

COMMUNITY PLAN *for* WESTERN HARRISON COUNTY



Community Plan *for* Western Harrison County

Harrison County, Mississippi

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The Harrison County Board of Supervisors and the citizens of
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Contents

Contents	Page
EXECUTIVE SUMMARY	1-1
INTRODUCTION	1-3
Purpose	1-3
Process	1-5
People	1-6
Acknowledgements	1-7
Organization of the Plan	1-8
CHAPTER 1. CONTEXT	1-10
Description of the Community	1-10
History	1-10
Regional Connections	1-11
Background and Current Trends	1-14
Community Input	1-17
Observations	1-19
CHAPTER 2. THE PLAN	1-23
Themes	2-24
Community Goals and Strategies	2-24
Implementation	2-25
Concept Plan & Sector Map	2-45
APPENDIX A. BACKGROUND ASSESSMENT	A-75
APPENDIX B. CITIZEN INVOLVEMENT	B-147
APPENDIX C. POTENTIAL GRANT SOURCES	C-188
APPENDIX D. PRINCIPLES OF NEW URBANISM, CONSERVATION DEVELOPMENT, AND LAND USE ANALYSIS	D-200
APPENDIX E. ACRONYMS AND GLOSSARY	E-209

List of Maps

<u>Label</u>	<u>Caption</u>	<u>Page</u>
Map 1-1	Regional Connections	1-12
Map 2-1	Western Harrison County Concept Plan	2-46
Map 2-2	Western Harrison County Sector Map	2-47
Map 2-3	Proposed State Route 601 Corridor	2-69
Map A-1	A significant number of parcels have been rezoned for housing following Hurricane Katrina through 2007 in the Western Planning Area.	A-95
Map A-2	Western Planning Area Communities	A-97
Map A-3	Existing Land Use Map	A-98
Map A-4	Existing Zoning as of November 2006	A-102
Map A-5	Water bodies and watersheds in the Western planning area	A-107
Map A-6	Publicly Owned Parcels along water bodies	A-109
Map A-7	Flood Zones in 1988	A-111
Map A-8	Wetland areas in the Western planning area	A-113
Map A-9	Map of the hydric soils	A-114
Map A-10	Hurricane Katrina Storm Surge	A-119
Map A-11	Service Areas for Harrison County and Pass Christian School Districts	A-123
Map A-12	Harrison County Fire Stations	A-125
Map A-13	Location of Recreational Facilities	A-128
Map A-14	2007 Average Annual Daily Traffic and Functional Roadway Classifications, Western Area	A-130
Map A-15	Proposed Alternatives for Route 601	A-133
Map A-16	Water Service Areas	A-138
Map A-17	Wastewater Service Areas	A-139
Map A-18	Proposed Gulf Region Water and Wastewater Projects in Western Harrison County	A-140
Map D-1	The LUCIS map identifies land most suitable for development	D-207

List of Tables

<u>Label</u>	<u>Caption</u>	<u>Page</u>
Table A-1	Population Estimates	A-85
Table A-2	Western Planning Area Population and Housing Forecast	A-86
Table A-3	Age Composition	A-87
Table A-4	Educational Attainment for the Population 25+ Years, 2000	A-88
Table A-5	Median Household Income, 2007	A-88
Table A-6	Household Income Distribution, 2007	A-88
Table A-7	Household Characteristics, 2007	A-89
Table A-8	Distribution of Housing Type, 2000	A-90
Table A-9	Housing Units by Year Structure Built, 2000	A-91
Table A-10	Occupancy and Vacancy Status	A-92
Table A-11	Owner Occupied Housing by Value, 2000	A-92
Table A-12	Basic Housing Affordability Scenario	A-94
Table A-13	Coastal Cities Average Percentage Increase in Rents	A-94
Table A-14	Homeownership Affordability Analysis	A-94
Table A-15	Land Use Classification for All Land	A-99
Table A-16	Zoning Designations	A-100
Table A-17	Workforce Description	A-102
Table A-18	Commute Times, 2007	A-103
Table A-19	Employment Status, 2007	A-104
Table A-20	2002 TAZ Information	A-104
Table A-21	Soils of the Western planning area	A-115
Table A-22	Soils of the Western planning area (cont.)	A-116
Table A-23	Enrollment Data by School and Year	A-121
Table A-24	Roadways of the Western Planning Area	A-131
Table B-1	Communities by Region of Western Harrison County	B-149

Table B-2	Community Preference Survey Results, Single Family Residential	B-167
Table B-3	Community Preference Survey Results, Multi-Family Residential	B-168
Table B-4	Community Preference Survey Results, Distance from the Road	B-169
Table B-5	Community Preference Survey Results, Streetscape	B-170
Table B-6	Community Preference Survey Results, Walking and Bike Trails	B-171
Table B-7	Community Preference Survey Results, Small Scale Commercial	B-172
Table B-8	Community Preference Survey Results, Large Scale Commercial	B-173
Table B-9	Community Preference Survey Results, Other Development	B-174
Table B-10	Town Hall Meeting Electronic Voting Results	B-185
Table B-11	Town Hall Meeting Dot Voting Results	B-186

List of Figures

<u>Label</u>	<u>Caption</u>	<u>Page</u>
Figure ES-1	Restoring the County Farm is an example of preserving the rural character of Western Harrison County.	1-2
Figure I-1	Citizens of the Western planning area meet to discuss their future.	1-4
Figure I-2	The Community Plan formed over eight months.	1-5
Figure I-3	The Steering Committee for the Western Harrison County Planning Process provided important information and feedback in the preparation of this plan. For example, Steering Committee member Angel Middleton arranged a tour of the County Farm, emphasizing the community's support for restoring its educational and agricultural purpose.	1-6
Figure I-4	Citizens from across Western Harrison County have come together to share their opinions and thoughts on the future of their community. These ideas have been integrated into this plan.	1-8
Figure I-5	Participants in the September 4th Town Hall Meeting came together to discuss the issues that are of importance to the future of the community.	I-9
Figure I-6	Students at Lizana Elementary School participated in the planning process by providing their ideas for what they would like to see near their school.	I-9
Figure 1-1	Much of Western Harrison County is forested with longleaf pine trees.	1-10
Figure 1-2	The Wolf River has played an important recreational role over time in Western Harrison County	1-11
Figure 1-3	Western Harrison County has strong connections to the water, including the Wolf River, Little Biloxi River, and area lakes and bayous.	1-13
Figure 1-4	Houses, such as this one, are common in Western Harrison County.	1-15
Figure 1-5	The Lizana Fire Station provides fire service to area residents, as well as serving as a voting precinct polling station.	1-15
Figure 1-6	Participants at the Town Hall Meeting completed a citizens survey to determine what issues are most important to residents.	1-16
Figure 1-7	This aerial photograph of a large lot subdivision received the most percentage of votes as acceptable (69.7%).	1-17
Figure 1-8	This type of commercial development was found to be acceptable by participants in the community preference survey.	1-17
Figure 1-0	The development of single family home subdivisions is occurring in many locations in Western Harrison County, such as this one on John Clark Road.	1-20
Figure 1-10	The Lyman Senior Center is viewed by citizens as a valuable community facility.	1-21
Figure 1-11	The County Farm jail used to house the prisoners that worked the farm.	1-21
Figure 2-1	One of the goals of this plan is to expand recreational opportunities. Shown below are the soccer fields at the County Farm.	2-23

Figure 2-2	Farms in the Western Planning Area are an example of the rural character to be preserved.	2-24
Figure 2-3	The County Farm Prison is one example of a connection to the Western Harrison County's past.	2-25
Figure 2-4	Western Harrison County sector key with descriptions.	2-48
Figure 2-5	The business shown below is an example of an appropriate small scale home based occupation in Western Harrison County.	2-49
Figure 2-6	Site plan of potential commercial center at Vidalia Road and Cable Bridge Road.	2-50
Figure 2-7	This conceptual site plan illustrates how development could occur at Vidalia Road and Cable Bridge Road.	2-51
Figure 2-8	This conceptual site plan illustrates how development could occur in the future at Lizana-School Road and State Highway 53.	2-52
Figure 2-9	Rendering of potential commercial center at Lizana-School Road and State Highway 53.	2-53
Figure 2-10	A site plan of a design idea for the intersection of State Highway 53 and County Farm Road. The design proposes some community commercial set back off of State Highway 53 to allow for signalization and widening. Also, the design creates a gateway for the County Farm to the south.	2-54
Figure 2-11	This perspective sketch of County Farm Road south of State Highway 53 illustrates some commercial development with an architectural style that is complimentary to the area. Also, potential gateway signage could be included to welcome visitors to the County Farm and the County Farm Road corridor.	2-55
Figure 2-12	This is an example of small scale retail that would be appropriate for the G-3 sector	2-56
Figure 2-13	Site plan of potential commercial center at Canal Road and Landon Road.	2-57
Figure 2-14	In areas where infrastructure is already in place, concentrated residential development is recommended.	2-58
Figure 2-15	A perspective rendering of a potential community center near State Highway 53 and CC Camp Road. The façade of the building could be designed to reflect the logging history of the area.	2-60
Figure 2-16	The addition of an indoor arena at the County Fairgrounds would expand on the already existing outdoor arena shown here.	2-61
Figure 2-17	A master plan of the County Farm would include future goals for all of the amenities located on that site	2-62
Figure 2-18	This conceptual master plan for the County Farm would retain many existing uses, rebuild parts of the farm and enhance farm activities.	2-63
Figure 2-19	Conceptual perspective illustrating the proposed Indoor Arena.	2-64
Figure 2-20	This multi-use trail can provide opportunities for pedestrians, biking and horse riding.	2-67
Figure 2-21	This is a conceptual site plan of potential interchange enhancements at proposed State Route 601 and State Highway 53.	2-70
Figure 2-22	This graphic shows the proposed interchange design in more detail at its intersection with SR 53. Deciduous street trees help to define the street and several types of trails and sidewalks provide opportunities for different types of transportation.	2-71
Figure 2-23	This section view of the interchange shows the 601 overpass and SR 53 at existing grade. This further demonstrates the how the various different types of trails, sidewalks, and vehicular travel lanes function together.	2-72

Figure 2-24	This perspective drawing illustrates design ideas for potential architectural enhancements to the bridge overpass. Stone or other types of masonry can be placed on the front of the columns in order to highlight historic bridges around the area. Also, street lights with banners can potentially be installed and will help to highlight the interchanges roles as a gateway into western Harrison County.	2-73
Figure A-1	Historic Map of Harrison County	A-75
Figure A-2	The Batson and Hatten Lumber Company in Lyman	A-76
Figure A-3	The Landon Train Depot in 1915	A-76
Figure A-4	Landon Train Depot Bunk House in 1915	A-76
Figure A-5	The Main Harrison County Lumber Mill in Lyman	A-78
Figure A-6	Our Lady of Chartres Catholic Church	A-79
Figure A-7	Our Lady of Chartres Catholic Church sign which highlights its founder John Delmas Dedeaux.	A-79
Figure A-8	The Historic County Farm Jail	A-80
Figure A-9	The Lyman Fish Hatchery just after its opening	A-80
Figure A-10	The original Dedeaux School	A-81
Figure A-11	The final resting place of Lyman Reeves in Finley	A-81
Figure A-12	Landon Sec Dwelling in 1915	A-83
Figure A-13	Remnants of the Lyman Lumber Mill	A-83
Figure A-14	The historic Lyman Post Office	A-83
Figure A-15	The New Hope Baptist Church	A-84
Figure A-16	The Mount Calvary Baptist Church	A-84
Figure A-17	Age Composition, 2007	A-87
Figure A-18	Single family housing is found throughout the planning area.	A-89
Figure A-19	Manufactured housing is common in the Western planning area.	A-90
Figure A-20	This historic family home was built in 1904.	A-91
Figure A-21	The house shown below is typical of many homes in Western Harrison County.	A-94
Figure A-22	This residential area is an example of an area zoned as R-1.	A-100
Figure A-23	Most citizens of Western Harrison County drive between 25 and 34 minutes to work	A-104
Figure A-24	Employment by Industry, 2007	A-105
Figure A-25	Employment by Occupation, 2007	A-105
Figure A-26	The Wolf River meanders through the Western planning area for approximately 19 miles.	A-108
Figure A-27	Cogon Grass is an example of an invasive species in area forests.	A-108
Figure A-28	Chinese Tallow is an invasive species commonly found in the area forests.	A-108
Figure A-29	Weyerhaeuser is the largest property owner in the Western planning area.	A-117
Figure A-30	The forestland below shows examples of leaning and sheared conifers affected by Hurricane Katrina	A-117

Figure A-31	The Lyman State Fish Hatchery is recognized as the only public birding area in the Western planning area, but due to unauthorized entry, birding is prohibited.	A-119
Figure A-32	Michael Memorial Baptist Church	A-121
Figure A-33	This church on Mennonite Road is an example of the local religious facilities.	A-123
Figure A-34	This fire station serves the Lizana Community	A-124
Figure A-35	The Harrison County Fairgrounds is a popular attraction for residents inside and outside of Harrison County.	A-126
Figure A-36	The County Farm houses a variety of animals.	A-126
Figure A-37	The Lyman Senior Center is located on the County Farm.	A-127
Figure A-38	The County Farm provides opportunities for school children to interact with farm animals.	A-127
Figure A-39	County Farm Road is one of the scenic roadways in Western Harrison County.	A-132
Figure B-1	A planning team assists a citizen in mapping his place of residence.	B-147
Figure B-2	Citizens of Western Harrison County gather for the Town Hall Meeting.	B-148
Figure B-3	Citizens discuss an image from the Community Preference Survey.	B-148
Figure B-4	Many citizens identified Lizana Elementary as the geographical center of their community	B-153
Figure B-5	Neco's is commonly considered to be the center of the Southwestern region of Western Harrison County	B-153
Figure B-6	A significant number of citizens cited the need for more small restaurants throughout the planning area	B-156
Figure B-7	Highway 53 was often identified as an appropriate location for the development of needed retail and services.	B-157
Figure B-8	This single family home was found to be very acceptable to residents of Western Harrison County	B-166
Figure B-9	Students at Lizana Elementary School requested increased recreation opportunities near their school.	B-175
Figure B-10	Students at Lizana Elementary School enjoyed planning amusement and skate parks near their community.	B-175
Figure B-11	Wider roads and other general roadway improvements were a frequently mentioned concern among the citizens of Western Harrison County.	B-185
Figure B-12	Citizens participated in electronic voting and dot voting in the December Town Hall Meeting	B-186
Figure D-1	The Lyman State Fish Hatchery is designated as an O-1 District in the Sector Map	D-202
Figure D-2	The sector mapping system identifies and allows communities to focus growth in appropriate areas while preserving rural land.	D-203
Figure D-3	Conservation Development can be implemented to fit a communities needs such as a horse boarding facility.	D-204
Figure D-4	This conventional subdivision creates large lots, but it does not provide the opportunity for shared open space or permanent protection of environmentally sensitive areas.	D-205
Figure D-5	This figure illustrates how reorganizing the subdivision creates community accessible, preserved open space.	D-205

Executive Summary

The *Community Plan for Western Harrison County* was created to guide growth in the community over the next twenty years. The plan is a roadmap for the community, created using citizen input and modern planning principles. Citizen input identified a list of the top issues for the community. These issues are the foundation of this plan and were used to create two themes:

Preservation - This theme is focused on safeguarding what is unique and special to the residents of the Western Harrison County. This includes such features as the rivers, bayous, forests, historic sites, and above all, the rural character of the community. This theme is also about preserving open space by reversing the trend of sprawl and focusing development in designated growth areas.

Connection - This theme is focused on connections within the Western Harrison County. This includes recreational trails and public access to the unique natural assets. Connections are also about linking the community to its history.

These themes are broken down into goals, objectives, and strategies that will help guide the community. The plan also lists actions that can be used by the County and the community. To show how these actions should be used, the plan has a timeline that puts the goals and actions in order of their importance.

The plan states a number of policies and examples of how land could be used to reach certain outcomes for Western Harrison County. Text and pictures also show how future development of the community could look. Policies, like protecting natural areas, would apply to the entire planning area, while land use rules would apply to only certain places within the community. The recommendations found in the plan support the citizens' vision of the community.

Public input from the September town hall meeting shaped the concept plan, strategies, and land use examples used in the plan. At the December Town Hall Meeting, the community reviewed the plan, identifying scenarios and policy strategies they found most important. The decisions made at this meeting assisted in determining the content of this Plan.

The Harrison County Board of Supervisors is in charge of many of the action steps because of its law-making power. However, to help carry out the plan, the citizens should consider forming a non-profit organization so that they are able to receive grant money, organize local efforts, and take on the non-regulatory action steps.

Figure ES-1. Restoring the County Farm is an example of preserving the rural character of Western Harrison County.



Source: Chris Cunningham

“This community plan focuses on preservation and connection”

Introduction

Purpose

Those along the Gulf Coast will never forget August 29, 2005, when destruction was wrought by Hurricane Katrina, damaging homes in Western Harrison County. As a result of the hurricane, a wave of new development has come to the community to accommodate residents displaced after the storm. Area citizens have come together to make decisions about how their community will grow and change in a way that is consistent with their values. *The Community Plan for Western Harrison County* articulates this future.

Shortly after the hurricane, Mississippi Governor Haley Barbour established the Governor's Commission for Recovery, Rebuilding, and Renewal. The Commission provided local leaders with ideas and information that has helped them decide what their communities will look like in the future. As part of this effort, they hosted the Mississippi Renewal Forum in partnership with the Congress for New Urbanism. The Renewal Forum focused on planning and visioning for the incorporated areas of the coast. However, it did not provide the same level of planning for the unincorporated areas. *The Community Plan for Western Harrison County* incorporates many of the ideas provided by the Governor's Commission and integrates them with the Western Harrison County citizens' vision for their community.

The Community Plan for Western Harrison County complements the County's planning process, which is based on the principles of smart growth, New Urbanism, and conservation development.

The Board of Supervisors for Harrison County recognized the need for a plan to guide future development of Western Harrison County. The Board invited Associate Professor Jennifer Cowley from

the City and Regional Planning Program at The Ohio State University (OSU) to bring in a technical assistance team to work with the residents in the Western planning area to facilitate this planning process. The plan has been funded through grants and in-kind contributions and is provided at no cost to Harrison County.

To assist the Western Harrison County planning team, Harrison County Supervisors Larry Benefield, Marlin Ladner, William Martin, and Kim Savant appointed a nine-person steering committee of local residents. The steering committee acted as a liaison between the citizens and the planning team. They provided input throughout the planning process and ensured that the planning team addressed citizen concerns and incorporated community goals into *The Community Plan for Western Harrison County*. Plans prepared by the adjacent communities of Gulfport, DeLisle, Pineville, and Saucier were evaluated during the preparation of this plan to ensure compatibility between planning efforts. Additionally, the plans of the State, the Army Corps of Engineers, and FEMA were taken into account.

The Community Plan for Western Harrison County has a long-range perspective. Its primary purpose is to aid in managing change in the community by:

- 1) Formulating goals to fulfill the community's vision, and
- 2) Developing a series of strategies to achieve those goals.

