likely impact the beach over the next 20 years.

Relevant Legal Rulings

The Cox ruling protects public access to the beach, as long as that access does not interfere with the littoral rights of the adjoining land owners. The plan recommends that new facility development be focused in areas within the public right-of-way and extensions of the public right-of-way across the Sand Beach. Additionally, facilities should be located across from other publically owned land.

The plan does not propose the location of permanent buildings, but instead recommends the placement of facilities such as parking and a recreational path. At the present time it is unclear the degree to which these types of facilities would be permitted on the beach. The municipalities and County are in consensus that these are the types of facilities that would improve the beach and enhance the visitor experience. It will be necessary for Harrison County to obtain a ruling from the Mississippi Attorney General to make sure that the Plan can be implemented as proposed. Additional

detail on the legal issues can be found in the Background Chapter.

Planning Area

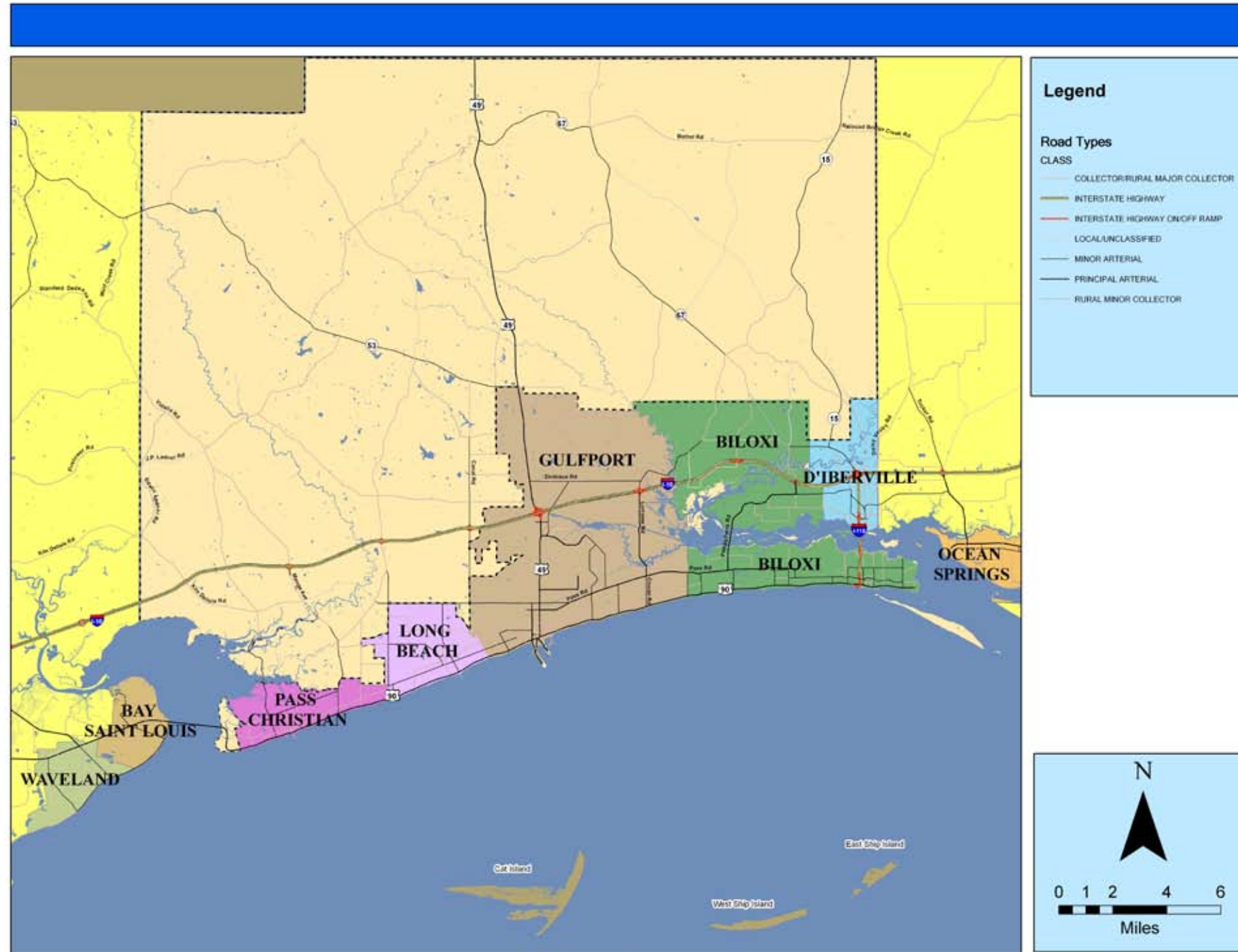
The Planning Area for the *Sand Beach Master Plan* is the 26 miles of Harrison County shoreline, inclusive of all beach area between the shore and seawall. US Highway 90, which runs adjacent to Sand Beach, is also included in the Planning Area. The Planning Area overlaps the municipal boundaries of Harrison County's four coastal cities – Biloxi, Gulfport, Long Beach, and Pass Christian – and the unincorporated community of Henderson Point-Pass Christian Isles.

