Prepared for
Pearl River County Board of Supervisors

by
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in association with the
Pearl River County Hazard Mitigation Council
Pearl River County Planning and Development Department
Pearl River County E-911/Digital Mapping Department
Pearl River County Civil Defense

for
Federal Emergency Management Agency
and
Mississippi Emergency Management Agency
Introduction and Purpose

Introduction

Pearl River County is located in the southwestern part of the State of Mississippi, immediately north of Hancock County. Stone and Forrest Counties border on the east with Marion and Lamar Counties on the north. The Pearl River forms the western boundary between Pearl River County and Washington and St. Tammany Parishes, Louisiana.

According to the U. S. Census Bureau, in the years between 1990 and 2000, the population of Pearl River County increased from 38,714 persons to 48,621. Two municipalities, Picayune and Poplarville are located in Pearl River County. The 2000 Census placed the population of those communities at 10,535 and 2,601 respectively, or 33.9 percent of the County’s population. The remaining population resides in the unincorporated communities and rural areas of the County.

Pearl River County’s weather is very diverse and is sometimes is susceptible to high winds and heavy rains from hurricanes making landfall along the Gulf Coast. The northern portion of the county is located in an area recognized by the Federal Emergency Management Agency (FEMA) as a high wind zone. Steams and rivers, particularly the Pearl River and Hobolochitta (Boley) Creek and their tributaries are subject to flooding due to heavy rains and stormwater runoff. Additionally, stormwater flooding along Alligator Branch and its tributaries is a problem in the southern portion of the county in and around the Nicholson Community.

Pearl River County is a growing community. While increased commercial development and population are welcome, they present their own set of problems. New retail establishments are springing up to serve the population, particularly around Picayune. These businesses often pave large areas, displacing storm water and increasing the potential for flooding in areas not affected prior to the development occurring. Previously undisturbed land is being graded to make way for new housing developments. Fill is often introduced to level building sites and natural drainage patterns are disturbed or re-routed, increasing the potential for silting of existing drainage ways and for flooding.

Purpose

The primary goal of the Hazard Mitigation Plan is to recognize natural and man made hazards affecting the citizens of the county and to define activities that can be implemented by the county to mitigate the affects of those hazards for the present and into the future. The Plan has been developed with a Hazard Mitigation Grant Program Planning Grant (HMPG) from the Federal Emergency Management Agency (FEMA) through the Mississippi Emergency Management Agency (MEMA). The plan will qualify the County for participation in the National Flood Insurance (NFIP) Community Rating System (CRS). According to NFIP and FEMA guidelines the plan must be reviewed annually by the Pearl River County Hazard Mitigation Council and County officials. The plan may be updated or amended at anytime the County deems necessary, however it must be updated at least every five years.

The Hazard Mitigation and Flood Protection Plan was developed for the Pearl River County Board of Supervisors, with assistance from the Pearl River County Civil Defense Agency, Planning and Development Department, the Pearl River County Hazard Mitigation Council and county staff members. The ten step planning process required for eligibility in the Community Rating System was used as a guide in
development of the plan. The ten step planning process is also recommended by FEMA in development of local hazard mitigation plans seeking to meet the requirements of the Hazard Mitigation Grant Program and the Flood Mitigation Assistance Program.

A local Hazard Mitigation Planning Council comprised of county, municipal, private sector, and public “at large” representatives was appointed by the Pearl River County Board of Supervisors. The county retained professional planners to facilitate development of the plan. A list of planning council members is located in the Appendices section of the plan.
I. TOPOGRAPHY, CLIMATE, HISTORY AND CURRENT CONDITIONS
I. Topography, Climate, History and Current Conditions

A. Natural Features

Pearl River County encompasses approximately 819 square miles in the southwestern portion of the State of Mississippi. It is bounded on the north by Marion and Lamar Counties, on the east by Stone County and Forrest Counties, on the south by Hancock County and on the west by the Pearl River that forms the boundary between Mississippi and Louisiana. The county seat, Poplarville, is located 125 miles south of Jackson, Mississippi, and 84 miles north of New Orleans, Louisiana. (See Figure 1. Location Map)

Pearl River County is located in the Piney Woods soil area, characterized by rolling hills and ridges. Sixty-five percent of the land area of the County is held in commercial forests. River systems draining the county include the Pearl River, Hobolochitto Creek and their tributaries. The Wolf River also has its source in the northern part of the county and meanders across the county southward to Harrison County where it empties into the Bay of St. Louis (See Figure 2. Land Cover Map).

The climate of Pearl River County is mild with mean annual temperatures in the upper 60’s. Average winter temperatures range from 53 to 60 degrees Fahrenheit with summer temperatures ranging from 80 to 85 degrees Fahrenheit. Rainfall averages approximately 62 inches annually with the majority of the accumulation in July through September. Wind speeds are generally less than 10 miles per hour, but often increase during storms. Thunderstorms occur frequently and are sometimes accompanied by strong to severe winds, including, tornadoes.

B. History of Pearl River County

The first permanent white settlement in the area was established at the Caesar Community when Stephen Jarrell established a trading post at the crossroads of Indian trails at the Hobolochitto Creek in the early 1800’s. Originally known as Center, the name was later changed to Caesar, a nickname white settlers had given to the chief of the Choctaw Indian tribe that inhabited the area. Other early settlements occurred along the Pearl River that forms the western boundary of the county.

Most of the land area that is now Pearl River County was originally organized as Pearl County in 1870; the seat of government was located in the Masonic Lodge building at Byrd’s Chapel, near the Pearl River. In 1878, the building burned, destroying all county documents. At that time, there was only one private owner of land in the county, with the remainder of the area in the public domain. Due to financial difficulties, Pearl County was abolished and the territory given back to Marion and Hancock Counties.

With completion of the New Orleans and Northeastern Railroad in 1890 through the center of the county, a vital transportation link was formed between New Orleans, Louisiana and points to the north. The population and private land holdings also increased in the area and a more successful attempt was made to organize the territory as a county. The name of the failed Pearl County could not be used again so the word “River” was added to the old name, and on February 22, 1890, Pearl River County became a political entity. A site on the rail route owned by “Poplar” Jim Smith was chosen as the County Seat and a courthouse and boarding school were constructed in 1892. It is widely believed that the town took its name from nearby Poplar Creek, although legend attributes the name to the owner of the railroad depot around which the town grew, “Poplar” Jim Smith.
In 1900, the northern portion of the County, including the Town of Lumberton, withdrew from Pearl River County and was annexed by Lamar County. In 1908, land area including Picayune was annexed from Hancock County, giving the county its second municipality. Over the years, a small area of Lumberton has spilled over into northern Pearl River County, with the majority of the community still located in Lamar County, so technically, the county is home to three municipalities, Picayune, Poplarville and Lumberton, at least in part.

The Pearl River Agricultural High School was established in 1909 in Poplarville and in 1922, Poplarville became the home of Pearl River Junior College, the first state-supported Junior College in Mississippi. Now known as Pearl River Community College, the school is still a very important presence in the community and the area. With the county seat of government, its location on the railroad and its central location in the county, Poplarville was the early center for commerce in the county. While the population of Picayune soon outpaced Poplarville’s, the town still holds the distinction of being the seat of government in the county.

The community known as Picayune was originally known as Hobolochitto. Established in 1901 twenty-four miles southwest of Poplarville, the community was founded by J. W. Simmons and became an incorporated village in 1904. With population growth, Picayune was designated a town in 1905 and a city in 1922. Early prosperity can be attributed to the railroad and two large lumber mills, the Goodyear Yellow Pine Company and the Rosemary Company. It later became known as the tung tree center of the world.

An early resident of Hobolochitto, Eliza Jane Poitevent, pioneer newspaperwoman played a role in the town being renamed Picayune when it was incorporated. Miss Poitevent authored stories that were printed in the New York Journal in 1860; under the pen name Pearl Rivers, her work was also published in the New Orleans Picayune, a precursor of the present day Times Picayune newspaper. She was later made literary editor of the newspaper, an almost unheard of position for a woman in that day and time. She married the publisher, Colonel Alva Holbrook and upon his death, became editor of the paper. When she died in 1896, she left the Picayune an established newspaper that has since grown to become the most widely circulated daily newspaper in South Louisiana. When the little town where she had grown up was incorporated, it was named Picayune for the newspaper she published.

C. Historic Natural Disasters

The County has a long history of property damaging flooding along the streams and rivers traversing the County. The Pearl River is the primary river system draining the County. The Pearl River originates in Neshoba County in north central Mississippi and meanders southward to empty into Lake Borgne and the Gulf of Mexico on the Mississippi – Louisiana border. The drainage basin of the Pearl River encompasses approximately 8,760 square miles of central Mississippi.

The primary tributary of the Pearl River located in the County is Hobolochitto (Boley) Creek. Much of the structural flooding that occurs in the county results from the creek overflowing its banks during periods of heavy rainfall. Additionally, Alligator Branch, Dead Tiger Branch and Mill Creek in the southern portion of the county often cause flooding problems in and around the City of Picayune. In the spring when the Pearl River is at flood stage, floodwaters back up into the creeks and tributaries. Periods of extended rainfall, especially in the spring, compound flooding problems.

The Wolf River has its source in the northern portion of the County north of Poplarville. Wolf River meanders eastward across Hancock County and into Harrison County then empties into the Bay of St. Louis and the Mississippi Sound. Wolf River runs through a relatively unpopulated area of Pearl River County and
does not pose a flood threat to the area. Wolf River is designated as a Wild and Scenic stream by the State of Mississippi and the Wolf River Conservation Society was incorporated to promote and ensure the pristine nature of the stream.

Pearl River County is also affected by any hurricane that makes landfall in eastern Louisiana or along the Mississippi Gulf Coast. While it is far enough inland not to receive storm surge or the brunt of damaging winds that affect coastlines, it can be affected by hurricane force straight line winds, heavy rain and tornadoes spawned by those storms.

D. Early Economic Growth

At about the time that Pearl River County came into existence, northern corporate syndicates bought the rights to the virgin, yellow pine forests that covered a large part of the county. Sawmill towns sprang up throughout the area and thrived until the 1930’s, when the pine forests were depleted. With the cessation of logging and closing of the sawmills that provided jobs, many of the little towns and communities were relegated into obscurity, along with the virgin yellow pine forests. Among those were the communities of Anderson, Barth, Bola Junction, Burge Spur, Conn, Elder, Emery, Forena, Loftin, Long Branch, McGehee, New Camp Rowlands, Orvisburg, Tyler, and Wilco.

Other communities in the county managed to maintain their identities, either because of where they were located in the County or because they did not rely solely upon the timber industry for livelihood. Residents of the Ceasar Community always relied primarily on farming for their income. One of the largest turpentine industries in the area was located in Carriere. Crossroads, once known as Strahan’s Ferry was the site of a ferry landing on Pearl River; roads leading to Poplarville, Picayune, Columbia and Bogalusa, Louisiana crossed at this point, thus the name. Several stores also operated there through the years and the community became known for its hardwood chairs, rockers and swings that were constructed there.

Cyber was originally a small sawmill town but later a large satsuma orchard was planted. There were also large tung orchards planted at Cyber. Henley Field, named for the Jeramiah Henley family, was the site of an industrial school. Jackson Landing was originally a flatboat landing site and later a ferry was operated there; a large hardwood mill opened there in 1936. L. O. Crosby donated 400 acres of land for the establishment of a Government Experimental Station for further development of the tung industry in Mill Creek, ensuring the survival of the industry and the town.

Located on the railroad and just south of Picayune, Nicholson was a flag stop for the Pearl River Valley Railroad, the last stop before crossing into Louisiana. The Palestine community grew up around the Palestine Baptist church and most area residents were truck farmers. Waukiah Bluff was the site of an old Indian campground and one of the oldest boat landings on the Pearl River; in later years, the area became a popular recreational area.

In the 1920’s, thousands of acres of cut over timber land were planted with tung trees, particularly in the central area of the County between Poplarville and Picayune. At the time, tung oil extracted from nuts on the trees was in high demand as an ingredient for paint and the availability of cut over, cleared land, combined to create a new agricultural opportunity for the area. A thriving industry for approximately 30 years, the tung industry fell prey to technology with the invention of synthetic paint ingredients in the second half of the century. When the bottom fell out of the tung market, many of the tung tree orchards were bulldozed to make way for pastures or other farming interest. The pale pink blossoms of the remaining tung trees in the spring are living reminders of a long gone industry. Some of the tung orchards were replanted with the pine trees, coming full cycle back to the forestry industry that fueled the early economy of the county.
A largely rural county, agriculture also played a significant role in the early development of Pearl River County. Agricultural interests included cattle, sheep, dairy and hog farming, truck farming and growing of pecans, satsumas and pears. At one time several garment factories operated in the area and in addition to saw mills there were also veneer mills and a plant that extracted turpentine and tar from the stumps remaining after the pine forests were cut. There was also a press to extract oil from tung nuts and cotton gins located in Picayune and Poplarville.

Additionally, brooms and baskets were manufactured on a small scale and muscle shells were harvested from the Pearl River for button making. The Goodyear Yellow Pine Company in Picayune produced bus bodies constructed of pine in the 1930’s and at least one enterprising farmer operated a frog hatchery to produce frog legs that were sold to the New Orleans culinary market.