Figure I-1. Citizens of the Western planning area meet to discuss their future.



Source: Chris Cunningham

The plan serves as a policy guide for the community. It does not create any laws or regulations; it only identifies methods that are appropriate for carrying out the policies. Any recommendations for zoning changes or new laws will require a separate and distinct public process. It is in the hands of the citizens of the Western planning area and the Harrison County Board of Supervisors to carry the plan through to implementation.

Description of the Planning Process

In collaboration with the County, the plan was created over an eight-month period (as noted in Figure I-2). Following the initiation of the planning process, the team gathered data and background information during the summer of 2007. The team traveled to Harrison County in September 2007 to gather additional data and survey the community's opportunities and challenges.

The team held a Town Hall Meeting on September 4th at the Lizana Elementary School. More than 500 citizens attended the meeting. During the meeting, citizens completed a written survey seeking their opinions on development issues in Western Harrison County. The attendees also participated in a Community Preference Survey designed

to reveal their opinions regarding development options for housing, setbacks, neighborhood center alternatives, walking trails, streetscapes, and commercial development. Attendees then participated in small group discussions of issues that they wanted addressed in the community plan.

Community goals were drafted based on the vision that Western Harrison County citizens communicated during the Town Hall Meeting, through the survey results, and additional comments gathered from a web-based discussion forum and a 1-800 number. Policies and strategies were researched by the team to enable Western Harrison County citizens to implement these goals.

On December 15, 2007 approximately 125 residents gathered at a second Town Hall Meeting to discuss the draft *Community Plan for Western Harrison County*. Citizens assisted in revising the Sector Map, prioritized strategies, and provided commentary. Results of the citizen participation are outlined in Appendix B.

Throughout the planning process, the team consulted with individual citizens, local businesses, developers, and community facility operators to understand the needs of the community.

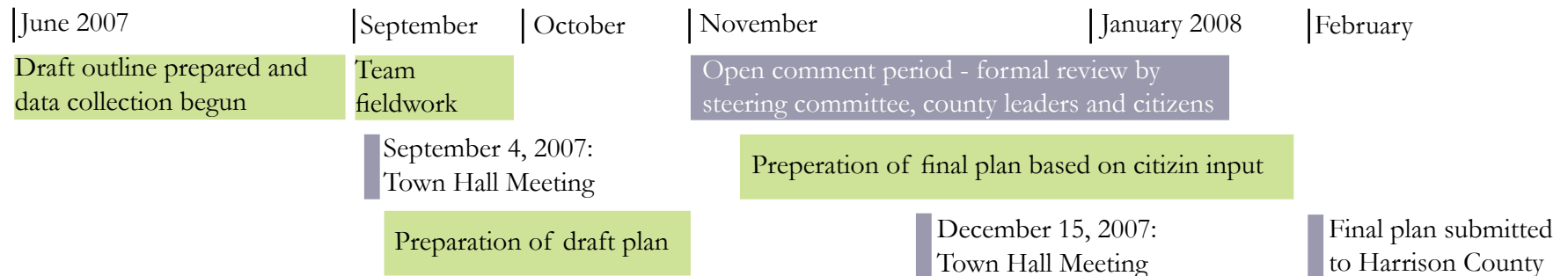


Figure I-2. The community plan formed over eight months.

People

The Planning Team

Professor Jennifer Cowley, PhD, AICP, served as the Project Manager and worked in conjunction with the Harrison County Board of Supervisors and Patrick Bonck, Harrison County Zoning Administrator. Cowley, who teaches planning at The Ohio State University, assembled the following team to work on the *Community Plan for Western Harrison County*.

Bob Cowell, AICP, Director of Planning and Development Services for the City of College Station, Texas, volunteered his time to serve as the Western Harrison County planning team leader. Cowell has spent many years working for local governments as a planner. He previously led the Pineville community planning process.

Team members included the following OSU City and Regional Planning graduate students: Nathan Harber earned his undergraduate degree in Political Science from West Point and served in the Army for five years before pursuing his graduate degree. Brandon Mark earned his undergraduate degree in Environmental and Natural Resource Economics from West Virginia University and is an intern with Franklin County, Ohio. Hannah Fout earned her undergraduate degree in Agriculture with a focus on Animal Sciences from The Ohio State University and is currently working for the Ohio Farm Bureau Federation. Matthew Leasure is a registered landscape architect and is working for Kinzelman Kline Gossman, a design firm. Abigail Mack holds a B.A. in International Studies from Colorado State University with certificates in East Asian Languages and Culture from Kansai Gaidai University Japan and Cornell University and is currently working for Columbus Housing Partnership. Chris Cunningham completed his undergraduate degree in Chemistry at the Ohio State University and is working for the Public Utilities Commission of Ohio.

The Steering Committee

Harrison County Supervisors Larry Benefield, Marlin Ladner, William Martin, and Kim Savant appointed a Steering Committee comprised of area representatives to assist the planning team in

coordinating communication within Western Harrison County and responding to questions and issues during the planning process.

Fred Boykin is a native of the New Hope/Sidecamp community. He served as an army ranger with the United States Army and retired after 28 years of service. He currently serves as a representative of the Retired Veteran's Association in Gulfport.

Brent Fairley was born and raised in Orange Grove. He graduated from Harrison Central High School. He is currently employed with Goldin Metals, Inc. in Gulfport and is active with the Mississippi Coast

Figure I-3. The Steering Committee for the Western Harrison County Planning Process provided important information and feedback in the preparation of this plan. For example, Steering Committee member Angel Middleton arranged a tour of the County Farm, emphasizing the community's support for restoring the farms educational and agricultural purpose.



Source: Chris Cunningham

Chamber of Commerce as an executive committee member. Brent still lives in Orange Grove with his wife and three small children.

Kurt Ladner was born and raised in the Dedeaux community. He is a retired veteran and an avid outdoor sportsman. Kurt is a member of the Paralyzed Veterans of America, Bayou Gulf States Chapter. He also does charity work with the Knights of Columbus Bishop Guinn catholic organization.

Charles Lizana has been a resident of Harrison County for his entire life. He is the owner of A-1 Construction, LLC. The company was started in 1982 and has grown to encompass renovation and new construction projects for major corporations and business enterprises.

Angel Middleton was born and raised in Western Harrison County. She has lived in the area for 41 years. She attended Harrison Central High School and received her nursing degree from Mississippi Gulf Coast Community College.

Kevin Necaise is a lifelong resident of the Vidalia-Dedeaux community. He received his associate degree in Mechanical Design and Technology and works for Lockheed Martin. He is married with three children.

David Reeves lives in the community of Finley. His family has lived in the area for five generations and his great-uncle, Lyman Reeves, was the namesake for the Lyman community. David and his wife Susan have one daughter and live in the family's 104-year-old home.

Aline Taylor is a retired elementary teacher with 41 years of experience with the Harrison County School District. She is married with two children and six grandchildren. She has lived in Harrison County for 43 years and currently resides on Mennonite Road in Lyman.

Lary Thrash has lived in West Harrison County for the last 57 years. He is married to Bonnie Thrash and together they have two children, Tanya and Timmy. He has been employed with the Harrison County School District as a teacher and vocational director for the last 35 years.

Acknowledgements

A warm thank you goes out to all the citizens of Western Harrison

County who welcomed the planning team into their community and took the time to share their community vision so willingly. It was truly this vision that guided the team and made this plan possible.

The steering committee members, who provided crucial information and gathered community feedback, were a valuable asset for the planning team. A special thank you goes out to long-time residents Joe and Babe Buckley, who provided the team with an aerial tour of Western Harrison County.

The entire Harrison County Board of Supervisors deserves thanks for their support of planning efforts in Western Harrison County. Thanks to Patrick Bonck, Smokey Johnson, and Kelvin Jackson and the rest of the Harrison County Zoning Office, who answered numerous questions and worked patiently with our many requests. Thanks also to Harrison County Supervisors Larry Benefield, Marlin Ladner, William Martin, and Kim Savant who coordinated with the planning team and steering committee and acted as invaluable sources of information about the communities of Western Harrison County. Thanks to Paul Barnes and the Southern Mississippi Planning and Development District for their aid in map making.

Community representatives from the Harrison County School District, the Wolf River Conservation Society, the Land Trust for the Mississippi Coastal Plain, the Department of Marine Resources, the Mississippi Institute of Forest Inventory, the Mississippi Gulf Coast Community College, the Mississippi State University Extension Agency, and community churches were also instrumental in compiling the plan. A special thanks goes to Debra Spiers, Principal of the Lizana Elementary School, for opening her school for the town hall meetings. Principal Spiers also opened her classrooms to allow students to provide their ideas for what they want to see for the future of their community.

The team would also like to acknowledge the funding sources that made this work possible, including the U.S. Department of Housing and Urban Development.

The team also thanks the other members of The Ohio State University planning team, whose assistance was critical. One additional professional planner, John Dahlgren from Cleveland, Ohio, volunteered

his time to assist with the planning process. Ellen Cowell, AICP and Meghan Gough generously volunteered their time to assist with the organization and facilitation of the town hall meetings.

Organization of the Document

Chapter 1. Planning Context

The Planning Context summarizes Western Harrison County's important characteristics, key trends, and pressing planning issues.

Chapter 2. Plan

The Plan outlines overall goals and objectives to address the issues identified in Chapter One and provides specific strategies and actions to

achieve these goals and objectives.

Appendix A. Background Assessment

The Background Assessment provides relevant information on community history and trends. It also provides a detailed analysis of the characteristics of population, housing, land use, natural resources, community facilities, and infrastructure that have been reviewed and examined as part of this planning process.

Appendix B. Citizen Involvement Process

The Citizen Involvement Process describes the methods for engaging citizens in the planning process, as well as the ideas and opinions of the community.

Figure I-4. Citizens from across Western Harrison County have come together to share their opinions and thoughts on the future of their community. These ideas have been integrated into this plan.



Source: Nathan Harber

Appendix C. Potential Grant Funding Sources

The Potential Grant Sources identifies sources to assist in implementing the community plan. Funding community projects is an essential element of plan implementation.

Appendix D. Principles of New Urbanism, Conservation Design, and Land Use Conflict Identification Strategy (LUCIS)

The principles of New Urbanism, Conservation Design, and Land Use Conflict Identification Strategy (LUCIS) standards inform the *Community*

Plan for Western Harrison County. These principles and standards emphasize smart growth, neighborhood development, and growth management.

Appendix E. Acronyms and Definitions

The Acronyms and Definitions provides guidance to the reader for terms found throughout this plan.

Figure I-5. Participants in the September 4th Town Hall Meeting came together to discuss the issues that are of importance to the future of the community.



Source: Chris Cunningham

Figure I-6. Students at Lizana Elementary School participated in the planning process by providing their ideas for what they would like to see near their school.



Source: Chris Cunningham

Chapter 1. *Planning Context*

Description of the Community

The Western planning area encompasses an area of 164.6 square miles in Western and Northwestern Harrison County. The planning area is bounded by Interstate Highway 10 to the south, the Little Biloxi River to the north, US Highway 49 to the east, and the county line to the west. These boundaries are shown in Map 1-1. The Western planning area encompasses many communities including Dedeaux, Delmas, Dubuisson, Finley, Landon, Lizana, Lyman, New Hope, Riceville, and Sidecamp. Much of the Western planning area is forested, with the Wolf River as the central water feature. The landscape is dominated by low density single-family houses within a serene rural context. The region's population is represented by both ethnic and economic diversity.

History

The history of the Western planning area centers on generational agriculture and the timber industry. This history is the basis for many of the current community and road names. The centers of these historic settlements continue as the centers of modern communities, such as Lyman, Landon, Lizana and Dubuisson, Dedeaux, and Delmas. Other centers were anchored by schools and churches, such as Finley, Sidecamp, New Hope, and Mount Calvary. Several of these structures have been restored and are still in use today.

Some other communities were named after their agricultural origins. Orange Grove was named after a grove of oranges owned by a local resident. Riceville was established by farmers who grew rice in the flood plains adjacent to the Wolf River.^a

Figure 1-1. Much of Western Harrison County is forested with long-leaf pine trees.



Source: Brandon Mark

The influence of the timber industry can be seen most significantly in the Lyman and Landon communities. At one time, Lyman had the largest timber mill in the world. Weyerhaeuser Forestry has significant land holdings in the northern area of the county and has facilitated timber production in the area for a significant period of time.

Several county facilities contribute to the historical context of the community. The County Farm, established circa 1880, was once a

640-acre, fully operating farm. A unique historic jail sits near County Farm and housed prisoners who worked on the farm. Today, the County Farm remains a smaller, active farm with educational and recreational resources for residents. Another historical facility is the Lyman Fish Hatchery. It opened in 1937 and has served as a critical source of ecological diversity and sustainability throughout Mississippi.

Figure 1-2. The Wolf River has played an important recreational role over time in Western Harrison County.



Source: CC Tex Hamill Collection, Mississippi Gulf Coast Community College.

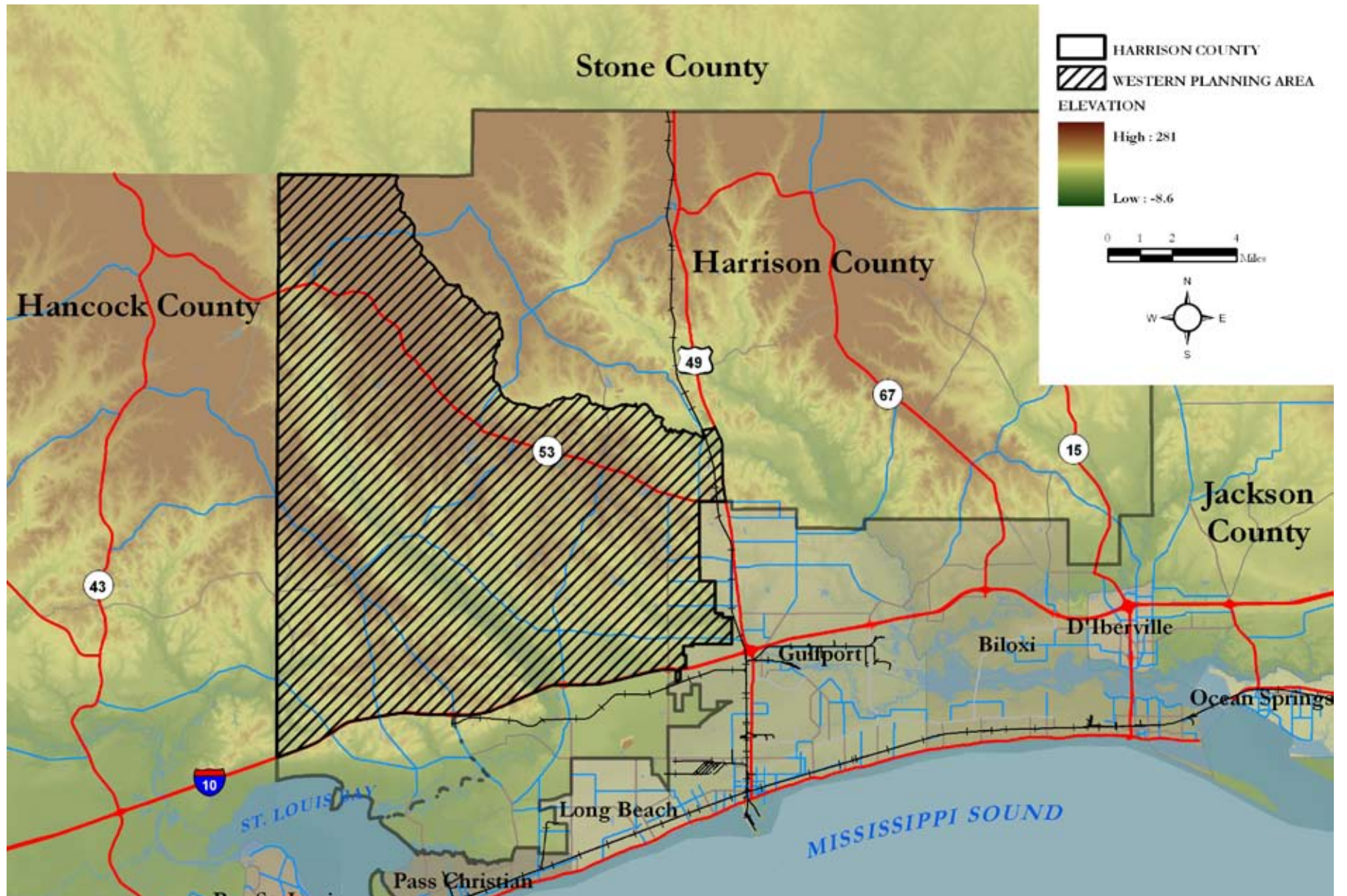
Regional Connections

The citizens of Western Harrison County live in a network of unincorporated communities throughout the area. Many of the citizens have lived in Western Harrison County for over 20 years.^b Fifty-two percent of the citizens work in an area outside of Western Harrison County and a majority travel between one and 19 miles to work every day. Gulfport is the primary destination for those who work outside of Western Harrison County.^c

The citizens of Western Harrison County are connected to other areas of Mississippi and the United States from east to west by US Interstate Highway 10 and from north to south by US Highway 49. Minor arterials in the area going north to south include County Farm Road, Vidalia Road, and Canal Road. Minor arterials going east to west include State Highway 53, Cable Bridge Road, John Clark Road, Landon Road, and Wolf Road. All of these minor arterials help create connectivity within the Western Harrison County region and provide access to other areas within as well as outside of Harrison County.

The major retail center for Western Harrison County is located at the intersection of US Highway 49 and Interstate Highway 10. This regional shopping area provides a mix of retail activity. Stretching three miles north from the intersection along US Highway 49 there are numerous strip-mall-style developments. These retail establishments provide residents with groceries, clothing, auto-related needs, and miscellaneous supplies. Within the Western planning area, there are also small-scale local shopping centers. These are located at busy intersections and typically consist of a convenience/gasoline station. One intersection, at Cable Bridge and Vidalia Roads, has a local supermarket. This is the only supermarket within the West Planning area. Typically, most shopping is located along the major arterials in Western Harrison County or in Diamondhead in Hancock County.

Map 1-1. Regional Connections



Source: Southern Mississippi Planning and Development District

Figure 1-3. Western Harrison County has strong connections to water, including the Wolf River, Little Biloxi River, and area lakes and bayous.



Source: Brandon Mark

Background and Current Trends

Demographics

Western Harrison County had a population of 14,994 according to 2007 estimates from the Mississippi Home Corporation, up significantly from 2000. As of 2007, a majority of the residents in the area were 35 to 54 years old and a substantial number of households had children under 18 years old. Homes within the community are located in a rural environment surrounded by wetlands, rivers, and wooded areas. The population is projected to increase to 32,460 by 2030.^d Much of this growth is due to development north of Interstate Highway 10 and west of US Highway 49, where multiple subdivisions have been proposed and are currently being built.

