

TWO YEARS AFTER KATRINA

*Progress Report
on Recovery,
Rebuilding
and Renewal*

TABLE OF CONTENTS

Message from Governor Haley Barbour	3
Introduction	4
Year One: Setting the Stage for Recovery	4
Local Governments, Nonprofits and Private Sector ...	5
Federal Assistance	10
Summary of Recovery Milestones	12
Housing	13
Public Infrastructure	20
Economic Development	24
Education	27
Health and Human Services	30
Environmental and Marine Restoration	33
Conclusion	38
Recovery Resources	39



August 29, 2007

Dear Friends,

As we stop to reflect on the second anniversary of Hurricane Katrina, I am reminded daily that we continue to find opportunities amidst this tragedy, the worst natural disaster in American history.

There are some memories that are just as vivid today as they were two years ago. I remember flying over in a helicopter the morning after the storm; it looked as if the hand of God had wiped away the Coast - in some places for blocks, in some places for miles. My wife Marsha went to the Coast for seventy of the first ninety days after the storm. She was often my best source of information, and she was one reason I quickly became confident about the Coast's recovery.

We knew that it would take years to recover. The rebuilding and renewal of our Coast after Katrina is a mighty tall order, but our people and the generosity of others are making it possible.

Volunteers continue to pour in from around the world to help with our rebuilding efforts, while the federal government has given unprecedented aid, \$23 billion so far, to assist in our recovery. Katrina resulted in the largest temporary housing operation in FEMA's history; travel trailers and mobile homes were given to 48,000 families. All the schools, except for one, were re-opened six weeks after the storm. What is even more incredible is that when state tests were administered to coastal students that spring, their scores had excelled.

All of this progress is critical. But the most important reason I'm not only optimistic, but absolutely confident about Mississippi's future is the spirit and character of our people.

Our people are also why record progress has been made on the Coast and all over South Mississippi. Recovery will never be fast enough, but it is obvious that renewal and restoration is taking place.

In the process, Mississippi's response to Katrina has done more than anything else to improve the image of our state. America and the world saw strong, resilient, self-reliant people; people whose character and spirit were reflected in their response to the crisis; people who were ready to share because they cared about their neighbors and their communities.

In the last couple of years, many companies have chosen to locate and create jobs in Mississippi because they liked what they saw in our response to Katrina. The country has given our state a second look since the storm, and that's a main reason our future is so promising.

May God bless you and your family as we press on towards the goal of a bigger and better Mississippi Gulf Coast.

A handwritten signature in black ink, appearing to read "Haley Barbour". The signature is fluid and cursive.

Haley Barbour

HURRICANE KATRINA TWO YEARS LATER



INTRODUCTION

The massive destruction of Hurricane Katrina has been well documented. Even if we were able to forget the images of disaster seen with our own eyes, visuals of rubble have continually been portrayed on television, in print and on the Internet. For those whose lives were thrown upside down on August 29, 2005, including those Mississippians who lost everything they had, the past two years have been a whirlwind. But yet we are assured that every dark cloud has a silver lining.

This report will detail recovery efforts that state government has made in the past 12 months. In some instances, activities from the first year are included, but the report *One Year After Katrina: Progress Report on Recovery, Rebuilding and Renewal* should be consulted for an explanation of year one events (this report can be downloaded at www.governorbarbour.com/recovery). Also, a summary of the work of the federal government, local governments, nonprofit entities and the private sector are included.

The accomplishments and assessments of the following areas will be described in this report:

- Housing
- Public Infrastructure
- Economic Development
- Education
- Human Services
- Environmental Restoration and Marine Resources

This comprehensive look at Mississippi's renewal efforts is meant to serve as a guide to citizens, governments, organizations and media as they determine post-Katrina successes and failures, both now and in the future.

YEAR ONE: SETTING THE STAGE FOR RECOVERY

Governor Haley Barbour set the tone for recovery early, stating just a few days after the storm's passing that South Mississippi would come back from Katrina even better than before. Drawing on the personal strength of those living in South Mississippi, the state would turn the disaster into an opportunity to improve the way of life for all Mississippians.

Just one week after the storm, Governor Barbour set this vision in motion by creating the Governor's Commission on Recovery, Rebuilding and Renewal (the Commission). Led by Jim Barksdale, the Commission established the framework for rebuilding affected areas.

In October, the Commission hosted a large charrette, the Mississippi Renewal Forum, to create development designs and plans for destroyed areas. The forum gathered 200 professionals from Mississippi and around the world to develop plans for more sustainable living patterns at all income levels. They suggested strategies to rebuild communities with pedestrian-friendly streets, more attractive transit options, and a better mix of commercial, office, and residential uses.

After thousands of hours of input from committees and intensive research, the Commission submitted its report, *After Katrina—Building Back Better Than Ever*, containing over 240 renewal recommendations devised by Gulf Coast leaders.

In December 2006, the U.S. Environmental Protection Agency honored the Commission with a Gulf Guardian award to recognize the innovative environmental solutions that resulted from its efforts.

Just as the Commission was putting the finishing touches on its report in late December 2005, Governor Barbour and the state's congressional leaders were securing an unprecedented disaster relief package for the state. The funds appropriated by Congress would provide the means to accomplish the recovery goals laid out in the Commission's report.

The importance of the efforts in those first four months cannot be overstated. Coastal residents were somehow able to fully engage in developing a rebuilding vision even as they tried to recover from their own personal disasters. While some of the recommendations and rebuilding designs from the Commission are being carried out, what is more

important is that each community began the process of rethinking land uses and envisioning what their neighborhoods and urban areas could look like 5, 10 and 20 years from now.

Both the recovery plan and the means to implement the plan were mostly accomplished in that short time span. The year and a half that has followed has built on that vision.

After the Commission's work was finished, the Governor added a full-time recovery office within his administration, the Governor's Office of Recovery and Renewal. This office works to facilitate revitalization efforts, coordinating with all levels of government. Three members of the Governor's staff are based on the Coast, working face-to-face with local leaders and nonprofit organizations.

In August 2006, the office hosted the Governor's Recovery Expo, which featured 25 model housing displays, over 40 training sessions, community outreach, employment services, town hall meetings, construction techniques, and other demonstrations. Over 150 vendors including federal and state agencies, lending institutions, foundations, non-profit aid groups, and private sector builders provided information to expo attendees.

After the passing of relief legislation, the Administration worked with state agencies to formulate plans to direct the uses of federal funds. This required extensive coordination with the federal agencies assigned to distribute those funds. The following describes the activities in various sectors that took place through those and other state efforts:

HOUSING. Although it is never fast enough, the deployment of temporary housing had never been done as quickly as it was done in Mississippi after the storm. Coastal citizens were able to stay in their communities while the Mississippi Development Authority worked to develop housing plans such as the Homeowners Assistance Program. The state also raised building standards for the five lower counties and local governments adopted higher flood elevations to ensure that rebuilding would be safe from future disasters.

PUBLIC INFRASTRUCTURE. The Mississippi Emergency Management Agency and local governments removed nearly all debris in the first year, and the Mississippi Department of Transportation had U.S. Highway 90 restored to four-lane traffic by January 2006. The state legislature, as recommended by the Commission, created the Gulf Region Utility Board to more efficiently provide water and sewer services throughout the Coast.

ECONOMIC DEVELOPMENT. Gulf Opportunity Zone Act incentives spurred the business recovery, and federal grants aided employment efforts. Employment levels throughout South Mississippi were close to pre-Katrina levels by the end of the first year. Small businesses received bridge funding from the Mississippi Development Authority and U.S. Small Business Administration.

EDUCATION. All schools in Mississippi were open just six weeks after the storm, except for Bay St. Louis-Waveland, which waited until November 7 for temporary classroom buildings to be available. By the spring semester, Coast K-12 schools had nearly 90 percent of their pre-Katrina enrollment. State colleges and universities made a quick recovery as well.

HUMAN SERVICES. The Mississippi Department of Human Services provided economic assistance to some 500,000 Mississippians, including provisions for food, medical care, shelter and other temporary needs. The Mississippi Department of Mental Health started Project Recovery to help citizens work out the stress and problems caused by the storm.

ENVIRONMENTAL RESTORATION. The Mississippi Department of Environmental Quality and the Mississippi Department of Marine Resources set about restoring beaches and coastal habitats. Most of these efforts are directed for the long-term and will continue for several years.

The efforts of the first year have provided a solid foundation with which to move forward, and have led to the tangible results produced in the past year.

LOCAL GOVERNMENTS, NONPROFITS AND PRIVATE SECTOR

LOCAL GOVERNMENTS

Some areas have experienced financial difficulties. In a 2006 special session, the state legislature provided some much needed assistance to city and county governments that had lost more than 25 percent of their revenues. The legislature passed a bill proposed by Governor Barbour that provided grants of up to \$3 million for struggling jurisdictions. Six communities received these funds, which will not have to be repaid.

After the untold suffering and loss from the devastation of Katrina, Mississippi's local governments are well on their way toward recovery. With the two-year anniversary of the landfall of Hurricane Katrina, Mississippi's coastal governments have worked to fulfill the temporary recovery needs of their citizens, while continuously working to develop solutions for the long-term problems facing their communities. The state has procured much of the federal assistance needed to address the projects and policies identified in state and local recovery plans. As such, local units of government now find themselves in the implementation phase of recovery.

HURRICANE KATRINA TWO YEARS LATER

Although all within miles of each other, Mississippi's coastal communities each had long-standing, distinct identities and enjoyed diverse economies and populations. The effects of the storm were also unique to each community, as has been the process of recovery. Several cities in coastal Mississippi have seen increased sales tax revenues compared to the same period in the previous two fiscal years, with some cities posting record sales tax numbers.

Even in the state's hardest hit areas, such as the historic downtowns of Bay St. Louis and Pass Christian and the residential communities of Waveland and Long Beach, strong benchmarks of recovery are evident. On May 17, 2007, these communities marked a milestone in Katrina recovery with the opening of the first two lanes of the new U.S. Highway 90 Bridge, linking West Harrison County with Hancock County.

Also in May, Governor Barbour announced approval of more than \$97.2 million in grants to help with post-Katrina revitalization projects in 15 coastal communities, ranging from new fire stations in Bay St. Louis, Moss Point, Picayune, Poplarville and Waveland to a county services complex in Jackson County.

"Many of these grants will help implement ideas generated shortly after Hurricane Katrina during the 'charrette' process undertaken by the Governor's Commission on Recovery, Rebuilding and Renewal. That comprehensive early work with leaders from business, education, government and, in fact, all walks of local community life is paying dividends today," Governor Barbour said. "These projects will help restore many public resources on the Mississippi Coast, greatly improving day-to-day life for residents and helping the region come back stronger than ever."

In addition, Governor Barbour announced \$7.2 million in grants to help communities plan for new growth and development, an important element in recovery efforts. These grants will be especially beneficial to quickly developing areas such as the northern sections of Jackson and Harrison counties and the upper counties of Pearl River, Stone, and George counties, which are all experiencing significant housing development and population growth spurred by Katrina.

Also of particular note is the stellar job local governments have done working with state and federal officials to manage the process of obligating more than \$2.3 billion in Public Assistance dollars through the Federal Emergency Management Agency (FEMA). To date, FEMA has generated more than 13,000 Project Worksheets or applications for public assistance for repair and rebuilding projects in Mississippi's communities. Today, local governments are focusing their efforts on completion of the Public Assistance closeout process, which will ensure that local governments receive final allocations of recovery money.

Mississippi's local units of government understand that their work to recover, rebuild, and renew will continue for years. However, they also understand that much opportunity lies ahead. Hurricane Katrina, with all its destruction, gave birth to a renaissance in Mississippi that will result in rebuilding the state bigger and better than ever before. Mississippi's communities will be at the heart of that renaissance.

From their adoption of newly-formed comprehensive and long-term recovery plans, to the adoption of stronger building codes and enhanced mitigation measures, Mississippi's coastal communities all find themselves engaged in the implementation of visionary recovery projects. These local projects, along with the ongoing recovery occurring on the Coast, are resulting in rebuilding a Mississippi that exceeds our expectations.

A Closer Look

Status of Mississippi's Public Libraries on the Gulf Coast

A total of 21 public libraries are located in the three counties along the coastline. Hurricane Katrina totally destroyed five of these library structures, which are now operating out of donated double-wide trailers. Three of these libraries will rebuild on their existing sites.

Some of the structures that were heavily damaged are now reopened, like the D'Iberville Public Library, the Pascagoula Library and the Long Beach Public Library. Although the devastation is hard to comprehend and there is still much work to be done, a majority of the libraries along the Gulf Coast are fully operational.

NONPROFIT AND FAITH-BASED GROUPS

Nonprofits, faith-based groups, and volunteers remain a very important part of the rebuilding of Mississippi's Gulf Coast. The continued work of repairing and rebuilding homes and providing social services such as mental health counseling, food, shelter, and job placement is vitally important to our coastal communities.

Several of these groups' offices were destroyed or damaged during Hurricane Katrina. Many of those who incurred damage provided services from trailers or other temporary facilities while they simultaneously rebuilt their structures. The second anniversary finds many of these groups back in their permanent facilities and others still working to rebuild. However, most continue to provide their services through persistence and dedication to their mission.

Increased Need and Collaboration. According to the National Center for Charitable Statistics, the number of nonprofits in Hancock, Harrison, and Jackson counties increased while their total revenue decreased from 2004 to 2006. In 2004, before Hurricane Katrina, there were 647 nonprofits registered in those counties with total revenue of \$171.8 million. In 2006, these same counties had 694 nonprofits registered with total revenue of \$153.5 million. The increased number of nonprofits and decreased amount of revenue show both the needs on the Gulf Coast and the commitment of both nonprofits and faith-based groups to serve the community.

These same groups are working more closely together than ever before. Their increased collaboration has led to capacity building and learning opportunities within the region. The South Mississippi Alliance for Service Organizations (SMASO) was created out of the Governor's Commission report and is facilitated by the Mississippi Center for Nonprofits. SMASO allows nonprofits and faith-based groups from a variety of service sectors to come together once a month and share experiences and resources.

This sector also held several conferences hosted by nonprofits in the region. These conferences focused on the need for continued mental health, housing, and the rebuilding and strengthening of the sector. In addition, the Mississippi Center for Nonprofits created the Nonprofit Leadership Institute to engage Gulf Coast nonprofit leaders in discussions on innovative solutions to pressing community issues. Nonprofits greatly benefited from these efforts by increasing their knowledge of best practices and community programs that will allow them to more effectively fulfill their mission. Planning for a stronger nonprofit and faith-based sector continues today with plans for a Volunteer Center hosted by United Way of South Mississippi and countless other projects and programs being developed and implemented to ensure a more robust sector in the future.