When the National Aeronautics and Space Administration (NASA) constructed its rocket testing site on the Pearl River in neighboring northwestern Hancock County in the 1960’s, workers were drawn to jobs at the site from all over the country. The influx of new NASA employees were attracted to the southern Pearl River County area in and around Picayune by the pleasant, small town environment and availability of reasonably priced land and many made their homes in the area. Now known as the John C. Stennis Space Center, the north gate of the test site it located southeast of Picayune, allowing an easy commute for space center workers. Incomes earned at the test facility continue to fuel the economy of the City of Picayune and Pearl River County.

E. Current Population and Economic Snapshot

Pearl River County grew by leaps and bounds in the last half of the 20th century. The most significant decades of growth were those between 1960 and 1970, and 1990 and 2000. It is significant that most population does not reside in the incorporated areas of the County. While growth patterns indicate that the majority of growth is taking place near the incorporated areas of the county, growth rates for the municipalities in the county reflect very little population change over the same period.

According to the Census Bureau, in the ten years between 1960 and 1970, the county experienced a 24.1% growth rate and between 1970 and 1980, a 21.6% rate of growth. In the decade between 1980 and 1990, the population growth rate dropped to 14.6%. Between the 1990 and 2000 Census counts, the population increased from 38,714 to 48,621, a 25.6% increase over the 1990 count.

The municipalities in the County experienced far lower growth, Poplarville experienced only 1.5% growth between the 1980 and 2000 Censuses. Picayune grew at the rate of 2.6% between 1980 and 1990 but actually lost 1.0% of its population between the 1990 and 2000 Census counts.

The 2000 Census shows a relatively young population with 42% of the population between the ages of 18 to 44 years of age and 31% between the ages of 0 to 17 years of age. Persons aged 45 to 64 years of age account for 27% of the population with the remainder (14%) ages 65 or older.

1999 County Business Patterns for Pearl River County indicate that more persons work in retail trade than any other segment of the economy. As of July 31, 2001, only 620 of the 20,110 persons in the county’s civilian labor force were unemployed, a rate of only 3.1 percent while the state’s unemployment rate was 4.7 percent. Income and wages in Pearl River County are slightly less than those for the state for the same period. Personal per capita income in the County is $16,639 or 80.6 percent of the state average. The average
wage of $364 is 78.9 percent of that of the state ($462). Table 1. 1999 County Business Patterns shows major sources of employment in the County.

Table 1. 1999 County Business Patterns
Pearl River County, Mississippi

<table>
<thead>
<tr>
<th>Industry</th>
<th>No. Employees</th>
<th>No. Establishments</th>
<th>Annual Payroll ($1000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construction</td>
<td>328</td>
<td>60</td>
<td>$4,812</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>964</td>
<td>41</td>
<td>23,364</td>
</tr>
<tr>
<td>Transportation &amp; Warehousing</td>
<td>295</td>
<td>30</td>
<td>4,630</td>
</tr>
<tr>
<td>Utilities</td>
<td>64</td>
<td>7</td>
<td>2,088</td>
</tr>
<tr>
<td>Wholesale, Retail Trade</td>
<td>2,770</td>
<td>212</td>
<td>41,106</td>
</tr>
<tr>
<td>Finance, Insurance, Real Estate</td>
<td>421</td>
<td>86</td>
<td>9,030</td>
</tr>
<tr>
<td>Services, Health Care</td>
<td>2,534</td>
<td>219</td>
<td>32,838</td>
</tr>
<tr>
<td>Professional, Scientific, Technical</td>
<td>213</td>
<td>57</td>
<td>4,782</td>
</tr>
<tr>
<td>Admin, support, waste mgmt</td>
<td>61</td>
<td>20</td>
<td>981</td>
</tr>
<tr>
<td>Information</td>
<td>142</td>
<td>13</td>
<td>4,195</td>
</tr>
<tr>
<td>Forestry, Agricultural, Mining</td>
<td>108</td>
<td>12</td>
<td>2,700</td>
</tr>
<tr>
<td>Arts, Entertainment, Recreation</td>
<td>73</td>
<td>8</td>
<td>616</td>
</tr>
</tbody>
</table>

Pearl River County is located within 600 miles of many major market centers, including Atlanta, Georgia, Dallas, Texas, Memphis, Tennessee and New Orleans, Louisiana. Port Bienville in Hancock County and the Mississippi State Port at Gulfport are the nearest deep water ports. Major east/west highways are Mississippi Highways 43, 26 and 53 and north/south highways are I-59 and U. S. Highway 11. The Norfolk Southern and Pearl River Valley Railroads operate in Pearl River County.

Natural gas is distributed by the City of Picayune in its jurisdiction and by Reliant Energy and Entex, Inc. in Poplarville. Propane fuel is available from several distributors in the area. Mississippi Power Company, Pearl River Valley Electric Power Association and Coast Electric Power Association provide electricity to the area. The Cities of Picayune and Poplarville maintain a public water system for consumption and sanitary purposes. Both also operate sanitary sewer systems that serve 99% and 95% of the communities respectively. Residents outside of the municipalities rely upon private, community water systems, wells and onsite sanitary sewer treatment systems.
II. PROBLEM IDENTIFICATION
II. Problem Identification

A. Types of Concerns

Protection of life and property of the residents of Pearl River County in the event of a disaster such as widespread wind damage from hurricanes or tornadoes or widespread flooding is a primary goal of county officials. Of concern are vulnerable populations who are considered to be of particular risk. Those populations include the following persons:

?? Elderly and disabled persons – This segment of the population is considered particularly vulnerable to a natural disaster. Many have mobility problems, are physically unable to make preparations and may not be able to evacuate or recover without assistance.

?? Lower income persons – The Census estimates that 17.5% of the population of the County lives in poverty. Lower income persons are considered at risk due to their limited financial resources to make preparations to protect property, evacuate and recover from a disaster. Additionally, many lower income persons may reside in older mobile homes not constructed to present wind standards or other substandard housing that may not be constructed to withstand high winds or out of harms way from rising water.

?? Persons with special medical needs – Included are chronically ill persons and those requiring life support equipment such as oxygen. Also included are homebound persons who are dependent upon others for day to day care and persons with mobility needs, also full time residents of extended care facilities.

?? Temporary populations – Interstate 59, a primary evacuation route from the New Orleans area bisects the county, the City of Picayune and runs just east of the corporate limits of the City of Poplarville. When storms have threatened southeastern Louisiana in the past, large numbers of refugees have arrived in Pearl River County, seeking emergency services such as sheltering, food and fuel.

An inventory of hazards affecting Pearl River County was made as part of the planning process. Hazards were classified into three categories, as follows:

?? Natural and environmental hazards – Included are those hazards generally classified as “acts of God” such as hurricanes, wind storms, floods, tornadoes and other naturally occurring events. Also included in this category are flooding due to human negligence and error.

?? Technological hazards – Man made hazards including lack of adequate transportation infrastructure, traditional manufacturing concerns, chemical plants and tank farms containing flammable or potentially dangerous materials. Because of the amount of potentially dangerous materials it transports across Pearl River County, railroads are included in this category.

?? Civil hazards – Those hazards occurring as the result of human error, acts of government, population shifts and migration. The potential for loss of income and tax revenues due to temporary or permanent closure of employment resources is considered a civil hazard.
B. Natural and Environmental Hazards

As with the rest of the country, waterfront property is considered the most desirable residential property in Pearl River County. Unfortunately, these properties are also particularly vulnerable to flooding. Rivers and creeks draining the county and surrounding area are highly susceptible to flooding due to heavy rainfall, particularly in the southern portion of the county and in and near the City of Picayune.

The county is also particularly vulnerable to tornadoes and other damaging wind storms. Of particular concern are residents living in structures not constructed to withstand high winds that are often damaged when these storms occur.

Wind Storms and Tornadoes

The Federal Emergency Management Agency has designated Pearl River County a Category III Wind Zone and a hurricane susceptible region. Areas located in Category III Wind Zones are considered to be at high risk for experiencing winds that can reach velocities as high as 200 miles per hour. Additionally, based upon NOAA, Storm Prediction Center Statistics, the Pearl River County is also included in an area where 6 to 10 tornadoes per 1,000 square miles have been recorded. This is borne out in reports from the National Climatic Data Center report for the years between 1993 and 2000.

The Fujita Scale of from FO to F5 is used to categorize tornadoes. Tornadoes typically occur in the spring and summer months but can occur at any time and are often spawned by hurricanes and tropical weather systems. Table 2. Shows categories on the Fujita scale and typical tornado damage that can be expected in each category:

Table 2. Tornado Category and Typical Damage

<table>
<thead>
<tr>
<th>Category</th>
<th>Typical Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>FO Light</td>
<td>Chimneys are damaged, tree branches are broken, shallow rooted trees are toppled.</td>
</tr>
<tr>
<td>F1 Moderate</td>
<td>Roof surfaces are peeled off, windows are broken, some tree trunks are snapped, un-anchored mobile homes are overturned, attached garages may be destroyed.</td>
</tr>
<tr>
<td>F2 Considerable</td>
<td>Roof structures are damaged, mobile homes are destroyed, debris becomes airborne, missiles are generated, large trees are snapped or uprooted.</td>
</tr>
<tr>
<td>F3 Severe</td>
<td>Roofs and some walls are torn from structures, small buildings are destroyed, non-reinforced masonry buildings are destroyed, most trees</td>
</tr>
</tbody>
</table>
are uprooted.

<table>
<thead>
<tr>
<th>F4 Devastating</th>
<th>Well-constructed houses are destroyed, some structures are lifted from foundations and blown some distance. Cars are blown some distance, large debris becomes airborne.</th>
</tr>
</thead>
<tbody>
<tr>
<td>F5 Incredible</td>
<td>Strong frame houses are lifted from foundations, reinforced concrete structures are damaged, automobile sized missiles become airborne, trees are completely debarked.</td>
</tr>
</tbody>
</table>

Debris and other objects picked up by the wind create missiles and are moved with enough force to damage and even penetrate windows, doors, walls and other parts of buildings. In general, the stronger the wind, the larger and heavier the missiles it can carry and the greater the risk of severe damage. Even small stones, branches and other lighter missiles can easily break doors and windows.

Tornadoes striking Pearl River County in the recent past include 3 Category F0 tornadoes, 6 Category F1 tornadoes and 1 Category F2 tornado. Between 1993 and 2000 with five tornado strikes, the City of Poplarville experienced the most tornadoes in the County. Two occurred in the Nicholson Community and one each in the White Sand, McNeil and Savannah Communities. During this period, 13 injuries were reported and $1.6 million in property damage could be attributed to tornado activity.

As a result of tornadoes in the spring of 2001, Pearl River County was included in a Presidential Disaster Declaration that included more than half the counties in the state. The declaration made federal funds available to residents for construction of safe rooms and storm shelters in existing structures vulnerable to tornado and wind damage in the County. The Federal Emergency Management Agency strongly recommends that residents of areas defined as being at high risk such as Pearl River County take steps to create a safe havens from these storms.

Additionally, between 1993 and 2000, 31 property damaging thunderstorms and high wind events resulted in damages totaling $131,000. The County also felt the affects of two hurricanes during that period.

Repetitive Flood Loss Properties

The National Flood Insurance Program (NFIP), describes a repetitive loss property as “one for which two or more claims for flood damages exceeding $1,000 have been paid in the previous ten years.” FEMA and the NFIP estimate that repetitive losses account for approximately 40 percent of all flood insurance claims. In the past several years, the County and the City of Picayune have corrected their repetitive loss lists and causes of flooding were determined. After corrections, a total of 27 repetitive loss properties were identified within the jurisdiction of Pearl River County and 19 in the City of Picayune. The City of Poplarville has no identified flood zones in its jurisdiction and does not participate in the National Flood Insurance Program at present. All except two of the repetitively flooded properties in the county are located in the far southern portion of the County, near Picayune. The major sources of repetitive loss flooding are the Pearl River, Hobolochitta Creek, and Alligator Branch (See Figure 3. Flood Data Map and Figure 4. Repetitive Loss Map).
Historically, most NFIP payments for flood losses in Pearl River County have resulted from stormwater flooding. The NFIP Repetitive Loss Detail by Community for Pearl River County published on December 31, 1999 reports 182 total losses totaling $2.6 million since the county entered the National Flood Insurance Program. Additionally, the same report shows that the City of Picayune had experienced 124 NFIP covered losses totaling $400,000 since entering the program. The average loss paid in the county was $14,285 and the average loss paid in the City of Picayune was $3,225. It is suspected that there are many more incidents of flooding in the county that are not reported by the NFIP because owners who should, do not carry flood insurance.

In all areas of special flood hazard, the County’s Flood Damage Prevention Ordinance requires that new construction or substantial improvement of any residential structure have the lowest floor elevated to one foot above the base flood elevation identified on the NFIP Flood Insurance Rate Map (FIRM). Nonresidential structures are required to be elevated or dry flood proofed. If dry flood proofing is utilized, certification by a professional engineer or architect is required.

The Floodplain Management Ordinance also places restrictions on subdivision proposals submitted for approval as follows:

1. All subdivision proposals must address the need to minimize flood damage;
2. All subdivision proposals must include plans for public utilities and facilities located in the subdivision to be constructed to minimize flood damage;
3. All subdivision proposals must include plans for drainage designed to reduce exposure to flood hazards; and
4. Base flood elevation data must be included for subdivision proposals and other proposed development greater than 50 lots or 5 acres.

The ordinance also places special requirements on the location of mobile homes in flood hazard areas, and that mobile homes be designed to resist flotation, collapse or lateral movement in the event of a flood.