Housing

In 2007, there were an estimated 7,248 housing units in the planning area, according to the Mississippi Home Corporation. These units were primarily single-family and manufactured homes. Of the housing units, a large percentage were owner-occupied. The majority of housing in the area experienced either wind and/or flood damage from Hurricane Katrina in 2005. To a large extent, the housing previously damaged has been repaired or rebuilt. In addition, new homes and several subdivisions are under construction or are being proposed in the area. The planning area is expected to add approximately 6,000 housing units between 2007 and 2030.^e

Economics

The Western planning area is primarily a rural area with limited local employment opportunities. Residents work in a variety of occupations and commute to employment centers, such as Gulfport and the commercial and office developments along US Highway 49 to the east of the planning area.

The commuting time of working residents is nearly divided

in half, with almost 45 percent of residents commuting between one and 24 minutes to work each day and the other 55 percent commuting more than 25 minutes to work. The industries that employ the largest percentages of the Western planning area residents include the service sector, construction, retail, and manufacturing. Retail employment accounts for about one-third of the 2,067 jobs located in the Western planning area, with the 1,382 remaining jobs being non-retail (school, hotel, small business, and light industry jobs).^f

Current Land Use

Overall, nearly 74 percent of the land in the planning area is forest. The majority of developed land is single-family residential. The single-family residential land is generally low-density and rural in character. Landon Road, Canal Road, and State Highway 53 are three primary residential corridors, with various small neighborhood streets branching off from them. The next largest categories of developed land are commercial and industrial. The primary commercial uses in the area are clustered around three crossroads, with the most extensive offering of services at Canal Road and Landon Road. Other crossroads offering retail services are at Vidalia Road and Cable Bridge Road and State Highway 53 and Lizana School Road. Industrial uses are found at County Farm Road and Firetower Road near Interstate Highway 10.

Natural Resources

The Western planning area is part of the Coastal Stream Drainage Basin, consisting of long-leaf pine forests, meadows, palustrine wetlands, two rivers, and many streams and bayous. The abundant natural resources of the planning area fosters a highly diverse wildlife habitat with over 250 species of plants, fish, and wildlife. The water bodies found in the planning area find their way into the Mississippi Sound by flowing either west into the Saint Louis Bay or east into the Back Bay of Biloxi.

Figure 1-4. Houses of varying styles are common in Western Harrison County.



Source: Brandon Mark

Figure 1-5. The Lizana Fire Station provides fire service to area residents, as well as serving as a voting precinct polling station.



Source: Chris Cunningham

Community Facilities and Resources

The Western planning area is home to a variety of community facilities. These include schools, parks, churches, the Harrison County Fairgrounds, and a senior center. The area is home to one elementary school and the site of a new high school facility. Also planned for the area are two emergency shelters, one of which is the new West Harrison County High School.

Of the many community resources within Western Harrison County, the County Farm is home to many recreational and community facilities. It is the location of soccer fields, the Harrison County Fairgrounds, the Lyman Senior Center, and it still functions as a farm that is worked by county inmates.

Infrastructure

The Western planning area contains three types of roadways: an interstate highway, state highways, and local roads. Interstate Highway 10 runs east-west and US Highway 49 runs north-south. These two roads provide the primary access points to Western Harrison County. The area has a number of roadways that connect to Interstate Highway 10 and US Highway 49, including Canal Road, County Farm Road, State Highway 53, Vidalia Road, and Kiln-Delisle Road, all of which allow for travel into and out of Western Harrison County. The Mississippi Department of Transportation has plans to construct State Route 601, which will run east of Canal Road from Interstate Highway 10 north through the planning area.

Twenty-five percent of the Western planning area receives public water, while the remaining population uses private or community wells. The elementary school and many subdivisions receive sanitary sewage services from local utility companies or sewage treatment plants. Other residents and facilities use on-site septic systems for the treatment of wastewater. The Dubuissou, Landon, Lyman, and Orange Grove communities will have the extension of water and sewer service into their communities as part of the *Gulf Coast Regional Water and Wastewater Plan*.

Figure 1-6. Participants at the Town Hall Meeting completed a citizens survey to determine which issues are most important to residents.



Source: Chris Cunningham

Surrounding Communities

In developing the *Community Plan for Western Harrison County*, the planning team reviewed the existing growth strategies of neighboring municipalities. The plans of DeLisle, Gulfport, Hancock County, and Pineville call for the adjacent areas to primarily retain their rural character.

The DeLisle plan calls for keeping the area south of Interstate Highway 10 as primarily rural residential, with the provision of the area at the top of the bay for a casino development.⁸ The 2003 *Gulfport Comprehensive Plan* includes sections of the Western Planning Area as part of a proposed growth area for potential annexation. This plan indicates that Gulfport is currently at 58.6 percent build out and that the city should look at annexation when build out reaches 60-65 percent. The portions of the Western Planning Area targeted for annexation in the Gulfport future land use map are designated as a mix of low density residential primarily south of the County Farm and rural residential and agriculture primarily north of the County Farm. Between Landon Road and Interstate Highway 10 the plan calls for commercial development.^h At the present time, the City of Gulfport is undertaking a comprehensive planning process, which is likely to change the future land use proposals.ⁱ Hancock County is also currently undertaking a comprehensive planning process. The plans have not yet been completed for the areas along the Harrison County/Hancock County border. It is anticipated that Diamondhead will continue to build out in a manner similar to the existing development, while areas north of Diamondhead will remain rural.^j

Community Input

The Community Plan for Western Harrison County is a reflection of the desires of the citizens for the future of their community. Citizens were engaged throughout the planning process in a variety of ways. Input was provided through a Community Preference Survey, small group discussions, community surveys, a 1-800 number, an on-line discussion board, responses to community newsletters, and steering committee

members. Much of the community input was gathered at a Town Hall Meeting held at the Lizana Elementary School on September 4th, 2007. A second Town Hall Meeting was held at the Lizana Elementary School on December 15th, 2007. A complete summary of the information gathered and the methods used can be found in Appendix B.

Figure 1-7. The majority of respondents (69.7%) found this aerial photograph of large lot subdivision as acceptable for Western Harrison County.



Source: Brandon Mark

Figure 1-8. This type of commercial development was found to be acceptable by participants in the community preference survey.



Source: Rickie Yeager

Community Preference Survey

A Community Preference Survey (CPS) was conducted at the September 4th Town Hall Meeting. Approximately 400 people participated. The survey is a tool used to determine a community's opinions on various alternatives for its built environment. The participants were asked to evaluate a series of images and rate them on a scale of one to five, with one being very unacceptable and five being very acceptable.

The images presented during The Western Harrison County CPS were used to measure preferences for single-family housing style, multi-family housing style, housing setback distance, walking/bike trail styles, and commercial development styles. Citizens showed a strong preference for housing on large lots with large setbacks from the road. The aerial image shown in Figure 1-7, was found most acceptable by citizens of Western Harrison County. Other styles of single-family homes received mixed opinions. Several multi-family homes were shown as well. The majority of citizens found these images to be unacceptable.

As for walking/bike paths, residents found the natural and landscaped paths to be acceptable somewhere in Western Harrison County. They found that walking/bike paths close to roadways would be unacceptable. The walking trail with natural landscaping received the most acceptable votes. Citizens were shown pictures depicting both small scale and large scale commercial developments. A small restaurant, which can be seen in Figure 1-8, was found to be an acceptable style of commercial development within Western Harrison County, with the other images receiving mixed results. As for large-scale commercial development, there were mixed results regarding each of the photos presented.

Small Group Discussions

The small group discussions held at the September 4th Town Hall Meeting revealed the strong ties that citizens feel to their community. Citizens were asked to identify what they liked best about Western Harrison County, what they liked least, and what they would change to make their community better.

Citizens expressed their appreciation for Western Harrison County's rural setting and the connection with the natural environment it affords. Traffic, connection to nature (especially waterways), and a lack of recreational facilities and small businesses were the top issues about which citizens had concerns. Additional access to waterways, increased recreational opportunities, and increased zoning enforcement were some of the top suggestions made by citizens.

Citizen Surveys

At the September 4th Town Hall Meeting, households of Western Harrison County were asked to answer a written survey. The team received a total of 216 responses from the Town Hall Meeting and by mail and electronic submission. The purpose of the survey was to gather information on citizens' current feelings about their community and to determine what issues are most important to them concerning the future. The results, in addition to other tools, were used to guide the formation of the plan.

The majority of Western Harrison County citizens responded positively to policies that support recreational opportunities, access to and preservation of natural resources, and the creation of senior housing. Policies encouraging construction of new office and industrial parks were not favored. Most citizens felt that the pace of development in the Western Harrison County area is either just right or too fast. The majority of citizens were concerned with existing environmental hazards, including landfills as well as those that affect water quality.

Citizens also answered questions concerning recreational and other community facilities that they would like to see in their community. Many citizens expressed a desire to see a community center, walking trails, and other recreational opportunities. The services that citizens would most like to see are restaurants, grocery stores, auto services, banking services and medical facilities.

Scenario and Policy Voting

During the December Town Hall Meeting citizens were asked to vote on a variety of development scenarios and policy options for the community. Participants support the further development of the crossroads communities. They also support the enhancement of the interchange of proposed State Route 601 and State Highway 53. Participants support a tree preservation policy and the establishment of a scenic roadway ordinance.

Dot Voting

Citizens prioritized strategies to be achieved as the *Community Plan for Western Harrison County* is implemented at the December Town Hall Meeting. Participants most strongly support preserving the rural character of the community.

Additional Community Input

Several additional methods were used to gather community opinions during the formation of the plan. A 1-800 number was available for citizens to call in and leave messages containing any questions, comments, or concerns throughout the planning process. An on-line discussion board was also available throughout the process and it served a similar purpose. It had the added benefit of facilitating dialogue among community members. All citizens received a series of newsletters, some of which contained articles requesting feedback on different alternatives. The Western Harrison County Steering Committee members also spoke with community members to gather community feedback. A Planner's Day in School event was held at the Lizana Elementary School to gain input from students on what they would like to see around their school. A summary of the responses received from these citizen participation tools can be found in Appendix B.

Observations

The following topics, which are the result of citizen input and information about Western Harrison County's past and current conditions, include the major concerns and opportunities facing the community today.

Hurricane Katrina

The areas along Western Harrison County's bayous and rivers were significantly impacted by Hurricane Katrina's storm surge. Some areas along the Wolf River experienced flood damage. The storm has also increased development pressure in the Western planning area.

Rural Character

As the community grows, an important concern of citizens is that the Western planning area should retain its rural character. A majority of citizens would like to see development remain the same as it was before Katrina, with rural residential and small businesses. Since portions of Western Harrison County have higher elevations, the area has become an attractive option for coastal citizens who are looking to relocate inland. A change in the area's character is likely unless measures are taken to preserve the area's rural setting and to focus urban development in desired locations.

Development Activities

Historically, The Western planning area has remained a rural area with a limited amount of development. However, the effects of Hurricane Katrina have caused people to seek higher land elevation for housing in places that are still a convenient distance to employment centers. In addition, population is anticipated to increase to approximately 32,000 people by 2030.

Citizens have noted that that they want to maintain the community's rural character as additional population is added. In order to identify the appropriate land for development, a land suitability

analysis was conducted. The conclusions of this analysis, which can be seen in Map D-1 on page D-206, aided in the development of the Sector Map and Concept Plan. The areas most suitable for development were determined using the results from the land suitability analysis in conjunction with other considerations, such as community input and current development patterns.

It is important to note that new development is happening at a rapid pace throughout the planning area. Examples of large-scale projects include the planned University of Southern Mississippi campus on Landon Road just east of County Farm Road, and the Bocage Project located east of Diamondhead and to the north of Interstate Highway 10.

Figure 1-9. The development of single family home subdivisions is occurring in many locations in Western Harrison County, such as this one on John Clark Road.



Source: Chris Cunningham

Natural Resources

Many citizens expressed a desire to preserve the natural environment surrounding their community. They value their close connection with the rivers, bayous, forests, and open meadows. The citizens view the natural features of the area as a great asset, especially the Wolf River, and they are concerned with the limited access they have to these community amenities. Protecting the area's natural features from overdevelopment and erosion is a priority for citizens. Additionally, the preservation and restoration of the natural environment will aid in flood mitigation. Wetlands act like a sponge, absorbing and slowly releasing excess water, which aids in protecting residential areas. The area's soil composition also indicates that flooding, heavy rains, and poor drainage are a natural occurrence in the Western planning area. Citizens are aware of the poor soil conditions, and they voiced concerns about overdevelopment leading to water contamination.

Recreation

The citizens of Western Harrison County expressed a desire to increase the recreational opportunities in the area. Citizens and the Lizana Youth Organization indicated that parks are located too far from much of the population and that additional fields are needed for youth.

There is also interest in expanding the County Fairgrounds facilities to accommodate a broader range of festivals and activities. Although the County Fairgrounds hosts many events annually, the site could become a regional center for entertainment activities within the area by upgrading the facilities.

Citizens also indicated the need for a larger community center to host activities. The primary suggestion is that the Lyman Senior Center be expanded to better meet the community's needs.

Commercial Convenience

The Western planning area contains limited commercial and retail services. Service areas are located at three crossroads: Canal Road and Landon Road, Lizana School Road and Highway 53, and Vidalia

Road and Cable Bridge Road. There are also scattered neighborhood-oriented stores. Citizens would like to see additional commercial and retail in their community while retaining a rural character. In particular, residents expressed a desire for a post office, local restaurants, and a pharmacy.

Community Heritage

The community has expressed the desire to restore the County Farm and its historic jail for use as a museum.

Infrastructure

Citizens of Western Harrison County are concerned with traffic congestion and excessive automobile speeds on area roadways. The Gulf Regional Planning Commission has identified a number of expansion projects on area roadways. In addition, State Route 601 is a planned four-lane, partially elevated roadway that will run to the east of Canal Road and connect US Highway 90 with Interstate Highway 10 which will continue on to Wiggins. These roadway additions and expansions will aid in accommodating current growth occurring throughout the planning area.

Citizens support the expansion of sewer service into the planning area. The current wastewater plans call for the extension of water and sewer service into Dubuison, Landon, Lyman, and Orange Grove (See Map A-16 on p. A-140). While citizens support the expansion of the infrastructure, the growth that occurs in these areas must be managed to maintain its rural character.

Figure 1-10. The Lyman Senior Center is viewed by citizens as a valuable community facility.



Source: Chris Cunningham

Figure 1-11. The County Farm jail was formerly used to house prisoners that worked the farm.



Source: Chris Cunningham

- a Brieger, James. F. 1980. *Hometown Mississippi*. Second Edition. From the collection of the Mississippi Gulf Coast Community College.
- b Community Survey Results, Appendix B.
- c Ibid.
- d Population forecasts developed by Ohio State University, methodology and population figures are provided in Appendix A.
- e Population projection developed by Ohio State University, methodology and population figures are provided in Appendix A.
- f Employment in the Western Planning Area is for 2002 from the Gulf Regional Planning Commission Traffic Analysis Zone data. The types of jobs were determined through field observations.
- g Harrison County. 2006. *Community Plan for DeLisle*. Retrieved on November 19, 2007 from <http://www.co.harrison.ms.us/departments/zoning/downloads.asp>
- h Gulfport. 2003. *Gulfport Comprehensive Plan*. Retrieved on November 19, 2007 from <http://www.ci.gulfport.ms.us/URBANDEV/DRAFTGulfportCompPlan.pdf>
- i Bounds, Jeff. 2007. Planner, Charontes Group, Personal Communication, October 22.
- j Spector, David. 2007. Planner, Camp, Dresser, and McKee, Personal Communication, November 26.

Chapter 2. *The Plan*

The focus of this plan is to establish goals and strategies that will make the citizens of Western Harrison County's vision for the planning area a reality. The plan recommends strategies and specific action steps to accomplish the goals and objectives.

Prior to defining goals, the planning team assessed the existing conditions and trends. The details of this study are found in Appendix A, Background Assessment. Issues and recommendations in this plan come from the results of the Town Hall meeting, discussions with the Western Harrison County Steering Committee, discussions with citizens and feedback from community residents gathered from a 1-800 number and an online community forum designed for this plan.

The *Community Plan for Western Harrison County*, in its broadest form, is a statement of what the community strives to achieve and what the residents hope Western Harrison County will become. The goals and strategies outlined in this chapter are to be achieved over the next 20 years. Some will be challenging to accomplish.

This plan documents the desires of the community, helps to determine public investment priorities, and serves as a general framework for the development of specific regulations and standards to guide public and private developments.

Figure 2-1. One of the goals of this plan is to expand recreational opportunities. Shown below are the soccer fields at the County Farm.



Source: Chris Cunningham

Themes

This plan includes two main themes. These themes provide the policy framework that shapes each of the goals, strategies, and implementation actions. The themes are:

Preservation - This theme is focused on safeguarding what is unique and special to the residents of the Western Harrison County. This includes such features as the rivers, bayous, forests, historic sites, and, above all, the rural character of the communities. This theme is also about preserving open space by reversing the trend of sprawl and focusing development in designated growth areas.

Connection - This theme is focused on connections within Western Harrison County. This includes recreational trails and public access to the unique natural assets. Connections are also about linking the community to its history.

Figure 2-2. Farms in the Western Planning Area are an example of the rural character to be preserved.



Source: Chris Cunningham

Figure 2-3. The County Farm Prison is one example of a connection to the Western Harrison County's past.



Source: Nathan Harber

Community Goals and Strategies

The objective of the plan is to evaluate and suggest improvements to aid the citizens in achieving their goal of managing change in their communities. The face of Western Harrison County is destined to change as the result of Hurricane Katrina. To manage change in the community, many options may be considered. Community input, survey responses, and the Town Hall Meetings were all instrumental in drafting the goals, strategies, and action items in this plan (see Appendix B for more detail). An integral part of the planning process is the formulation of goals that represent a community's vision for the future.

While they are concerned about the future, residents also recognize the need to build and grow in a sustainable manner that meets the needs of the present generation without compromising the ability of future generations to meet their own needs.

The following goals work toward sustainability through the application of sound planning principles that also incorporate the wide range of issues and opportunities identified by Western Harrison County community members. The community stated they would like to:

- Ensure Western Harrison County prepares for growth;
- Maintain the rural character of their communities;
- Enhance and preserve the environment;
- Develop and expand recreational opportunities;
- Support a variety of economic activity; and
- Promote strategic investment in housing.

Implementation

If this plan is to be a blueprint for Western Harrison County, then it must provide citizens with implementation strategies. It does this in a number of ways. In this section, each goal is supported by a series of strategies meant to assist the community in focusing its resources. Under each strategy there are detailed actions that serve as a checklist for the community to achieve its goals. Many of the actions in this plan will require significant financial investment. Appendix C describes a variety of funding sources that are available to aid in the implementation of this plan.

Because Western Harrison County is an unincorporated community, the Harrison County Board of Supervisors is the entity responsible for carrying out most of the action steps. For example, the Board is the entity that has the authority to adopt any recommended regulatory measures. However, in order to assist in the implementation of the plan, Western Harrison County residents are encouraged to form a non-profit organization to solicit and receive grant monies, coordinate local citizen efforts, and undertake other action steps, especially those that are non-regulatory.