Volunteers. Over 500,000 volunteers have shared their time, resources, and hard work to rebuild South Mississippi bigger and



better. The state is blessed to have so many individuals come to help with our rebuilding efforts. Volunteers continue to come to Mississippi to support the ongoing mission of many nonprofit and faith-based groups. They devote their time, hearts, and money to projects that support individual families and the Gulf Coast. A tremendous amount of work has been accomplished by volunteers on the Gulf Coast from rebuilding homes, to cleaning beaches and building playgrounds for children.

Corporation for National and Community Service. The Mississippi Commission for Volunteer Service, in partnership with the Corporation for National and Community Service, provides opportunities for 75,000 citizens across the nation, including more than 1,400 in Mississippi, to meet critical needs in education, the environment, public safety and other areas. These efforts are conducted in conjunction with national and local nonprofit and community organizations, AmeriCorps, VISTA, and the National Civilian Community Corps (NCCC). Since 1994, 8,558 Mississippians have participated in these programs, totaling 14 million volunteer hours.

Since September 2005, the NCCC has deployed over 2,000 members to the Gulf Coast region and have collectively served more than 900,000 hours on over 395 projects. The Mississippi Commission for Volunteer Service helps direct NCCC members who served as resources to the American Red Cross and FEMA during the initial relief period and then shifted to supporting local community-based organizations on recovery projects. Their accomplishments include:

- Refurbished 5,320 homes
- Completed 10,695 damage assessments
- Supported 726 emergency response centers
- Distributed 2,369 tons of food
- Distributed 1,817 tons of clothing
- Served 1.3 million meals

HURRICANE KATRINA TWO YEARS LATER

The AmeriCorps, NCCC, and VISTA programs continue to provide resources to the Gulf Coast to support countless projects. Governor Barbour recognized the hard work and dedication of AmeriCorps and their members by signing a proclamation to designate May 13-20, 2007, AmeriCorps Week in the State of Mississippi.

National Commitment. The commitments of national nonprofit groups and foundations like Habitat International, Living Cities, The Knight Foundation, and countless others have led to tremendous support and rebuilding. These groups have provided resources for rebuilding homes, plans for community redevelopment, and other projects that benefit the Gulf Coast.

National groups like Oxfam America, Hands On Network, and others have created local affiliate offices. These offices are providing many services including volunteer coordination, technical assistance, and repair and rebuilding of homes. Many of these groups have committed to providing Mississippi with these services for many years to come.

Several foundations also provided resources towards the rebuilding efforts. An example of these efforts was the commitment of The Laura Bush Library Foundation and the Bill & Melinda Gates Foundation to provide financial support to Mississippi's libraries. The resources made available by these organizations allowed both children and adults to get back into facilities with Internet access, books, and other resources needed for rebuilding homes and lives.

Arts, Culture, and Museums. Hurricane Katrina had a devastating effect on many of our museums and disrupted a well-established arts and culture environment in several cities along the Coast. In the two years since the hurricane, several facilities are fully functioning. Organizations such as the Lynn Meadows Discovery Center are open for business and entertaining children, holding theatre productions, and providing support to local schools. The Center Stage and Biloxi Little Theatres are operating and providing several productions. Others are in varying stages of repair and planning, including the Ohr-O'Keefe Museum of Art, the Bay St. Louis Little Theatre, and the Maritime & Seafood Industry Museum.

Farmers' markets and other outdoor events have returned to the Coast and others have been created since the hurricane. Cities are providing community events from Moss Point's Waterfront Cafe to Bay St. Louis' Depot Days. Each of these events allows local musicians and artists to showcase their work and provide a community gathering place for local Mississippians and volunteers.

Historical Preservation. The National Park Service and the Department of the Interior provided \$26 million to the Mississippi Department of Archives and History (MDAH) to repair and restore historically significant structures, both publicly and privately owned, that suffered hurricane damage. MDAH has allocated \$24 million to approximately 326 grant recipients through four rounds of the Hurricane Relief Grant Program for Historic Preservation.



Before

A Closer Look

The Schaeffer House

One of the recipients of the Hurricane Relief Grant Program for Historic Preservation was the Schaeffer House, part of the Scenic Drive National Register historic district in Pass Christian. This home suffered massive damage that shattered the front of the house, leaving the second-story porch and roof hanging in mid-air.

The \$150,000 grant that the Schaeffers received through the Hurricane Relief Grant Program for Historic Preservation has allowed them to move forward with the preservation of their home. Their success story has encouraged neighbors to begin repairing their own historic homes, lending hope that the once magnificent Scenic Drive Historic District can be restored to its former grandeur.

After



PRIVATE SECTOR

Two years ago, Hurricane Katrina destroyed thousands of businesses in Mississippi, and billions of dollars in sales revenue were lost. Beachfronts and hotels were obliterated. Losses in livestock and agriculture hit our state's farming community especially hard. Small businesses—the lifeblood of many local economies—were wiped out along the coastline, and many were damaged or destroyed miles inland. However, Mississippi's economy is regaining its foothold.

Business leaders across the Coast recognize that a strong economy is key to ensuring a sustainable recovery effort. As rebuilding continues, Mississippi is experiencing a significant expansion of the state's economic infrastructure. Unemployment rates are continuing to drop, sales tax revenues are setting records in several municipalities along the coast, and small businesses are returning to the most devastated areas. With employment levels now above pre-Katrina levels, Mississippi's economic recovery is in full swing. Much of the economic boom is being led by the innovative and persistent spirit of the private sector.

South Mississippi is blessed with a diverse business community which includes everything from world-class gaming and entertainment corporations, to world-leading global defense and government contractors. The Mississippi Gulf Coast is also home to the largest Chevron oil refinery in the world, leading financial institutions, and many small businesses. All of these organizations have not only performed diligently in responding to the needs of their customers, they have provided critical leadership in the rebuilding effort.



One such organization providing visionary leadership in recovery is the Gulf Coast Business Council, a newly-formed organization comprised of top business and economic leaders in the coastal counties of Mississippi. The Gulf Coast Business Council is working to provide a unified, regional voice of business on important matters of public policy which affect the economic vitality and quality of life of the region. The council is also addressing the common economic and business interests of the Mississippi Gulf Coast by identifying issues, convening resources, framing public policy, and working to improve the business environment and promote the economic growth and development in all of the counties on the Mississippi Gulf Coast.

"The private sector is the engine that will drive Mississippi's long-term recovery," said Gulf Coast Business Council President Brian Sanderson. "Hurricane Katrina has presented unique economic opportunities for our state. It is critical that we seize those opportunities and allow the Mississippi Gulf Coast to realize its full potential."

Since the one-year anniversary of Katrina, several world-class companies have announced new operations in coastal Mississippi. For example, PSL-North America, one of the largest spiral pipe manufacturing companies in the world, announced in May that they will construct a pipe manufacturing and coating facility on a 155-acre site at the Port Bienville Industrial Park in Hancock County – the hardest hit county on the Mississippi Gulf Coast. The plant will initially employ 275 people, with wages averaging \$50,000 per year.

Also in Hancock County, Rolls-Royce broke ground on its new outdoor jet engine testing facility at NASA's John C. Stennis Space Center. The new facility will be used to test development and prototype jet engines. It is the first Rolls-Royce test facility of its kind outside the United Kingdom.

"The decision by Rolls-Royce to relocate a significant portion of its outdoor jet engine testing to Mississippi speaks clearly about our state's ability to accommodate business operations on a global scale," Governor Barbour said.

Existing industries in coastal Mississippi are also reaping the benefits of recovery. The gaming and entertainment industries have posted record revenues in Mississippi, and several new casino developments have been announced, including Harrah's much anticipated Margaritaville Casino & Resort, which will represent the single largest investment in coastal Mississippi since Hurricane Katrina.

HURRICANE KATRINA TWO YEARS LATER

Small businesses are also recovering at a record pace, as is evident by the number of new and existing small businesses either opening or expanding their operations. These businesses received a boost in March, when legislation signed by Governor Barbour allowed more small and mid-sized businesses to qualify for GO Zone tax-exempt bond financing as they build new facilities or expand in Mississippi. The legislation, House Bill 1390, changed the Small Enterprise Development Finance Program (SED) so that more small-to-mid-sized businesses can qualify for low-interest loans of between \$350,000 and \$4 million to finance the construction and renovation of buildings or the purchase of new equipment. Prior to this change, only manufacturing and industrial projects were eligible; under the SED Program, most commercial businesses, including retail development and service-related businesses, may qualify for tax-exempt financing.

Also in March, Governor Haley Barbour signed The Mississippi Growth and Redevelopment Act of 2007. A major component of the bill provided much-sought after relief for small businesses faced with skyrocketing insurance premiums. "The wrath of Hurricane Katrina didn't end when the wind and water subsided in August 2005. As a state, we will be dealing with Katrina's aftermath for years to come, and the availability of insurance - not to mention its affordability - is absolutely critical to helping businesses get back on their feet," Governor Barbour said.

With critical insurance reforms, robust economic growth, and significant development occurring on the Gulf Coast, the private sector will continue to be a major driving force for long-term recovery in Mississippi, thus creating new horizons of opportunities for future generations of Mississippians.

FEDERAL ASSISTANCE

The success of recovery efforts can be largely attributed to support received from the federal government. This assistance, both financial and physical, has provided the basis by which the state is revitalizing the Gulf Coast. Indeed, the vast majority of Katrina projects have been funded by federal dollars.

On November 1, 2005, Governor Barbour took a \$34 billion recovery plan to Congress. Through the efforts of the state's congressional leadership, in particular U.S. Senators Thad Cochran and Trent Lott, the state received an unprecedented relief package. These leaders worked the halls of Congress to secure the relief their state would need to rebuild.



*Gene Taylor, Trent Lott, Thad Cochran, AJ Holloway
Michael Chertoff and Haley Barbour*

Photo courtesy of FEMA

One of Governor Barbour's highest priorities in recovery has been to ensure that all resources from the federal government are used to their maximum potential. To this end, the Administration has been extensively involved in directing the uses of federal funds, and has helped coordinate efforts between state and federal entities.

Over \$23.5 billion has been directed to Mississippi for state and federal recovery efforts. The state will seek another \$8.5-\$10 billion for long-range environmental restoration projects that will be identified in an upcoming U.S. Army Corps of Engineers report.

Most of this federal assistance has come from the Stafford Act and Congressional appropriations. These mechanisms have provided the means through which most state recovery efforts are founded.

STAFFORD ACT

The Robert T. Stafford Disaster Relief and Emergency Assistance Act (the Act) defines the roles and responsibilities of the federal government after a disaster. When a major disaster strikes, the governor of the affected state officially requests a declaration from the president. If appropriate, the president then makes the declaration, triggering the activation of federal assistance laid out in the Act.

The Federal Emergency Management Agency (FEMA) is the primary federal agency that leads response, relief and reconstruction efforts. FEMA coordinates disaster efforts with other federal agencies, state and local emergency management agencies, and the American Red Cross. The state's partner with FEMA is the Mississippi Emergency Management Agency (MEMA).

Essential Assistance. In the initial aftermath of Katrina, FEMA and MEMA coordinated all response activities, including the provision of food, water, shelter, medical services, search and rescue missions, and other essential needs. Temporary structures were deployed for government and school operations.

Individual and Household Assistance. The Act directs FEMA to provide temporary housing for disaster victims, either directly or through financial means, such as rent payments. Katrina resulted in the largest temporary housing operation in FEMA history, which provided travel trailers and mobile homes for over 48,000 Mississippi families.

FEMA will also pay for some home repairs and other personal needs, such as expenses related to healthcare, clothing, household appliances, clean-up items, and other post-disaster needs.

Individuals and households may receive up to \$26,200. Over 350,000 Mississippians have received \$1.2 billion through Individual Assistance from FEMA.

Public Assistance. FEMA's Public Assistance program pays for the repair, restoration and rebuilding of public facilities, including schools, fire and police stations, water and sewer systems, recreational facilities, and all other governmental buildings. FEMA will also cover the losses of the contents within those facilities. In addition to public entities, certain non-profits that serve governmental functions may be eligible for assistance as well.

The program is helping to rebuild the public infrastructure of the state using over \$2.3 billion in federal funds.

Debris Removal. The 46 million cubic yards of debris left by Katrina have mostly been cleared, with the utilization of the Army Corps of Engineers in some cases. The cost associated with debris removal is over \$700 million.



*Dept of Homeland Security Secretary Chertoff and Governor Barbour
Photo courtesy of FEMA*

Hazard Mitigation. The Hazard Mitigation Grant Program (HMGP) was enacted to reduce the loss of life and property after a disaster. The total federal pot for HMGP equals 7.5% of all other Stafford Act assistance, which amounts to \$433 million for Mississippi.

The state will use these funds for a variety of hazard mitigation measures, such as generators, relocating buildings outside of flood prone areas, building storm shelters and retrofitting buildings to shelter codes.

Non-Federal Match. Nearly all funds received through the Act require some contribution from the state, local governments or other non-federal sources. Typically, a state and the entities within a state must pay for ten percent of rebuilding costs following a major disaster.

In 2007, Congress waived the non-federal match requirement for all recovery programs except HMGP. These programs will now be 100 percent federally-funded. This legislation will save the state and local governments over \$100 million dollars.

A 25 percent non-federal match is still required for HMGP, and the state is currently exploring options to use in-kind match for the state portion of this program. The highest potential for in-kind match is in Community Development Block Grants, which lose their federal identity once received by a state, meaning they may count as a credit towards non-federal match responsibilities.

CONGRESSIONAL APPROPRIATIONS

While the Stafford Act has met typical post-disaster recovery needs, the enormous magnitude of the storm caused tremendous impacts to a number of sectors, some of which are beyond the Act's reach. Congress had been very generous in stepping in and filling those gaps to ensure a full revitalization after Katrina.

Three separate appropriations packages were passed in December 2005, June 2006 and May 2007. The bill passed in December 2005, Public Law 109-148, provided over \$10 billion in recovery funds that have been the bedrock on which the state has based recovery efforts. The legislation provided help for housing, medical centers, schools and colleges, highways and bridges, employment, law enforcement, human services, coastal restoration and other important needs. Later sections of this report will detail how these monies have been used.

In the 2007 relief bill, Congress provided funds for coastal restoration projects, allowed the potential cancellation of Community Disaster Loan repayments, and extended certain timeframes for the Social Services Block Grants and Gulf Opportunity Zone Act. Most importantly this legislation waived the match requirements of most Stafford Act

HURRICANE KATRINA TWO YEARS LATER

programs, which would have required the state and local governments to pay over \$100 million dollars for recovery projects. A match waiver had occurred in only two previous disasters.