Most of the repetitive loss properties in the county are pre-FIRM structures, constructed prior to the County entering the NFIP. The County and municipal permitting officials are very conscientious about enforcement of their floodplain management ordinances when it comes to permitting new construction. The high incidence of flood losses reported for pre-flood insured properties indicates that owners of repetitively flooded properties have relied primarily upon the NFIP or public assistance to cover their repetitive flood losses.

The NFIP requires retrofitting to reduce flood damage when cumulative losses exceed 50% of the property’s value. This is a difficult rule to enforce because after a major flood or natural disaster, building officials often waive issuing permits in order to assist owners with recovery. Additionally, when flood damage does not include structural damage or damage to electrical or gas services requiring inspection before being restored, owners simply proceed with repairs without contacting local Building Permit Offices. The 50% rule is an essential tool in reducing flood losses and while difficult to track, should be a priority issue for the Floodplain Manager after a flood or natural disaster. It is strongly recommended that the County and its municipalities require issuance of permits for any repairs due to flooding and perhaps waiving the cost of building permits in order to track these cases.

Funding is available to local governments through the Hazard Mitigation Grant Program to retrofit or acquire repetitively flooded properties. The Community Development Block Grant (CDBG) and Home Investment
Partnership Act (HOME) programs also offer grant funding to local jurisdictions on a competitive basis. As well as other purposes, CDBG and HOME program funds can be used for retrofitting flood prone structures, especially in lower income areas.

The County has applied for HMGP funds to remove structures and make drainage improvements along Alligator Branch south of the Picayune City Limits. When completed, the Alligator Branch project should greatly enhance movement of stormwater from South Picayune and through the Nicholson Community. Making HMGP, CDBG and HOME funds available to owners for elevation, retrofitting or buyout of repetitively flooded properties throughout the County should also be considered.

**Other Natural Hazards**

The National Oceanic and Atmospheric Administration, National Climatic Data Center collects and maintains data concerning severe weather related events. Significant events affecting Pearl River County since 1993 are shown on Table 3.

Table 3. Storm and Weather Events National Climatic Data Center 1993 – 2000

<table>
<thead>
<tr>
<th>Type Event</th>
<th>No. Events</th>
<th>Deaths</th>
<th>Injuries</th>
<th>Property Damage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Floods</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>$100,000</td>
</tr>
<tr>
<td>Hurricane &amp; Tropical Storm</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>602,085</td>
</tr>
<tr>
<td>(Statewide)</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ocean/Lake/Surf</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Thunderstorm/High Wind</td>
<td>31</td>
<td>0</td>
<td>2</td>
<td>131,000</td>
</tr>
<tr>
<td>Tornadoes</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>1,638,000</td>
</tr>
<tr>
<td>Lightening</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>90,000</td>
</tr>
<tr>
<td>Hail</td>
<td>16</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Drought</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Wildfires</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Ice/Snow</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Source: NOAA National Climatic Data Center

Because of high annual precipitation amounts, Pearl River County is not usually prone to property damaging wildfires. Occasionally, however, drought-like conditions prompted fire service officials to issue frequent bans against burning and become more concerned about wildfires. Forestry and County Fire Service officials are especially concerned about encroachment of urban development into forestlands, creating the potential for property damaging wildfires.
Table 4. Repetitive Flood Loss Properties in Pearl River County

<table>
<thead>
<tr>
<th>Address</th>
<th>Cause of Flooding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 155 Kendrick Lane</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>2. 126 Meadowood Drive</td>
<td>West Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>3. 1215 Old Camp Road</td>
<td>Long Branch</td>
</tr>
<tr>
<td>Poplarville, MS 39470</td>
<td></td>
</tr>
<tr>
<td>4. 70 Minnie Furr Road</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>5. A Inside Road</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>6. 170 Horseshoe Lane</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>7. Rt. 3 George Ford Road</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>8. 10 Inside Road</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>9. 311 Northwood Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Carrier, MS</td>
<td></td>
</tr>
<tr>
<td>10. 319 Gogo Road</td>
<td>Wolf Creek</td>
</tr>
<tr>
<td>Poplarville, MS 39470</td>
<td></td>
</tr>
<tr>
<td>11. 177 Westchester Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>12. 1532 N. Beech Street</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>13. 117 Westchester Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>14. P. O. Box 525</td>
<td>Unable to Locate</td>
</tr>
<tr>
<td>Poplarville, MS 39470</td>
<td></td>
</tr>
</tbody>
</table>
15. 132 Browning Circle
    Picayune, MS  39466
    Hobolochitto Creek

16. 170 Cypress Point
    Picayune, MS  39466
    Hobolochitto Creek

17. 128 Tennyson Cove
    Picayune, MS  39466
    Hobolochitto Creek

18. 135 Sam Mitchell Road
    Picayune, MS  39466
    Alligator Branch

19. Solomon Lott Road
    Picayune, MS  39466
    Pearl River

20. 269 Caesar Road
    Picayune, MS  39466
    Hobolochitto Creek

21. 16 Eden Lane
    Picayune, MS  39466
    Bay Branch

22. 169 Fox Run
    Picayune, MS  39466
    Hobolochitto Creek

23. 208 Horseshoe Lane
    Picayune, MS  39466
    Hobolochitto Creek

24. 4107 Highway 43 North
    Picayune, MS  39466
    Hobolochitto Creek

25. 81 Pine Grove Road
    Picayune, MS  3946
    Lotts Creek

26. 641 Gelpt Ave.
    Jefferson, LA
    Unable to Locate

27. Range 17 TWP 4S
    McNeil, MS
    Unable to Locate
Table 5. Repetitive Flood Loss Properties in the City of Picayune

<table>
<thead>
<tr>
<th>Address</th>
<th>Cause of Flooding</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Rear 2300 N. Hwy. 11</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>2. 1933, 1935 Daniels Street</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>3. 207 Boley Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>4. 1216 Baylous Street</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>5. 1222 Baylous Street</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>6. 1104 Brookdale Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>7. 1102 Brookdale Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>8. 1103 Brookdale Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>9. 400 N. Abrams</td>
<td>Unknown</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>10. 412 Browning Circle</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>11. 418 Carol Street</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>12. 828 Idlewild Drive</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>13. 717 Magnolia Lane</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
<tr>
<td>14. 514 Taylor Street</td>
<td>Hobolochitto Creek</td>
</tr>
<tr>
<td>Picayune, MS 39466</td>
<td></td>
</tr>
</tbody>
</table>
C. Transportation and Technological Hazards

Transportation related problems are recognized as hazards facing the community. Of primary concern is Interstate Highway 59 that bisects the county. Interstate 59 is the primary evacuation route away from the New Orleans, Louisiana area. When a hurricane threatens the area, thousands of motorists fleeing the low-lying areas of New Orleans and south Louisiana utilize that route. Of particular concern is the large number of persons who may seek refuge in Pearl River County where lodging, fuel, shelters and other resources may already be overburdened.

Additionally, in many places, trees growing in or near the I-59 and Highway 11 rights of way overhang the roadway. In the event of storms involving high wind, trees are often broken off or uprooted and in some cases, have blocked the highway until crews can remove them. In the event of a major hurricane, it is feared that fallen trees blocking the interstate could severely hamper the movement of vehicular traffic through the county and even trap motorists who are attempting to evacuate, leaving them inadequately protected.

The railroad passes through the most densely populated areas of the County. Freight trains that travel through the area carry toxic, flammable and other chemicals on a daily basis. Within ½ mile of the railroad are 11 schools with enrollments of approximately 10,000 students. Additionally, there are 3 personal care facilities and the largest hospital in the county housing 1,000 to 1,500 special needs patients located within ½ mile of the railroad. While no derailments have occurred in recent history, the potential for accidents and derailments always exists. Additionally, tractor-trailer trucks transport chemicals, toxic, flammable and other hazardous materials on a regular basis. A recent diesel spill on Interstate I-59 resulting from a tractor-trailer truck accident highlights the potential for hazardous or flammable spills on the county’s roadways.

Flammable materials such as gasoline, oils and aircraft fuels are stored in Picayune at the airport. Additionally, there is a gasoline storage facility located in Poplarville near the Middle School. A chemical facility storing large quantities of anhydrous ammonia is located in the White Sands Community. There is one bulk fertilizer dealer located in the County and several well suppliers handle chlorine. There are also several pipelines traversing the County carrying oil and natural gas.

There are two general aviation airports located in the County, one in Picayune and one near Poplarville. Air traffic at both airports is limited to use by private aircraft.
A large paper mill is located in Bogalusa, just across the Pearl River from the County. Several years ago, a chemical spill at the plant occurred that required evacuation of areas of Bogalusa overnight while the spill was contained and fumes dissipated.

D. Civil Hazards

Still a largely rural area, Pearl River County has yet to experience the crowding problems that more urban areas deal with. Because the County is maintaining a steady double-digit growth rate, however, it is important that development regulations address growth before it gets out of hand. The County has some development tools in place, however, those tools may not be adequate to control growth into the future.

With the majority of personal income and jobs attributable to retail trade, the closure of the retail establishments in the County over even a short period could result in an economic downturn and a loss of sales tax revenues to the Cities of Picayune and Poplarville.
III. PREPAREDNESS
III. Preparedness

A. Organization

Pearl River County developed methods to prepare for natural, technological and civil disasters. The most widely recognized hazard in the community is the threat of severe weather that produces property damaging winds and flooding. Methods to prepare the community for storm hazards include the following steps:

- Maintaining and improving the drainage system throughout the county,
- Informing residents of the potential for storm damage and flooding in the county
- Adopting and enforcing wind damage prevention and storm water management ordinances and land use regulations; and
- Cooperating with municipal jurisdictions in the county to mitigate storm damage and other hazards.

Civil Defense Activities

Pearl River County and its political subdivisions developed the Comprehensive Emergency Management Plan (CEMP), commonly referred to as the “Disaster Plan.” The purpose of the plan is to create mutual aid agreements to perform respective emergency functions before, during and after disasters or emergencies.

The CEMP attempts to be all-inclusive in combining the four phases of emergency management. Those phases are:

- Mitigation: activities that eliminate or reduce the probability of disaster.
- Preparedness: activities that governments, organizations and individuals develop to save lives and minimize damage.
- Response: activities designed to prevent loss of lives and property and provide emergency assistance in the event of disasters.
- Recovery: short and long term measures that return all systems to normal and improved standards.

Pearl River County Emergency Management, located in Poplarville, is charged with promulgation of the CEMP. The CEMP is cognizant to the State’s Emergency Operation plan. The agency provides up to date information and an organizational structure to implement emergency programs and disseminate emergency information. During an emergency, the operation plan dictates the following responsibilities to the Emergency Management office that operates the Emergency Operations Center to which designated department heads report for emergency operations as per the CEMP:

- Development and coordination of an adequate warning system
- Issuing warnings in the event of an emergency situation; and
- Educating the public regarding the use of the warning system, activating the warning systems and providing manpower during door to door warnings if necessary.

There are three automated river gauges on streams in the county, one on the Pearl River and two on Hobolochitta Creek. Data recorded by these gauges is transferred automatically to the National Weather
Service by computer modem. The National Weather Service depends upon this data to make flood predictions.

B. Community Education

The Pearl River County Civil Defense Agency serves as the point for information to be released to the public concerning disasters, along with decisions, suggestions and instructions. The agency is responsible for developing and maintaining public information and education programs. Telephone numbers where the public can obtain official disaster information is published.

The Civil Defense Agency provides education to the public through many activities. The director frequently makes presentations to various agencies as requested and residents are welcome to call or visit the Civil Defense office to receive information. Educational brochures and hurricane tracking maps are distributed to the general public and organizations. The Civil Defense Agency routinely participates in drills and exercises in the County and in conjunction with State and other local Civil Defense Agencies in the area.

The local media is included within the Civil Defense chain of command to disseminate information about weather systems having the potential to cause flooding, tornado activity and other emergency situations. Information includes:

- Continuous situation updates
- Information about evacuation routes and who should evacuate
- Location of shelters
- Preparation and personal protection measures
- Flood gauge information from local streams and rivers
- Property protection measures
- Road closings
- Location of emergency medical services
- Government, school and business closings due to flooding or other disasters

Television and Radio Stations

Residents of the South Mississippi and Pearl River County are provided hurricane, flood awareness and other disaster information via local and regional television affiliates. Included are WLOX (ABC Biloxi/Gulfport), WMAH (PBS Biloxi), WDAM (NBC – Hattiesburg/Laurel), WHLT (CBS – Hattiesburg/Laurel), WDSU (NBC New Orleans), WWL (CBS New Orleans), WGNO (Independent New Orleans), and WYES (PBS New Orleans). Throughout the year, and especially at the onset of hurricane season, stations present frequent educational programs about hurricane preparedness. Nearly every station produces at least one documentary feature every year on the subject that is aired during prime time.

Many, including local WLOX Channel 13, designate the week including June 1 each year as Hurricane Preparedness Week. Each day, special programming focusing on hurricanes and the problems they present to the area is presented during the regular newscasts several times daily. Topics included descriptions of the hazards, safety, property protection, flood insurance and warnings. All major local television stations have sophisticated, up to date equipment for forecasting and predicting severe weather, including pinpoint Doppler Radar System. The Doppler system is particularly important in warning the public when tornadoes
and severe thunderstorms threaten. Up to the minute reporting is provided any time of the day or night that the National Weather Service issues severe weather warnings.