The plan is meant to be a living document, one that is consulted regularly by the community and that serves as a practical guide to decision making. Responsible parties are identified for each action, such as the Board of Supervisors, the Western Harrison County non-

profit (Western Harrison County Action Team or W.H.A.T.), or other appropriate entities. These parties are noted in the Implementation Timeline table that follows each goal. Timeframes for implementation are broken down into four categories:

1. Immediate;
2. Short-term;
3. Medium-term; and
4. Long-term.

The immediate term follows the publication of this plan to the end of the first year. In other words, the immediate term encompasses Year One (2008). The short-term is the entirety of Years Two through Five (2009-2012). The medium-term follows this five-year period from Years Six to Ten (2013-2017). The long-term is the remainder of the period that this plan covers through Year 20 (2018-2027).

The short-term implementation strategies are broken into one-year periods. The medium- and long-term implementation strategies use more general timeframes, since opportunities for action are less clear at this point. Such timeframes are a guide for the community to prepare for development and next steps. The pursuit of medium- and long-term aspects of the plan will often be dependent on the progress of short-term action items.

GOAL 1. ENSURE THAT WESTERN HARRISON COUNTY PREPARES FOR GROWTH.

STRATEGY A. Use the *Community Plan* as a guide for future growth and development.

Action 1. Circulate and promote the *Community Plan for Western Harrison County* to make residents, business owners, and property owners aware of its policies and recommendations.

Action 2. Support the establishment of W.H.A.T to oversee and seek funding for the implementation of the plan.

STRATEGY B. Promote growth as specified in the designated zones of the Sector Map and in the manner described in the Concept Plan.

Action 1. Promote low- to medium-density residential and neighborhood commercial development in sectors identified as Controlled Growth (G-2) where centralized water and sewer service is available.

Action 2. Promote medium- to high-density residential and commercial development in Intended Growth (G-3) sectors where centralized water and sewer service is available.

Action 3. Discourage the expansion of water and sewer service in areas designated Restricted Growth (G-1), Preserved Open Space (O-1), and Reserved Open Space (O-2).

Action 4. Require subdivision and rezoning approval to be contingent upon water and sewer availability in the Controlled Growth (G-2) and Intended Growth (G-3) sectors.

Action 5. Revoke rezoning approval if progress is not made on development within two years.

Action 6. Enforce zoning codes as development occurs and ensure that development is consistent with this plan.

STRATEGY C. Provide an adequate roadway network to support growth.

Action 1. Coordinate with Mississippi Department of Transportation (MDOT) to ensure that a stoplight is added at the intersection of State Highway 53 and County Farm Road.

Action 2. Coordinate with MDOT on the design of the interchange on State Route 601 and State Highway 53 to ensure that the aesthetics of the overpass help enhance the character of Western Harrison County by creating an attractive gateway.

GOAL 2. MAINTAIN THE RURAL CHARACTER OF THE COMMUNITY.

STRATEGY A. Promote low density uses in designated rural residential areas.

Action 1. Support retention of the existing agricultural and very low density residential uses in the Restricted Growth (G-1) Sector.

Action 2. Support the rezoning of areas in the Restricted Growth (G-1) sector that are not currently zoned as either E-1 Very Low Density Residential or A-1 General Agriculture.

Action 3. Amend the Zoning Ordinance to allow families to locate more than one home as part of a family compound in the General Agriculture (A-1) district.

STRATEGY B. Preserve the quiet residential areas and scenic nature of appropriate portions of Western Harrison County.

Action 1. Encourage the creation of a scenic corridor ordinance to enforce setback and landscape requirements in order to preserve, restore, and enhance Western Harrison County's rural roadways, such as Wolf River Road, Cable Bridge Road, Firetower Road, Kiln-Delisle Road, Vidalia Road, and Cemetery Road.

Action 2. Designate State Highway 53, between the Western border of Harrison County and State Route 601 as a scenic byway.

STRATEGY C. Encourage the preservation of open space within new residential developments.

Action 1. Encourage conservation subdivision development in areas designated as Controlled Growth (G-2).

Action 2. Amend the Zoning Ordinance to require community open space in all new subdivisions in Controlled Growth (G-2) and Intended Growth (G-3) sectors.

STRATEGY D. Restore the connections between Western Harrison County and its heritage.

Action 1. Implement the master plan for the County Farm and its related facilities and properties to aid in its return as a viable operation, recognize its historic role in the community, and expand its programs.

Action 2. Encourage the creation of a Harrison County Historic Preservation Committee.

Action 3. Encourage the Harrison County Historic Preservation Committee to conduct a survey of Western Harrison County to identify historic sites within the county.

Action 4. Support the development of community gateways at the new State Highway 601 overpasses on State Highway 53 and Landon Road and at the overpass of Interstate Highway 10 and County Farm and Firetower Roads.

Maintain the rural character of the community.									
	Responsible Parties	Possible Funding Source	Immediate	Short Term			Medium Term	Long Term	
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6-10	Year 11-20
2.A Action 1. Support retention of the existing agricultural and very low density residential uses in the Restricted Growth (G-1) Sector.	Harrison County								
2.A Action 2. Support the rezoning of areas in the Restricted Growth (G-1) sector that are not currently zoned as either E-1 Very Low Density Residential or A-1 General Agriculture.	Harrison County								
2.A Action 3. Amend the Zoning Ordinance to allow families to locate more than one home as part of a family compound in the General Agriculture (A-1) district.	Harrison County								
2.B Action 1. Encourage the creation of a scenic corridor ordinance to enforce setback and landscape requirements in order to preserve, restore, and enhance Western Harrison County's rural roadways, such as Wolf River Road, Cable Bridge Road, Firetower Road, Kiln-Delisle Road, Vidalia Road, and Cemetery Road.	Harrison County								

GOAL 3. ENHANCE AND PRESERVE THE ENVIRONMENT.

STRATEGY A. Protect the natural features in Western Harrison County.

Action 1. Support W.H.A.T. in educating members of the community about the advantages of wetland mitigation and habitat protection and encourage them to work with the Land Trust for the Mississippi Coastal Plain and the Wolf River Conservation Society to protect privately owned wetlands and forests.

Action 2. Coordinate with the Wolf River Conservation Society and other organizations to prepare a Wolf River Basin plan and to identify conservation opportunities in the Wolf River watershed.

Action 3. Encourage developers to use low impact development techniques, such as pervious surfaces, rain gardens, restored wetlands, and bioswales, to protect water quality by cleaning and detaining water before it enters the area.

Action 4. Support Harrison County's enforcement of best storm water management practices.

Action 5. Support W.H.A.T. and the Harrison County Soil and Water Conservation District in educating citizens about controlling invasive species on their property and encourage them to coordinate with local agencies to eliminate the top ten invasive plant species in Mississippi.^a

STRATEGY B. Encourage landowners to plant or restore storm-resistant, native species.

Action 1. Advocate community participation in seedling and tree give-away programs sponsored by the National Arbor Day Foundation, Replant South Mississippi, Urban Forestry Council, and the Audubon Society.

Action 2. Support W.H.A.T. in organizing an initiative to educate members of the community about native and non-native plants and how to recognize them so that there is an understanding of when and where they should be preserved.

Action 3. Support W.H.A.T. in the creation of a native tree handbook that can be distributed to the community as part of the native tree education initiative.

STRATEGY C. Encourage the expansion of the greenway along Wolf River to establish environmental preservation and recreational amenities.

Action 1. Support W.H.A.T. in educating members of the community about the advantages of wetland mitigation and habitat protection and encourage them to work with the Land Trust for the Mississippi Coastal Plain and the Wolf River Conservation Society to protect privately owned wetlands and forests.

Action 2. Coordinate with the Land Trust for the Mississippi Coastal Plain, the Wolf River Conservation Society, and/or the Mississippi Department of Marine Resources to continue to purchase and hold conservation easements adjacent to the Wolf River.

Action 3. Encourage landowners along the Wolf River to join the Scenic Streams Stewardship Program (SSSP).

STRATEGY D. Encourage the remediation of previous industrial sites.

Action 1. Identify former industrial sites within the planning area that have potentially hazardous remnants, such as heavy metals and volatile organic compounds. These may include former landfills, turpentine, tung nut, and lumber manufacturing sites.

Action 2. Apply for state and federal brownfield funding opportunities, as listed in Appendix C, for the remediation of the former industrial sites identified in Action 1.

Action 3. Support the county in executing the state and federal brownfield grants through oversight during the remediation process.

STRATEGY E. Protect the public from environmental hazards of septic system failures.

Action 1. Encourage property owners to connect to sewer service where it is available.

Enhance and preserve the environment.		Possible Funding Source	Immediate	Short Term			Medium Term	Long Term	
Responsible Parties			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6-10	Year 11-20
3.A Action 1. Support W.H.A.T. in educating members of the community about the advantages of wetland mitigation and habitat protection and encourage them to work with the Land Trust for the Mississippi Coastal Plain and the Wolf River Conservation Society to protect privately owned wetlands and forests.	W.H.A.T., Land Trust for the Mississippi Coastal Plain, Wolf River Conservation Society	NR-2							
3.A Action 2. Coordinate with the Wolf River Conservation Society and other organizations to prepare a Wolf River Basin plan and to identify conservation opportunities in the Wolf River watershed.	Harrison County, Wolf River Conservation Society	NR-4							
3.A Action 3. Encourage developers to use low impact development techniques, such as pervious surfaces, rain gardens, restored wetlands, and bioswales, to protect water quality by cleaning and detaining water before it enters the area.	Harrison County	II-2							
3.A Action 4. Support Harrison County's enforcement of best storm water management practices.	Harrison County								
3.A Action 5. Support W.H.A.T. and the Harrison County Soil and Water Conservation District in educating citizens about controlling invasive species on their property and encourage them to coordinate with local agencies to eliminate the top ten invasive plant species in Mississippi.	W.H.A.T., Land Trust for the Mississippi Coastal Plain, Wolf River Conservation Society, University of Southern Mississippi, Mississippi State University Extension, Mississippi Museum of Natural Science	NR-17, NR-18							

Enhance and preserve the environment. (Cont.)		Possible Funding Source	Immediate	Short Term					Medium Term	Long Term
Responsible Parties			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6-10	Year 11-20	
3.B Action 1. Advocate community participation in seedling and tree give-away programs sponsored by the National Arbor Day Foundation, Replant South Mississippi, Urban Forestry Council, and the Audubon Society.	W.H.A.T.	NR-1, NR-7, NR-8								
3.B Action 2. Support W.H.A.T. in organizing an initiative to educate members of the community about native and non-native plants and how to recognize them so that there is an understanding of when and where they should be preserved.	W.H.A.T.	NR-9, NR-10								
3.B Action 3. Support W.H.A.T. in the creation of a native tree handbook that can be distributed to the community as part of the native tree education initiative.	W.H.A.T.	NR-10								
3.C Action 1. Support W.H.A.T. in educating members of the community about the advantages of wetland mitigation and habitat protection and encourage them to work with the Land Trust for the Mississippi Coastal Plain and the Wolf River Conservation Society to protect privately owned wetlands and forests.	W.H.A.T.	NR-2, NR-4, NR-5, NR-13								
3.C Action 2. Coordinate with the Land Trust for the Mississippi Coastal Plain, the Wolf River Conservation Society, and/or the Mississippi Department of Marine Resources to continue to purchase and hold conservation easements adjacent to the Wolf River.	Harrison County, Land Trust for the Mississippi Coastal Plain, Wolf River Conservation Society, Mississippi Department of Marine Resources	NR-5, NR-14, NR-15, NR-16								
3.C Action 3. Encourage landowners along the Wolf River to join the Scenic Streams Stewardship Program (SSSP).	W.H.A.T.	NR-5								

GOAL 4. DEVELOP AND EXPAND RECREATIONAL OPPORTUNITIES.

STRATEGY A. Create, maintain, and expand public facilities and parks.

Action 1. Remediate the old landfill at the County Farm to create a community park.

Action 2. Coordinate with agencies such as the Land and Water Conservation Fund of the Mississippi Department of Wildlife and Fisheries and Parks to obtain additional funding sources designated for natural parks with recreational opportunities.

Action 3. Coordinate with the Land Trust for the Mississippi Coastal Plain, the Wolf River Conservation Society, and/or the Mississippi Department of Marine Resources to make conservation easements along the Wolf River publicly accessible for canoeing.

Action 4. Encourage W.H.A.T. to partner with the Harrison County School District to ensure maintenance of the Lizana Elementary baseball fields.

Action 5. Provide citizens of Western Harrison County with a community center at the current location of the Lyman Senior Center and an additional location in Western Harrison County.

Action 6. Coordinate with the Harrison County School District to expand public access to athletic facilities during off school hours, after athletic practices, and during summers.

Action 7. Partner with the University of Southern Mississippi regional campus to allow for community access to recreational facilities at any recreational facilities that are developed at the site.

STRATEGY B. Promote the development of recreational trail connections.

Action 1. Use the Concept Plan as a guide to promote the development of bike and walking trails and equestrian paths that connect subdivisions and community crossroads to natural resources and recreational amenities.

Action 2. Coordinate with MDOT to obtain funding through the *Safe Routes to School Program* to install appropriate pedestrian infrastructure (e.g., sidewalks, crosswalks, crossing signals, street trees, and bike racks) in the vicinity of the Lizana Elementary School.

Action 3. Coordinate with the Land Trust for the Mississippi Coastal Plain, the Wolf River Conservation Society, and/or the Mississippi Department of Marine Resources to make conservation easements along the Wolf River publicly accessible for recreational trails.

GOAL 5: SUPPORT A VARIETY OF ECONOMIC ACTIVITY.

STRATEGY A. Promote a strong tax base and economic vitality.

Action 1. Use the Concept Plan as a guide to promote neighborhood-serving commercial development at the following locations: Vidalia Road and Cable Bridge Road; County Farm Road and State Highway 53; Lizana School Road and State Highway 53.

Action 2. Use the Concept Plan as a guide to promote region-serving commercial development at the County Farm Road interchange of Interstate Highway 10 and the State Highway 53 interchange of State Highway 49.

Action 3. Coordinate with the Harrison County Development Commission (HCDC) to identify additional opportunities to create employment in the community.

Action 4. Partner with HCDC to identify and apply for economic development funding to support businesses in Western Harrison County.

Action 5. Partner with the HCDC and the Southern Mississippi Planning and Development District (SMPDD) to create a new place for local work opportunities on the property (indicated as the Employment Center on the Concept Plan) between Vidalia Road and Firetower Road and between Interstate Highway 10 and the Pecan Grove Landfill to complement the regional economic development strategy.

Support a variety of economic activity.	Responsible Parties	Possible Funding Source	Timeline						
			Immediate	Short Term			Medium Term	Long Term	
			Year 1	Year 2	Year 3	Year 4	Year 5	Year 6-10	Year 11-20
5.A Action 1. Use the Concept Plan as a guide to promote neighborhood-serving commercial development at the following locations: Vidalia Road and Cable Bridge Road; County Farm Road and State Highway 53; Lizana School Road and State Highway 53.	Harrison County								
5.A Action 2. Use the Concept Plan as a guide to promote region-serving commercial development at the County Farm Road interchange of Interstate Highway 10 and the State Highway 53 interchange of State Highway 49.	Harrison County								
5.A Action 3. Coordinate with the Harrison County Development Commission (HCDC) to identify additional opportunities to create employment in the community.	Harrison County, HCDC								
5.A Action 4. Partner with HCDC to identify and apply for economic development funding to support businesses in Western Harrison County.	Harrison County, HCDC	ED-2, ED-3, CD-2, II-1							
5.A Action 5. Partner with the HCDC and the Southern Mississippi Planning and Development District (SMPDD) to create a new place for local work opportunities on the property (indicated as the Employment Center on the Concept Plan) between Vidalia Road and Firetower Road and between Interstate Highway 10 and the Pecan Grove Landfill to complement the regional economic development strategy.	Harrison County, Harrison County Development Commission (HCDC)	ED-2, ED-3, CD-2, II-1							

GOAL 6: PROMOTE STRATEGIC INVESTMENT IN HOUSING.

STRATEGY A. Encourage the development of a variety of quality housing that is affordable to a diverse range of incomes.

Action 1. Work with the Mississippi Home Corporation and the Renaissance Corporation to identify and promote the use of funding opportunities for homeownership (e.g., Housing trust fund, community land banks, New Markets Tax Credit, patient capital funds, etc.).

Action 2. Support the Renaissance Corporation in efforts to create workforce housing adjacent to employment areas, such as the employment center described in Goal 5, Strategy A, Action 5, and to partner with employers on employer-assisted housing opportunities.

Action 3. Support new construction of additional housing on existing vacant lots in established neighborhoods.

Action 4. Encourage the creation and use of housing improvement programs, including grants, loans and other assistance programs.

Action 5. Work with FEMA and other local agencies to transition temporary residents into permanent, quality housing.

Concept Plan and Sector Map

The Concept Plan illustrates the major physical policies stated in the aforementioned goals, strategies, and action statements. This part of the plan is conceptual in nature and conveys general ideas about development patterns, public and private investments, and the extension or expansion of existing facilities and services. In conjunction with the Concept Plan, the Sector Map serves as the land use map that guides the location and intensity of development. Appendix D provides further explanation of the Sector Map definitions. In order to help guide the development of the Concept Plan and Sector Map, the team used a Land Use Conflict Identification Strategy (LUCIS) to identify areas that are most suitable for development. In deciding where to guide growth, the team took into consideration the community's desire to preserve natural areas. By considering many of the features in the Western planning area that the community values the team produced a model highlighting areas most suitable for development. (See Map D-1 on page D-207).

The following section briefly explains the contents of the Concept Plan and Sector Map as well as the basis for its recommendations. This Sector Map, when combined with the Concept Plan, provides a clear vision for the use of land and management of change in Western Harrison County. The Sector Map and the Concept Plan should be used together when undertaking any of the described strategies and actions.

Preservation Areas

The Concept Plan supports the preservation of natural areas along the Wolf River and the bayous in Western Harrison County. The specific areas in Western Harrison County that should be preserved are classified as Preserved Open Space (O-1) and Reserved Open Space (O-2) on the Sector Map, though preserved natural areas are encouraged in all of the sectors. These preservation areas should accommodate additional recreational opportunities, including public canoe, kayak, and fishing access as well as bicycle and pedestrian paths and equestrian trails.

To access the Wolf River, Section 16 land, easements on private properties, and conservation easements should be considered. When

long term leases expire on the Section 16 parcels adjacent to the river, public access could be provided by dedicating a portion of the land to boat launches. When Weyerhaeuser decommissions land, the community could seek acquisition or land swap for property adjacent to the river for public facilities. When conservation easements are provided to property owners adjacent to the Wolf River, extra incentives could be provided to allow limited public access to the river. When public boat launches are installed along the Wolf River, stream bank stability, erosion, and compaction from foot traffic should all be considered to ensure environmental stewardship.