The most extensive funding has come in the form of Community Development Block Grants (CDBG). Congress has appropriated over \$16 billion to the U.S. Department of Housing and Urban Development (HUD), which then distributed these grants to Gulf Coast states affected by Katrina. Mississippi was allocated \$5.4 billion in CDBG while Louisiana was given \$10.4 billion.

The Mississippi Development Authority (MDA) is the state agency responsible for administering these funds. Governor Barbour has worked closely with MDA and HUD to ensure that these funds are used efficiently to spur housing, infrastructure and economic development recovery.

CONCLUSION

The paragraphs above highlight major assistance from the federal government, and in no way are meant to be a comprehensive listing of funding and activities. The relief given is too extensive to describe in this report. This section does not include the Gulf Opportunity Zone Act, which is making a tremendous contribution to the rejuvenation of the Coast's business industry. FEMA still has a presence in South Mississippi, conducting operations with MEMA out of its Transitional Recovery Office in Biloxi.

The federal government has given, and continues to give, the help necessary to bring the Coast back even better than it was before.

A Closer Look

Loans to Local Governments

After the storm, the Mississippi Development Bank coordinated nearly \$80 million in loans to coastal governments to help with operational costs while local tax revenues were unstable. The question has been posed whether the state intends to forgive these loans. The answer is that the state does not have the authority to do so. Although these loans are backed by the state, the loans were provided through private entities, and not through state funding sources.

In 2007, Congress reformed law to allow another type of loan, FEMA's Community Disaster Loans, to be cancelled based on a post-Katrina financial assessment. The state has asked FEMA to forgive these loans.



SUMMARY OF RECOVERY MILESTONES

The state has seen many accomplishments and milestones in the past twelve months. The following lists some major highlights.

Homeowners Assistance Program. Both parts of the program are in full swing. Phase I has distributed nearly \$1 billion dollars to Gulf Coast homeowners. Checks for Phase II are being drafted; over \$40 million dollars has been given to applicants.

Elimination of Cost-Share. Congress waived the non-federal cost-share requirement for FEMA disaster assistance, meaning costs of rebuilding public buildings and other infrastructure will be borne solely by the federal government. This measure will save the state and local governments in excess of \$100 hundred million dollars.

Bay St. Louis Bay Bridge. The bridge opened two lanes in May, reconnecting the residents and businesses in Hancock County and Harrison County.

Employment. Unemployment rates were at pre-Katrina levels by the beginning of 2007.

Housing. The number of Mississippians forced to live in FEMA temporary housing is dwindling. In August 17,000 remained in FEMA travel trailers and mobile homes, down 19,000 from one year ago. Citizens that remain are being transferred to more comfortable conditions through the Mississippi Alternative Housing Program. In a competition between five Gulf Coast states, the alternative housing proposals submitted by Mississippi were deemed the best, and the state received \$281 million of the total \$400 million available for this important program.

Public Schools. Students are back and are performing exceptionally well. Enrollment figures in the six southern-most counties totaled 94 percent of the pre-Katrina total. Despite the overwhelming adversity these students are facing, all schools achieved high marks on state accountability tests.

Wind Pool. The state protected wind insurance rates from drastic increases by infusing disaster relief funds into the wind pool. The state avoided increases of 397 percent for homes and 200 percent for businesses, limiting hikes to 90 percent and 142 percent, respectively.

Wet Debris. The 80-mile stretch of Mississippi Sound has been cleared of debris. This year the state enjoyed one of its best shrimp seasons in years.

Mental Health. Project Recovery made over 360,000 visits to hurricane victims, offering relief from the stress and anguish caused by the storm.

HOUSING

Federal Assistance - Housing

Community Development Block Grants	\$3.2 billion
National Flood Insurance Program	\$2.4 billion
SBA Homeowners and Renter Loans	\$2 billion
FEMA Individual Assistance	\$1.2 billion
FEMA Alternative Housing Pilot Program	\$281 million
National Park Service Historic Preservation Fund	\$27.5 million
HUD Public Housing Authorities	\$27 million
USDA Rural Development	<u>\$23 million</u>
Total	\$9.3 billion

The state's highest priority in recovery has been the replacement of the staggering number of houses damaged by the storm. The U.S. Department of Housing and Urban Development (HUD) estimates that over 60,000 homes statewide received major damage. The initial housing recovery concentrated on supplying temporary accommodations and clearing debris from neighborhoods.

During the first year, the state laid the groundwork for a meaningful housing recovery. MEMA succeeded in keeping residents close to their homes by helping implement the largest deployment of temporary housing in FEMA's history. The Governor lobbied Congress for recovery funds and obtained an unprecedented relief package for the state. The package included \$5 billion in Community Development Block Grants (CDBG). State agencies have worked with federal partners to create housing programs using these funds.

The state has built on this foundation in the second year. Several important state programs are quelling the housing crisis that existed after the storm.



Photos Courtesy of Mississippi Heritage Trust

The need for temporary housing is subsiding, and the state is implementing alternative solutions for those who remain in need for such accommodations. The state has worked to tame soaring insurance rates, and acted as a mediator between residents and insurance companies.

While a revival of Gulf Coast housing is not yet complete, these efforts have resulted in significant progress that will continue as the region recovers.

SINGLE-FAMILY HOUSING

Much of the state's recovery efforts have focused on single-family housing. 2000 Census figures show that nearly 70 percent of homes on the Coast were owner-occupied prior to the storm.

The following programs have been undertaken by the state to address these housing losses:

Homeowners Assistance Program – Phase I. More CDBG funds have been allocated for Phase I than for any other CDBG program. MDA sought homeowners who lived outside the federally delineated 100-year floodplain that had regular homeowner insurance but not federal flood insurance, and whose homes suffered damage from the storm surge.

HURRICANE KATRINA TWO YEARS LATER

These requirements were premised on the belief that these homeowners made a good faith effort to protect their homes using FEMA and National Flood Insurance Program standards. To that end, MDA amended Phase I in June 2007 to include homes that were located inside the floodplain, but elevated in accordance with Flood Insurance Rate Maps.

Eligible residents received up to \$150,000. In exchange for this grant, the homeowner was required to rebuild to the International Residential Building Code, the Advisory Base Flood Elevation maps and to maintain flood insurance on the property in perpetuity.

Nearly all applicants who were deemed eligible have received a check. By the end of July 2007, over \$976 million had been given to more than 13,500 homeowners, an average of over \$72,000 per grant. According to surveys conducted by MDA, over 90 percent of residents intended to use the funding to repair or rebuild their damaged house instead of relocating. Regular updates on Phase I can be found by visiting www.mississippi.org.

Homeowners Assistance Program – Phase II. The second phase targeted families with low and moderate incomes whose homes were damaged by the storm surge. To be eligible, a household's income must be at or below 120 percent of Area Median Income. These income levels vary by county and household size. For example, a family of four in Harrison and Hancock counties would need an income at or below \$56,150 to be eligible for the program.

Homeowners receive compensation of up to \$100,000 to rebuild, repair or relocate. If applicants did not maintain insurance on their damaged properties, and do not meet the special needs criteria, their grants are calculated at 70 percent of their uncompensated damage. Grant awards for those who maintained insurance or meet special needs criteria are calculated at 100 percent of their uncompensated housing damage. The three special needs categories are: applicants age 65 and over, those with physical or mental disabilities, and households with incomes at or below 60 percent of Area Median Income.

Besides the income requirement, this program differs from Phase I by including applicants located inside the floodplain and by not requiring homeowner's insurance for eligibility. This program contains the same building code, elevation and flood insurance requirements of Phase I. In addition, the Phase II covenant requires that hazard insurance, as well as flood insurance, be maintained on the damaged property in perpetuity.

As of mid-August 2007, over 600 households have received \$44 million in assistance, an average of over \$70,000 per grant. A total of 7,424 applications have been received by MDA for Phase II. Regular updates on Phase II can be found by visiting www.mississippi.org.

Elevation Grant. Eligible applicants under Phase I and Phase II are also eligible for an elevation grant of up to \$30,000 to help defray the added costs of elevating their homes in accordance with the Advisory Base Flood Elevations. Over 5,000 applications have been received for this program.

Mortgage Revenue Bond Program. The Mississippi Home Corporation offered the Mortgage Revenue Bond Program before Hurricane Katrina to provide low-interest mortgages to first-time homebuyers and assistance with closing costs equal to 3 percent of the mortgage amount. The Gulf Opportunity Zone Act made this program even more lucrative in hurricane-affected areas by waiving the first-time buyer requirement and placing higher limits on buyer's income and the purchase price of the home.

Before



After



Photos Courtesy of Mississippi Heritage Trust

The increased flexibility under the GO Zone legislation has resulted in a significant increase in lending under the program. Over 740 households in the southern-most six counties have received these low-interest mortgages, which have totaled over \$90 million. Nearly 400 families had qualified in 2007, receiving over \$49 million to find affordable homes.

Modular Housing Tax Reduction. Governor Barbour called a Special Session of the Mississippi Legislature in October 2006 to ask lawmakers to reduce the cost of construction of new homes on the Coast. As a result of the session, the state's tax on modular homes was reduced from seven percent to three percent. The measure is saving homeowners \$4,000 to \$6,000 per home.

Federal Disaster Assistance. After a declared disaster, the U.S. Small Business Administration offers low-interest loans of up to \$200,000 to repair or restore primary residences to their pre-disaster condition. SBA has approved loans for 31,000 homeowners totaling over \$2 billion, an average of \$66,000 per loan.

Through FEMA's Individual Assistance Program, more than 216,000 Mississippi families have received more than \$846 million in housing assistance to help repair and rebuild damaged housing.

The U.S. Department of Agriculture Rural Development has provided nearly \$23 million in home loans and grants to over 340 families.

RENTAL HOUSING

The unavailability of affordable rental housing has been a major problem after Katrina. HUD estimates that about 20,000 rental units on the Coast sustained serious damage. The scarcity of housing after the storm caused rents to increase dramatically, worsening the problem.

Several rental initiatives are helping to replace affordable rental stock:

Small Rental Program. In July 2007, MDA gained approval of the Small Rental Program, which will provide loans in an aggregate amount of up to \$250 million to owners of small rental properties located in Hancock, Harrison, Jackson and Pearl River counties.

Smaller rental properties (fewer than four units) make up the large majority of total rental units in these counties. According to Census 2000 figures, over three-quarters of total rental units were single-family units, duplexes or other small rental properties.

Rental property owners will be eligible for up to \$30,000 per unit for repair, rebuilding or construction. The funds are loans, which

will be forgiven if the landlord meets certain conditions. The primary stipulations are that the units will be rented to residents with incomes at or below 120 percent of AMI and a certain percentage to residents at or below 80 percent AMI. Owners are also restricted in the rents that can be charged to each tenant based on the tenant's income. The conditions must be met for five years for the loans to be forgiven.

A guidebook on the program has been posted on the Internet, and applications will be accepted in early September.

Low Income Housing Tax Credits. The Gulf Opportunity Zone Act authorizes the Mississippi Home Corporation (MHC) to allocate approximately \$35 million annually in Low Income Housing Tax Credits in 2006, 2007 and 2008. These credits encourage the construction and rehabilitation of low and moderate-income rental housing.

MHC allocates these federal tax credits based on a competitive scoring process conducted according to the "Qualified Allocation Plan" approved by the Governor. The plans have been structured to ensure that more credits are used in the lower six counties and to encourage innovative mixed income developments.

In 2007, \$54 million was allocated to the six lower counties, which will incentivize the construction of 4,500 affordable housing units. As of August 2007, a total of \$68 million had been allocated to this area since Katrina to help build over 5,700 units.

Public Housing. The five public housing authorities on the Coast received damage to 2,500 of their nearly 2,700 housing units. These entities provide living accommodations for low and very low-income residents who lack access to housing.

The Governor authorized \$100 million in CDBG to rebuild and repair these units. As of July 31, 2007, the public housing authorities on the Mississippi Gulf Coast have requested funding for 24 projects. Environmental assessments are required by the federal government before these projects can be fully funded. The assessments have been completed for 30 percent of these projects, and the environmental review is more than three-quarters complete for an additional 20 percent of the projects.

Applications for pre-development costs have been provided to the public housing authorities (PHAs), in an effort to quickly provide funding for those expenditures that are exempt from environmental clearance. This pre-development application process enables each PHA to receive up to 15 percent of its total allocation early on for expenditures incurred before construction begins. Eligible pre-

HURRICANE KATRINA TWO YEARS LATER

development costs include engineering and design costs, as well as costs associated with legal or environmental work. The PHAs have begun submitting these applications and it is anticipated that most of the housing authorities will participate in this process over the coming weeks.

The state is currently reviewing draft applications for multiple PHA project sites, and it is anticipated that MDA will receive final applications for several of these sites by the end of August. As of July 2007, only the Long Beach Housing Authority, which is rehabilitating or reconstructing 75 units at two public housing developments, has submitted a final application.

TEMPORARY HOUSING

The staggering loss of homes required the largest deployment of temporary housing in FEMA history. During the course of the FEMA temporary housing program, disaster victims have occupied over 48,000 travel trailers and mobile homes. As more and more housing comes back into service, that number has dwindled. Only 17,000 families were living in FEMA temporary units in August 2007. In Hancock, Harrison and Jackson counties, only 13,000 units remain.

Travel trailers provide a quick and efficient temporary housing solution for those left homeless by a disaster, but have many disadvantages as well. The Governor has advocated that these units are not suitable for accommodating families for the length of time that it takes to rebuild after a major natural disaster of the magnitude of Hurricane Katrina.

Mississippi Alternative Housing Program. Immediately after Hurricane Katrina, the State of Mississippi led the movement to find a more suitable replacement for travel trailers. The first alternative housing designs were created at the Mississippi Renewal Forum, convened by the Governor's Commission on Recovery, Rebuilding and Renewal in

October 2005. The cottage design produced at the forum generated substantial interest from around the country on the issue of disaster emergency housing.

The state actively pursued the issue of replacing travel trailers for its residents. In June 2006, U.S. Senator Thad Cochran successfully proposed the allocation of funds to support alternative temporary housing solutions. The primary goal of the Alternative Housing Pilot Program is to exhibit a superior product for housing disaster victims that can be delivered as quickly and inexpensively.

In creating its alternative housing designs, the Governor's Office collaborated with an expert team of architects and organizations, including the Oak Ridge National Laboratory, the College of Architecture, Art and Design at Mississippi State University, the Federation of American Scientists, and the architectural firm Looney Ricks Kiss.