The more populated areas of the county are covered by commercial television cable and with affordable satellite service, near unlimited media access is available. In particular, stations like the Weather Channel are invaluable when hurricanes and severe weather threaten. Following are examples of national programming:

- The Discovery Channel has a weekly program entitled “Storm Warnings” that often focus on hurricanes, wind storms like tornadoes and floods.
- A program entitled “Wrath of God: Disasters in America” is periodically aired by the History Channel and focuses in large part on Hurricane Camille and the destruction the storm caused in 1969.
- On PBS stations, a National Geographic presentation shows how hurricanes form, damage caused by hurricanes and with computer modeling demonstrates projected storm surge flood depths in nationally known Jackson Square in New Orleans, Louisiana approximately 30 miles to the west. This program airs several times each year.

Public service announcements produced by the Federal Emergency Management Agency and National Flood Insurance Program air during prime time on virtually every major television network. The announcements stress the importance of flood insurance, even for those who have never flooded or do not live in high-risk areas.

Local radio stations play a vital role in dissemination of information during an emergency, especially during the evacuation process when residents are likely to be on the road attempting to flee or return to the area. Information broadcast by radio stations at the height of a storm and in the early days after a storm when electric power and cable television service are interrupted is essential to the community attempting to survive and recover from a major storm. An Emergency Information Network has been established in South Mississippi that includes a number of local FM and AM radio stations. During an emergency, normal programming is suspended and public service announcements are broadcast until the emergency subsides or is over.

Print News Media

Two newspapers publish local news in Pearl River County, the Picayune Item and the Poplarville Democrat. Both are published several times weekly. Other daily newspapers are distributed in the County include The Sun Herald, published in Biloxi/Gulfport, the Times Picayune, published in New Orleans, Louisiana and the Hattiesburg American, published in Hattiesburg, Mississippi. The larger newspapers carry extensive weather related news, especially news and public information concerning flooding, hurricanes, tornadoes and other severe weather affecting the area. At the onset of hurricane season on June 1 each year, extensive coverage is dedicated to hurricanes, preparedness for severe weather and safety steps that can be taken before, during and after a storm.

Other Sources

Local telephone directories include pages in the community information sections concerning emergency preparedness. Telephone numbers are provided for local civil defense offices and readers are encouraged to
telephone for additional information and answers to specific questions. Telephone numbers to access the Emergency Information Network (EIN), National Weather Service and Hurricane Hotline are also included.

C. Drainage System Maintenance

Local public works departments maintain the storm drainage systems in the municipalities of the County. The County Road Department and Public Works Departments of the municipalities are staffed with personnel and equipment for maintenance of drainage systems. Each jurisdiction has a drainage system maintenance plan and responds to drainage problems in the area. Picayune has undertaken major drainage projects designed to mitigate or eliminate flooding, especially that caused by stormwater flooding, throughout their jurisdiction.

Additionally, the County maintains all roadside ditches and drainage channels in its jurisdiction. Under the direction of the County Engineer and Road Department Superintendent, work centers located in each of the county’s districts maintain equipment and personnel whose duty it is to ensure that the drainage system is maintained. During periods of heavy rainfall, county work crews are put into the field to inspect known choke points, clear debris from ditches and ensure that culverts across roadways are open and water is flowing. Debris is removed from all road-side ditches on a regular basis and roadside ditches are mowed several times during the growing season.

D. Critical Facilities

In the event of a disaster, Pearl River County and its municipalities must be prepared to protect and maintain their critical facilities. Critical facilities are defined as follows:

?? Hospitals, nursing homes and housing likely to contain occupants who may not be sufficiently mobile to avoid death or injury during a flood or other emergency.

?? Public safety facilities such as fire stations, vehicle and equipment storage facilities and emergency operations centers needed for disaster response activities before, during and after a flood or other disaster.

?? Public and private utilities that are vital to maintaining or restoring normal services to areas before, during and after a flood or other disaster.

?? Structures or facilities that produce, use or store highly volatile, flammable, explosive toxic and/or water-reactive materials.

?? Roads and bridges to and from the county essential for safe evacuation and egress for emergency personnel and supplies before, during and after a disaster.

Most county owned and municipal buildings in the county are considered critical facilities. These include buildings for operation and continuity of county and municipal governments, police and sheriff’s stations, fire stations, public works centers, and the county’s correctional facility. The emergency evacuation shelters located in the county are also considered critical facilities. The locations of critical facilities in Pearl River County are shown on Figure 5.

Emergency evacuation shelters are located throughout the county for use by persons who either live in unsafe structures, evacuation zones or other areas likely to flood in the event of a major storm or whose homes are not well enough constructed to withstand hurricane force winds. All shelters are considered critical facilities.
Two hospitals, with a combination of 119 beds are located in the County. Several skilled nursing facilities housing elderly or severely disabled residents, are also located in the county. Most are located outside of flood prone areas, but all could be vulnerable to hurricane winds or tornadoes.

Mississippi Power Company and Coast Electric Power Association furnish electric power to Hancock County. Natural gas is available in the county’s two municipalities and propane gas is widely distributed by several dealers. Bell South furnishes the telephone communication system; additionally, several other companies provide cellular telephone service to the county. Because of their importance in maintaining communication during an emergency, cellular phone towers are considered critical facilities in Pearl River County. The public utility companies have mutual aid pacts with other providers to furnish assistance when major damage occurs to their transmission systems. Both have disaster response plans in place and are responsible for their distribution systems and facilities, ensuring that service is restored as quickly as possible after a disaster occurs.

Several flammable storage facilities are located in the county. Additionally, several industrial interests manufacture or use flammable, toxic, explosive or water-reactive materials in their manufacturing process. Pearl River County Fire Services and the Civil Defense Agency recognize these as critical facilities; most have disaster response plans in place and are responsible for their facilities.
IV. COMMUNITY NEEDS AND COMMUNITY GOALS
IV. Community Needs and Community Goals

A. Community Needs

The purpose of the Pearl River County Hazard Mitigation Plan is to improve the County’s level of disaster preparedness and resilience to natural disasters. The county, due to its location and topography, is subject to many types of hazards including hurricanes, flooding and tornadoes.

Many hazard related problems that are faced today; drainage, repetitive flooding of homes, erosion, sedimentation, and evacuation are related to rapid growth in Pearl River County. Still other hazards are based upon the risk of building and living within a community that is subject to tornadoes and strong straight-line winds. This planning effort provides an opportunity to reduce the exposure of the community to these problems by implementing a plan of action that seeks at it’s very purpose to make the community more resilient and disaster resistant.

The Pearl River County Hazard Mitigation Council was composed of residents of the unincorporated portions of Pearl River County, the City of Picayune and the City of Poplarville. The Hazard Mitigation Council included staff representing the Pearl River County Board of Supervisors, the City of Picayune and the City of Poplarville. The economic development arm of the Pearl River County, the Partners for Pearl River County (nee Pearl River County Development Association) was also represented on the planning team. The plan was developed under the auspices of the Pearl River County Department of Planning and Development and the Pearl River County Office of Civil Defense.

The Pearl River County Hazard Mitigation Council defined the following hazards as priority concerns:

1. Tornadoes
2. Hurricanes
3. Storm water flooding
4. Lack of County-wide water distribution systems
5. Downed power lines
6. Limited capacity on roadways within the county
7. Drought
8. Riverine flooding
9. Movement of hazardous materials through the county
10. Railroad infrastructure
11. Gas and fuel pipelines
B. Community Goals

The diversity of Pearl River County and the vastness of Pearl River County create unique challenges for the mitigation of natural and man-made hazards within the county. Pearl River County is a large county, which is topographically very diverse. The land area within the south is very flat, and the land area of the county rises towards the northeast from the Pearl River towards gentle hills and ravines. The County has three incorporated cities within the large land area, with most of the land area lying outside of incorporated boundaries.

The Council identified goals that defined skills and tools that could be used throughout Pearl River County to mitigate hazards. These “common” goals include enhancing planning capabilities countywide, developing and sharing specific information across jurisdictional lines, cooperating between local governments and between state agencies, and providing information to individuals. The Council also identified specific actions geared towards specific problems at specific locations.

The Pearl River County Hazard Mitigation Council established eight distinct goals. But each of these goals falls within five specific action areas. These action areas are:

- To enhance planning capabilities within the county including developing and sharing data information across jurisdictions;
- To adopt new tools and policies, both regulatory and non-regulatory to create a more hazard resistant community;
- To establish Interagency and Intergovernmental cooperation and relationships to address existing hazardous situations and to avoid future problems that may cross jurisdictional boundaries;
- To establish a Hazardous Materials Team and Standard Operating Procedures to address hazardous spills within the County.
- To provide educational outreach so people can adopt practices that will help protect themselves and their property; and

The Council was concerned with planning for the future and planning to create a more resilient community. The diversity of the county suggests that multi-jurisdictional planning could leverage the intellectual capital of the community and share community resources to make the community resilient to disasters.

The eight goals defined by the Hazard Mitigation Council are:

1. Develop and implement a countywide comprehensive plan to identify growth, infrastructure, land use and impact on drainage.
2. Establish an accessible, comprehensive and countywide data network.
3. Pearl River County will establish policies and procedures to become pro-active instead of reactive in the County’s response to natural disasters.
4. Minimize damage to structures through the adoption of building and fire codes and the enforcement of codes.
5. Establish interagency cooperation and partnerships between the local governments, between local
governments and federal agencies, between local governments and state agencies, and between local
governments and the quasi-public and private sectors to reduce damage, and recover quickly from
natural hazards.

6. Establish issue-driven, countywide governmental interaction through networking, shared resources,
and avoidance of the duplication of services by cooperative agreement.

7. Establish a Hazardous Mitigation Team and Standard Operating Procedures for addressing hazardous
materials situations.

8. Provide education and outreach to the general public regarding preparedness and hazard mitigation
activities.
To enhance planning capabilities within the county including developing and sharing data information across jurisdictions;

Two goals were identified by the Pearl River Hazard Mitigation Council that promote planning and the development of a shared data information system that can help local governmental leaders and staff make better regulatory decisions that promote the health, safety and welfare of residents of Pearl River County and reduce the risk of hazards from new developments within the County. Through the implementation of planning tools and models, based upon a comprehensive countywide plan, the Pearl River County Board of Supervisors can establish standards to promote safe developments and reduce cumulative impacts from new developments upon existing developments.

The ultimate aim is to insure that new developments do not create hazardous situations for existing homes, businesses and infrastructure. This effort will not only create a safer, resilient place to live and work, but can also reduce costs to local governments to retrofit infrastructure and also reduce potential public assistance costs associated with damages from natural disasters.

Among the goals and actions defined by the Council that will promote proactive planning to guide growth and make the community more resilient are:

1. Develop and implement a Countywide Comprehensive Plan to identify growth, infrastructure, land use and impact on drainage.
   
   a. Develop and adopt a Comprehensive Plan for Pearl River County.
   b. Develop a drainage and storm water management plan.
   c. Develop a Capital Improvement Program that includes drainage.
   d. Expand stream protection and preservation programs and secure easements to protect riparian areas.
   e. Establish programs to preserve green spaces.
   f. Establish a policy of extra-territorial review of subdivisions adjacent to jurisdictional boundaries to insure a comprehensive review of cumulative impacts within the watershed.

2. Establish an accessible, comprehensive, countywide data network.

   a. Update information that is available from the flood insurance maps.
   b. Establish a comprehensive drainage model.
   c. Provide easily accessible tax map information to the three cities, to insurance and banking industries, and to the public.
   d. Provide updated information to the U.S. Army Corps of Engineers.

Goal 1. Develop and implement a Countywide Comprehensive Plan to identify growth, infrastructure, land use and impact on drainage.

The aim of this effort is to establish a countywide, cross-jurisdictional plan that will assist the County and the Cities to make the best decisions possible regarding development and growth patterns in Pearl River County. The preliminary objectives of this effort is to establish a comprehensive data network to assist the planning and public works departments in making decisions related to new developments, to establish comprehensive protocols for modeling to make sound cost-effective decisions; and to develop an array of tools that can protect existing and proposed developments from erosion and flooding.
1.a. Develop and adopt a Comprehensive Plan for Pearl River County.

It is recommended that a Comprehensive Plan for Pearl River County be developed. The proposed plan should be a unified effort of the three local political subdivisions; the Pearl River County Board of Supervisors, the Mayor and City Council of the City of Picayune and the Mayor and Board of Aldermen of the City of Poplarville.

Components of the Comprehensive Plan should include a study of existing land use, proposed growth corridors, projected growth measured in terms of projected population growth and projected land consumption. The plan should also determine existing drainage patterns. Drainage information should include base flood elevations throughout the county, define natural drainage basins and natural drainage systems, as well as man-made drainage configurations, and the capacity of these man-made systems. The plan should also develop a capital improvement program that can be adopted by the local governments that will incorporate major capital projects that will influence growth patterns, that will provide services to the public and that will define improvements to the County’s drainage systems.

The Mississippi State Code requires that a Comprehensive Plan include the following components:

i) Goals and objectives for long range development of the county. Goals should look 20 to 25 years into the future and should address residential, commercial and industrial development, parks, open space and recreation, street and road improvements, and public school and community facilities.

ii) Land use plan is required to identify the extent of land uses and the distribution of residential, commercial, industrial, recreational, public and quasi-public land uses, density and intensity of land uses, and projections of future land uses based upon quantitative recommendations.

iii) A transportation plan should be represented as a map and detail the functional classifications of existing and proposed roadways, defines other types of transportation that are available within the community. The Transportation plan serves as one element of the capital improvements program.

iv) A community facilities plan should address housing, schools, parks and recreation, public buildings, utilities and drainage. The community facilities plan serves as a second element of the capital improvements plan.