These recommendations are in response to the community's desire to maintain its rural character and protect its natural resources. Much of the area's rural character is defined by the Wolf River, the bayous, associated wetlands, and the forested areas. Further, these recommendations are in response to the stated desire to increase recreational opportunities, especially those associated with the bayous and Wolf River. Finally, these recommendations would aid in reducing the impacts of localized flooding, as well as flooding associated with hurricane storm surges, while also providing improved wildlife habitats.

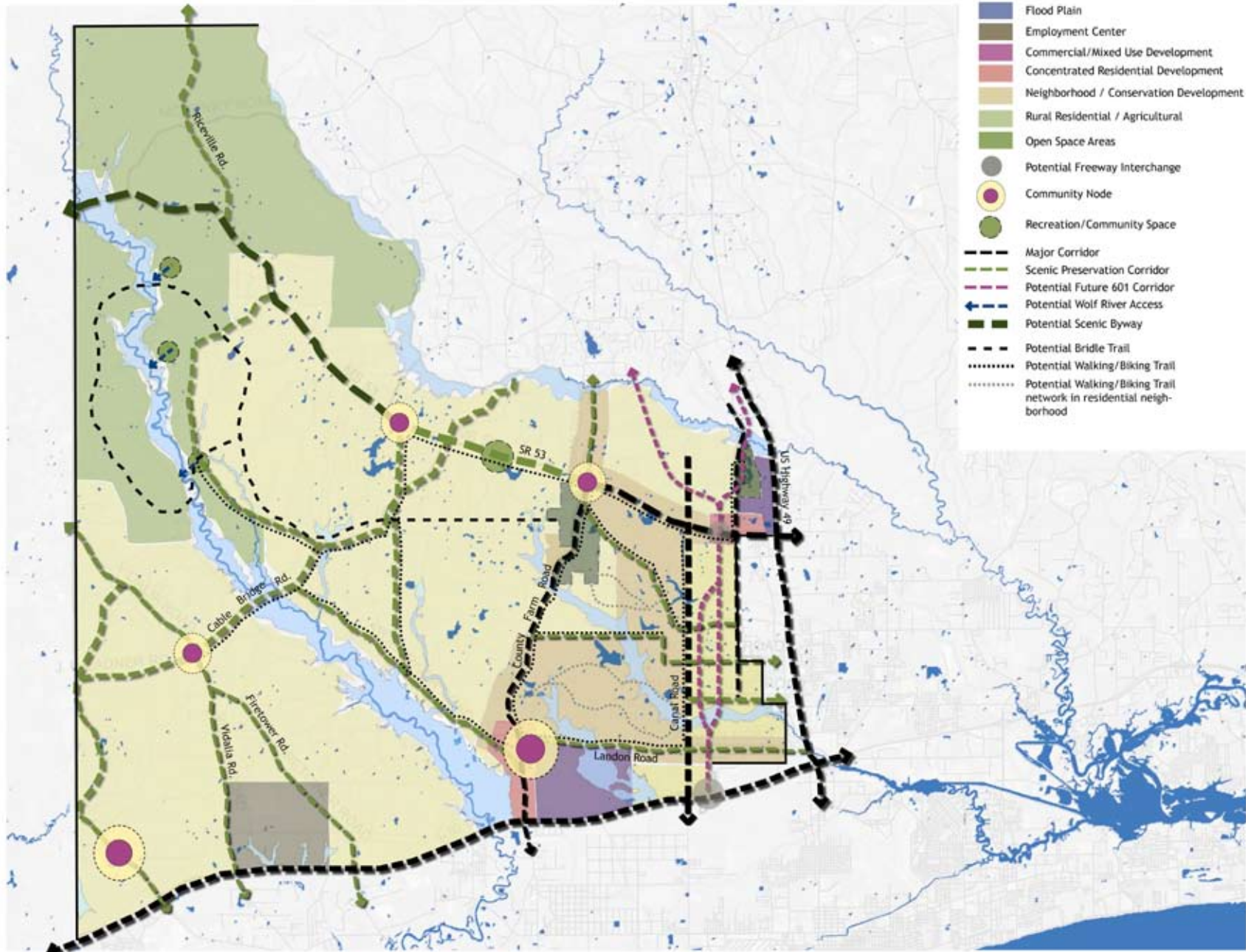
Commercial Centers

Citizens of Western Harrison County requested more businesses to serve their retail and service needs. In order to accommodate this request, this draft plan proposes three types of commercial activities: 1) home based businesses, 2) community commercial centers, and 3) regional commercial centers.

Home-based Businesses

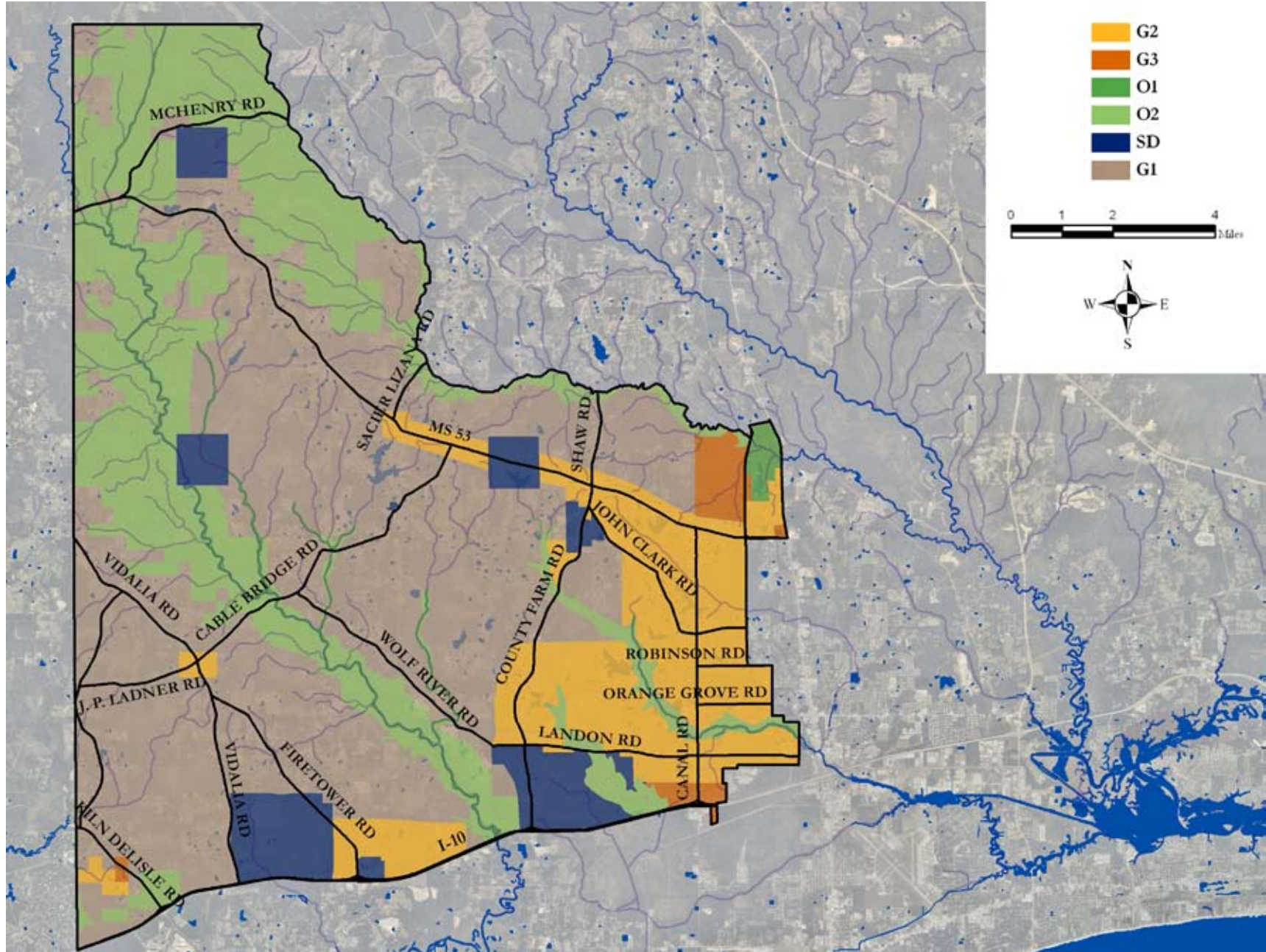
Small-scale home-based occupations and rural home-based businesses may be appropriate throughout Western Harrison County. These activities, which could occur in any sector, should be very limited and consistent with the character of the surrounding uses. Examples of home-based occupations could include home-based offices, such as

Map 2-1. Western Harrison County Concept Plan



Source: The Ohio State University

Map 2-2. Western Harrison County Sector Map



Source: The Ohio State University

Figure 2-4. Western Harrison County sector key with descriptions.

		Sector	Description
	(O-1)	PRESERVED OPEN SECTOR	Sector consists of open space already protected from development in perpetuity. The Preserved Open Sector includes undeveloped areas under environmental protection by law or standard, as well as land acquired for conservation through purchase or land protected from development by easement. Areas designated Preserved Open Sector (O-1) are mapped using the criteria listed below.
	(O-2)	RESERVED OPEN SECTOR	Sector is composed of undeveloped parcels larger than 20 acres outside of incorporated cities and wastewater service areas that are either vacant or in agricultural/forestry use. It includes open space that should be but is not yet protected from development. The areas designated Reserved Open Sector (O-2) are mapped using the criteria listed below.
	(G-1)	RESTRICTED GROWTH SECTOR	Sector consists of areas of low-density, rural development, such as is typical in Eastern Harrison County. This sector includes hamlets and clustered residences with parcel sizes ranging from small lots within the hamlet to lots of up to 20 acres surrounding the hamlet. Hamlets may also have a small amount of retail and some community facilities located at main intersections. Areas within the G-1 may have value as open space, but are they subject to development based on the existing zoning that enables such development. This sector also includes conservation development, where 50 percent or more of a development is reserved as open space. These areas may be outside the sewer service areas.
	(G-2)	CONTROLLED GROWTH SECTOR	Sector consists of locations where development is encouraged, as it can support mixed-use by virtue of proximity to a thoroughfare.
	(G-3)	INTENDED GROWTH SECTOR	Sector consists of locations along high-capacity thoroughfares that can support substantial commercial development.
	(SD)	SPECIAL DISTRICT	Designation covers non-residentially developed areas that are isolated from residential neighborhoods.

Source: The Ohio State University

bookkeeping, where activities would be inside and create minimal traffic. More intense rural home-based businesses could occur in the crossroads and neighborhood centers. These recommendations are in response to the community's desire to increase employment opportunities while limiting the construction of new office and industrial buildings.

Community Commercial

Community commercial centers are classified as Controlled Growth (G-2) on the Sector Map and would include a mix of businesses and civic uses, all of which should be arranged within a defined center, as described below. The community centers should develop in a manner consistent with the principles of New Urbanism described further in the Appendix D.

Dubuisson Commercial Center: This center is located in the general vicinity of the intersection of Kiln-Delisle Road and Cleo Smith Road. It is the result of the Bocage development, which includes a commercial component along Kiln-Delisle Road. The current development proposal calls for mixed-use commercial and residential development. The commercial center could include a mix of convenience retail, restaurant, and services, as well as small office uses. This center would be surrounded by housing as part of the Bocage development.

Landon Commercial Corridor: This center begins at the intersection of Canal and Landon Roads and runs east towards State Highway 49. It would complement the University of Southern Mississippi site through the creation of new neighborhoods that would include retail uses.

Figure 2-5. The business shown below is an example of an appropriate small scale home based occupation in Western Harrison County.



Source: Brandon Mark

Dedeaux Commercial Center: This center is located at the intersection of Vidalia Road and Cable Bridge Road. Neco's grocery store, the Front Porch Café, and other small businesses are currently at this location. This center would continue to develop in a pattern similar to today, allowing for the addition of other small community serving businesses, such as an urgent care clinic, a snow cone stand, and other retail uses. Homes on smaller lots would be allowed within a quarter of a mile radius of the center (see Figures 2-6 and 2-7).

Figure 2-6. Site plan of potential commercial center at Vidalia Road and Cable Bridge Road.



Source: Matthew Leasure

Figure 2-7. This conceptual site plan illustrates how development could occur at Vidalia Road and Cable Bridge Road.



Source: Matthew Leasure

Lizana Commercial Center: This center is located at the intersection of Lizana-School Road and State Highway 53. Currently it has a mix of commercial uses, including Fazzio's. This center would continue to develop in a pattern similar to today, allowing for the addition of other community serving businesses, such as a Dollar General, a doctor's office, restaurant, and other retail uses. Homes on smaller lots would be allowed within a quarter of a mile radius of this center. For an example of possible development at the Lizana Commercial Center (see Figures 2-8 and 2-9).

Figure 2-8. This conceptual site plan illustrates how development could occur in the future at Lizana-School Road and State Highway 53.



Source: Matthew Leasure

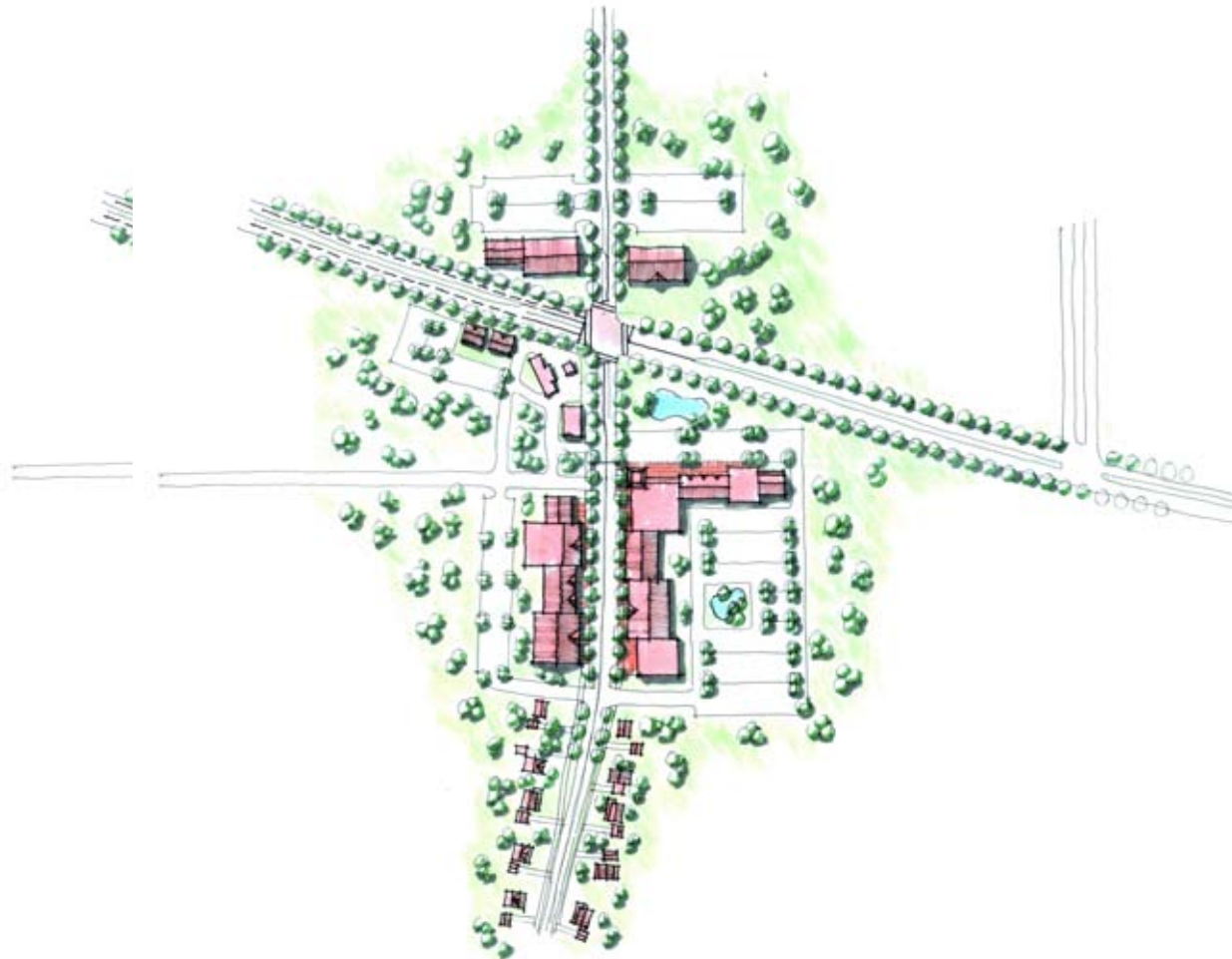
Figure 2-9. Rendering of potential commercial center at Lizana-School Road and State Highway 53.



Source: Matthew Leasure

County Farm Commercial Center: This center is located at the intersection of County Farm Road and State Highway 53. Currently this location has a mix of commercial uses, including a small convenience store, a gas station, a snow ball stand, and a used car lot. This center would continue to develop in a pattern similar to today, allowing for the addition of a restaurant, small-scale community-serving commercial, and limited office space. Within a quarter of a mile from the center would be homes located on smaller lots. For an example of possible development options at the County Farm Commercial Center see Figures 2-10 and 2-11.

Figure 2-10. A site plan of a design idea for the intersection of State Highway 53 and County Farm Road. The design proposes some community commercial set back off of State Highway 53 to allow for signalization and widening. Also, the design creates a gateway for the County Farm to the south.



Source: Matthew Leasure

Figure 2-11. This perspective sketch of County Farm Road south of State Highway 53 illustrates some commercial development with an architectural style that is complimentary to the area. Also, potential gateway signage could be included to welcome visitors to the County Farm and the County Farm Road corridor.



Source: Matthew Leasure

Regional Commercial

Regional commercial centers are classified Intended Growth (G-3) on the Sector Map and would include a mix of businesses and civic uses, all of which should be arranged within a defined center, as described below. The regional centers should develop in a manner consistent with the principles of New Urbanism described further in the Appendix D.

State Highway 53/State Route 601 Interchange Corridor: This regional commercial corridor begins at the intersection of Highway 53 and the proposed State Highway 601 interchange and runs east on State Highway 53 towards State Highway 49. At the present time, the exact location of the interchange has not been determined by the Mississippi Department of Transportation. See the transportation discussion on page 2-67 for further detail about the location of State Route 601. The area immediately adjacent to the interchange would have medium scale commercial, such as a gas station or fast food restaurant within one quarter of a mile of the interchange.

To the east of the interchange, additional commercial development, such as a grocery store, automotive service, and a shopping center development, would be allowed. The corridor could have building placement, architectural, landscape, and signage design standards to create an attractive roadway in the community. The design standards would be utilized to ensure that visitors to the area see a definite distinction between the already existing development on Highway 49 and the new development located west of Highway 49 on Highway 53. Enforcement of access management practices and utilization of shared parking lots would also increase the attractiveness of the corridor and reduce traffic congestion. To the west of the interchange, State Highway 53 would maintain its rural character. This would be achieved by not allowing further commercial development.