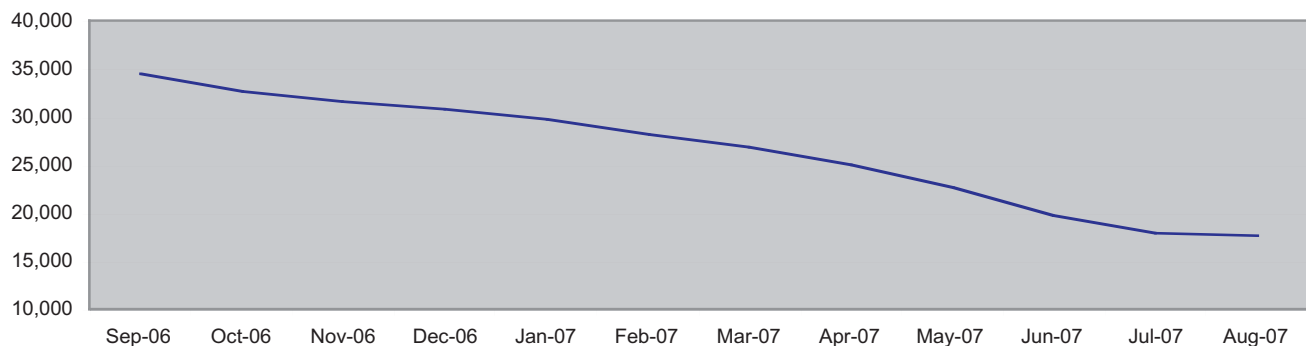
In October 2006, Mississippi submitted proposals for FEMA's Alternative Housing Pilot Program. FEMA plans to allocate more than \$280 million to fund Mississippi's proposals, which include three housing models -- Park Models, Mississippi Cottages and Green Mobile units.

The Mississippi Alternative Housing Program is now being administered by MEMA. The program is replacing current FEMA disaster housing units with cottage-type units that are stronger, safer and larger than normal travel trailers.

MEMA is working with several in state and out of state manufacturers to build one, two and three bedroom units that range from 400 to 900 square feet. The first one-bedroom unit, called a Park Model, was occupied on June 21, 2007 in Biloxi.

The 24-month long program is being coordinated with both FEMA and HUD. Approximately 3,000 to 4,000 units will be built and occupied during that time, with those citizens helping to evaluate the units.

FEMA Temporary Housing in Mississippi, September 2006-August 2007



INSURANCE

Throughout 2006 and 2007, the Mississippi Insurance Department (MID) continued to deal with issues brought about by Hurricane Katrina. Nine additional bulletins were issued dealing primarily with the handling of Katrina claims. In addition, six new regulations were enacted dealing with a variety of issues, including the expansion of the Department's successful mediation program to include those involved in litigation and requiring insurers to completely inform policyholders of flood and earthquake exclusions.

Katrina Mediation Program. One success story of the state's recovery continues to be the MID's Hurricane Katrina Mediation program. From the time actual mediation conferences began in February 2006, the program has seen a consistent settlement success rate of 83 percent among the thousands that requested mediation through the program.

In August 2006, after seeing the success of the mediation program, Judge L. T. Senter Jr., Senior Judge of the United States District Court, Southern District of Mississippi, approached MID about the possibility of allowing some of the cases pending before him to participate. Judge Senter, MID, and representatives from the American Arbitration Administration (AAA) worked together to design a pilot program for hurricane insurance cases to help alleviate court docket backlogs and lengthy delays.

Once he approved the pilot program, Judge Senter selected and ordered 21 Federal cases to be mediated by AAA-appointed mediators through the state-mandated MID Hurricane Katrina Mediation program in the Federal Courthouse in Gulfport. The pilot program resulted in 17 of the 21 selected cases being mediated and seven settling for a 41 percent success rate. In July 2007 the program was in its third phase with over 100 cases ordered into the program, and had achieved a nearly 50 percent success rate.

Wind Pool. During the last two years, Insurance Commissioner George Dale has worked with Governor Barbour to gain approval of \$80 million in federal grant funds to lower insurance rates. To help offset the large rate

increases requested by the Mississippi Windstorm Underwriting Association (Wind Pool), MID presented a plan to the Governor to use federal grant funds to subsidize the Wind Pool. This subsidy plan was approved and with the infusion of \$50 million federal dollars the proposed 397 percent rate increase was limited to only 90 percent, saving a Gulf Coast homeowner more than \$2000 a year on average.

An additional \$30 million in grant funds was approved by Governor Barbour and HUD in 2007 to offset high commercial wind pool rate increases. This resulted in commercial wind rates being reduced from an over 200 percent increase to 142 percent.

Both of these initiatives resulted in millions of dollars of savings for homeowners in the Wind Pool. In addition, these plans will allow the rebuilding process to continue.

House Bill 1500, known as The Mississippi Growth and Redevelopment Act of 2007, was approved unanimously by both houses of the State Legislature to mitigate the increase of insurance premium costs across the entire state.

The bill created the Mississippi Windstorm Underwriting Association Reinsurance Assistance Fund. Monies in the special fund may be used by the Department of Insurance, with approval from the Legislature, to defray the cost for reinsurance, lowering the risk for insurance companies writing policies in Mississippi.

This legislation provides \$80 million over the next four years from the insurance premium tax to buy reinsurance, which will result in lower premiums for wind pool policyholders. The bill encourages companies to write plans in the wind pool by providing an annual credit against state insurance premium taxes for domestic and foreign insurance companies for new wind and hail policies written in the coastal area of the state.

Private Insurance. In October 2006, insurance companies reported that approximately 98 percent of their Hurricane Katrina claims were settled, closed or paid. Final reporting figures showed that statewide there were 486,913 total claims filed (includes insurance companies, Mississippi Residential Property Insurance Underwriting Association, Mississippi Windstorm Underwriting Association, and the National Flood Insurance Program) and Statewide Total Claims Payments totaled \$11.9 billion.

A market conduct examination of State Farm regarding their handling of claims in the lower six coastal counties was announced with results expected later in 2007. In early 2007, an agreement was reached by



HURRICANE KATRINA TWO YEARS LATER

the MID and State Farm in which the insurance company agreed to reopen and re-examine approximately 35,000 Hurricane Katrina claims on the Mississippi Gulf Coast.

A similar agreement was reached with Nationwide Insurance in spring 2007, and the company is reopening and re-examining thousands of Hurricane Katrina slab claims. This should result in additional wind-related payments on a significant number of Katrina claims along the Gulf Coast of Mississippi. This new plan should result in additional payments to a number of policyholders in Hancock, Harrison, and Jackson counties.

Flood Insurance Rate Maps. One of the most anticipated markers of recovery is FEMA's Digital Flood Insurance Rate Maps (DFIRMs). These maps dictate the height at which construction must occur for coastal areas to be eligible in the National Flood Insurance Program. The maps are being created using sophisticated technology and processes, and will be the most accurate predictor of flood risk available to coastal residents.



A Closer Look

Governor Barbour Hands Over Keys to First Cottage Resident

On June 21, 2007, Governor Barbour presented the keys to the first Mississippi Park Model cottage to Biloxi resident Katherine St. Amant, whose Claiborne Street home was destroyed by Hurricane Katrina. She was randomly selected to receive the cottage through the Mississippi Alternative Housing Program after living 18 months in a FEMA-provided travel trailer.

As the ceremony was ending, St. Amant offered to cook the Governor a pot of gumbo the next time he was in town.

Once completed, these new flood maps will replace FEMA's current Advisory Base Flood Elevation Maps (ABFEs). In the wake of Hurricane Katrina, FEMA developed these high-resolution advisory maps to serve as a guide for rebuilding and new construction.

The proper utilization of the advisory maps has been a central issue of debate for local governments. Adoption of the ABFEs is not mandatory; coastal counties and municipalities had the choice of whether to approve them or not. Many locals complained that the ABFEs are not accurate and require building elevations that are too burdensome for homeowners. Local leadership has attempted to strike a balance between protecting new construction from flood hazards while not impeding homeowners' prospects of rebuilding.

Many coastal communities adopted the advisory standards anticipating the new DFIRMs would soon follow. However, in August 2007, two years after Katrina, communities were still waiting for Flood Insurance Rate Maps that more accurately reflect flood risk.

FEMA is confident they will deliver flood map data to Mississippi for final enhancement and production by the fall of 2007. Each community will have 90 days to provide public comments. Once adopted, homeowners, business owners and local government will have an important tool by which to make critical recovery decisions.

Due to increased public awareness campaigns and mitigation efforts following Hurricane Katrina, flood insurance policies have increased from 41,000 to more than 87,000 policies statewide. Over \$2.4 billion in flood insurance claims have been paid to Mississippi homeowners after Katrina.

HOUSING BARRIERS

Many barriers exist that are slowing down housing recovery and causing potential homeowners to hesitate from making rebuilding decisions.

Insurance. While the state has helped maintain reasonable wind pool rates, insurance premiums are significantly higher compared to before Katrina. Many residents have the financial resources to buy or build a house, but are unwilling to pay relatively high costs for wind insurance coverage. Approximately 40,000 residents have wind pool policies, up from 16,000 before the storm. Since the wind pool is an insurer of last resort, this increase reflects the lack of availability of private insurance. Often the prevailing mindset is to wait on purchasing a home with the belief that rates will be lower in the future.

One solution advocated by Governor Barbour is the concept of an all-perils insurance policy.

Currently private insurers do not cover flood damages, meaning coastal homeowners must purchase separate flood and wind policies. Flood insurance is only provided by the federal government through the National Flood Insurance Program (NFIP). This distinction has led to many feuds between homeowners and insurers as to whether hurricane damage was caused by wind or water.

In July 2007 a bill was introduced in Congress that, if enacted, would allow the NFIP to offer wind and flood coverage in one policy.

The Multiple Peril Insurance Act would set premiums based on concrete actuarial principles, meaning rates would not be severely effected by risk fluctuations, such as those that resulted from the 2005 hurricane season. The bill would also eliminate the need for the wind vs. water damage distinction, as one policy would cover both losses.

Inflated Market Values. The high demand for housing coupled with a low supply has led to high sales prices for available housing. Many homeowners are taking the approach they have with insurance: wait out the market until prices go down.

Land Use Decisions. The Coast has been cleared of debris, but the landscape is still not perfectly clear as to what will be built back and where. The changing dynamics of cities and neighborhoods are causing homeowners to delay rebuilding decisions until it becomes more evident what mix of commercial and residential aspects their areas will embody. Homeowners may not want to build back on their previous lots if they will be surrounded by condos, casinos and the like.

All coastal cities are undergoing these planning processes, and many are close to developing a good idea of how they want to revitalize. The state has provided \$10 million in planning grants for cities to hire architects and planners to create comprehensive rebuilding plans. Once these plans begin to be adopted, residents will have a clearer picture of what their neighborhoods will look like.

CONCLUSION

Although headway has been made, the state recognizes that the rebuilding process will take time. Under normal circumstances, a single housing development would take around two years to go from the concept stage to construction and occupancy. Complicating this timeframe are issues arising in the post-Katrina environment, including wetlands regulations, increased cost of materials and labor, and zoning and planning uncertainties.

However, the efforts in the second year have led to significant progress in rebuilding the thousands of homes destroyed by Katrina. Residents are receiving financial resources to rebuild and more housing options are

becoming available. The state is mindful of the dangerous effects of natural hazards, and has placed mitigation policies within housing programs to lessen those harmful impacts. It is not enough to simply rebuild homes; they must be built back stronger and safer to serve communities for years to come.

With more and more financial resources becoming available, and with the policies the state has put in place, the bedrock for housing recovery has been put in place. It is only a matter of time before that progress becomes physically evident.

A Closer Look

Habitat for Humanity of the Gulf Coast

Through volunteer labor, donations, and over 300 hours of sweat equity from future homeowners, Habitat for Humanity provides working class families that make 25-80% of the average median income the opportunity to become homeowners.

Between February 11, 2007, and August 3, 2007, 1,922 volunteers participated in building homes with Habitat for Humanity of the Gulf Coast. These volunteers, the future homeowners, and the Habitat staff have constructed 126 homes. The nonprofit hopes to support the construction of 1,000 homes by 2011 and currently has a waiting list of 589 individuals.



PUBLIC INFRASTRUCTURE

Federal Assistance - Public Infrastructure

U.S. Military Facilities	\$3.5 billion
FEMA Public Assistance	\$2.3 billion
FEMA Mission Assignments	\$1.6 billion
Federal Highway Administration	
Emergency Relief Program	\$1 billion
Community Development Block Grants	\$1 billion
FEMA Hazard Mitigation Grant Program	\$433 million
USDA Rural Development	
Community Facilities Program	\$10 million
Total	\$9.9 billion

Hurricane Katrina damaged everything it touched, leaving a mass amount of debris in its wake. Rebuilding was stalled while the ground was being wiped clean of rubble. After twelve months, nearly all the debris had been removed.

Even while waiting to clean the landscape, much was accomplished during that time span. All major roads and highways were repaired just a few months after the storm. Coastal jurisdictions began thinking about joining together to better provide water and sewer services for their residents.

In the past year, transportation has continued its comeback: two major bridges will have reopened by the end of 2007. Regional infrastructure is no longer a concept; it has become a reality. Mitigation funds are ensuring that public buildings are being rebuilt to resist the harmful effects of natural hazards. Some public facilities have been rebuilt, while construction is beginning on others.

PUBLIC FACILITIES

FEMA has obligated more than \$2.3 billion to Mississippi through the Public Assistance reimbursement program to repair, replace or restore damaged publicly-owned facilities and those of certain nonprofit organizations.

Public Assistance Category E – rebuilding of public buildings and replacement of their contents – represents the largest permanent work category. There are 865 large building projects set to take place, with an estimated price tag of nearly \$500 million. Small public facility projects account for another \$30 million.

As of the end of July 2007, 15 large project worksheets have been fully paid, indicating that the construction had been completed on those projects. Over 20 percent of large projects had received funds for part of their balance, meaning rebuilding work has begun.

MEMA has worked with two contracting firms to assist the agency's Public Assistance staff to speed payments to affected jurisdictions. The agency has paid more than \$1.2 billion as of August 1, 2007, which is more than any other disaster in the state's history.

A state-of-the-art management system was designed and implemented by MEMA to capture the receipts for every dollar of Public Assistance spending. Although originally Public Assistance was completed at a 90 percent federal/10 percent state cost-share, Congress passed legislation in May 2007 to make the entire disaster a 100 percent federal cost-share.

MEMA's Hazard Mitigation Grant Program has approved \$86 million to local governments and private nonprofits to reduce and prevent the damage of future disasters. Projects include relocating buildings outside of flood-prone areas, building storm shelters and retrofitting buildings to shelter codes.

TRANSPORTATION

The Mississippi Department of Transportation (MDOT) has made great strides during the past year in recuperation of transportation infrastructure. Mississippi was allocated \$1.013 billion in federal funding, which will pay for the reconstruction of federal highways in Mississippi such as Highway 90 and Interstates 10 and 110. The funds were 100% federal (no state match required) with no time limit on when MDOT must complete the project.