The Mississippi Code provides the basic requirements of a Comprehensive Plan. The county should consider expanding the scope of their effort to also include a detailed storm water management plan and a capital improvement program, or insure that these two elements can be incorporated into the Comprehensive Plan, if these two elements are completed under a separate action by the Board of Supervisors.

Responsible entities: Pearl River County Board of Supervisors
Pearl River County Department of Planning and Development
Supporting entities: City of Picayune Mayor and City Council/Planning Department
City of Poplarville Mayor and Board of Aldermen/Planning Commission
Deadline: 2004
1.b. Develop a drainage and storm water management plan.

The Pearl River County Board of Supervisors has secured funding through grants from the U.S. Army Corps of Engineers, Federal Emergency Management Agency and other entities. These grant funds will be used to develop a Geographic Information System (GIS) for Pearl River County. Funds from FEMA will be used to determine actual base flood elevations within the 100-year flood plain throughout the county and also to improve information and produce new Flood Insurance Rate Maps (FIRM) within the County.

The development of maps with updated and correct base flood elevations will greatly assist the county in their efforts to plan to avoid hazards. The information is also important to community members because it will determine whether or not property owners may be required to purchase flood insurance. Ultimately, the knowledge of base flood elevations will allow people to make better development decisions in locating structures on land areas, and can help the county direct growth away from high hazard flood areas.

The City of Picayune will be required to adopt a storm water management plan by the year 2003, as part of the NPDES (National Pollutant Discharge Elimination System) Phase II Permit Program. That study will require the information previously discussed, and should also document natural and man-made drainage systems within the county, and define problematic areas and areas that are currently flooding and areas that have the potential to flood. The study should also provide a comprehensive overview of probable solutions to these drainage issues. This funding can assist the City of Picayune to achieve this federal requirement.

Responsible Entities: Pearl River County Board of Supervisors
City of Picayune
Pearl River County Department of Planning and Development

Supporting Entities: County Engineer
FEMA, MEMA, U.S. Corp of Engineers
Pearl River County Mapping Department

Deadline: 2004

1.c. Develop a Capital Improvement Program that includes drainage.

It is recommended that the Pearl River County Board of Supervisors develop a Capital Improvement Program for capital projects within the County. A Capital Improvement Plan is a five year plan that details the purchase, financing, and implementation of major capital purchases and infrastructure improvements. The Plan should be adopted by the Board of Supervisors and become the capital budget that guides purchases and projects over a five-year period.

Mississippi State Law requires that a Comprehensive Plan include a facilities plan and a transportation plan. These two elements, the Code suggests, should be the basis for a Capital Improvement Program. It is suggested that the Pearl River County Board of Supervisors develop a Capital Improvement Program for that time frame prior to the completion of the Comprehensive Plan.

Responsible Entity: Pearl River County Board of Supervisors
Supporting Entities: Pearl River County Administrator
Pearl River County Engineer
Pearl River County Road Department
Pearl River County Department of Planning and Development

Deadline: 2001-2004
1.d. Continue and expand stream protection and preservation programs to secure easements to protect riparian areas.

The Wolf River begins in Pearl River County and in 1998 was designated as Mississippi’s first Scenic River. Mississippi’s Scenic River Program was established to promote the protection of unique waterways within the State. The waterway must be nominated for designation, and the State requests the adoption of a series of non-regulatory best management practices by property owners adjacent to the designated river. The State provides workshops and technical assistance to property owners to determine the best methods to establish vegetative buffers within the riparian area of the floodplain.

Streamside buffers and protection programs serve many functions. The buffers provide recreational opportunities for people to walk alongside and enjoy the waterway. The buffers also provide flood storage, by avoiding locating structures immediately adjacent to the waterways. Finally, streamside buffers serve to filter pollutants and runoff from upland sources, by promoting infiltration of runoff.

Buffers can provide economic benefits to the landowner and to the community. Studies indicate that well designed buffers can increase property values significantly. Homes located adjacent to buffers in Boulder, Colorado increased property values by 32% (Correll et al, 1978). This increase in property values contributed $500,000 in additional tax revenues per year (Fausold and Lilieholm, 1996). A study in California indicated that homes located adjacent to restored streams had property values that were 3% to 13% higher than properties located next to unrestored streams (Streiner and Loomis, 1996). The difference was determined to be due to enhanced habitat and vegetation adjacent to the stream banks. Besides enhancing the value of adjacent properties, the use of buffers also accrues cost savings to the local government. A Minnesota Department of Natural Resources study indicated a cost savings of $300 per acre-foot associated with a minimized need to develop floodwater storage.

It is recommended that these programs be encouraged and expanded within the County. The non-regulatory nature of the state program requires education and outreach. It is suggested that the Pearl River County Board of Supervisors partner with the Mississippi Department of Wildlife and Parks and the Wolf River Conservation Society to develop a brochure on the program and its benefits to property owners, develop a series of newspaper articles that can be published in the local newspaper about the importance of buffers, and finally that interactive workshops be promoted within Pearl River County to allow residents to understand the importance of maintaining buffers and the enjoyment that a property owner can realize.

It is also suggested that the Pearl River County Department of Planning and Development identify people that may be interested in working together to enhance other waterways in Pearl River County, such as the Hobolitchito Creek or segments of the Pearl River. Technical assistance can be secured through the Mississippi Department of Wildlife and Parks to establish non-profit conservation organizations, or through the Mississippi Department of Environmental Quality for the more informal Adopt-a-Stream Program.

Expand Stream bank protection on the Wolf River

Responsible Entities: Mississippi Department of Wildlife and Parks
Wolf River Conservation Society

Supporting Entities: Pearl River County Board of Supervisors
Pearl River County Department of Planning and Development

Deadline: 2002 and on-going
Encourage stream bank protection on other rivers and streams in Pearl River County

Responsible Entities: Mississippi Department of Wildlife and Parks
                  Pearl River County Department of Planning and Development

Supporting Entity: Mississippi Department of Environmental Quality

Deadline: 2003

1.e. Establish programs to preserve green spaces.

Green spaces and open space can serve several functions. They can preserve special habitats, reduce flooding by protecting floodplains and reducing the amount of impervious coverage within a watershed, establish wildlife corridors, treat and filter storm water runoff and provide recreational areas for residents.

The county can achieve this activity in several ways. (1) The county can encourage new subdivisions and commercial developments built within the county to include open space development as part of their development. (2) The county and non-profit partners can also encourage private landowners to consider maintaining their lands as open spaces and green spaces through conservation easements and other incentives programs offered by the county or non-profit organizations.

The preservation of green spaces and open lands can create significant economic benefits. According to the President’s Commission on Americans Outdoors, by the year 2000 eighty percent of Americans will live in metropolitan areas and will need to find convenient outdoor recreation lands in and near urban areas. Pearl River County is positioned with a one-hour drive from the New Orleans region, the Hattiesburg area and the Mississippi Gulf Coast.

Besides recreational uses and tourist potential, the use of green and open spaces can also reduce the amount of drainage infrastructure and the cost of the infrastructure required for new subdivisions and the community, and green and open spaces can contribute to groundwater recharge through infiltration.

Finally, green and open spaces can contribute to the value of adjacent land uses. Resource Analytics (1994) studied two areas in North Carolina adjacent to natural areas. Homes adjacent to the Pea Island National Wildlife Refuge had a 20% higher value than homes located further from the refuge. In Colorado, Correl et al (1978) determined that homes located next to greenbelt buffers had a value estimated at 32% higher than a similar home not located adjacent to a buffer.

The County can encourage that open space and buffers are incorporated into subdivisions through modifications to the subdivision regulations. Neo-traditional planning or conservation design methods create open space, create buffers and minimize impervious coverage within subdivisions by clustering homes together on a portion of the land area, leaving a large portion of the land area undeveloped or in open space. This type of development can create significant cost savings to the developers. The National Association of Home Builders indicated that cluster development can reduce the capital costs of subdivision development by as much as 33%, mostly due to reducing the length of the roadways, reducing site clearing and grading, reducing the drainage system, and reducing water and sewer lines within the subdivision (1986). The Center for Watershed Protection estimates that storm water runoff in cluster developments can be reduced by twenty percent to sixty percent (1998). Studies indicated that the value of homes in clustered subdivisions can increase faster than homes in conventional subdivisions. A study completed in Massachusetts indicated that homes in cluster subdivisions appreciated 12% faster than homes in conventional subdivisions over a twenty-year period (Lacey and Arendt, 1990).
Cluster and open space subdivisions can be encouraged by allowing conservation of the site “by-right”. Clustered or “conservation” developments should not be subject to additional time restraints from review by county staff than conventional subdivisions.

The county and non-profit organizations can encourage the conservation of land providing outreach and education on available programs. The county can encourage this effort by providing locations within the Offices of the County Tax Assessor and Collector and the Planning Department for the placement of brochures from the Coastal Land Trust and the Nature Conservancy on their conservation programs. 

Responsible Entity: Pearl River County Department of Planning and Development 
Supporting Entities: Pearl River County Board of Supervisors 
Coastal Land Trust 
Nature Conservancy 
Deadline: 2002

1.f. Establish a policy of extra-territorial review of subdivisions adjacent to jurisdictional boundaries to insure a comprehensive review of cumulative impacts within the watershed.

It is recommended that a memorandum of understanding be adopted and a policy defined to establish extra-territorial review of proposed development projects during the site plan review process of both the Cities and the County for developments that lie either adjacent to the jurisdictional boundaries or within a drainage sub-basin. This could insure a comprehensive review of the development, and also define possible cumulative impacts from the proposed developments that may cause flooding within the watershed. 

Responsible Entities: Pearl River County Board of Supervisors 
City of Picayune Mayor and City Council 
City of Poplarville Mayor and Board of Aldermen 
Supporting Entities: Pearl River County Department of Planning and Development 
Picayune Planning Department 
Poplarville Public Works Department 
Deadline: 2002

Goal 2. Establish an accessible, comprehensive, countywide Geographic Information System (GIS).

An accessible and comprehensive county and cities data network will greatly assist efforts to coordinate development within the county and to make decisions about new development and the development of new infrastructure within Pearl River County. Shared data will allow local governments and local developers, banks and insurance business to make more informed decisions, and it will assist businesses and residents seeking to determine their risk of being effected by natural disasters. And since data information is expensive to gather and maintain it will also prove to be cost effective to the three local governments to share in the development of the system.

Pearl River County seeks to create a Geographic Information System (GIS) that is comprehensive in land use information that can be retrieved and studied. The County also seeks to make this data accessible to all county departments, all city departments and to residents and businesses operating in Pearl River County. The greater the accessibility, the more likely the data will be used in decision making.
The ultimate goal of providing good data is to enhance the amount of information that is available to county and city staff and to residents, developers and business managers within the area so that they can plan for new development, plan for expansions and understand the risks involved in developing at specific locations.

2.a. Update information that is available from the flood insurance maps.

Pearl River County is a Cooperative Technical Partner (TCP) with the Federal Emergency Management Agency, tasked to update floodplain information within Pearl River County, including mapping base flood elevations. This information is extremely important to residents and property owners within Pearl River County. The information gained for this effort will provide up-to-date and accurate maps of Pearl River County detailing special flood zones, floodplains and base flood elevations. This increased accuracy can help people make the best possible decisions about building, help the County protect floodplains, help the county understand the impacts of new developments within the floodplain, and finally identify accurate flood zones for insurance purposes.

Responsible Entity: Pearl River County Board of Supervisors
Federal Emergency Management Agency

Supporting Entities: Pearl River County Department of Planning and Development
Pearl River County Mapping Office
Pearl River County Tax Office

Deadline: 2003

2.b. Establish a comprehensive drainage model.

The development of a comprehensive base map with layers of geographic information that details watershed, elevations, land uses and impervious coverage will provide the local governments with information that they need, to make decisions regarding the impact of new developments on drainage basins and the impact of impervious coverage, grading and clearing will have on raising the base flood elevation. This information can be obtained and modeled using geographic data and can be used to assess the amount of impervious coverage that can occur within a sub basin before base flood elevations will create hazards for existing structures.

It is recommended that the county-wide Geographic Information System develop and provide access to information on (1) watershed boundaries and drainage basins, (2) base flood elevations, (3) flood zones, (4) elevations, (5) land uses, (6) location of structures, (7) impervious coverage, (8) existing drainage structures and their capacity, and (8) permit information on clearing and grading should be layers of information available for review.

From these data sources, models can be developed that can determine the base flood elevation rise with additional clearing grading, fill and impervious coverage.

Responsible Entities: Pearl River County Department of Planning and Development
City of Picayune Engineering Department
City of Poplarville Public Works

Supporting Entities: Pearl River County Tax Office
City of Picayune Planning Department

Deadline: 2004
2.c. Provide easily accessible tax map information to the municipalities in the County, insurance, Realtors, banking interests, and individuals.