University of Southern Mississippi Center: This regional center is located at the intersection of County Farm Road and Landon Road. It is classified as Intended Growth (G-3) on the Sector Map and could include a mix

of single-family homes, townhomes, and apartments, as well as a variety of commercial activities, including big box retailers such as Target, restaurants, and shopping centers (see Figure 2-11).

Figure 2-12. This is an example of small scale retail that could be appropriate for the G-3 sector.



Source: Matthew Leasure

Figure 2-13. Site plan of potential commercial center at Canal Road and Landon Road.



Source: Matthew Leasure

Residential Areas

Recommendations for the residential areas are in response to the need to provide additional housing to accommodate the projected population increase. They are also in response to the stated desire to maintain the majority of Western Harrison County in a low density rural residential setting. Targeting development to areas where sewer and water is or will be located can limit the pressure to spread residential development throughout the entire planning area. Development in these areas will use the principles of Smart Growth and New Urbanism (see Appendix D for a discussion on Smart Growth and New Urbanism).

Rural/Crossroads Residential: It is recommended that the majority of the planning area remain rural residential, classified as Restricted Growth (G-1). These Restricted Growth (G-1) areas should generally be limited to single-family residences on acreage lots. In locations where sewer and water are available, it would be appropriate to cluster the residences to avoid the most environmentally sensitive portions of the site, as seen in conservation developments (see Appendix D for further explanation). In cases where conservation development is incorporated, the intent is to preserve the rural character of the community by conserving land and providing a rural living environment for residents. At the designated community commercial centers, smaller lot sizes would be permitted within one-quarter of a mile of each center. The one-quarter mile is the average distance a person is willing to walk to a store from their home.

Neighborhood Residential: The type of housing in neighborhood residential areas is suburban in nature. These areas have access to major roadways, commercial development, and proposed or existing water and sewer. The developments consist of one to three housing units per acre. Neighborhood Residential areas are classified as Controlled Growth (G-2) on the sector map. The Concept Plan suggests that conservation subdivisions be the preferred method of residential development in these areas. These subdivisions would be planned to provide an interwoven system of walking/biking trails, neighborhood streets, recreational

areas, and preserved open space. By utilizing conservation subdivisions, residents of Western Harrison County can preserve the rural character while allowing for a transition between rural residential and concentrated residential developments.

Concentrated Residential: Concentrated residential development, with three or more housing units per acre, is recommended in areas where sewer and water services are available, that are adjacent to major roadways, and that are near regional commercial centers. These areas, which may include small-lot single-family homes, townhouses, and apartments, are shown as Intended Growth (G-3) Sectors near the new University of Southern Mississippi Campus and along State Highway 49.

Figure 2-14. In areas where infrastructure is already in place, concentrated residential development is recommended.



Source: Chris Cunningham

Community Facilities

The residents in Western Harrison County have requested that there be more community facilities and services provided. The community has expressed a desire to expand the Lyman Senior Center, add a new community center, expand facilities at the County Fairgrounds, and add emergency storm shelters and police substations. The Concept Plan accommodates these requests of the community.

Senior Center: Many residents indicated that the Lyman Senior Center is an invaluable asset to the community. There was concern that the center needs to expand its services or the facility itself so that more services could be provided. One concern was the need for an increase in frequency of trips from the senior center to commercial locations along Highway 49. To accomplish this goal, W.H.A.T. would cooperate with the Lyman Senior Center to increase the number of monthly trips made to commercial destinations.

Community Center: The residents of Western Harrison County indicated that the addition of a community center would be a great amenity. Suggestions were made to have a center at the County Farm, in Lizana, in Riceville, and in other locations throughout Western Harrison County. The availability of land for public use is a major consideration. The Section 16 property off of CC Camp Road is one location for a potential multi-purpose community center. The community center would provide a large indoor, open space that would be available by reservation for many types of private or public events. Other rooms would include smaller conference rooms that could be rented out for meetings. The site could also include some outdoor activities, such as a tennis court, a basketball court, and a walking path. Currently this property is leased to an individual by the Harrison County School District. Once this lease expires, Harrison County officials would need to cooperate with the Harrison County School District to acquire a long-term lease on a piece of Section 16 property that would be utilized for construction of the center. Another parcel of Section 16 land is located on Vidalia Road and

could also be considered for a new community facility site. The county would then utilize various funding options to help with construction costs. To review funding options, see Appendix C.

FEMA Storm Shelters: Concerns were also raised over the lack of storm shelters during Hurricane Katrina. Citizens wanted to see more availability of storm shelters so that during major storm events, protection could be provided for all citizens.

In conversations with the Deputy Director of Harrison County Emergency Services, it was learned that two new FEMA-361 shelters are being built in Western Harrison County. The FEMA-361 shelters will be available during a storm event and will be built to withstand 200-mile-per-hour winds. One shelter will be located on Section 16 property at CC Camp Road and the other will be the new Harrison County High School located on County Farm Road.^b FEMA requires between 10-20 square feet of floor space per individual in a shelter. The Harrison County High School will have enough space to house approximately 2,000 individuals during a storm event and the shelter on CC Camp Road will have enough area to house approximately 1,000 individuals.

Police Substations: Citizens have requested police substations within Western Harrison County. The Harrison County Sheriff's Department has substations at every fire station located within the county. According to Fire Chief George Mixon, each station provides a room with an Internet connection, a computer, a telephone, and other amenities for the sheriff's deputies. Each deputy can stop at any of the fire stations within the area and utilize those facilities at any time.^c With the addition of a new fire station, such as the one located on County Farm Road, the Harrison County Sheriff's office will receive a new substation location.

Figure 2-15. A perspective rendering of a potential community center near State Highway 53 and CC Camp Road. The façade of the building could be designed to reflect the logging history of the area.



Source: Matthew Leasure

County Farm Complex: The county farm has been identified by residents as a special place within Western Harrison County. The county farm has many different uses which include 16 soccer fields, a senior center, a county fairgrounds complex, a model airplane flying field, county road maintenance facilities, the parks and recreation office, and an active farm facility. Because of the number of uses on the property and residents request to rebuild destroyed buildings and maintain its current uses, a master plan has been proposed for the County Farm property.

Goals for the property include maintaining and protecting existing forest and wetlands areas, maintaining active farming on the property, rebuilding the farm buildings destroyed during Hurricane Katrina, adding a walking park with a baseball diamond, and enhancing the county fairgrounds facility. These goals will be achieved by maintaining existing uses, rebuilding to support those uses, and expanding uses and facilities on the farm.

Some goals look to rebuild and preserve some of the uses on the county farm complex. The county's active farming of the property was the original use of the property and what remains of the farming was devastated by Hurricane Katrina. Almost all of the farm buildings were destroyed by the storm and remain in disrepair today. To maintain and preserve these farming activities, the barns off of John Clark Road should be rebuilt, as well as the barns located near the main entrance off of County Farm Road. When these barns are rebuilt, local schools as well as local residents could utilize the facility for field trips that would teach students about agricultural practices and the importance of farming. These activities could include educational tours, petting zoos, and on site activities that teach students and residents about farming.

The old County Jail is located off of County Farm Road adjacent to the County's road maintenance facility. The jail was built in the early 1900's and was used to house county inmates that would work on the farm. This building represents the history of the property and creates a tie for residents to the history of Western Harrison County. With the creation of a Historic Preservation Committee, the old County Jail could be designated as a historic landmark. By designating it as a historic landmark, the jail could receive state funding to refurbish its interior.

Once refurbish, the building could be used for a historic museum and could also be used during school field trips to teach local youth about the history of the property.

Other goals attempt to enhance and add to the use of the county farm property. An area has been identified for use as a walking park and baseball field. This area was once a landfill for Harrison County and is located on the west side of County Farm Road behind the old County Farm Jail, north of the model airplane field. The landfill has been closed for almost 20 years and has the potential to be redeveloped. The site could include a circular walking path around the perimeter with a baseball diamond in the center. These amenities would accommodate residents requests for more baseball fields as well as availability to walking paths.

Figure 2-16. The addition of an indoor arena at the County Fairgrounds would expand on the already existing outdoor arena shown here.



Source: Matthew Leasure

The County Fairgrounds complex also has potential for enhancement in the form of an indoor arena, new stall barns, and increased parking. These additions to the existing fairgrounds facility could create opportunity for larger events. The new indoor arena could be a two story building with a dirt arena and seating for approximately 5,000 people. The arena could also have pull out flooring to allow for festivals, dances, and other activities. The arena could also include office space and conference rooms that could be utilized by the community for special events or meetings.

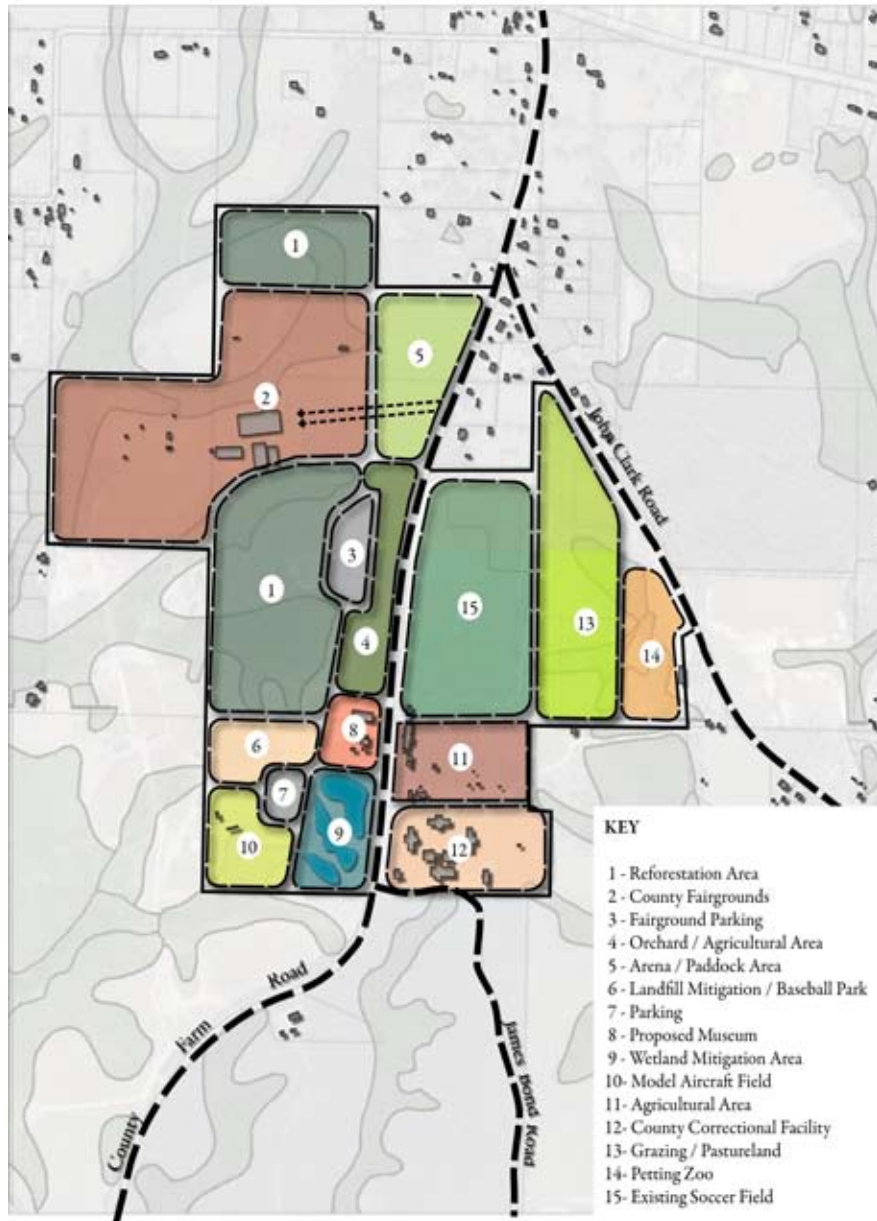
To accommodate the new addition, new stall barns would be added next to the two existing stall barns. This would be utilized to accommodate larger equestrian events hosted at the site. Increased parking would also be needed. The parking could be located directly south of the Fairgrounds complex, approximately 700 feet from the existing arena. The parking would be accessed by an existing lane that connects the county road maintenance facility to the county fairgrounds. Parking lots could be made of gravel to reduce the cost of installation. Overflow parking could also be located inside the paddocks east of the existing arena for larger, non-equestrian events.

Figure 2-17. A master plan of the County Farm would include future goals for all of the amenities located on that site.



Source: Babe Buckley

Figure 2-18. This conceptual master plan for the County Farm would retain many existing uses, rebuild parts of the farm and enhance farm activities.



The county farm has been identified by residents as a special place within Western Harrison County

Figure 2-19. Conceptual perspective illustrating the proposed Indoor Arena.



Source: Matthew Leasure

Recreation

The Concept Plan supports the development of pedestrian, bicycle, and equestrian paths that could connect the commercial crossroads centers and the forested areas of the county. Additional recreational opportunities are encouraged along the Wolf River. The Concept Plan also supports the creation of a ballpark and other recreational amenities, such as baseball fields, soccer fields, and a skate park. According to community input received at the Town Hall Meeting and through citizen surveys, the community wants more parks and athletic fields (to see a complete overview of citizen input, see Appendix B). Because of this need, the Concept Plan contains several locations for many different types of recreational opportunities.

Baseball Fields: An increase in the number of baseball fields made available to the public was requested by the residents of Western Harrison County. Options as to where ball fields could be located were discussed and two sites came up as options. These two sites include the Section 16 land on CC Camp Road, which is currently leased by a private individual, and the old landfill site located on the County Farm.

The site on CC Camp Road will be utilized for a new stand-alone FEMA storm shelter. This shelter can only be used during times of a storm emergency and must be kept ready for a storm event.^d One concept is to locate a ball field adjacent to the storm shelter because of the availability of parking. This would require the cooperation of the County, School District, and private lease holder. The baseball fields could be centrally located on State Highway 53 and could have the parking infrastructure already in place to support sporting events by using parking for the FEMA shelter.

The other location that could be utilized as a recreational facility is the site of the old Harrison County Beat Four Landfill. This landfill is located on County Farm Road directly behind the old County Jailhouse. The landfill was closed in 1990 in accordance with all state and federal regulations and is eligible for a possible brown field redevelopment project.^e Brownfield Redevelopment helps communities make possibly

contaminated lands acceptable for use and development. The program is conducted on a State and National level, with funding available for the testing of the site and any remediation needed to ensure that the site is safe. Once the site has been tested and any needed remediation is completed, then the county could develop the site for baseball fields and/or a walking/biking path. For more information on the redevelopment of the old landfill see the County Farm section in this chapter.

Bridle Paths: Many residents requested that more horse trails or “bridle trails” be constructed in Western Harrison County to accommodate horse owners in the area. The trail system would include scenic trails through wooded landscapes. It would also be useful in creating alternative connections between the citizens of Western Harrison County and local businesses and facilities, such as Fazzio’s and the County Fairgrounds. Bridle trails require several miles to create a complete system, and many options have been identified as possible sources of land for such a project. The need for extensive amounts of land as well as money for operations and management of a trail system can restrict their development.

Currently, no trail systems exist in Western Harrison County for public equestrian use. Many of the private stables in operation are for hunter/jumper activities which utilize mostly indoor arenas and outdoor paddocks for training. According to the operators of Foxwood Farm, many visitors call asking about the ability to rent horses for private trail rides. If a trail system is implemented, this could be another use for the county bridle trails system.^f

Due to the expense of acquiring land for the use of bridle trails, several options for acquiring land at minimal to no cost have been identified for Western Harrison County. Weyerhaeuser has expressed interest in creating a master plan for its holdings in the area, which could include allowing the county to place bridle trails on portions of their property that would not interfere with forestry operations. Weyerhaeuser would not build or maintain the trails, but could give long term leases to the County so that trails could be built and utilized.

Another option is to build trails along and through county owned property. This would reduce the cost of acquiring land for the project and reserve more funding for trail amenities and operations and management expenses. Public utility corridors have been used previously by trail riders in Harrison County.^g Currently, gates and barriers have been placed along these corridors restricting access for riders. Cooperation with the local utility companies to allow access to these areas could provide an increase in trail miles within the county.

Other options include utilizing conservation easements throughout the county, acquiring lease agreements with the County School District on areas of Section 16 land, and utilizing undevelopable floodplains. These parcels each have development restrictions that should not be effected by the creation of trails for riders and could be acquired at very little to no expense. Funding opportunities for the actual construction or purchase of trail right-of-ways or easements can be found in Appendix C.

Trails also require operations and maintenance requirements, typically in the range of \$6,000 - \$10,000 annually per mile of trail.^h Funding sources for the operation and maintenance of trails can be found in Appendix C, another solution is an “adopt-a-trail” program. This program would allow citizens or citizen groups to adopt a certain number of miles of trails and they would be responsible for clearing and maintaining the trails.ⁱ

Other amenities that would be required for a trail system are staging areas/trailheads that provide ample parking and trail/visitor information, restroom facilities at high use areas, staging areas or horse areas adequate for many trailers (group rides), manure disposal areas, garbage containers, and hookups and campgrounds for overnight patrons.^j Resting or holding areas are also needed approximately every three to five miles of trail so that riders can dismount and give their horses a short break. Staging areas could be located along Riceville Road and Highway 53. Resting/holding areas could be added along the trails as needed within the three to five mile recommendation. Funding sources to help develop the staging areas and holding areas can be found in Appendix C.

Another issue is protection of riders during hunting season. Many county lands and Weyerhaeuser properties are leased for private hunting clubs. On the DeSoto National Forest Bigfoot Trail, which is located partially in Harrison County, riding is not permitted in Wildlife Management Areas during hunting season.^k This option, along with separation of trail locations and hunting areas will need further consideration for the safety of all riders, horses, and hunters. Consultation with local bridle trail riders would be recommended when a trail system is designed for Western Harrison County.

Walking and Biking Trails: Walking trails and biking trails throughout the area were another recreational amenity requested by the residents of Western Harrison County. Several options have been considered and several opportunities were identified to add walking/biking trails in Western Harrison County.

One option was to use conservation easements currently maintained by the Wolf River Conservation Society along the Wolf River for walking/biking trails. There would be a partnership between the society and Harrison County, and the county would build and maintain the trails along the Wolf River.

Those trails would then be connected to trails that run near Wolf River Road, County Farm Road, Big Creek Road, Lizana-School Road, Landon Road, Robinson Road, and John Clark Road. These trails would be located along donated or county-acquired easements and/or within the road right-of-way. The county would own and maintain the system of trails.

To add more connectivity through walking/biking trails, a requirement could be added to the subdivision regulations that any new subdivision provide walking/biking trails within the development and that those trails connect to the county-operated walking/biking trail system discussed previously. The idea is to create interconnectivity between all citizens of Harrison County and the amenities located within the area (e.g., county farm complex, community nodes, etc).

Special Districts

The Sector Map designates three areas in Western Harrison County as a Special Districts (SD). Special Districts are areas that cannot be categorized under other uses, such as residential or commercial.