As of July 2007, the \$1.013 billion in Federal Highway Association (FHWA) Emergency Relief funds to repair Katrina damage were broken down as follows:

- \$280,000,000 was the actual reimbursement for FY 2006
- \$385,101,000 was the actual reimbursement for FY 2007
- \$345,000,000 is projected to be spent in FY 2008
- \$686,971,672 is the total expended
- \$681,498,685 is the total funds reimbursed by FHWA
- \$19,544,840 is the total funds reimbursed by the FEMA

Construction. MDOT's greatest success was the opening to two-way traffic on the US Highway 90 Bay St. Louis Bridge on May 17, 2007. This event marked a milestone for the recovery efforts on the Mississippi Gulf Coast, as the communities of Henderson Point in Harrison County and Bay St. Louis in Hancock County were once again united. The bridge is being completed under a \$266.8 million design-build contract with Granite Archer Western. The bridge's final two lanes are expected to open in November 2007.

While this bridge was under construction, MDOT and Hornblower Marine Services used FHWA emergency relief funds to provide free vehicular ferry service for commuters on the days the weather would allow operation. The service, which ran from November 1, 2006, through May 17, 2007, ran every half hour from 6:00 a.m. to 6:30 p.m., saving gas and time for motorists.

Another success story is the reconstruction of the US Highway 90 Biloxi Bay Bridge connecting Ocean Springs to Biloxi. Two-lane traffic is tentatively set to open in early November 2007. Residents of both communities have been so curious about the construction of the bridge that viewing zones had to be created. The \$338.6 million design-build bridge is being constructed by GC Constructors. The remaining portion of the bridge is set to open in April 2008.

The following repairs and construction projects have been completed or are currently in progress:

- I-10 Bridge over Pascagoula River East Bridge
- I-110 Bridge Repair
- Bridge Assessments for Gulf Coast Counties
- I-10 Temporary Widening I-110 to SR 609
- US Highway 90 between Ocean Springs and the CSX Railroad
- US Highway 90 from CSX Railroad to Ocean Springs Bridge
- US Highway 90 Henderson Bridge Replacement
- Popp's Ferry Road Bridge Repair
- SR 609 at Fort Bayou Bridge
- Beach Boulevard Repair by Hancock County in Bay St. Louis
- I-59 between Mile Marker 15 and 29
- Sign Repairs
- I-59 between Louisiana state line and Jones County line
- I-10 Fence Repair
- Emergency Lighting Repair in District 6
- US Highway 90 Lighting Project

Hurricane Preparedness. The Interstate Contraflow Plan, which aids in the evacuation of New Orleans residents and eases the congestion for Mississippi residents, was updated and placed on MDOT's website.



Newly built Bay St. Louis Bridge

MDOT met with local, state and federal agencies to develop the Gulf Coast Intelligent Transportation System. This system will combine computer and communications technology with real-time traffic management and information coordination. One key element of the system is the inclusion of the Advanced Emergency Management System, which will more effectively detect and respond to emergency needs on transportation facilities, including hurricane evacuation.

MDOT incorporated an in-house Crisis Call Center to help support the public's questions about road closures and other pertinent emergency information. The Crisis Call Center will operate 24 hours a day in the event of a disaster.

MDOT's Hurricane Evacuation Guide was distributed by local newspapers prior to the start of hurricane season. The brochure is available at all MDOT facilities, city halls, chambers of commerce, libraries, Welcome Centers and area convention & visitors bureaus.

MEMA has contracted with private companies for 70,000 gallons of unleaded fuel and 30,000 gallons of diesel fuel for use by emergency workers in the event of another disaster. MEMA has also completed a survey of fuel stations throughout the Gulf Coast and along the major evacuation routes of which stations have generators in place should fuel be needed after landfall. MEMA has worked with FEMA to pre-stage commodities such as food and water to be used immediately following a hurricane or other major event.

MDOT installed underground fuel storage tanks at several project offices in order to have a secure supply of fuel for its emergency operations. Those offices are in Hattiesburg, Lyman, Ocean Springs and Waynesboro. MDOT has also purchased a 2,400 gallon bob-tail tanker truck and a 9,200 gallon tanker truck for the mobile refueling of first responders during emergencies.

HURRICANE KATRINA TWO YEARS LATER

All emergency personnel with MDOT attended conferences and seminars with sister states to share best practices about evacuation procedures in times of disaster. MDOT also held “mock” hurricane drills in order to be better prepared in the event one should arise.

WATER AND SEWER

Gulf Region Water and Wastewater Plan. As part of the Gulf Regional Infrastructure program the Governor directed the Mississippi Department of Environmental Quality (MDEQ) to develop the Gulf Region Water and Wastewater Plan to determine the needs for water, wastewater, and storm water infrastructure in the six coastal counties. The plan’s goal was to prioritize infrastructure needs in the region for CDBG funding.

A draft of the Plan was developed in October 2006 with significant stakeholder involvement. The public was provided an opportunity to review the draft plan in November 2006. A public notice was provided for notification of the draft plan and for a series of public meetings. The plan was made available at various locations in the region and on MDEQ’s website. After consideration of public comments, the plan was modified and a final draft was developed in December 2006.

The Governor increased funding for the infrastructure program by approximately \$140 million after comments from the public were addressed in the plan, raising the total funds allocated for the program to \$641 million. The plan was approved by HUD in April 2007.

MDEQ has made CDBG grant awards to the county utility authorities for six projects located in Pearl River, Hancock, Harrison, and Jackson counties. These projects when completed are expected to cost approximately \$21 million. As of July 2007, these projects were in the engineering phase with the exception of the Poplarville Water Supply project. This project has completed engineering and is expected to begin the construction phase in September 2007.

MDEQ expects to make grant awards for all of the other projects except those in Stone County by August 1, 2007. It is anticipated that most of the projects will be constructed by the end of 2010.

Water Pollution Control Revolving Loan Fund. The Water Pollution Control Revolving Loan Fund (WPCRLF), administered by the Construction Branch within MDEQ’s Office of Pollution Control,

provides low interest loans for wastewater projects, sludge disposal facilities, storm water pollution control projects, non-point source pollution control projects, and estuary management projects. These loans are available to cities, counties, sewer districts, regional wastewater authorities, and other governmental entities.

Over the two years since Hurricane Katrina, MDEQ’s Construction Branch staff has worked closely with the existing WPCRLF loan recipients to provide much needed financial relief in the form of loan forbearances to allow time for rebuilding/recovery and return of their sewer customers.

Also, state legislation passed in the 2007 legislative session (SB 3201) provided \$3.9 million in state match funding required to secure \$19.5 million in U.S. Environmental Protection Agency funds available to the WPCRLF Program through Federal Fiscal Year 2008. These funds will be made available as low interest loans which can further assist the coastal communities as a means of financing needed wastewater infrastructure projects for which grant funding may not be available.

Facility Status. Treatment of municipal wastewater is a crucial element in the reconstruction of the Coast and in protection of the environment. MDEQ continues to work with coastal communities as they repair and upgrade wastewater treatment facilities:

- Waveland and Bay St. Louis have begun the reconstruction of utility infrastructure in the most devastated areas. This work will replace all water and sewer lines in the area between the railroad tracks and the beach.
- Temporary bladder tanks are being provided to residents in Waveland until construction is complete.
- Long Beach is nearing completion of sewer line replacement along Beach Boulevard. Portions of the beachfront have been opened for redevelopment.
- Pass Christian has begun replacement of sewer lines along Scenic Drive. The east end near the beach remains on temporary service pending FEMA approval of reconstruction bids.
- Gulfport, Biloxi and D’Iberville are planning major replacement projects at their wastewater treatment plants (WWTP); however, existing systems are fully operational with some temporary measures still in place.
- All municipal WWTP are operational although some are still working with FEMA on funding final permanent repairs.



Water monitoring by MDEQ

DEBRIS REMOVAL

Hurricane Katrina generated almost 46 million cubic yards of storm debris across the state with approximately 24 million cubic yards of that in the three coastal counties. The majority of this debris has now been removed and either disposed or recycled. FEMA has continued to provide assistance to communities in the southern-most counties of the state in the removal and disposal of dead trees as well as with the demolition and disposal of numerous damaged residential structures. The state is also working with FEMA to monitor the more than 320 emergency debris management sites in the state to ensure the sites have been properly closed and where possible restored to natural conditions.

The State of Mississippi, with support from the federal government, is also continuing work with an engineering firm on an initiative to develop a long range plan addressing solid waste needs in the six southern-most counties of Mississippi. This initiative will help the counties address solid waste needs created by the impact of debris disposal from Hurricane Katrina but will also help the counties plan for the management of debris for future disaster events.

CONCLUSION

The state still has a long way to go to replace all of the public buildings that were lost to the storm. The funds are in place; it is now a matter of hiring contractors and beginning the work. Projects are close to beginning on regional water and sewer infrastructure, which will lay the groundwork for future housing developments to expand into new areas. Lastly, with the opening of the two bridges that connect the entire Coast, the region's transportation recovery will nearly be complete.



A Closer Look

Bay St. Louis Bridge Celebration

On May 17, 2007, the Bay St. Louis Bridge was opened to two-lanes of traffic for the first time since Hurricane Katrina. The linking of Bay St. Louis and Pass Christian was marked by an all-day celebration attended by hundreds of residents. "Bridge Fest" included a ceremony with Governor Barbour, Bay St. Louis Mayor Eddie Favre, Pass Christian Mayor Chipper McDermott and other state and local officials.

Bridge Fest commemorated a milestone in recovery. The bridge shortened lengthy commutes for many and connected businesses to more customers. The success of Bridge Fest has local officials planning an even bigger party for the opening of the Biloxi Bay Bridge, scheduled for November 2007.



ECONOMIC DEVELOPMENT

Federal Assistance - Economic Development

Community Development Block Grants	\$660 million
SBA Business Loans	\$560 million
National Emergency Grant	\$95 million
Total	\$1.3 billion

The numbers indicate that progress is being made in the coastal economy. Employment is at pre-Katrina levels. Sales tax receipts have reached record levels for some municipalities, as citizens buy items to rebuild and replace what was lost in the storm. Economic prospects for Hancock County are improving with the rebuilding of the Bay St. Louis Bridge and other developments. Casinos are helping lead a revitalization of the tourism industry.

In the past year, the state has worked on several initiatives to enhance the recovery of this sector.

ECONOMIC DEVELOPMENT

To build successful economies, several factors must be present. Commercial infrastructure is important; attractive business areas attract customers. Also, the creation of quality, high-paying jobs draws residents to the area and gives consumers more purchasing power.

To achieve these goals, the state is pushing three economic development programs using CDBG funding. In addition, the Mississippi State Legislature passed a measure to assist small businesses.

Community Revitalization. This program provides grants to local governments to rebuild and repair downtown and commercial areas. MDA has allocated \$150 million for these projects in the lower six counties.

In Round I, MDA has awarded \$97 million for 19 downtown revitalization and public building projects in the lower six coastal counties. Local governments identified a broad range of uses: fire stations, civic centers, waterfront development, downtown restoration among other purposes. The inspiration and designs for many of these projects came from the charrette hosted by the Governor's Commission. Many of the communities that have been approved for funding will be starting construction in the coming months.

In Round II, MDA has invited full applications from 15 communities in the lower six coastal counties in the amount of \$51 million. Full applications were received on July 16, 2007. The applications will be approved and funded in September 2007.

In June 2007, Governor Barbour requested approval from HUD for another \$150 million for the program. Half of these funds would be designated for the six southern-most counties, while the rest would be allocated to other disaster-declared counties, with \$30 million assigned to small communities.

Community Planning. MDA has allocated \$10 million for local governments to create comprehensive land use and zoning plans. These planning efforts will guide the redevelopment of these areas to enhance the commercial viability of rebuilt districts. Common themes in planning visions include walkable cities, mixed-use neighborhoods, and the use of SmartCode.

In Round I, MDA has awarded \$7 million to 17 coastal communities. As of August 2007, many of these planning projects had already begun. In Round II, MDA has invited full applications totaling \$2.7 million in seven coastal communities. The applications will be approved and funded in September 2007.

Economic Development. The purpose of this program is to provide infrastructure to support economic development and job creation. Funds are used to attract new industries which offer well-paying jobs. Currently there is \$340 million available for these activities.

In the Economic Development Program, funding is on a project-by-project basis. To date, four projects have been approved, ten more are in the approval process, and another twenty projects are currently under review.

Small Business Financing. Under state law passed in the 2007 legislative session, more small and mid-sized businesses will be eligible for GO Zone tax-exempt bond financing as they build new facilities or expand in Mississippi. House Bill 1390 changed the Small Enterprise Development Finance Program (SED) so that more small-to-mid-sized businesses can qualify for low-interest loans between \$350,000 and \$4 million to finance the construction and renovation of buildings or the purchase of new equipment. Prior to this change, only manufacturing and industrial projects were eligible; now, under the SED Program, most commercial businesses, including retail development and service related businesses, may qualify for tax-exempt financing.



Photo courtesy of FEMA

EMPLOYMENT

Employment levels had almost returned to normal one year after the storm. In 2007, the three coastal counties boasted some of the lowest unemployment rates in Mississippi. The June 2007 unemployment for Hancock (5.9 percent), Harrison (6.2 percent) and Jackson (6.4 percent) counties was below the state average (6.9 percent). State efforts continue to focus on job placement and training.

National Emergency Grant. The Mississippi Department of Employment Security (MDES) applied for a National Emergency Grant (NEG) immediately after Hurricane Katrina. The initial grant of \$64 million was followed by a grant of \$31 million, for a total of \$95 million. These grants are used to provide temporary jobs and transition workers to permanent employment, and also provide workforce training. Over 9,750 people have been served.

Over 2,000 people were placed in temporary recovery jobs with NEG funds. In addition, more than 6,250 people received training in Mississippi community colleges and proprietary schools. Businesses have also received on-the-job training dollars.

The Working Your Way Back Home program helps Mississippians who evacuated 151 miles or more from home get the assistance they need to find a job, including reimbursement for travel and relocation expenses.

Almost 400 individuals and families have received Working Your Way Back Home assistance. Citizens have returned from eleven different states, including Nevada, Georgia, and Missouri. Bringing people back to Mississippi not only helps families, it enables businesses on the Gulf Coast to have the skilled workers they need to continue the recovery and to grow.

In addition to the NEG funds, MDES received \$8 million in workforce development funds from the Department of Labor. These funds have been used by the state's community and junior colleges to provide training and employment in high-growth and high-demand fields. Specifically, \$5 million has been focused on construction related job training, with the remaining targeted for other high demand jobs.