Geographic information representing property descriptions, elevation, location within a flood zone, land uses and ownership should be made accessible by placing this information on either a local network platform or placed on the internet for access by the local governments, banking, real estate and insurance interests working within the county and to individuals. This information is critical to research that local governments must make daily in granting and conditioning permits for development, but often the information that they need is not easily accessible. The information will assure that better decisions are made quickly. This information is also important to business interests and individuals that can review this information to weigh the risk of development of property, the types of permits that will be required to develop a parcel of property, or the location of the property in relation to needed infrastructure.

Responsible Entities: Pearl River County Mapping Office
                     Pearl River County Tax Office

Supporting Entities: Pearl River County Department of Planning and Development
                    City of Picayune Planning Office and Engineering Office
                    City of Poplarville Public Works

Deadline: 2003

2.d. Provide updated information to the U.S. Army Corps of Engineers for decision-making.

Pearl River County is participating with the U.S. Army Corps of Engineers through a grant program entitled Planning Assistance to States. Grant funds will help the county upgrade geographic information related to storm water, drainage, and water and wastewater resources. This information will enhance the ability of the Corps to develop projects within the County that may contribute to improved drainage.

Responsible Entities: Pearl River County Department of Planning and Development
                     Pearl River County Mapping Office
                     U.S. Army Corps of Engineers

Supporting Entities: Pearl River County Engineer
                     Pearl River County Tax Office

Deadline: 2002

3. Pearl River County will establish policies and procedures to become pro-active instead of reactive in the County’s response to natural disasters.
   a. Establish pre-disaster maintenance procedures for right of way along county roadways.
   b. Establish criteria for shelters. Establish a short term goal to retrofit existing shelters so that they meet minimum criteria for safety and establish a long-term goal to develop well-placed, safe and convenient shelters.
   c. The county will establish and adopt a policy on maintaining drainage ways.
   d. Establish, by ordinance, a policy to determine and require the correct size culverts.
   e. Establish a policy of extra-territorial review of subdivisions adjacent to jurisdictional boundaries to insure a comprehensive review of cumulative impacts within the watershed.
   f. Follow through with Alligator Branch improvements.
g. Reduce the number of repetitive loss properties within the County by elevating properties and
where elevation is not an option, purchase properties at owner’s request.

4. Minimize damage to structures through code enforcement.

   a. Adopt building codes and minimum standards for high winds zones.
   b. Adopt similar enforcement procedures between the county and two cities, and consider shared
      staff to reduce costs and insure consistent enforcement.
   c. Adopt and implement a regulation requiring building owners to retrofit their structures for
      flood damage, if the structure’s insured loss exceeds 50% or more of the structure’s value.

Goal 3. Government will be pro-active instead of reactive in their response to natural disasters.

The aim of this goal is to insure that the local government is prepared for natural disasters, with plans for
response and recovery in place and ready to be activated, and actions to mitigate potential expected damage.
Ultimately the aim is to restore the everyday activities to businesses and residents of Pearl River County as
quickly as possible.

3.a. Establish pre-disaster maintenance procedures for Right of Way along county roadways.

It is recommended that County adopt pre-disaster maintenance procedures for county roads and bridges to
reduce the amount of road closures due to downed trees and power lines, and bridge and culvert wash-out.
Regular maintenance and visual review of the county’s drainage systems will help to discover potential
culvert and bridge wash-outs by identifying areas adjacent to bridges and culverts that have erosion
problems.

The County should also provide visual inspections of roadways to determine heavily treed overgrowth and
dead limbs that may need to be cut down. The county should weigh the options of having county crews
removing these limbs or contracting for the maintenance of the rights of way. It is highly recommended that
the road crews document these dead or defoliated limbs and contact the power utility companies to
coordinate with the power utility companies for removal of these dead limbs which lie in power right of
ways.

Responsible Entities: Pearl River County Board of Supervisors
                  Pearl River County Road Department
                  Pearl River County Engineer

Deadline: 2002

3.b. Establish criteria for shelters to insure public safety. Establish a short term goal to retrofit existing
shelters so that the shelters will meet basic safety criteria, including being built to minimum construction
standards, and establish a long term goal to provide well-placed, safe and convenient shelters throughout
Pearl River County.

Shelters provide a location of last resort for community members to seek safety from hazardous conditions.
Pearl River County has a series of shelters throughout the county that are managed by volunteer
organizations including local churches and the American Red Cross. These shelters serve a vital function
providing shelter to Pearl River County residents that live in flood prone areas, people that live in mobile or
manufactured homes, and residents that may live in sub-standard housing.
Churches and schools are the locations of most of these shelters, however, some of these shelters are located in floodplains. Also since building codes and wind loads are not required in Pearl River County many of the shelters located in churches may not be built to code.

It is recommended that the Pearl River County Board of Supervisors, through their Emergency Management Office, prescribe minimum standards for shelters within Pearl River County. These criteria should include that (1) the building is built to minimum building standards as prescribed by the Southern Standard Building Code or the International Code, (2) that the building is not located within an “A” Flood Zone or that the area in which the shelter is in has not flooded in the past, (3) that glass doors and windows within the shelters are shuttered, or use shatter resistant glass or film to cover the glass (4) that equipment required for preparing food and for lodging evacuees is located on site, and (5) that the shelter prescribe the maximum number of people that can be sheltered within the location.

A short term goal is to insure that existing shelters meet this basic criteria and require that these shelters are retrofitted to meet standards prescribed in the Southern Standard Building Code or the International Building Code to meet wind load requirements for the region, have shatter resistant windows and doors and also require that the shelters have equipment available to serve as a shelter. It is suggested that an inspection of each of the shelters be prepared to define the elements within each shelter requiring retrofit.

A long-term goal of the County is to establish well-placed, safe and convenient shelters throughout Pearl River County. This effort would seek to insure that shelters would be provided within growth corridors, adjacent to concentrations of people; located outside of flood-prone areas; meet building codes and wind loads to withstand Category 4 Hurricanes; have shutters and/or shatter proof windows, and can provide basic needs for food and bedding to serve the needs of Pearl River County residents. The shelters could also serve as county office buildings and community center.

Finally, it is recommended that the County consider adopting a local ordinance that would require developers of manufactured home subdivisions to develop a community shelter on site for residents of the subdivision. This structure should be a permanent structure that can withstand hurricane force winds. In many parks, these shelters also serve as community centers for the Manufactured Home Subdivisions, Offices and even laundry buildings. These sites should be open to the residents of the manufactured home sites during severe weather.

Short term goal- retrofit existing shelters so that they meet criteria.
Responsible Entity: Pearl River County Emergency Management
Supporting Entity: Churches, American Red Cross
Deadline: 2005

Long-term goal- establish well-placed, safe and convenient shelters.
Responsible Entity: Pearl River County Board of Supervisors
Pearl River County Emergency Management
Supporting Entity: Pearl River County Department of Planning and Development
Deadline: 2008

Require shelters are built within manufactured Home Subdivisions
Responsible Entity: Pearl River County Board of Supervisors
Pearl River County Department of Planning and Development
Supporting Agency: Site Plan Review Committee
Deadline: 2005
3.c. The county will establish and adopt a policy on maintaining drainage ways. This policy will include regularly scheduled maintenance and the establishment of a written tracking policy.

It is recommended that the Pearl River County Board of Supervisors establish standard operating procedures for the maintenance of the County’s drainage system and drainage easements. This standard operating procedure should be adopted as policy by the Pearl River County Board of Supervisors and adopted into the regular work program and daily operations of the Pearl River County Road Department.

Regular oversight and maintenance of the system will allow prospective problems to be sighted and identified before the problem has the potential to cause larger erosive problems. Some of the greatest problems that arise from drainage problems include eroding roadbeds and bridge supports. Regular review and maintenance will allow problems to be identified and repaired quickly.

The standard operating procedures should incorporate the following actions:

- Regular visual inspection of drainage system
- Visual inspection of drainage system after major rain events
- Regular maintenance policy, such as mowing, cleaning of culverts, and securing stream banks likely to erode
- Tracking of responses to citizen complaints

The standard operating procedures should be drafted and accepted as policy by the Road Department.

Responsible Entity: Pearl River County Road Manager
Supporting Entities: Pearl River County Board of Supervisors
Pearl River County Road Manager
Deadline: 2003

3.d. Establish, by ordinance, a policy to determine and require the correct size culverts.

It is recommended that the County establish, by ordinance, a policy to determine and require that correctly sized culverts be installed when new driveways, roadways and parking areas are established throughout the county. Establishing correctly sized culverts will allow water to continue to flow unimpeded through the drainage system. When culverts are undersized, water backs up. This water will usually back up and overflow the banks of the drainage systems. It can cause flooding of roadways, driveways, lawns, and perhaps homes and businesses. The bank full overflow can cause severe problems to the entire drainage systems. Bank full overflows can cause severe erosion to the walls of the drainage way. These erosive soils are collected within the drainage system reducing the capacity of the systems to hold and to move water. Often the soils collect in culverts, blocking the flow of water. Bank full overflow from undersized culverts can also erode the roadbed.

It is suggested that the policy require that culverts be no less than fifteen inches in diameter, but be determined based upon accepted engineering formulas. It is also suggested that culverts be constructed of reinforced concrete, and be designed to carry not less than the storm water from the maximum 24-hour rainfall expected to occur once in ten years with a runoff factor of 90 percent.

To insure that the correct size culvert is chosen and installed by the developer, it is recommended that the developer secure a permit from the County to install culverts in county operated drainage systems.
effort should be coordinated through the County’s site plan review process and/or subdivision review process and should be secured before building permits are issued.

Responsible Entity: Pearl River County Board of Supervisors
Pearl River County Department of Planning and Development

Supporting Entities: Pearl River County Engineer
Pearl River County Road Department

Deadline: 2004

3.e. establish a policy of extra-territorial review of subdivisions adjacent to jurisdictional boundaries to insure a comprehensive review of cumulative impacts within the watershed.

It is recommended that a memorandum of understanding be adopted and a policy defined to establish extra-territorial review of proposed development projects during the site plan review process of both the cities and the county for developments that lie either adjacent to the jurisdictional boundaries or within a drainage sub-basin. This could insure a comprehensive review of the development, and also define possible cumulative impacts from the proposed developments that may cause flooding within the watershed.

Responsible Entities: Pearl River County Board of Supervisors
City of Picayune Mayor and City Council
City of Poplarville Mayor and Board of Aldermen

Supporting Entities: Pearl River County Department of Planning and Development
Picayune Planning Department
Poplaville Public Works Department

Deadline: 2002

3.f. Follow through with Alligator Branch improvements.

The County submitted an application for Federal Emergency Management Agency (FEMA) Hazard Mitigation Grant Funds (HMGP) for improvements to the Alligator Branch. This waterway drains about one-third of the southern portion of Pearl River County. This drainage way drains the downtown area of Picayune, the Picayune Industrial park, and independent industrial areas located within Picayune, as well as several neighborhoods within the City and the County. Several of the repetitive loss properties that exist within the City of Picayune (19 properties) and Pearl River County (27 properties) are due to flooding of the Alligator Branch. Many of the reported losses in Picayune during the May of 1995 flood were related to bank full overflows of the Alligator Branch.

The application for improvements of the Alligator Branch Floodplain includes the purchase and removal of a mobile home park, and the acquisition of three residential structures in the Green Briar Subdivision. The Project will also include significant improvements to the Alligator Branch and improvements to several bridges within the area that are defined as critical facilities and are overtopped during flooding of the Alligator Branch.

Responsible Entity: Pearl River County Board of Supervisors
Supporting Entity: Pearl River County Department of Planning and Development
Federal Emergency Management Agency
Mississippi Emergency Management Agency

Deadline: 2003
3.g. Reduce repetitive loss properties within the County by elevating properties and where elevation is not an option, purchase properties at owner’s request.

Pearl River County has 27 Repetitive Loss properties located within the unincorporated portion of Pearl River County. The City of Picayune has 19 Repetitive Loss properties located within the City’s municipal limits.

Most of the Repetitive loss properties within the unincorporated portion of Pearl River County are concentrated in the southern portion of the county along the Alligator Branch, within the Westchester Subdivision, located within the Pearl River Floodplain, or along the Hobolocitto Creek, located north of Picayune. Several other properties are located across the county, but these are not concentrated.

It is recommended that the Pearl River County Board of Supervisors pursue additional Hazard Mitigation Grant Program funds to purchase and relocate, or elevate homes located within concentrated areas of flooding in particular, homes within the Westchester Subdivision that are repetitively flooded by Hobolochitto Creek should be addressed.

Apply for funds to elevate/purchase repetitive loss properties in the Westchester Subdivision
Responsible Entity: Pearl River County Board of Supervisors
Supporting Entity: Mississippi Emergency Management Agency
Deadline: 2003

The City of Picayune is also threatened by flooding from the Hobolochitto Creek. Areas immediately adjacent to the Creek such as Baylous, North Abrams, Clarenda, and North Loftin, have properties that repetitively flood.

It is recommended that the City of Picayune investigate applying for Hazard Mitigation Grant Program funds to elevate or purchase homes located on North Loftin, North Abrams, Clarenda and Baylous that have flooded repetitively. This is a moderate income neighborhood and additional grant funds may be available to assist with relocation or elevation.