The first SD is the County Farm. Due to the special nature of this land, it was deemed appropriate to dedicate this land as a special use. The second SD is the USM site. This site has an educational, corporate campus and other mixed uses that do not fit into one category of classification. The third SD is the property between Vidalia Road and Firetower Road south of Cunningham Road. This property could be used as an employment center, as mentioned earlier in the plan. This could be a unique center because it could have the ability to complement the regional aerospace industrial cluster anchor by Stennis Space Center in Hancock County.

Transportation Improvements

The Concept Plan acknowledges proposed Mississippi State Route 601. This north-south roadway will begin at a proposed fully-directional interchange at Interstate Highway 10 and Canal Road and extend northward through the planning area. The proposed State Route 601 Corridor will parallel US Highway 49 and will function as an interstate freeway, providing a by-pass of US Highway 49 in its most heavily congested areas. The current plans indicate that the freeway will be elevated as well. Plans are yet to be finalized, but it is known that there will be an interchange at State Highway 53, as well as at Interstate Highway 10.

The interchange at Interstate Highway 10 has already been designed by MDOT (see Figure 2-19 for a picture of the proposed interchange). This interchange will create access to State Route 601 and Interstate Highway 10/Canal Road. The interchange at State Highway 53 has yet to be designed. The location of the interchange is dependent upon which proposed route for State Route 601 will be the actual route used. Because there is not a definite plan for how the interchange at State Highway 53 will work, the Concept Plan incorporates two possible

Figure 2-20. This multi-use trail can provide opportunities for pedestrians, biking and horse riding.



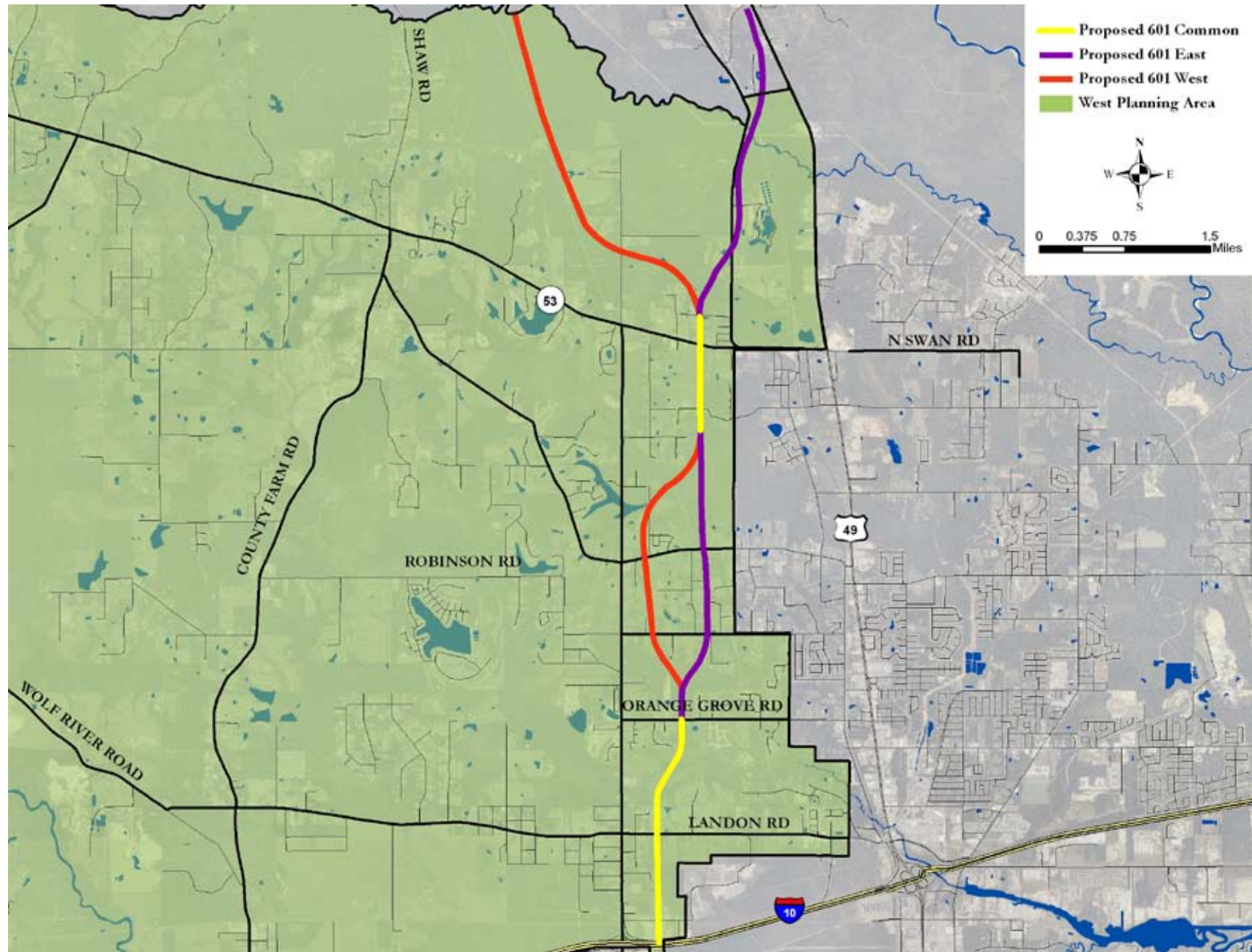
Source: Matthew Leasure

locations for the interchange. This plan calls for Harrison County and W.H.A.T. to work with MDOT to implement an enhanced design for this interchange discussed on page 2-56. This would include landscaping and an enhanced bridge design. By creating gateway style bridges, visitors to the county would have an indication of when they are leaving Gulfport and entering the communities of unincorporated Western Harrison County. See Figure 2-21 for an example of a gateway improvement and Figure 2-25 for a demonstration of landscaping guidelines along the roadway embankment.

In addition to the new State Route 601, the MDOT State Transportation Improvement Program from 2007-2012 identifies projects on already existing roadways within the Western planning area. State Route 53 is slated to have two lanes added from US Highway 49 to Lizana in 2012.¹ Citizens in Western Harrison County showed interest in the need for a stoplight at the intersection of State Highway 53 and County Farm Road. Because of the addition of two lanes to State Highway 53 within this area, the Concept Plan indicates that Harrison County officials should work with MDOT to require that a new light be added at this interchange when expansions of State Highway 53 are complete.

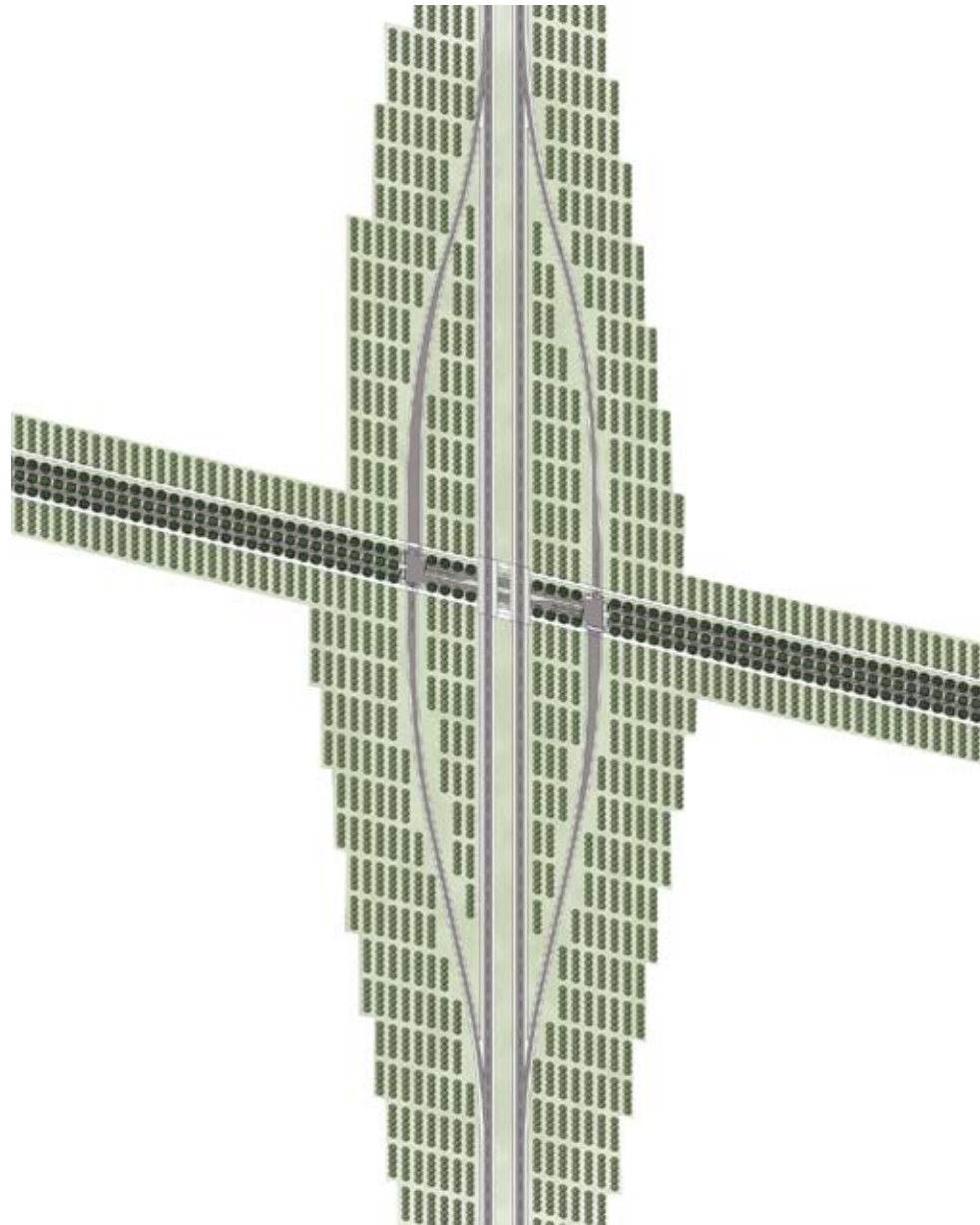
US Highway 49 through the Western planning area is also scheduled to have two lanes added in 2009.^m Upgrades to other roadways in the community are discussed further in Appendix A.

Map 2-3. Proposed 601 corridor.



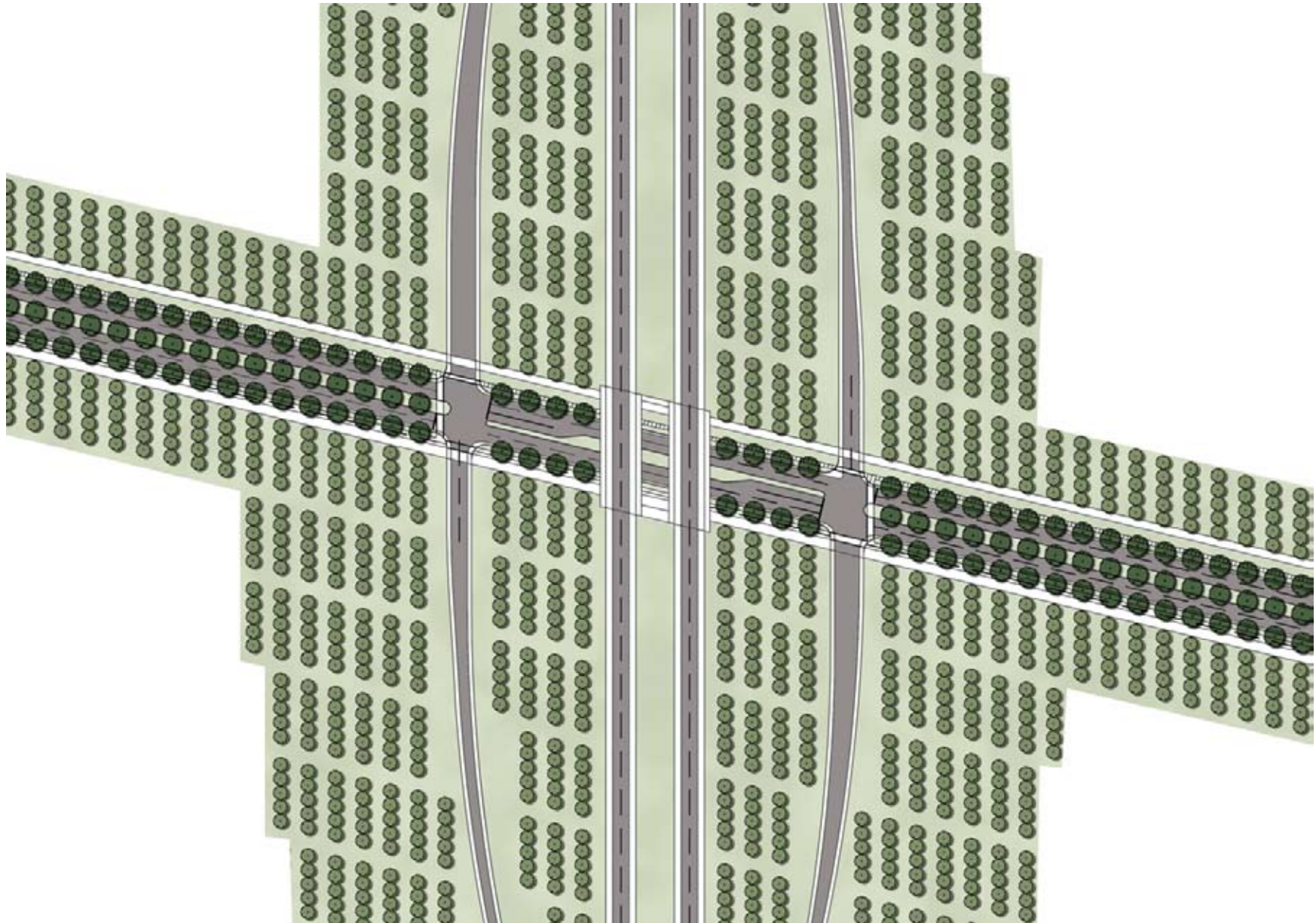
Source: Mississippi Department of Transportation

Figure 2-21. This is a conceptual site plan of potential interchange enhancements at proposed State Route 601 and State Highway 53.



The citizens of Western Harrison County expressed great concern about road safety, especially on Highway 53.

Figure 2-22. This graphic shows the proposed interchange design in more detail at its intersection with SR 53. Deciduous street trees help to define the street and several types of trails and sidewalks provide opportunities for different types of transportation.



Source: Matthew Leasure

Figure 2-23. This diagram illustrates how State Highway 53 could be enhanced to provide access for multiple users.

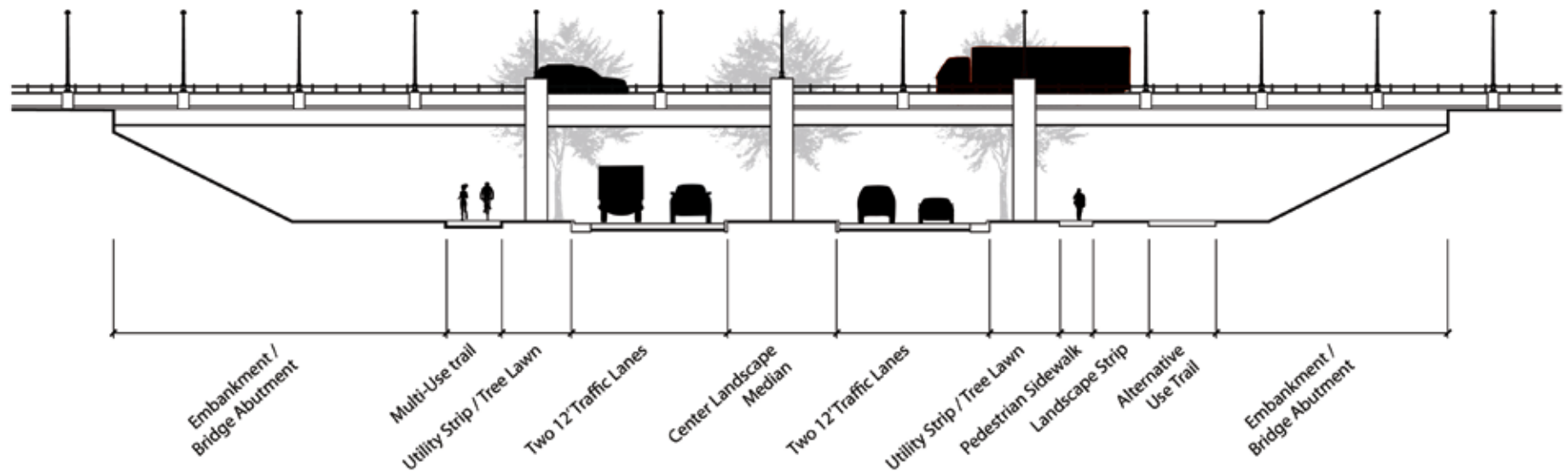


Figure 2-24. This perspective drawing illustrates design ideas for potential architectural enhancements to the bridge overpass. Stone or other types of masonry can be placed on the front of the columns in order to highlight historic bridges around the area. Also, street lights with banners can potentially be installed and will help to highlight the interchanges roles as a gateway into western Harrison County.



Source: Matthew Leasure

- a The top ten invasive plant species in Mississippi are Kudzu, Tropical Soda Apple, Purple Loosestrife, Water Hyacinth, Alligator Weed, Chinese Tallow Tree, Japanese Honey Suckle, Chinese Privet, Cogon Grass, and Johnson Grass.
- b Lacy, Rupert. 2007. Harrison County Emergency Management Deputy Director, Personal Communication. September 5.
- c Mixon, George. 2007. Harrison County Fire Chief, Personal Communication. September 4.
- d Lacy, Rupert. 2007. Harrison County Emergency Management Deputy Director. Personal Communication. September 5.
- e Jones, Trent. 2007. MDEQ Solid Waste Policy Planning & Grants EEIT. October 9.
- f Darren Vedros. 2007. Owner and Operator of Foxwood Farm, Personal Communication. November 20.
- g Tonia Miller. 2007. Avid Trail Rider in Western Harrison County. Personal Communication. November 20.
- h Board of County Commissioners, Clark County Nevada. Clark County Nevada Comprehensive Plan Trails Element. Adopted October 18, 2005. Accessed November 12, 2007.
- i Board of County Commissioners, Clark County Nevada. Clark County Nevada Comprehensive Plan Trails Element. Adopted October 18, 2005. Accessed November 12, 2007.
- j Tonia Miller. 2007. Avid Trail Rider in Western Harrison County. Personal Communication. November 20.
- k USDA National Forests, Forests in Mississippi. Frequently Asked Questions. <http://www.fs.fed.us/r8/mississippi/desoto/faq/index.shtml>. Accessed November 20, 2007.
- l Mississippi Department of Transportation. 2007. MDOT STIP. Accessed August 6, 2007: http://www.gomdot.com/stip/pdf/070307/Urban_Street_Transportation_Improvement_Program-Gulf_Coast_Urbanized_Area.pdf
- m Mississippi Department of Transportation. 2007. MDOT STIP. Accessed August 6, 2007: http://www.gomdot.com/stip/pdf/070307/Urban_Street_Transportation_Improvement_Program-Gulf_Coast_Urbanized_Area.pdf

Appendix A. *Background Assessment*

HISTORY

The Western planning area is composed primarily of small communities, wetlands and streams, and native pine forests. Many of the communities were established as mill locations for the lumber industry. The resulting landscape in the Western planning area is a collection of small towns with an interwoven network of old logging roads, railroad lines, float ditches, bayous, and forests.