Workforce Investment Network. The Workforce Investment Network (WIN) system, through four local Workforce Areas, responded quickly to the special demands created by Katrina. The partnerships among the Workforce Areas, MDES, and other agencies were strengthened following Katrina, and the forty-three WIN Job Centers throughout the state have continued to expand service delivery options to meet the employment service needs of both job seekers and employers.

In the weeks following Katrina, MDES learned that customers appreciated having the option to use the MDES website and a toll-free number to access services. Learning from that experience, MDES has expanded its call center capacity and is also offering more website services, including job postings for employers.

In May 2007, job seekers and employers were offered a unique job fair experience with the first statewide live job fair telecast from the Mississippi Public Broadcasting studios in Jackson. MDES employees staffed a bank of phones to answer callers' job search questions and to refer them to job opportunities. Over 300 calls were received during the two-hour program.

AGRICULTURE

The Mississippi Department of Agriculture and Commerce's (MDAC) continued role in Hurricane Katrina's year two disaster recovery continued in the following categories: disbursement of federal disaster payments, insect and invasive species control, farm stabilization, animal safety and security, farm equipment recovery, and public awareness for federal and state support programs.

MDAC was directed by the Governor's Office to be the lead agency in the dispersal of two aquaculture disaster grants and a livestock feed assistance grant due to Hurricane Katrina and the subsequent drought. Applications were completed for these programs and disbursements of approximately \$11 million have been paid to Mississippi farmers for damages and feed loss.

The Department's Bureau of Plant Industry, in cooperation with the Mississippi Department of Health, monitored and regulated mosquito control in the Gulf Coast counties. The inspection of insect control sys-

HURRICANE KATRINA TWO YEARS LATER

tems involved disbursement of chemical insect control products and the application equipment that would effectively manage the insect problem. MDAC, through the Bureau of Plant Industry, also took on the task of combating the spread of invasive species and pest plants such as cogongrass, privet, and Chinese tallow.

The Mississippi dairy industries suffered tremendous losses. Since Hurricane Katrina, approximately 20 percent of dairy farms in Mississippi have closed. Commissioner Lester Spell, in cooperation with the Mississippi Farm Bureau, Mississippi State University, members of the legislature, and the Office of the Governor, worked to secure the Milk Producers Transportation Cost Assistance Loan Fund for struggling dairy producers. This zero-interest loan program will enable dairy farmers to offset some of the increased cost of transporting milk to area processors.

MDAC's Market Development Division made regular announcements of state and federal assistance programs for Mississippi producers in their bi-monthly Mississippi Market Bulletin. This informative farm bulletin is received by approximately 50,000 subscribers and allowed for informative news and contact information for farm-based programs in relation to Hurricane Katrina.

The Mississippi Board of Animal Health has been coordinating preparedness and response activities for animal issues during disasters. This involves working with county emergency managers to implement an Emergency Support Function for animals (ESF-11) at the county level, recruiting and training volunteers for Mississippi Animal Response Teams (MART) and finalizing a Pet Sheltering Plan for Mississippi. MART teams will be activated during emergencies to help care for the animals at "Pet Friendly" Shelters that will be established around the state during times of evacuation. In addition, the board has worked with MEMA and other state agencies to address pet issues for individuals involved in the Governor's Coastal Evacuation plan. Also, the Mississippi Animal Disaster Preparedness Program has been implemented, which encourages livestock owners to register with the Board of Animal Health, so that during times of disaster or disease outbreak, farmers can be contacted in a timely manner.

The Department's Agriculture and Livestock Theft Bureau assisted in a task force in recovering lost or stolen equipment in the Mississippi coastal counties. This task force was successful in their efforts finding several pieces of equipment being used in clean-up efforts and returned them to their rightful owners.

CONCLUSION

The state has sought to assist the efforts of private industry through grants that have helped businesses pay employees, enabled cities to revitalize their commercial districts, and provided funds for struggling farmers.

Ultimately though, these industries, drawing on the improvement in other sectors of the renewal, will lead their own recovery.

A Closer Look

Tourism: The Lifeblood of the Coast's Economy

Before the Hurricane Katrina, dollars spent by visitors to Mississippi's Coast provided a significant boost to the state's economy. Plans for the Coast's tourism recovery are setting goals even higher.

The tourism industry is coming back strong. All beaches are clean and open. In July, there were almost 11,000 hotel rooms in operation, a number that is 63 percent of the pre-Katrina total. Restaurants, museums and shops are back in service, and Gulf Coast casinos are posting record revenues. Gulf Coast communities are also embracing the collaborative planning and design efforts that will enhance each district's unique qualities, giving visitors more reasons to enjoy their stay in Mississippi.



EDUCATION

Federal Assistance - Education

Hurricane Katrina Education Recovery Act	\$323 million
Higher Education Recovery	<u>\$122 million</u>
Total	\$445 million

The quick recovery of the state's educational institutions has been one of the shining achievements after the storm. The importance of schools, not just to children, but also to families and communities, is something we often take for granted. The accomplishments of school administrators and schoolchildren, while dealing with everything that Hurricane Katrina dealt them, deserves much praise.

K-12 EDUCATION

When Hurricane Katrina struck on August 29, 2005, schools had just begun a new year. New routines were still being established and children in new schools were just beginning to learn their way around the hallways. And then the hallways were gone—along with walls, roofs, desks, books and everything else in between. Yet, even in the face of this destruction, school leaders were undeterred. While suffering personal losses due to the hurricane, school administrators, teachers and other staff members worked tirelessly to return students to the classroom.

Mississippi Gulf Coast Public School District Opening Dates After Hurricane Katrina

September 26	Biloxi, Moss Point, Ocean Springs
October 3	Gulfport, Harrison County, Jackson County, Long Beach, Pascagoula
October 6	Pascagoula
October 10	Hancock County, Pass Christian
November 7	Bay St. Louis-Waveland

School personnel understood the critical role that schools played in the recovery effort. Families could not return to the area without schools for their children to attend. Children could not afford to lose a year of academic progress because of the events of one day.

All but one school district reopened by mid-October, with the only delay in the last district due to lack of portable classrooms and the inability to repair the infrastructure adequately to put the classrooms in place.

Educational Performance. The incredible speed with which school districts reopened is just the beginning of the amazing success story. Certainly, if test scores had been less than stellar, it would have been understandable. After all, students, teachers and administrators were living in uncertain conditions. Many were living in very cramped quarters in FEMA trailers. Many were battling insurance companies so that they were unsure if rebuilding their homes would ever be a possibility.

And yet, despite these adversities, the results of the state tests administered in Spring 2006 revealed that the students had not just held their own during the year of Katrina, they had excelled.

Of the 122 schools in the 16 school districts in the six southern-most counties, 63 were rated Level 5, Superior-Performing under the Mississippi Accountability System. In addition, 39 schools were rated Level 4, Exemplary and 30 schools were rated Level 3, Successful. None of their schools were rated Level 1 or Level 2, Under-Performing. Four school districts, Ocean Springs, Jackson County, Pass Christian, and Long Beach, had all of their schools rated Level 5.

Three of the four schools selected by the U.S. Department of Education as Blue Ribbon Schools in 2005, based on 2004 results, were from the Gulf Coast, including Gautier High School and Pascagoula High School in the Pascagoula School District and Pass Christian High School in the Pass Christian School District.

The nominees for the storm year were also from the Coast and South Mississippi, including Long Beach Senior High School, Petal High School, Biloxi High School and Bayou View Elementary in the Gulfport School District.

Aid Received. These school districts have received a tremendous amount of help along the way. The outpouring of support from schools, churches, nonprofit organizations and corporations immediately following the storm was overwhelming. From prom dresses donated by high school girls, to a BellSouth Grant for the Mississippi Virtual Public School that is still helping students complete requirements for graduation online, to state-of-the-art technology components donated by Cisco Systems, Mississippi schools have been fortunate to be the recipients of such generosity.

In addition, Mississippi's schools have received over \$323 million in federal dollars through the Hurricane Katrina Education Recovery Act. They have received \$100 million in Emergency Impact Aid for Displaced Students, \$222 million through the Immediate Aid to Restart School Operations and \$687,000 in funds for homeless education.

HURRICANE KATRINA TWO YEARS LATER

Current Status. Schools continue to make progress in the rebuilding process, but there is still a long road ahead. While many of the facilities that received mild, moderate or even severe damage have been repaired and are being used, some of the schools that were completely destroyed have not yet been replaced. Some districts are waiting on FEMA approval of the proposed sites to proceed with building new facilities.

Enrollment continues to grow but has not yet reached pre-Katrina enrollment levels. Before the storm, enrollment in the school districts in George, Hancock, Harrison, Jackson, Pearl River and Stone counties was 76,980. In the last month of the 2006-2007 school year, enrollment was 72,332 in the same districts, equaling 94 percent of pre-Katrina students.



HIGHER EDUCATION

In June 2006, the Board of Trustees of State Institutions of Higher Learning (IHL) reaffirmed its commitment to the Mississippi Gulf Coast by announcing that the University of Southern Mississippi's Gulf Park Campus, nearly destroyed by Hurricane Katrina, would be rehabilitated and an additional Southern Mississippi campus on the Coast would be created to meet the growing needs of Mississippi's educational landscape.

To this end, the Board created the Office of Gulf Coast Operations to be responsible for assessing and meeting the changing educational needs of the Mississippi Gulf Coast. This includes oversight of the establishment of the additional Coast campus to be led by Southern Miss and the rehabilitation of the University of Southern Mississippi Gulf Park Campus in Long Beach.

Additional USM Campus. State demographers have forecasted the population on the Mississippi Gulf Coast to grow substantially in the near future. In June 2006, the Board began seeking land for the establishment of an additional campus that would be capable of meeting the educational needs of this growing population. From the outset, the Board stressed that the land must be centrally located and easily accessible to any Mississippi Gulf Coast resident who desires a higher education, and highly visible to serve as a constant reminder that education is the key to a brighter, more prosperous future.

After considering multiple sites, the Board selected Cross Creek as the best site for the project. The Cross Creek site is approximately 200 acres located just north of I-10, five miles from the Gulf Park Campus and two miles from Hwy 49. The land was donated to the Board.

Next steps include a master academics and facilities plan for the additional campus, including a review of all IHL offerings and facilities for potential reconfiguration and integration of programs. Regular updates can be found by visiting www.mississippi.edu/gulf_coast.

USM Gulf Park Campus. The Board's Office of Gulf Coast Operations, in conjunction with the University of Southern Mississippi, has been hard at work this past year rehabilitating the Southern Miss Gulf Park Campus at Long Beach.

The Gulf Park campus began hosting a limited number of classes on the Gulf Park campus in Long Beach for the spring 2007 semester.

The university also opened three additional buildings and two new quad units in the Student Service Center in Gulfport in the spring, making available much needed office and classroom space. In the fall of 2007, Southern Miss plans to resume day-time classes with the opening of the Gulf Park Library and Advanced Education Center in Long Beach. In addition, the Holloway and Business complex are operational.

The university began construction on a new Technology Learning Center with the help of a \$1.6 million grant through the Mississippi Department of Rehabilitation Services. Originally required to be completed by September 2007, recent federal time extensions will allow consideration of additional funding sources for increasing costs.

Next steps include a master plan for the Gulf Park campus to meet the long-term, sustainable educational mission for this site. Regular updates can be found by visiting www.mississippi.edu/gulf_coast.

Hattiesburg Campus Repairs. On the Hattiesburg campus, the cost of recovery was \$15.7 million, which included damage to facilities, loss of building contents such as furniture and equipment, and debris removal.

Repairs to affected facilities are largely complete, which include new roofing on several buildings. Some of the roofing work included clay tile roofs for several of the historic structures and new copper cladding on the university's iconic Aubrey K. Lucas Administration Building. Roofing work on Reed Green Coliseum has also been completed.

New Academic Programs. The University of Southern Mississippi's film program will move from Hattiesburg to the university's Gulf Coast Student Service Center in Gulfport in August, which is the first step in the university's overall plan to build a full-scale academic program in entertainment industry studies on the Coast.

The relocation of the film program and the creation of an Entertainment Industry Center on the Gulf Park campus are designed to capitalize on the state's efforts to attract the entertainment industry to the Coast. Initial plans to relocate the film program in August 2006 were cancelled after Hurricane Katrina.

The only bachelor of science in marine science degree in Mississippi will be offered starting in the fall of 2007 at the Gulf Coast Student Service Center in Gulfport. This new undergraduate degree program will educate students in the multidisciplinary field of marine science and provide a basic understanding of oceanic processes. The development of the bachelor's degree in marine science was in response to a specific request by the U.S. Navy who wanted the program available to its enlisted personnel.

Recovery Aid. The University of Southern Mississippi's libraries at the Gulf Park and Gulf Coast Research Laboratory sites also were grant recipients from SOLINET, a nonprofit membership organization representing 2,600 libraries in 10 Southeastern states and the Caribbean. Southern Miss received two grants of \$25,000 each, one for the library at GCRL and the other for the library at the Long Beach campus. The SOLINET grants were funded through the Mellon Foundation.

In August 2006, the U.S. Department of Education awarded \$4,322,893 to Southern Miss through the Hurricane Katrina Foreign Contributions fund, to be used mostly for reconstruction.

Hurricane Katrina Research Center. During the past year, the university announced appointments of staff and faculty to head the Katrina Research Center that will serve as a public clearinghouse and repository for historical information related to the storm.

Researchers also plan ongoing academic study of the storm and its effects, whether natural, physical, social, political or economic.

Southern Miss is taking the lead in trying to ensure that the memories, stories, and artifacts related to Hurricane Katrina are preserved and documented. In addition, Southern Miss faculty and staff are also committed to uncovering the lessons and effects from the storm and sharing them with the rest of the country and the world.

Among the donations so far are nearly 1,000 photographs by Keith Fishman, a nationally-renowned photographer who came to assist his brother with medical relief efforts in Hattiesburg immediately after the storm.

The center will be located on the third floor of the Gulf Park Library in Long Beach. Items for the collection and sources of funding are being sought. More information is found online at www.usm.edu/katrina.

CONCLUSION

While the impact of Hurricane Katrina is still evident in many facets of life on Mississippi's Gulf Coast, the schools in the area have made tremendous progress and overcome numerous obstacles and adversities to provide an excellent education for the boys and girls of that area. While recovery is not yet complete, there is no doubt that the schools on Mississippi's Gulf Coast will emerge from the recovery process as even greater centers of educational excellence than they were in 2005.

A Closer Look

Schools Will Double As Hurricane Shelters

Two Gulf Coast schools are being rebuilt with more than education in mind. The new West Harrison High School and D'Iberville High School are using construction techniques that will upgrade the schools to standards providing almost total protection from hurricanes and tornadoes.