Investigate the potential for relief from flooding through a HMGP Grant to purchase or to elevate homes that repetitively flood on North Loftin, North Abrams, Clarenda and Baylous Streets in Picayune.
Responsible Entity: City of Picayune Mayor and City Council
Supporting Entity: Picayune Community Development Department
Mississippi Emergency Management Agency
Federal Emergency Management Agency
HOME Partnership
Mississippi Development Authority/CDBG Housing
Deadline: 2004

It is recommended that the County submit additional applications for Hazard Mitigation Grant Program funds to address concentrations of repetitive loss properties located along the Hobolochitto Creek, east of Picayune, and within the Pearl River Floodplain, as the projects along the Alligator Branch and the Westchester Subdivision near completion.
Responsible Entity: Pearl River County Board of Supervisors
Supporting Entities: Pearl River County Department of Planning and Development
Goal 4. Minimize damage to structures through code enforcement.

One of the best tools that a community can utilize to mitigate against the damage of natural disasters is the adoption of minimum standards for the construction of buildings. It is recommended that the Pearl River County Board of Supervisors adopt building codes and provide training and staffing to implement building codes within the county and to adequately train code enforcement officers, adequately educate contractors and enforce the building code.


Building codes are minimum standards applied to the construction or reconstruction of buildings to insure public health, welfare and safety. A community can adopt minimum standards that determine how a building should be constructed. “Model” codes have been developed for communities to consider in their adoption. There are four “model” codes that apply across the country. In 1999, each of the Code Congresses took steps to adopt one set of model codes, the International Building Code. The International Building Code was completed and ready for adoption in 2000. The International Code Congress is also responsible for publishing the One and Two Family Dwelling Code that is included as an appendix in the Uniform Building Code and the Southern Building Code.

In Pearl River County, both the City of Picayune and the City of Poplaville adopted a Standard Building Code developed by the Southern Building Code Congress International. Both cities maintain staff to implement and enforce the building code within their municipal limits. The Pearl River County Board of Supervisors has not adopted a building code, but they have adopted a process to apply for a permit to build. The permit allows the county to maintain a record of new buildings and remodeled buildings, and allows the county to enforce the floodplain ordinance.

The purpose for the adoption of building codes is to provide safer structures that reduce deaths and property damage that result due to the failure of the building or its systems. Building codes insure that there is minimum structural integrity to the building and that the building can perform to certain standards to withstand natural disasters. Besides saving lives and reducing property damage, the adoption of minimum standards for buildings helps to reduce the amount of public and private disaster aid after a natural disaster; maintains employment in businesses that may be damaged during a natural disaster, if not for the implementation of building codes; and the adoption of building codes helps to preserve the built environment and property values.

It is recommended that Pearl River County adopt minimum building codes to regulate all the construction. It is preferable that the County and both cities adopt the International Building Code.

In addition to adopting the International Building Code, the Pearl River County Board of Supervisors should consider adopting the Standard for Hurricane Resistant Residential Construction published by the Southern Building Code Congress International or adopt SSPD-1099 which is part of the International Building Code. These standards provide performance standards for residential structures under a specified wind pressure defined by wind zones. The Insurance Institute for Property Loss Reduction estimated that between 1991 and 1995, insured property losses from wind damage across the United States was estimated at $4.8 billion per year (Natural Hazard Mitigation Insights, 1996).
Minimum standards provide a certain level of comfort for homeowners. There is an assurance of a certain minimum standard of construction. Most homeowners seek this comfort level when they purchase a home. A study by the Institute for Business and Home Safety indicated that 91% of homeowners that lived in coastal areas prone to hurricanes believed that builders should follow stricter building codes. Homeowners indicate that they would assume additional costs of as much as $5,000 for a $100,000 home to have a safer home.

Responsible Entity: Pearl River County Board of Supervisors
Pearl River County Department of Planning and Development
City of Picayune Mayor and City Council
City of Poplaville Mayor and Board of Aldermen

Supporting Agencies: Pearl River County Homebuilders Association
Deadline: 2002

4.b. Adopt similar enforcement procedures between the county and two cities, and consider shared staff to reduce costs and insure consistent enforcement.
Consistency in the implementation and the enforcement of building codes will insure that contractors in Pearl River County successfully follow the codes. For this reason it is recommended that similar model codes be adopted and that enforcement of the codes is a shared responsibility between the three local governments. Shared staff will insure consistent enforcement within the County, and can create an economy of scale that will provide better service to county residents and contractors and reduce costs.
Responsible Entity: Pearl River County Board of Supervisors
Pearl River County Department of Planning and Development
Supporting Entities: City of Picayune Mayor and City Council, Code Compliance Officer
City of Poplaville Mayor and Board of Alderman, Building Official
Deadline: 2003

4.c. Adopt and implement a regulation requiring building owners to retrofit their structures for flood damage, if the structure’s insured loss exceeds 50% or more of the structure’s value.

The National Flood Insurance Program requires retrofitting to reduce flood damage when losses exceed 50% of the property’s value. If the cost to repair a flood damaged building exceeds 50% of the fair market value of the home, then the building must be rebuilt in compliance with the Flood ordinance. This will be an essential tool to reduce flood losses in the County and the City of Picayune.
Responsible Entities: Pearl River County Department of Planning and Development
City of Picayune Planning Department
Deadline: 2004

To establish Interagency and Intergovernmental cooperation and relationships to address existing hazardous situations and to avoid future problems that may cross jurisdictional boundaries.

Chief among these efforts is to establish a relationship between the Pearl River County Board of Supervisors and the Mayor and City Council of the City of Picayune and the Mayor and Board of Aldermen of the City of Poplaville to insure seamless response and recovery to natural disasters and to also insure a coordinated approach to prevention and mitigation of potential natural hazards.

Another very important objective of this effort is to insure cooperation and coordination from federal and state agencies to insure that response and recovery from natural disasters occurs quickly and that hazard
mitigation activities are coordinated to reduce the risk to the community. Chief partners within this effort are the Federal Emergency Management Agency, the Mississippi Emergency Management Agency, and the Mississippi Department of Transportation.

The Council defined two goals to address establishment of Interagency and Intergovernmental cooperation:

5. Establish interagency cooperation and partnerships between the local governments, between local governments and federal agencies, between local governments and state agencies, and between local governments and the quasi-public and private sectors to reduce damage, and recover quickly from natural hazards.

   a. Establish a formal policy to invite countywide staff to attend site plan review for projects that are immediately adjacent to the jurisdiction or will impact the jurisdiction.

   b. Cooperate with Mississippi Department of Transportation to establish pre-disaster policies on maintenance of rights-of-way.

   c. Request assistance from the Mississippi Department of Transportation to address street flooding on two major thoroughfares within southern Pearl River County.

   d. Establish a procedure for review between the County, cities and Mississippi Department of Transportation concerning the issuance of driveway permits.

6. Establish issue-driven, county-wide governmental interaction through networking, shared resources; avoid duplication of services by establishing cooperative agreements.

   a. Establish quarterly meetings between the Board of Supervisors and the city governments.

Goal 5. Establish interagency cooperation and partnerships between the local governments, between local governments and federal agencies, between local governments and state agencies, and between local governments and the quasi-public and private sectors to reduce damage, and recover quickly from natural hazards.

5.a. Establish a formal policy to invite county/city staff to attend site plan review for projects that are immediately adjacent to the jurisdiction or will impact the jurisdiction.

It is recommended that a memorandum of understanding be adopted and a policy defined to establish extra-territorial review of proposed development projects during the site plan review process of both the Cities and the County for developments that lie either adjacent to the jurisdictional boundaries or within a drainage sub-basin. This could insure a comprehensive review of the development, and also define possible cumulative impacts from the proposed developments that may cause flooding within the watershed.

Responsible Entities: Pearl River County Board of Supervisors  
                City of Picayune Mayor and City Council  
                City of Poplaville Mayor and Board of Aldermen

Supporting Entities: Pearl River County Department of Planning and Development  
                    Picayune Planning Department  
                    Poplaville Public Works Department

Deadline: 2002
5.b. Cooperate with Mississippi Department of Transportation to establish pre-disaster policies on maintenance of the right of way.

The Hazard Mitigation Council cited Interstate 59 and U.S. Highway 11 as critical thoroughfares in Pearl River County. These roadways were not only critical for evacuation purposes, but also are important to response and recovery actions after natural disasters occur. During wind storms, tornadoes, severe thunderstorms and tropical weather including hurricanes, both of these roadways are subject to downed tree limbs and trees that block the roadways. Having to close the highway can create safety hazards, as well as delay response actions, and slow recovery.

It is recommended that the Pearl River County Board of Supervisors request that the Mississippi Department of Transportation take a more proactive stance to mitigation, by establishing maintenance procedures that identify dead and dying trees and limbs along these two roadways and remove these trees and limbs, as well as trim trees to prevent the limbs and trees from falling during natural hazard events.

Responsible Entity: Mississippi Department of Transportation
Supporting Entity: Pearl River County Board of Supervisors
Mississippi Emergency Management Agency
Deadline: 2003

5.c. Request assistance from the Mississippi Department of Transportation to address street flooding on two major thoroughfares within southern Pearl River County.

Highway 43 South and Highway 43 North are the major east to west connectors in the southern portion of Pearl River County. These roadways are estimated to have average daily traffic counts of 7,800 and 7,400 respectively. The Pearl River County Road Department has identified problems with storm water overflow on two sections of these heavily trafficked roadways. One section of roadway that is impacted is Highway 43 South at Stafford Road, east of Picayune, and Smith’s curve located on Highway 43 North.

It is suggested that the Pearl River County Board of Supervisors work with the Mississippi Department of Transportation to develop solutions for these two flooding problems.

Responsible Entity: Pearl River County Board of Supervisors
Mississippi Department of Transportation
Pearl River County Engineer
Supporting Entity: Pearl River County Department of Planning and Development
Deadline: 2003

5.b. Establish a procedure for review between the county, cities and Mississippi Department of Transportation concerning the issuance of driveway permits.

Establish a Memorandum of Understanding with the Mississippi Department of Transportation that would allow the County Engineer to review the issuance of driveway permits received by the Mississippi Department of Transportation and the Cities of Picayune and Poplaville to insure that culverts proposed for the driveways meet the requirements for culverts adopted by the Board of Supervisors and that the culvert will not impede drainage. Specific requirements for this policy were suggested as action 3.d.

Responsible Entity: Pearl River County Board of Supervisors
Pearl River County Department of Planning and Development
Pearl River County Engineer
Goal 6. Establish issue-driven, countywide governmental interaction through networking, shared resources; avoid duplication of services by establishing cooperative agreements.

6.a. Establish quarterly meetings between the Board of Supervisors and the 2 city governments.

The Pearl River County Board of Supervisors, the Mayor and City Council of the City of Picayune, and the Mayor and the Board of Aldermen of the City of Poplaville should continue to meet on a quarterly basis to promote countywide programs that share resources and avoid the duplication of services. The monthly meetings should have a set agenda to discuss specific issues facing the county.

At least once a year, on the agenda of the meeting should be an overview of the standard operating procedures for hurricane response and other emergencies within the County. This program should be introduced at the meeting immediately before the start of hurricane season. At this meeting, an overview of FEMA’s Hazard Mitigation program should be prepared and progress should be measured on the success of the program to remove repetitive losses in Pearl River County.

To establish a Hazardous Materials Team, and Standard Operating Procedures to address hazardous spills within the County.

Transportation infrastructure in Pearl River County is part of a national system that serves most major cities within the Southeast. Rail lines that lie within Pearl River County originate in New Orleans and provide rail access to such major southern cities as Birmingham, Alabama and Atlanta, Georgia. U.S. Interstate 59 provides access from the New Orleans region to the Atlanta area. Average daily traffic on Interstate 59 was estimated to be 33,000 vehicle in the year 2000. Hazardous materials are moved through Pearl River County by both rail and by highway. Pearl River County has approximately 19 facilities that are listed as hazardous waste handlers by the U.S. Environmental Protection Agency.

Specific actions and recommendations related to this goal follow:

a. Develop a Hazardous Materials Response Team through an interlocal agreement.
b. Develop a written plan and standard operating procedure to be incorporated into the County’s Comprehensive Emergency Management Plan (CEMP).
c. The Hazardous Material Response Team will receive regular training to maintain certification.

Goal 7. Establish a Hazardous Materials Team and Standard Operating Procedures to address hazardous spills within the County.
7.a. The Civil Defense Director, the volunteer fire departments and the municipal fire departments will develop a Hazardous Materials Response Team through an interlocal agreement.

Increasing population and economic growth within Pearl River County, as well as increased rail and truck traffic is creating a greater risk of an accident involving hazardous materials. Currently, the County relies upon mutual aid agreements with Hazardous Materials teams from the Stennis Space Center and Bogalusa to respond to these incidents. With increasing traffic and a greater population, the County and the two cities should consider establishing a Hazardous Materials Response Team.

Training, equipping and maintaining a Hazardous Materials Team is an expensive endeavor. Therefore, it is recommended that this effort be a cooperative program established by the County Board of Supervisors and the Cities of Picayune and Poplaville. This would allow for shared staffing costs, shared costs for equipment and shared training costs. The County and two cities should work to develop a budget for the team as well as staffing requirements.

The drafting and the adoption of an Interlocal Agreement between the three local governments must precipitate the establishment of the Team. That interlocal agreement should determine the amount of staffing from each entity, the ownership of equipment, the fiscal agent for the Team, how revenues from grants and reimbursements will be accounted for and spent, and how property purchased by the Team will be owned.

Responsible Entity: Pearl River County Board of Supervisors
Mayor and City Council of the City of Picayune
Mayor and Board of Aldermen of the City of Poplaville

Supporting Entities: Pearl River County Office of Civil Defense and Fire Marshal
Picayune Fire Department; Poplarville Fire Department
Mississippi Emergency Management Agency

Deadline: 2002

7.b. A written plan and standard operating procedures will be developed and incorporated into the County’s CEMP (Comprehensive Emergency Management Plan).