Currently, the communities of Biloxi and Gulfport have higher densities of development near the beach corridor than the three other communities. Local access to the beach is available through a number of parking lots and pull-offs provided off of US Highway 90. On a regional scale, access is from the west and east by US Highway 90 which traverses the county, eventually leading to regional population centers such as New Orleans, Louisiana and Mobile, Alabama. In addition US Highway 49 and the Interstate Highway Spur 110 and US Highway 49 connect the corridor to Interstate Highway 10, connecting the Gulf Coast with the region. The Gulfport-Biloxi International Airport and several intercity bus terminals connect the city to the region and the nation. Amtrak's Sunset Limited provided regional passenger rail service to the area, however this service has yet to be restored after Hurricane Katrina.

Beach Usage

Harrison County's Sand Beach is a unique and diverse recreational destination where beach goers can choose from a wide variety of activities along the coastline. Some sections of the 26-mile beach are hubs of activity where large crowds gather while other sections are typically quiet and peaceful. Observations, surveys, citizen feedback at the Ideas Forums, and stakeholder input has been used to develop a classification system based on varying levels of activity along the entire 26 miles of the Sand Beach.

Sections of beach have been classified as active, moderate, and passive, as described in further detail in the Physical Plan chapter.¹ This



Map of Region The Harrison County Sand Beach is surrounded by the Mississippi Sound and National Seashore to the South, the cities and unincorporated county to the north and by the Biloxi Bay to the East and Bay of St. Louis to the West. The Sand Beach has significant ties and connections to the region.

classification is similar to that used in the *1986 Sand Beach Master Plan* and is used to plan for improvements to beach facilities. The most important consideration in classifying levels of beach activity was adjacent land use. Active areas are located across from commercial districts and tourist destinations. These areas are sections of beach that become crowded during the height of the tourist season. Areas where existing municipal development plans call for high density growth are also classified as active. In contrast, passive areas see few visitors and are located across from primarily low density residential uses. In some passive zones, beach users can walk more than a mile without encountering another person. Typically these areas are used by residents and visitors who want to avoid the crowds. Areas of moderate activity experience a level of use that falls between the passive and active zones and are mostly located across from transitional zones where both residential and commercial uses are present.

CURRENT ISSUES

Katrina Recovery

The Sand Beach and US Highway 90 corridor were significantly affected by Hurricane Katrina. Many structures along the beach were destroyed including beach comfort stations, piers, and boardwalk. North of US Highway 90, most structures were damaged, many beyond repair. The damage was most extreme in the western extent of the corridor where the eye of the storm made landfall. Progress is being made toward rebuilding damaged buildings but it will take years before the recovery is complete. Most facilities on the Sand Beach were also destroyed. In mid-2008, the reconstruction of the boardwalk and sand renourishment were underway.

Development Pressures

Across the coast, post-Katrina land speculation has driven up



Source: Rebecca McCarthy

Regional Connections In addition to serving as an amenity for visitors, the Sand Beach is a working waterfront. The Mississippi Sound is well known for the quality of its shrimp and oysters. The seafood caught off the coast is distributed across the region and the United States. Maintaining the beach and waterfront connections to the region and beyond is an important issue to address as part of the Master Plan.

the cost of beachfront property. New mid-rise and high-rise condominium buildings have been proposed across the coast. In particular, Biloxi is experiencing a boom in development on its beach corridor with a number of waterfront projects in the planning or construction phases. Though it may take years to fully recover from Hurricane Katrina, new development pressures are changing the character of the communities adjacent to the Sand Beach. As a result, this *Plan* acknowledges the changing development patterns and encourages adjusting the beach activity levels based on land uses.

Demand for Facilities

In early 2008, all public restrooms and comfort station facilities destroyed by the storm have yet to be replaced. The Coast Transit Authority has spearheaded an effort to build comfort stations along the beach, replacing the facilities lost; however gaps in funding to pay for these facilities delay their construction. Even after these facilities are constructed there will still be the need for additional restroom facilities to support the millions of visitors to the beach each year. Beyond Comfort Stations, Beach users and County residents indicated a desire to have playgrounds, shelters and other amenities along the beach.