Once completed, the schools will be used as storm shelters, and will protect more than 5,000 residents in the event of extreme weather. The construction of these schools is just one example of how the state is incorporating disaster mitigation into rebuilding efforts.

HURRICANE KATRINA TWO YEARS LATER

HEALTH AND HUMAN SERVICES

Federal Assistance - Health and Human Services

Uncompensated Care Program	\$640 million
Social Services Block Grant	\$128 million
FEMA Crisis Counseling	<u>\$25 million</u>
Total	\$793 million

Hurricane Katrina had a profound effect on health and human needs. As with other sectors, the physical damage to facilities was overwhelming. At the same time, the storm created a greater need for these services, especially in the areas of mental health and social service needs. The combination of these by-products required a major response from the state and human services sector.

During the first year, the state did much to combat these problems. The Mississippi Department of Human Services provided economic assistance to over 500,000 Mississippians. This assistance included food stamps, delivery of water and meals, help paying utility bills, home repairs and replacement of household appliances, and child care services. The Department is now focusing on assistance that goes beyond the initial phase of recovery.

Although over 30 percent of the state's hospitals received significant damage, all were repaired and operating within a year. Efforts were then directed to expansion of facilities and services, retaining professionals, and improving health information systems.

The Mississippi Department of Mental Health provided crisis counseling to hurricane victims immediately after the storm, and continued to offer therapy in 2007.

HEALTH

The physical repair of the Gulf Coast medical infrastructure has nearly been completed. Doctors whose clinics still need repairing are operating out of temporary buildings. The state has also focused on other areas of health care infrastructure.

Social Services Block Grants. The primary mechanism for advancing recovery has been the Social Services Block Grants (SSBG) appropriated by Congress in December 2005. The grants, totaling \$128 million, are aimed at health services, mental health services, and for the repair, renovation and reconstruction of health and mental health facilities. SSBG can also be used for other areas of human services.

These funds were initially required to be expended by September 2007. In May 2007, Congress extended this timeframe to September 2009.

Besides repairing storm damages, SSBG is being used to restore care services, develop storm-proof infrastructure, hire and retain health care professionals, and improve information systems.

Nearly 70 SSBG grants have been approved by the Mississippi Department of Human Services. Major grants include nearly \$8 million to the Coastal Family Health Center to restore primary health care services in the southern-most three counties, and almost \$3 million to the Singing River Hospital System for emergency preparations and employee pay.

Retaining Professionals. Governor Barbour has set aside \$10 million of SSBG to help hospitals along the Gulf Coast recruit and retain health care professionals.

Funds are available to the following hospitals: Singing River Hospital System (including Singing River Hospital and Ocean Springs Hospital), Biloxi Regional Medical Center, Memorial Hospital at Gulfport, Hancock Medical Center, Garden Park Medical Center and Gulf Coast Medical Center.

This grant money will be extremely helpful in keeping experienced medical staff, as well as luring qualified providers to meet the medical needs of the Gulf Coast.

MENTAL HEALTH

Hurricane Katrina created an incredible strain on the lives of Mississippi citizens. To help alleviate the strain and distress, the Mississippi Department of Mental Health (DMH) applied for and received federal grants for the Crisis Counseling Program, Youth Suicide Prevention and Supplemental Emergency Relief.

Project Recovery. Project Recovery provides services following a disaster that are beyond the scope of state and local resources. Project Recovery provided crisis counseling services through community outreach, public education and referral.

Project Recovery was funded through a FEMA grant and administered by the Substance Abuse and Mental Health Services Administration (SAMHSA). Crisis counseling grant funds were awarded through two funding mechanisms. The first funding mechanism was the Immediate Services Program (\$2,819,878). The second funding mechanism was the Regular Services Program (RSP) which provided funds for nine months. The RSP

(\$19,975,167) was awarded to DMH on February 15, 2006. According to the guidelines for the RSP, the program was scheduled to end November 15, 2006.

Based on the mental health needs identified on the Mississippi Gulf Coast, DMH requested a no-cost extension to this program. DMH was awarded the extension through May 15, 2007.

In addition to extending the program, DMH also identified the need to provide a higher level of crisis counseling services to individuals on the Coast. DMH submitted a change of scope proposal to provide Specialized Crisis Counseling Services (SCCS). SCCS were provided by teams comprised of a master's level mental health professional and a resource coordinator. SCCS targeted recipients who had a higher level of distress and needed more support and resources than could be offered through the traditional crisis counseling program.

Through the outreach program and Helpline services, Project Recovery was able to touch many lives in Mississippi. During the course of the program, 366,604 individual face-to-face encounters were documented. The majority of these encounters were made in the individuals' place of dwelling. This may have included a shelter, FEMA trailer, relative's residence, etc. Additionally, the Project Recovery Helpline became a listening ear and a link to services for more than 11,000 Mississippians who accessed it at all hours of the day. SCCS were made available to 346 individuals.

Based on the increasing demand for mental health treatment services on the Mississippi Gulf Coast, DMH submitted a request to FEMA that any remaining funds from Project Recovery be directed towards mental health treatment. As of June 2007, DMH has been notified by FEMA that this request was denied based on a provision set forth in the Robert T. Stafford Act and current crisis counseling program guidelines.



Youth Suicide Prevention. In October 2006, DMH was awarded \$400,000 per year for three years by SAMHSA to develop and implement suicide prevention and early intervention activities to youth directly impacted by Hurricane Katrina with concentration in the coastal counties.

The project provides training for individuals in middle and high schools, as well as in community colleges and universities. Participants are trained in effective practices and programs for recognizing youth at-risk for suicide and making appropriate referrals for mental health and other interventions that may be needed. The grant has also provided for professionals at community colleges and local universities to receive intensive specialized training in identifying and intervening with young people ages 18 to 24 years old who appear to be at risk for suicide.

Social Services Block Grants. DMH received \$10 million in SSBG funds. These funds were used for restoration of day treatment and other services for children and adults, building repairs, patient transportation, staff retention supplements, and to bridge other budget shortfalls.

The Gulfport Memorial Hospital is using a portion of their \$10 million SSBG to restore a rehabilitation unit for mental health treatment, and Project Relief, involving licensed mental health professionals in Mississippi, has received SSBG funds to provide healthy coping skills and improve the self-sufficiency of coastal families.

INDIVIDUAL AND FAMILY ASSISTANCE

The Mississippi Department of Human Services (MDHS) has been instrumental in restoring basic human services and helping to rebuild lives across Mississippi's Gulf Coast.

Senior Services. The MDHS Division of Aging and Adult Services has actively sought out the needs of senior citizens after Katrina. The Division has partnered with local Area Agencies on Aging (AAA) to restore, rebuild or repair senior center services to the Gulf Coast using \$13 million in SSBG funds. Out of these funds, Southwest AAA provided \$230,000 in assistance to seniors for repairs or modifications to their homes. About 46 clients were served through this endeavor.

MDHS also established partnerships between local county and city governments to provide local support for retirees.

Technology gaps in the Mississippi Aging Network were identified after Katrina. Procurement and implementation of a new secure Information and Referral Service will be complete by the end of October 2007.

HURRICANE KATRINA TWO YEARS LATER

Child Support. The MDHS Division of Child Support Enforcement used \$4 million in SSBG funds to hire additional Child Support Enforcement officers to work through the backlog of cases representing lost files on the Gulf Coast and replace computer equipment in the Katrina affected areas.

The Division also took measures to prepare for future disasters. Mississippi Debit MasterCard, direct deposits and Western Union disbursement methods were implemented to ensure that clients will receive their child support payments in the event of another disaster. Accurant, a new location tool, has been implemented to locate custodial and noncustodial parents during disasters.

Child Care. The MDHS Office for Children and Youth (OCY) is playing a major role in the restoration of the age-appropriate playground infrastructures at licensed and unlicensed child care facilities in 18 of Mississippi's hardest hit counties. Additionally, OCY is providing training, educational materials and miscellaneous repairs and equipment to these centers.

As of July 2007, the Division has installed 206 age-appropriate playgrounds, and delivered educational materials to 105 licensed centers. Many licensed centers have requested additional replacement materials which are also being purchased and distributed.

Community Services. The MDHS Division of Community Services was awarded \$8 million in SSBG funds to assist in the rebuilding of homes. These funds will restore clients to pre-hurricane status. Services include home repairs, septic tanks, water line repairs, furniture, appliances, bedding, debris removal, short-term rent, personal items, food, clothing, shelter, health/mental health care, medication and medical equipment. As of July 2007, over 414 homes have been completed.

Social Services Block Grants. SSBG have been given to non-governmental institutions such as the United Way of South Mississippi, International Relief Organization, N.E.E.D.S., Gulf Coast Women's Center for Nonviolence, Progressive Outreach with Energetic Resolution, Manna Ministries and YOUTHBUILD Americorps.

Services provided by these groups include economic assistance, case management and referral, repairing and rebuilding homes, distribution of food and clothing, and other unmet needs.

CONCLUSION

The comeback of the physical infrastructure of the health and human services sector is nearly complete, but some clinics need repairs or rebuilding. Efforts to retain and recruit medical professionals and to develop health information systems will bolster a long-lasting recuperation of the medical industry on the Coast.

MDHS had done an exemplary job in meeting the needs of hurricane victims. While the need for these services is decreasing, this agency will continue to monitor and provide assistance when necessary.

While great efforts have been made, the mental health aspect of recovery will continue to require attention in the coming years. The public mental health service system, especially in the Coast area, was severely compromised in this disaster, yet the need for these services is overwhelming and will continue to challenge the mental healthcare system. The public mental health system is struggling to rebuild in order to meet the increase in demand for services.

Emotional healing will take years. The fear, stress, anxiety and depression will more than likely intensify as a new hurricane season approaches.

A Closer Look

Marsha Barbour Community Resource Center

In May 2007, the groundbreaking for the Marsha Barbour Community Resource Center took place. The center, which includes a swimming pool, basketball court, wellness center, meeting space and computer workstations, was named in honor of First Lady Marsha Barbour for her dedication to the Coast in the aftermath of the storm.

The center is located in Pass Christian and funded through private donations from the Mississippi Hurricane Recovery Fund and other sources. In July, Clyde Drexler and other stars of the NBA and WNBA joined the first lady to dedicate the center's basketball court. The players held a basketball camp attended by over 200 area children.



ENVIRONMENTAL AND MARINE RESTORATION

Federal Assistance - Environment

U.S. Army Corps of Engineers	\$267 million
NOAA Marine Resources	\$37 million
Total	\$304 million

Although Mississippi's coastal environment suffered extensive damage from Hurricane Katrina, much work has been accomplished during the past two years to restore the environment to its pre-Katrina condition. Since the storm, the Department of Environmental Quality, the primary state agency overseeing environmental efforts, has spearheaded activities that promote a healthy Mississippi coastline. The Department of Marine Resources has worked diligently to restore coastal habitats, and the U.S. Army Corps of Engineers will soon begin projects to assist coastal communities with beach restoration and repairs.

Combined efforts from both federal and state agencies have been—and will continue to be—a critical part of restoring Mississippi's environment to pre-Katrina levels.

ENVIRONMENTAL QUALITY

After Hurricane Katrina, the Mississippi Department of Environmental Quality (MDEQ) in conjunction with state and federal partners worked hard to evaluate environmental conditions along the coast. Air, water, soil sediment, fish, shrimp, and crabs from the Mississippi Sound and surrounding areas were monitored through multiple studies, with each study indicating very limited chemical contaminants as a result of the storm. In fact, Katrina's 30-foot storm surge seemed to have a temporary cleansing or flushing effect on some coastal systems.

Although the frequency of studies has since been reduced, continued monitoring of the Gulf Coast by MDEQ is an important effort to ensure a safe return to normal environmental conditions.

Environmental Monitoring. Other monitoring efforts are being undertaken to ensure public safety along the Gulf Coast. To protect the public, MDEQ, with support from the Gulf Coast Research Laboratory and the Beach Monitoring Task Force, has re-established the Beach Monitoring Program to advise the public of potential health risks if bacteria concentrations exceed State Water Quality Criteria. To maintain the health and quality of life of coastal residents and visitors, MDEQ and the Gulf Coast

Research Laboratory are working together to monitor mercury levels in fish tissue to evaluate health risks associated with eating these fish. In addition, MDEQ is continuing to coordinate the removal of hazardous materials and containers still being found in the woods or remote areas.

In April 2007, MDEQ received an \$897,000 Post Katrina Supplemental Air Monitoring Grant from the U.S. Environmental Protection Agency (EPA) to improve air monitoring capabilities along the coast as well as to increase the state's ability to respond and continue functioning following another hurricane or other disaster. These funds will be used to replace air monitoring sites and equipment destroyed by the storm; strengthen existing air monitoring sites; purchase satellite radios that will improve communication abilities; and install a backup generator for the MDEQ laboratory to prevent the loss of key environmental samples and data.

The MDEQ Asbestos Projects Section has been very active in ensuring that demolition and renovation activities being performed as a result of the damage created by Hurricane Katrina are conducted in a manner resulting in a safe environment and in compliance with asbestos regulatory requirements. MDEQ has worked hard to continue the No Action Assurance Agreement with EPA, which has expedited the removal of thousands of damaged houses. Currently, the MDEQ Asbestos Projects Section is monitoring demolition projects on a weekly basis.

Although federal funding for the National Coastal Assessment Program ended in 2006, MDEQ is partnering with the Gulf Coast Research Laboratory and the Department of Marine Resources to continue this water quality monitoring program, which is vital to evaluating the quality of Mississippi's coastal waters and the implementation of the Governor's Gulf Region Water and Wastewater Plan.

Disaster Preparedness. MDEQ has also been active in strengthening Mississippi's ability to respond in the event of another natural disaster or security event. One measure MDEQ has taken is to revise its Response Plan to improve coordination and communication with local MEMA, FEMA, sister agencies and local governments. MDEQ has trained additional staff, including National Incident Management Systems training, in order to better coordinate with other agencies and properly document expenditures to ensure state funds expended are eligible for FEMA reimbursement. Also, MDEQ has acquired additional FEMA trailers and equipment to serve as temporary housing and office staff when responding to incidents. To test agency preparedness, MDEQ participated in the Hurricane Zora Disaster drill in May 2007.

HURRICANE KATRINA TWO YEARS LATER

COASTAL RESTORATION

The Mississippi Department of Marine Resources (DMR) is leading efforts to restore coastal areas. Major efforts have been conducted to rehabilitate coastlines, marine habitats, and coastal waters.