Prior to adopting the interlocal agreement, the County and municipalities should draft standard operating procedures to respond to hazardous materials incidences that may involve the transporting of hazardous materials by air, rail, roadways and water through Pearl River County. The Team should also draft response procedures for the hazardous materials leakages from Pearl River County businesses that are air-borne and water borne, as well as land borne.

These response and recovery procedures should be documented and incorporated in the County’s CEMP and adopted by the Board of Supervisors and by both Cities.

Responsible Entities: Pearl River County Office of Civil Defense and Fire Marshal
Pearl River County Association of Fire Chiefs
Picayune Fire Department; Poplarville Fire Department
City of Poplaville Fire Department
Mississippi Emergency Management Agency

Supporting Entities: Pearl River County Board of Supervisors
Mayor and City Council of the City of Picayune
Mayor and Board of Aldermen of the City of Poplaville

Deadline: 2002
7.c. The Hazardous Materials Team will receive regular training to maintain certification.

The Hazardous Materials Team must receive certification in the handling of materials and achieve continuing education credits to maintain their certifications. The County and the two cities should include the initial education requirements for certification and the continuing education within their yearly budgets to insure a certified team.

Responsible Entities: Pearl River County Board of Supervisors
Mayor and City Council of the City of Picayune
Mayor and Board of Aldermen of the City of Poplaville

Supporting Entities: Pearl River County Office of Civil Defense
Picayune Fire Department; Poplarville Fire Department

Deadline 2002 and on-going

To provide educational outreach so people can adopt practices that will help protect themselves and their property.

Public education provides people with an opportunity to assess the amount of risk that they are willing to take, and to provide information on techniques and technologies that are available to help people mitigate against loss of life and damage to property.

A specific list of the recommended projects follows:

a. Establish monthly educational programs for local government and staff.
b. Provide outreach to the community, including local officials, about the Hazard Mitigation Grant Program and requirements of elevation and purchase programs.
c. Establish a Hazard Mitigation Library at the Public Library
d. Develop a brochure “Hazards in Pearl River County” that will detail hazards within the County.
e. Develop three programs for “Focus on Pearl River County” on WRJW.
f. Establish a Speakers Forum
g. Establish a Hazard Mitigation and Disaster Preparedness booth at the Blueberry Festival and the Picayune Street Fair.
h. Encourage the Chambers of Commerce, PRCDA and Civil Defense to develop a program on Business Continuity Planning for businesses.
i. Host a luncheon for school principals to showcase educational materials that are available to teachers.

Goal 8. Provide education and outreach to the general public regarding preparedness and hazard mitigation activities.

8.a. Establish monthly educational programs for local government and staff.

Establish monthly educational programs for local government and staff regarding issues related to prevention of disasters, mitigation of damage and recovery. These monthly programs will not only provide an opportunity for networking, but provide information on new programs and technologies available for mitigation as well.
The workshops should include topics on disaster recovery, disaster prevention, hazard mitigation, planning, drainage systems, ecological systems, new construction techniques, new drainage maintenance techniques, the National Flood Insurance Program, The Community Rating System Program, Federal and State Hazard Mitigation Programs, Continuity planning for local government departments, the interpretation of monitoring data on area streams and rivers, storm water modeling and mapping and technology.

Responsible Entities: Pearl River County Department of Planning and Development
Supporting Entities: Pearl River County Emergency Management
                  Pearl River County E-911
                  Pearl River County Sheriff’s Office
Deadline: 2002 and on-going

8.b. Provide outreach to the community, including local officials about the Hazard Mitigation Grant Program and requirements for elevation and purchase programs.

One of the first workshops suggested for the monthly educational programs should be a presentation by the Federal Emergency Management Agency and the Mississippi Emergency Management Agency on the Hazard Mitigation Grant Program to address repetitive loss properties. Generally, these funds are used to either purchase or remove a repetitive loss property or to elevate the property, based upon a cost-benefit analysis of the property. The program is a voluntary program.

The workshop should be open to local government officials, their staff and the general public. This effort would allow community members to ask specific questions about the application of the program to their problem. It will also assist local government officials to gauge the support within the community of the program, and also assist them with evaluating sources of funds that can be used to match Federal funds.

Responsible Entities: Pearl River County Board of Supervisors
                  Pearl River County Department of Planning and Development

Supporting Entities: Pearl River County Emergency Management
                  Federal Emergency Management Agency
                  Mississippi Emergency Management Agency
Deadline: 2002

8.c. Establish a Hazard Mitigation Library at the Library.

The reduction of damage to property as the result of natural disasters is a goal of Pearl River County. To accomplish this goal, establish a hazard mitigation library in the Pearl River County Library System. The materials should include manuals on building within flood prone areas, as well as building in hurricane areas. Most of these materials are available to the county at no or minimal costs from the Federal Emergency Management Agency and the American Red Cross. These materials can be catalogued and cross-referenced within the card catalogue. The library will provide an excellent centralized location to house these materials.

During Severe Weather Week in February and prior to Hurricane Season, the Office of Civil Defense should work with the Library to insure that these materials are available in the library for use by the public. Besides construction manuals and documents, FEMA and American Red Cross also publish several children’s titles, and handbooks on business continuity planning that should be included within this collection. This collection should also include a copy of the plan.
Suggested titles include Coastal Construction Manual, Taking Shelter from the Storm, the Disaster Twins, Business Continuity Planning for Businesses and Industry, and IBHS Continuity Planning for Small Business.

The County’s Department of Planning and Development and the County’s Office of Civil Defense should work with the library to update and expand the offerings of this collection.

Responsible Entity: Pearl River County Library System
Supporting Entities: Pearl River County Emergency Management
                  Pearl River County Department of Planning and Development
                  Federal Emergency Management Agency
                  American Red Cross
                  Institute of Business and Home Safety
                  NOAA- Hazards Division

Deadline: 2002

8.d. Develop a brochure “Hazards in Pearl River County” that will detail natural hazards within the county.

The brochure will be an educational tool available to all residents of Pearl River County which will detail the types of hazard that are prevalent in Pearl River County, most notably hurricane threats, tornadoes, severe weather and flooding from streams, rivers and also storm water flooding within the County. The brochure will provide safety tips for residents, to help them prepare for hurricanes and severe weather. The brochure should suggest mitigation measures that homeowners can take to secure their homes from the threat of natural disasters.

The brochure can serve three purposes. (1) The brochure can provide outreach for residents living within flood prone areas to help them realize their risks and suggest actions that they can take – such as the purchase of flood insurance. (2) The brochure can also help people prepare for hurricane season and hurricanes. The brochure should suggest actions that residents can take to secure their homes, as well as provide information to people about developing their hurricane plan, which may include evacuation, or securing their homes to wait through the storm. (3) Finally, the brochure should include information on mitigation activities that residents can consider to secure their homes from high winds.

The brochure will be distributed to all new residents. The brochure will be mailed to new residents after they receive their E-911 Serial number. The brochure will also be placed in the offices of the Utility Offices and Building Permit offices, as well as the power company offices.

Responsible Entity: Pearl River County Emergency Management
Supporting Entities: Pearl River County Department of Planning and Development
Deadline: 2002

8.e. Develop three programs for “Focus on Pearl River County” on WRJW.

Local radio station WRJW provides a semi-monthly program on the activities in Pearl River County. WRJW is the only locally owned and operated radio station in Pearl River County. It is recommended that three programs be developed during the year to be featured on “Focus on Pearl River County”.

It is recommended that these programs should be in February, as part of Severe Weather Week, and in June and August the program should focus on Hurricane and Severe Weather preparedness. Speakers should include the Emergency Management Director to speak on preparedness, response and recovery, and the Planning and Development Director to address mitigation actions and opportunities.
8.f. Establish a Speakers Forum.

Pearl River County has many active social and civic organizations. Pearl River County Churches also provide an opportunity for residents to learn actions that can mitigate and prevent the loss of life and reduce the damage to property. It is recommended that the Pearl River County Office of Civil Defense establish a Speaker’s Forum, update this listing yearly, and provide this listing to the County’s social, civic and spiritual organizations. This would provide a list of available speakers to these organizations.

It is suggested that this list include speakers such as the County Civil Defense Director, the Hurricane Forecaster for MEMA, the Hazard Mitigation Specialist for MEMA, the transportation planner for MEMA, the Chief Forecaster with the Naval Meteorology and Oceanography Command, the Chief Forecaster from the National Weather Service in Slidell and Weathercasters from local radio stations in Biloxi, Hattiesburg and New Orleans.

It is suggested that this listing of Speakers be updated yearly to reflect personnel changes, and new staff representing new missions within the organizations. It is also suggested that this updated list be mailed to all organizations within Pearl River County each year.

Responsible Entity: Pearl River County Emergency Management
Deadline: 2002

8.g. Establish a Hazard Mitigation and Disaster Preparedness Booth at the Blueberry Festival and the Picayune Street Fair.

Pearl River County is the host to two major festivals each year. The Picayune Street Fair is held each year in for two days in April and November in Picayune. The fair boosts approximately 15,000 visitors per event. The Blueberry Festival is held each June in Poplarville. The festival has hosted as many as 17,000 people. Both festivals provide an opportunity to provide education and outreach to a large portion of the region’s population.

It is recommended that the Pearl River County Office of Civil Defense establish a booth at each festival. The intent is to provide materials to participants of the festival and to be available to answer questions about preparedness and mitigation in Pearl River County. These venues will allow Pearl River County residents to ask questions and gather materials. It is suggested that the materials at the Blueberry Festival stress hurricane and flood preparedness, and that the materials used in the April Picayune Street Fair focus on tornadoes, windstorms and severe thunderstorms.

Responsible Entity: Pearl River County Emergency Management
Supporting Entity: Picayune Downtowner’s Association
Poplarville Chamber of Commerce
Deadline: 2002
8.h. Encourage the Chambers, PRCDA and Civil Defense to develop a program on Business Continuity Planning for businesses.

The U.S. Small Business Administration indicated that 43% of small businesses that are forced to close due to a disaster never re-open. The SBA believes that another 29% of small businesses close within 2 years of disaster. In Pearl River County, approximately 77% of the businesses within the county employ less than 10 people. These businesses are particularly vulnerable to closures and disasters. Many lack the resources to compensate for time closed due to the disaster and many may lack the knowledge to develop continuity plans for their businesses.

It is recommended that the Picayune and Poplarville Chamber of Commerce, the Pearl River County Development Association/Partners for Pearl River County and Pearl River County Civil Defense establish a program to present business continuity planning information to businesses within Pearl River County. The Institute of Business and Home Safety provides a curriculum designed specifically for small businesses. IBHS provides train the trainer workshops, allowing the county’s business community to make an investment in the knowledge to develop small business continuity plans.

Responsible Entity: Picayune and Poplarville Chamber of Commerce
Supporting Entity: Pearl River County Development Association and
Pearl River County Emergency Management
Deadline: FY 2003

8.i. Host a luncheon for school principals to showcase educational materials that are available to teachers.

It is recommended that the Pearl River County Office of Civil Defense host a luncheon each year to introduce new educational materials for children on natural hazards to school principals and school and county librarians. The Federal Emergency Management Agency and the American Red Cross have developed unique and very effective materials that can be incorporated into the school’s existing curriculum and can be used to enhance the existing curriculum. Such programs as the American Red Cross’ and Allstate Insurance’s Masters of Disaster offer lessons in language arts, math, and science related to disaster preparedness for children.

It is recommended that copies of the materials are available at the luncheon, as well as having a field representative from American Red Cross, FEMA or MEMA available to provide ideas on using the materials within the classroom.

Responsible Entity: Pearl River Emergency Management
Supporting Entity: American Red Cross, FEMA and MEMA
Funding: Corporate sponsorship to cover luncheon
Deadline: FY 2002
APPENDICES 1.
HAZARD MITIGATION COUNCIL

1. Mr. J. D. Wheat
   101 N. Main Street, Suite C
   Poplarville, MS  39470

2. Mr. Gary Beech
   P. O. Box 569
   Poplarville, MS  39470

3. Mr. David Smith
   1222 S. Main Street
   Poplarville, MS  39470

4. Ms. Slyvia Stewart
   406 S. Main Street
   Poplarville, MS  39470

5. Mr. Jerry Bounds
   8953 Hwy. 11 North
   Poplarville, MS  39470

6. Mr. Sherman Gaspard
   157 Balmoral Drive
   Poplarville, MS  39470

7. Mr. Steven Surles
   P. O. Box 278
   Picayune, MS  39466

8. Mr. Reggie Oliver
   203 Goodyear Blvd.
   Picayune, MS  39466

9. Mayor Woody Speirs
   203 Goodyear Blvd.
   Picayune, MS  39466

10. Mr. James Buckley
    2163 Palestine Road
    Picayune, MS  39466

11. Mr. LaDonnis Seal
    P. O. Box 135
    Picayune, MS  39466
12. Mr. Junior Howard  
    178 J. M. Howard Road  
    Poplarville, MS  39466

13. Mr. Roger Spence  
    70 Aubrey Aden Road  
    Carrier, MS  39426

14. Mayor Billy Spears  
    200 Highway 26 East  
    Poplarville, MS  39470
APPENDICES 2.
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