Regional Partnerships

The improvements proposed in this *Plan* are necessary to ensure the long-term success of the Sand Beach, however the County alone cannot implement this *Plan*. Harrison County will require assistance from local municipalities, citizens, tourism providers, and business groups to fully develop the Sand Beach into a premier destination. The County is encouraged to form partnerships to promote a unified vision for the Sand Beach and the US



Source: Jane Lantner

Issue: Development Pressure Hurricane Katrina destroyed most of the buildings that were located adjacent to the beach. As a result, there are significant opportunities to reimagine what the development along US Highway 90 might look like in the future. Harrison County and the cities have engaged in planning and visioning processes that have conceptualized what the future land uses might be. In contrast to the past, more of the coastline will be developed with condominiums, casinos and more intense commercial uses. At the same time, there are neighborhoods and commercial uses that are rebuilding in the same low-density pattern as before the storm. The *Master Plan* recognizes these development pressures and proposes that the programming of the beach provide opportunities in high activity areas such as where casinos are located as well as low activity areas where neighborhoods exist.

Highway 90 corridor.

Accessibility

Limited access is an important issue for the Sand Beach. While there are some parking facilities, they are insufficient for the large influx of visitors that come to the beach during the summer months. In addition to more parking, there is a need for more facilities for pedestrians, bicyclists, and those using wheelchairs. Though some intersections on US Highway 90 are Americans with Disabilities Act (ADA) compliant, facilities to accommodate these users at the beach are damaged or missing altogether. Where accessible facilities are present, they line a busy highway and largely do not lead down to the beach level. Improvements to crosswalks along US Highway 90 and along the seawall and beach itself would improve accessibility and safety for Beach users.

Coastal Protection, Beach Maintenance and Wind Erosion

The Sand Beach and its seawall serve as a protective barrier to minimize erosion of the coastline. To protect the seawall from being undermined, the sand beach was constructed to manage erosion. Over time, wind and storms erode the sand which is replaced by the Army Corps of Engineers in a process called renourishment.

Nearly half the sand lost along the beach is simply blown away, much of it eventually ends up on US Highway 90. This creates an unsafe condition for drivers and requires the roadway to be cleaned and the sand to be placed back onto the beach. To mitigate this problem, the Sand Beach Authority cleans the seawall



Source: Zhinghou Chen

Issue: Accessibility Hurricane Katrina destroyed much of the boardwalk along the beach in the county. Residents complained that the boards entered their storm during the storm. Citizens have requested that when the boardwalk is rebuilt that it not be rebuilt of wood. There are plans to replace the wooden boardwalk with a concrete boardwalk along stretches of the beach.



Source: Rebecca McCarthy

multiple times a year, clearing sand that accumulates on the seawall before it can reach the height of the roadway and create the dangerous condition. Beyond managing the sand erosion problem, the Authority has other responsibilities that include managing and maintaining the beach as a recreational asset to the county’s residents and visitors.

Maintaining a clean beach is a priority of the County. Standard beach maintenance, currently scheduled at one week intervals, includes removing trash and sifting the sand to remove debris. Discussions with stakeholders and some survey respondents indicated support for a more frequent maintenance schedule.

A Supportive Business Environment

The renewed focus on amenities for tourists presents challenges for the County as it manages development along the Sand Beach. As the beach becomes a premier destination, there will be increasing numbers of visitors to the beach. Visitors will depend on beach vendors to supply the basics for fun at the beach. In addition, the County must carefully balance the needs of visitors to the beach with the maritime industries along the coast. The State Port, commercial fishing and pleasure boating in particular have been sources of local employment for generations. These industries are part of the cultural heritage of the Gulf Coast and are a draw for tourism in their own right. As the beach continues to develop, it will be important to create a balance between commercial water-based activities and visitor activities.

(Endnotes)

1 This classification is similar to the Recreation Opportunity Spectrum (ROS) developed by the US Forest Service. The Forest Service has utilized the ROS system for nearly 30 years to create recreation management plans for its lands. The system classifies forest land into four categories and specifies appropriate levels of use for each.



Source: Ryan Pilewski

Issue: Erosion Hurricane Katrina caused serious erosion of the sand dunes. The result has been significant wind blown erosion of the beach. When strong winds occur the sand is blown onto US Highway 90 resulting in safety concerns for drivers. Efforts are underway to renourish the beach and replant the dunes to minimize erosion. These efforts should aid in stabilizing the beach and over the years as the dunes grow erosion should be minimized.



Source: Zhinghou Chen