Corps Projects. Under a Congressional directive, the U.S. Army Corps of Engineers and DMR have worked together to prepare an interim report detailing what could be done in the near-term to restore and renew coastal Mississippi, including the cost of the plan and how the plan should be implemented. The Final Interim Report describes 15 specific restoration projects at a projected cost of \$107 million and also identifies 11 additional restoration/flood reduction projects in Coastal Mississippi (estimated by DMR to cost an additional \$41 million.)

After the report's release, Governor Barbour asked Congress for funding to implement these interim projects, which include beach restoration, rebuilding and repairing seawalls, and constructing flood control measures. Through the efforts of the state's Congressional delegation, Congress acted quickly, approving \$107 million with the next Katrina appropriations package in May 2007.

Hurricane Katrina exposed the vulnerability of Mississippi and Louisiana to powerful storms; long-term protective measures are needed to guard exposed areas. The federal government has allocated billions of dollars for rebuilding the levees around New Orleans to protect the city from hurricane-caused flooding. Likewise, federal funding will be needed for the restoration and conservation of Mississippi's ecological systems to protect the state's coastline from future hurricanes.

An upcoming report from the Corps will identify long-term coastal restoration and hurricane protection measures, such as the restoration of the barrier islands and other coastal lands important to both the ecology and protection of the Mississippi Gulf Coast. The state will seek an estimated \$8.5-\$10 billion for these projects.

Coastal Impact Assistance Program. The Coastal Impact Assistance Program (CIAP) was established by the Energy Policy Act of 2005 to assist states and their coastal political subdivisions (CPSs) in mitigating the impacts from Outer Continental Shelf (OCS) oil and gas production. The CIAP legislation appropriated \$250 million per year for fiscal years 2007 through 2010 to be distributed among eligible producing states and their counties. Mississippi is one of six states eligible to receive CIAP funds, and Hancock, Harrison and Jackson Counties are eligible counties within Mississippi.

Authorized uses of CIAP funds include mitigation of damage to fish, wildlife, or natural resources; conservation, protection, or restoration of coastal areas activities; implementation of federally approved marine, coastal, or comprehensive conservation management plan; and mitigation of OCS activities through funding of onshore infrastructure projects and public service needs.

The Mississippi CIAP Plan identifies projects to be funded through sub-grants awarded by the State and counties based on the estimated allocations for fiscal years 2007 to 2010. The State will receive 65% of the total allocation and the counties will receive 35%. The county allocation is as follows: Hancock County - \$8,281,986, Harrison County - \$16,546,000, Jackson County - \$16,920,941 and State of Mississippi - \$76,221,805.

In 2005, Governor Haley Barbour designated DMR as the state's lead agency to coordinate CIAP. Over the past two years, DMR has worked cooperatively with the three coastal counties via their Boards of Supervisors, their designated points of contact, and many other collaborators to identify goals for the Mississippi CIAP Plan and to propose coastal restoration, protection, enhancement and conservation projects and infrastructure projects. These projects will serve to improve the health of the coastal ecology and improve the quality of life for all Mississippians, particularly those living in our coastal communities. The state and counties enlisted the assistance of advisory committees, hosted public meetings and invited proposals from agencies, nonprofits, educational institutions and others. All proposed projects were rated based on criteria established by the state and counties. The projects will be implemented through a series of sub-grants to partners to meet the CIAP goals as established by the State and counties.

Marine Debris Removal. DMR is continuing its work with FEMA, U.S. Coast Guard, and other agencies to organize and implement the debris removal process. To date, over 113,000 cubic yards of



Coastal restoration on the Mississippi Sound

marine debris have been removed in the three coastal counties, including from mean-high tide to four miles into the Mississippi Sound. The vast majority of marine debris has been removed.

In September 2006, boaters and land-based volunteers flocked to Mississippi's beaches, islands and waterways to pick up marine debris at 43 designated cleanup sites during the 18th annual Mississippi Coastal Cleanup, part of the International Coastal Cleanup and organized jointly by DMR and the Mississippi Marine Debris Task Force. More than 3200 volunteers picked up 31.6 tons of trash along 147 miles of Coastal waterways in Hancock, Harrison and Jackson Counties and the Barrier Islands during the cleanup.

Various volunteer groups, working with DMR Coastal Preserves, have removed over 20 tons of debris from Deer Island. Volunteers have worked in the Pascagoula River and other areas to remove debris.

Public Affairs at DMR has continued to promote the awareness of storm debris hazards in our marine waters and shoreline through the local media and to keep the public informed of the progress of the marine debris removal effort.

MARINE HABITATS

Hundreds of acres of coastal marshes and water bottoms were covered with storm debris after Katrina hit the Gulf Coast, which prevented these areas from functioning as essential habitats for important commercial and recreational species—such as shrimp, crabs, and finfish. However, DMR reports that many of these areas have already been cleared of debris and have been restored to pristine conditions. Efforts are ongoing to remove the remaining debris from these coastal areas.

Oyster Habitats. Because oysters are a long-term crop, total recovery from Hurricane Katrina may take years, and the full effects of the storm on shellfish populations may not be understood for a decade. However, DMR continues to monitor various aspects of oyster habitats in an effort to gather evidence relating to the current state of the shellfish population along the Mississippi Gulf Coast.

The DMR Shellfish Bureau is continually monitoring and assessing the oyster reefs damaged by Hurricane Katrina. By identifying and mapping the oyster reefs using side scan sonar and poling techniques with Global Positioning Systems, the areas are analyzed to determine which sites are best suited for cultivation, cultch planting or the relaying of oysters.

From May 2006 to May 2007, the DMR Shellfish Bureau began the oyster reef rehabilitation process by depositing over 71,000 cubic

yards of cultch material to refurbish 710 acres of Mississippi Oyster reefs in the Western Mississippi Sound. The deployment of cultch material, either oyster shells or limestone, is an important process used to provide a clean surface on which larval oysters can attach. The Spring 2006 and Fall 2006 cultch plants have proven successful and are currently growing small juvenile oysters. The planting of cultch material is part of a five-year plan to repair damaged oyster reefs due to Hurricane Katrina.

From November 2006 through January 2007, 84 Mississippi commercial oyster harvesters participated in a program with the DMR Shellfish Bureau to relay oysters from Biloxi Bay and Graveline Bayou to various reefs located in the Western Mississippi Sound. Each harvester was paid for up to 40 sacks per day, and a total of 75,000 sacks of live oysters and shells were transported from this area. These live oysters provide additional brood stock to enhance the recruitment of oyster larvae on cultch plant sites in areas that were damaged by Hurricane Katrina.

In March 2007, the DMR Shellfish Bureau created a newsletter highlighting the various programs that were implemented for the rehabilitation of the Mississippi oyster reefs. This is a useful tool used to share information with the Mississippi oyster fishermen and other stakeholders of our timeline and successes of our current and future restoration efforts.

Fish, Shrimp and Crabs. The shrimp and crab marine resources of Mississippi are recovering well from the impacts of Hurricane Katrina. Shrimp landings have been favorable and blue crab landings for 2006 were the highest in over 15 years. However, the fishery participants have not fared so well. Both shrimp and crab license sales are down by at least half as fishermen struggle to recover. The demand for live bait shrimp is high, as licensed bait dealer facilities have declined from around 30 to the current 13.



HURRICANE KATRINA TWO YEARS LATER

Loss of and/or damage to gear and vessels, high fuel costs and lack of fisheries infrastructure following the storm continue to plague the cultural-ly and economically important coastal industry. Infrastructure requirements desperately needed to revitalize the coastal fisheries include: dock-age space, fuel and ice facilities, and dealer and processor outlets through which to sell shrimp and crab harvests.

As part of the Hurricane Katrina Recovery Grant, commercial shrimp and crab fishermen have been contracted to assist marine resource managers in monitoring the fisheries recovery and have been paid over \$3 million. An additional \$3 million will be used for this coopera-tive project through the fall of 2007. Program participants include 400 Mississippi resident historical commercial fishermen (330 shrimp fishermen and 65 crab fishermen). Over 11,500 individual trip moni-toring tickets have been submitted by the shrimp and crab fishermen outlining valuable information such as fishing locations, gear utiliza-tion, and harvest information.

Since the storm, over 10,000 derelict crab traps have been removed and recycled from coastal Mississippi marine habitats by contracted commercial crab and shrimp fishermen.

Artificial Reef Restoration. Hurricane Katrina resulted in the scour-ing and/or burying of 90 percent of Mississippi's offshore reefs and about 85 percent of nearshore reefs, which prevented the reefs from functioning as reef habitat. As a result, DMR has been continuously working to recover the lost habitat, with a goal to restore 75 percent of reef habitat in five years.

Currently, Hurricane Katrina disaster funds are being used to restore nearshore and offshore reefs. Other funding has been obtained for reef habitat restoration through the National Fish and Wildlife Foundation. Five inshore reefs have been restored and work is continuing. The goal is to complete a total of twenty-five inshore reefs this year.

Along with the restoration of near shore reefs, offshore reef construc-tion is continuing. Since February of 2006, the DMR has deployed six barges of concrete culverts, six steel hull vessels, and 180 Florida Limestone reefs. The Florida Limestone artificial reef has a design that incorporates a true tetrahedron footprint with three panels of limestone rock. The base is a 12-foot triangle with a height of 8 feet and weight of 3.5 tons. Designed reefs are a new material that is being integrated into Mississippi's Artificial Reef Program. Experiences from other states indicate that design materials are more stable in the face of tropical events.

Fisheries Recovery. Katrina funds have been used to enhance five shoreline access sites by restoring surrounding lost low-pro-file reef habitat. Recovery efforts to enhance the shoreline access sites and monitor fisheries are also ongoing. In addition, DMR is working to enhance the state's red snapper stock. Captured fish are being stripped of eggs, and larvae are being raised. Improvements have been made in the algae and copepod produc-tion to provide food for larvae and juvenile red snapper.

SMART GROWTH

Responsible for the coordination and facilitation of smart growth across the coast, DMR's Smart Growth Program, in conjunction with the Mississippi Gulf Coast Chamber of Commerce, continues to host its annual Smart Growth Conference. This regional educa-tional event gains momentum yearly. In 2007, over 500 regis-trants and 24 exhibitors were involved in the outreach for rebuild-ing and development along the coast. Continuing education units were granted to 48 real estate professionals and 19 appraisers.

Governor Barbour along with Chairman Donald E. Powell and Don Chen from Smart Growth America were featured speakers in sup-port of the program's ongoing efforts.

The program supports developments in Harrison and Jackson counties using the smart growth principles, and has also been instrumental in working with city planners and elected officials to encourage responsible rebuilding efforts.

GIS Storm Recovery Support. The GIS Storm Recovery Support provides an array of important information, including: Coast-spe-cific geospatial datasets to federal, state, county, city, and NGO entities; the production of digital and hardcopy mapping-related media for recovery-related projects, such as NGO Conservation Area Priority Model and CRMP Potential Land Development Suitability Model; development of mobile mapping and data col-lection procedures and protocol including hardware and software selection, digital collection methodology, and map output produc-tion; acquisition of historical aerial imagery in a georeferenced digital format to support long-term habitat restoration; and devel-opment of a digital wetland permit tracking database to establish baseline inventory of shoreline structures and potential impacts. Additional benefits provided include tracking of wetland impact mitigation sites; mapping and tracking of potential land acquisi-tion in support of the Coastal Preserve Program and other state/federal hazard mitigation land acquisition activities; and partnerships with federal and state preservation entities to inven-tory and map destroyed/surviving historic structures.

CONCLUSION

The recovery of Mississippi's natural resources is unique in that unlike homes and businesses, which can be rebuilt and reopened, marine resources may take many years to return to pre-Katrina levels. However, the continued efforts of DMR, DEQ and related agencies are expediting this recovery process while respecting the natural progression of the state's marine life and resources. As outlined above, efforts are well underway to restore, enhance, and create coastal marshes, beaches, and forests. Programs like Smart Growth are also instrumental in providing guidance for building back better, stronger, and smarter.

The massive operation to remove marine debris, covering the area from the 80-mile coastline to four miles into the Mississippi Sound is almost totally complete. The state has enjoyed one of the best shrimping seasons it has had in years.

In short, these continuous efforts even two years after Katrina remain an important part of the long-term vision for restoring one of the Mississippi's most precious natural treasures—the Gulf Coast.



A Closer Look

Protecting Mississippi's Coastline

The state is implementing two programs with a focus on converting coastal land into green space. The Hazard Mitigation Grant Program promotes safety from natural disasters, while the Coastal Impact Assistance Program encourages coastal restoration. While under those different purposes, both initiatives fund the purchase of beachfront property for conversion into parks, coastal preserves and beaches.

Besides moving property out of harm's way and preserving environmental areas, these activities serve other goals, such as enhancing the aesthetic beauty of Mississippi's coastline, boosting quality of life and improving the tourism economy.

CONCLUSION

Even after the worst disaster in our nation's history took all that some had, Mississippians did not moan, whine or blame; they simply went about the business of repairing their lives.

Everything that one calls home - neighborhoods, churches, schools, workplaces, parks, personal possessions – was gone in one day, yet these people stood strong.

Governor Barbour has guided a recovery that has strived to be worthy of this spirit. Just seven days after that fateful August day, with the creation of the Governor's Commission, the state put the past behind it and concentrated solely on the future. The tone set early was that in the midst of great tragedy, Mississippi could come back bigger and better than ever before.

The plans currently in motion will enable a robust recovery in all sectors. Housing remains a critical issue, and the state will work to break down the barriers that are restraining a housing boom.

While great strides have been made the past 24 months, it is important to remember that Mississippi is in year two of a process that will last many years. The most crucial elements for a full revitalization are in place: strong leadership, recovery funding, visionary plans, intelligent policies and most importantly, the personal will of the people that refuses to be broken.

South Mississippi will continue to rely on the strength of its citizens until that day when we will celebrate the emergence of a Mississippi that is greater than we ever imagined.



RECOVERY RESOURCES

To apply for the Homeowners Assistance Program, call 1-866-369-6302. Information on Phase I and Phase II can be found online at www.mshomehelp.gov.

Information on Mississippi Home Corporation programs, including the Mortgage Revenue Bond program, can be found online at www.mshomecorp.com.

Governor's Office of Recovery and Renewal

The Links section of its website, www.governorbarbour.com/recovery/links includes such documents as: the one-year anniversary report, Mississippi Recovery Fact Sheet, Governor's Commission final report, final documents from the Mississippi Renewal Forum (charrette materials), and federal and state legislation related to Hurricane Katrina.

FEMA Press Releases

FEMA news related to Hurricane Katrina recovery efforts in Mississippi is posted on <http://www.fema.gov/news/event.fema?id=4807>.

Phase I and Phase II of the Homeowners Assistance Program

Updates are posted weekly on the Mississippi Development Authority's website, www.mississippi.org. Links to the latest numbers are located in the lower left corner of the front page.