Transportation and Industry

Transportation routes had a major impact on the development of the historical economy of the Western planning area. The Gulf and Ship Island Railway played an important role in the development of several of the communities in this planning area. This railway runs in a north-south direction, paralleling the current location of US Highway 49.^a In Lyman, the Batson and Hatten Lumber Company provided its own rail service to connect the timber cutting areas and logging mills, and it also connected to the Gulf and Ship Island Railway.^b

US Highway 49 is on the western edge of the planning area. This highway was first upgraded from woodland trail status when it was graded into a recognizable road by the Harrison County Engineer under the leadership of Icham Reeves in 1912. Reeves is the son of Lyman Reeves, who is the original founder and namesake of Lyman.^c The work was first done by men with shovels and mules with draglines. Eventually, a tractor equipped with a blade was brought in to cut ditches. The roadway was then improved to the point of a finely paved surfaced suitable for efficient travel.^d This roadway was critical in connecting the northern parts of the state, including Jackson, to the coast.^e

Figure A-1. Historic Map of Harrison County



Source: Southern Mississippi University Archives

Figure A-2. The Batson and Hatten Lumber Company in Lyman



Source: University of Southern Mississippi Archives

Figure A-3. The Landon Train Depot in 1915



Source: University of Southern Mississippi Archives

Figure A-4. Landon Train Depot Bunk House in 1915



Source: University of Southern Mississippi Archives

In the late 19th century, people living in timber country began ranching large herds of cattle and flocks of sheep. The sale of wool and beef was profitable, and the wool was particularly valuable as it was fine and equivalent to washed wool from free-roaming sheep.^f In the early 1930's, the Mississippi state legislature enacted a law that required all stock owners to pen their cattle, which did not allow them to roam over the open sections of land that were not on the ranchers' properties. This forced the ranchers to sell their stock, and the industry diminished to nothing. This led the Mississippi legislature to repeal the law, but by that time the effect had been significant enough to permanently destroy the industry.^g

Forestry has historically been a major industry in Harrison County. The native pine forests have provided years of productive employment for the early settlers of the area. Many small towns were settled to mill the raw timber felled from the nearby forests. The stumps that were left over were first considered a nuisance, but they were later utilized for the production of turpentine, rosin, and other products. Additionally, the act of blasting and removing these stumps loosened the soil and provided excellent conditions for the agricultural production of other crops, specifically the production of the Tung nut oil, which is used to create a wood varnish.^h

The Ingram-Day Lumber Company was headed by former Wisconsin lumberman W.H. Hatten, who moved to Mississippi to take advantage of its seemingly limitless yellow pine forests. With Lyman as its center, the company operated several mills on the Gulf and Ship Island Railroad. The rail line covered the four counties from which the company was milling timber.ⁱ In 1917, the company employed 650 men in Lyman alone, producing 140,000 feet of lumber every day of the year. Automobiles ran on regular daily schedules to bring visitors from Gulfport to see its largest sawmill in the world. With its success, the little town boasted two fine hotels, comfortable gravel streets, and the Wood Consolidated School.^j

The success of the company led to the creation of the company's "Commissary", which was the Coast's first complete shopping center.

The building had a 65 foot wide by 300 foot long footprint. It offered the most complete line of general merchandise in all of South Mississippi, including clothing, millinery, home furnishings, drugs, a soda fountain, a library, hardware, automotive supplies, agricultural supplies and feed, and a complete grocery and fresh produce market.^k

After the closure of the mill many residents left the area, and the local economy became based on agriculture and timber. Today, Lyman is a growing residential suburb of Gulfport.

Cultural Heritage

There is a strong Native American Heritage in Southern Mississippi.^l Tribes who lived in the coastal region included the Natchez, Choctaws, and Chickasaws. Tribes living in Mississippi generally lived in individual towns, and they followed a strict clan system of social organization. All of the clans belonged to one national council, which settled major problems and looked after the general welfare of the nation.^m

The Spanish explorer Hernando De Soto discovered the Gulf Coast in the 1540's, and eventually European countries established colonies in the area. The French were the most prolific settlers, and by 1730 the French settlers and Native American tribes had established a friendship. This led to inter-marriage between the groups. Most of the mixed French and Native American families adopted their European names, including such locally familiar names such as Favre, Cuevas, Dubuisson, and Ladner.ⁿ

The Creole culture in Harrison County also stems from European colonization. The term "Creole" is typically utilized to refer to people of mixed racial descent; however, this is not the traditional Louisiana usage. The Louisiana Creole Heritage Center defines Creoles as having "mixed French, African, Spanish, and Native American ancestry, most of who reside in or have familial ties to Louisiana ... many other ethnicities have contributed to this culture including, but not limited to, Chinese, Russian, German, and Italian."^o

"Creole" is now accepted as a broad cultural group of people

Figure A-5. The Main Harrison County Lumber Mill in Lyman



Source: Dixie Press Collection, Mississippi Gulf Coast Community College

of all races who share a French or Spanish background. The story of local Creole culture can best be summarized by the family history of local resident Adrenne Dedeaux. Adrenne has French, Spanish, Native American, and African Heritage. Her grandfather, John Delmas Dedeaux, was a resident in the late 19th century. He attended Our Lady of Good Hope Catholic Church in DeLisle. As a result of a racial split in the Parish, black parishioners were relocated from Our Lady of Good Hope to Our Lady of Chartres Catholic Church.^p John Delmas Dedeaux took action on behalf of his fellow Creole and African American parishioners. In 1912, he spearheaded the physical relocation of an existing Catholic Church from North Long Beach to a site several miles away near New Hope. Our Lady of Chartres Catholic Church is now located on Big Creek Road. Today, the church is a mission church of the larger St. Ann Catholic Church based in Lizana. Adrenne Dedeaux is the only surviving descendent of the original parish. The church has 20-50 regular attendees.^q

Special Places

The Harrison County Farm started in 1880 as a fully functioning farm. At one point, the farm had dairy cows and barns, hogs, and cattle. Today, the farm continues to be an active farming, as well as providing soccer fields and an equestrian facility.

In the early 1900's, Harrison County began a program to send county prisoners to the farm for reform. A concrete jailhouse was constructed around 1940 and still stands today. When the reform program was first initiated, the County Farm was considered by the inmates to be the least desirable place in the correctional system. Today, the farm continues with various farming activities and also provides public soccer fields as well as an equestrian facility.

Around 1950, the farm also started a Boy Scout visitation program. The Boy Scouts set up camp and perform training drills and activities. Over the life span of the program, over 6,000 boy scouts have visited the farm.

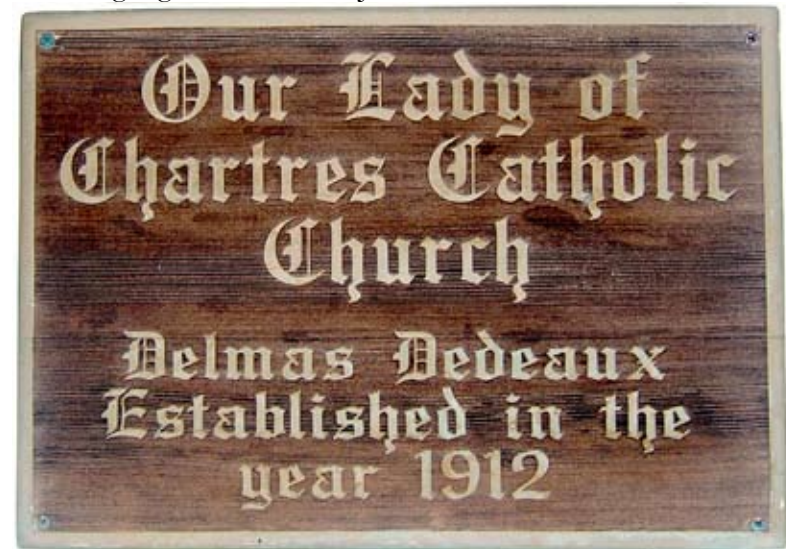
Around 1940, a significant portion of the farm to the west of County Farm Road was utilized as a refuse landfill. The landfill has been

Figure A-6. Our Lady of Chartres Catholic Church



Source: Matthew Leasure

Figure A-7. Our Lady of Chartres Catholic Church sign, which highlights its founder John Delmas Dedeaux.



Source: Matthew Leasure

covered by soil and vegetation and is now generally unusable for any purpose other than open space.^f

The Lyman fish hatchery was established in 1937 and is located near the intersection of State Highway 49 and State Highway 53. The Batson-Hatten Lumber Company donated over 200 acres of land for the hatchery because of its advantageous position near several timber ponds and artesian wells. The hatchery has historically been a major source of freshwater fish. For example, between January and June of 1957 it supplied almost one and a half million bass and more than two million Blue Gill to private ponds and public waters.^g The fish hatchery is still in operation today and has plans for expansion.

Figure A-8. The Historic County Farm Jail



Source: Matthew Leasure

Figure A-9. The Lyman Fish Hatchery just after its opening



Source: CC Tex Hamill Collection, Mississippi Gulf Coast Community College

Communities of the Western planning area

Dedeaux is named after Homer Dedeaux, one of three brothers of Creole descent whose families emigrated from France to Canada, and eventually moved down the Mississippi River to settle in Hancock and Harrison Counties. They chose to settle away from the coast to avoid mosquitoes. The brothers were farmers of cotton and livestock, and their farms were completely self-sustaining. Eventually, the agricultural production of the area expanded to include dairy farming and tung nuts, which were used in paint products.

Also in Dedeaux, moonshine production was extremely prevalent during the prohibition. Over 80 percent of Dedeaux families were involved in the production and transportation of bootleg whiskey, as were many families throughout Western Harrison County.^t

A combined school and catholic church was established and remains today. The land that the school is sited on was originally donated by Jareese Dedeaux, and it is situated exactly on the Harrison

and Hancock County line. The school graduated its first class in 1927 and its last class in 1959. Today, the school is considered the center of the community and is operated by the Sacred Heart Catholic Church.^u

Figure A-10. The original Dedeaux School



Source: Matthew Leasure

Delmas is a community located near the intersection of Wolf River and Saint John Road. It is named after John Delmas Dedeaux, a brother of Homer Dedeaux. Saint John Road is also named after John Delmas Dedeaux.^v Today, the center of the Delmas community is the Our Lady of Chartres Catholic Church on Big Creek Road. At one point, Delmas was home to a one-room schoolhouse that was located next to the church. This has historically been an agricultural community, with members of the Dedeaux family settling in this area. The proximity of Delmas to the Wolf River allowed its residents to swim, play, and wash clothes in the river.

The Dubuisson community is named after the Dubuisson family, who originally moved to Western Harrison County from the Lacombe/Slidell area just east of New Orleans. Eugene Dubuisson is the original family member who moved to the area.^w Later, in August

1905, the Dubuisson family moved with their 13 children to Long Beach so that the City of Long Beach community could meet the population minimum of 900 residents to become incorporated.^x

Finley is located just to the west of the Lyman on State Highway 53. It was founded as an agricultural community before the town of Lyman emerged. The center of the community consisted of a school, church, and cemetery located at the intersection of State Highway 53 and Finley Cemetery Road. The cemetery still exists and serves as the final resting place of Lyman Reeves.^y

While the Ingram-Day Lumber mill was in its prime, Finley was considered to be the residential counterpart to Lyman, and many of the mill workers walked to the lumber mills. Much of the timber was logged in Finley and transported to the Lyman lumber mill on railroad dummy lines.^z

Figure A-11. The final resting place of Lyman Reeves in Finley



Source: Matthew Leasure

Landon is partially inside the City of Gulfport, and it is also in part of the Western planning area. Landon was originally settled on October 20, 1838 when a man named John Dale first settled at Pecan Grove. He obtained a “millwrit” patent to 40 acres of land. He sold his land to Gaius Kibbee, a ship captain who was actively engaged in coastal business. He had a sluiceway dug through the property to float out logs to another water course. The sluiceway eventually eroded into a permanent waterway known as Qubbee Ditch.^{aa}

The 40 acres continued to be important to the town’s development. Eventually it became the property of Sue J. Land, and it was named after her family in 1873. In 1880, Reverend Joseph P. Walker purchased the land and converted it to a dairy farm, which promoted dairying in the entire area. Another significant dairy farm, the Johnny Graham Dairy Farm, was located on Landon Road.^{ab}

The Landon area also contained a large sawmill around the area where Interstate Highway 10 sits today. Alongside was a rail depot that serviced both freight and passenger trains. The Landon Depot served as a flag station for rail passengers heading north towards Hattiesburg or south to the coast. A passenger would purchase a “flag”, or ticket, and raise it into the air as the train approached.^{ac} This was a significant method of personal transportation in central Harrison County.

Lizana, first settled in 1900, was named for Henry Lizana, who built a home in the area in the early days of the community.^{ad} The center of Lizana is currently considered to be the Lizana Elementary School. The St. Ann Catholic Church is also a significant part of the community. It was founded in 1901 when Father Rene Sorin opened a mission church in Lizana. In 1937, the church was moved to its present location on State Highway 53. The church has played a significant role in providing relief for Katrina victims with its “Project Hope and Compassion.” The goal of the project is to provide support for continual cleanup.^{ae}

Lyman is located approximately six miles north of Landon. It was established in approximately 1895 and was named after Lyman Reeves, who built the first house on the town site. Lyman Reeves was born in Bendale, Mississippi and had four children before moving to

Figure A-12. This photograph is of a home in Landon in 1915.



Source: National Archives, Mississippi Gulf Coast Community College

what would become Lyman in 1885. He arrived and acquired several hundred acres on which he raised cattle and sheep. He also took a position with Little and Leinhard of Handsboro, supervising their timber holdings. When the Gulf and Ship Island Railroad connected north from Gulfport, Reeves took on a partner named Taylor and built the first sawmill in the area. He also built a comfortable log cabin near the mill for his family, which became the first home in the community. The first settlers of the area were mostly his relatives.^{af} The Ingram-Day Lumber Company bought the house in 1900, and it was eventually torn down by the Ingram-Day Lumber Company.^{ag}

There are remnants of the timber and rail industry in Lyman, including two prominent historical homes. The Norman Hatten House is located at the southern entrance of the town, while the home of Oscar Betson is located on US Highway 49, just outside the northern limits of the town.

The town was first called Reeves Crossing, but the US Post Office Department would not permit this name to be used because there was another Reeves in northern Mississippi. Instead, the citizens

Figure A-13. Remnants of the Lyman Lumber Mill



Source: Matthew Leasure

utilized the first name of its founder rather than the last, and it officially became Lyman.^{ah}

Eventually Lyman Reeves sold his farm to Harrison County and built a Methodist church. Every Sunday morning before he died he would arrive early to church and light the fire prior to the arrival of the congregation.^{ai}

In 1920, the Wood Consolidated School became a state-accredited school and graduated its only official graduate, Vida Williams. Williams' diploma was signed by A. S. Mitchell, who was manager of the Ingram-Day Mill at the time and was President of the Board of Trustees. She went on to Mississippi Normal College and became a primary school teacher herself in 1922^{aj} The last sawmill in Lyman closed in 1934, at which time 70 percent of the population moved away.

New Hope is located three miles west of Gulfport.^{ak} It is generally in the same area as Landon, Sidecamp, Mount Calvary, and

Figure A-14. The historic Lyman Post Office



Source: Matthew Leasure

Orange Grove. The area was originally named after the construction of the New Hope Baptist Church, a predominantly white church constructed in the late 1940's.^{al}

Orange Grove originated from the establishment of the Orange Grove Elementary School in 1917. The school was founded as a result of the need to consolidate three smaller districts: Friendship school west of Landon, Happy Wood School in the Creosote community, and the Nugent Separate School District. The original school was a two-story frame structure designed by the state architect. It was named after a beautiful orange grove owned by J.P. Wilson.^{am}

Eventually, the original building reached its capacity and another building was erected in 1941. The building housed first through 12th grades from 1940 until 1957. Now, it houses the 4th, 5th, and 6th grades, with an approximate enrollment of 660 students.^{an}

Figure A-15. The New Hope Baptist Church



Source: Matthew Leasure

Riceville, a town located about eight miles northeast of Lizana, was established around 1850. The name of the community originated from the practice of growing rice in the lowlands along the adjacent Wolf River. John Shaw, a school master, moved to Riceville in 1848 and taught in the community for many years. He originally taught in a subscription school, which held sessions for a few months of each year. The public school system was instituted after the civil war, and Shaw became a teacher in the Riceville public school.^{a0}

Side Camp is located roughly two miles west of Landon. It was established in 1898 as a camp for African-American workers who were employed by a family in the turpentine business.^{a1} The workers cut and harvested trees located nearby camp.^{a2} The workers were eventually given the opportunity to purchase the land where their cabins were located and many of them did.^{a3}

A few years later, in 1906, the workers established the Mount Calvary Baptist Church. This church is predominantly African-American and recently celebrated its centennial. Because it was the only African-American church in the area, many people referred to this area as Mount Calvary.^{a4}

Located on the western edge of the county, Vidalia is a small community about 14 miles northwest of DeLisle. In the early 20th century, the Vidalia Catholic Church was moved to the area. This allowed Vidalia to become officially recognized as a separate community. It was the most prosperous time in the community's history, with citizens raising rice, corn, and sweet potatoes. Their chief economic base came from the sale of wool and logs. The logs were transported down the Wolf River to St. Louis bay.^{a5} Today, the Vidalia area is more widely recognized as Dedeaux and Dubuisson.

Figure A-16. The Mount Calvary Baptist Church



Source: Matthew Leasure

DEMOGRAPHICS

In order to better understand and plan for the impact of future growth in the Western planning area of Harrison County, current demographics and future population projections are needed. An in-depth look at key demographic trends assists in the formulation of goals and recommendations. The purpose of this section is to provide the necessary analysis using data compiled from the US Census Bureau and other figures provided by the Mississippi Home Corporation (MHC).^{au} MHC uses Environmental Systems Research Institute (ESRI) statistics, which combines data recorded in the decennial Census of Population and Housing conducted by the US Census Bureau with new sources of information gathered from disaster response agencies, news reports, and fieldwork.^{av}

Population

According to MHC, the Western planning area population in 2000 was 14,525, with 5,085 households. Since 2000, the population of the planning area has grown to an estimated current population of 17,994. This represents an average annual growth rate of 3.1 percent. It is estimated that average household and average family size have decreased slightly, although the total number of households has increased by approximately 5 percent over the seven-year period.

Table A-1. Population Estimates

	2000	2007
Total Population	14,252	17,994
Households	5,085	6,733
Average Household Size	2.80	2.67
Families	3,927	4,997
Average Family Size	3.11	3.01

Source: US Bureau of the Census, 2000 Census of Population and Housing, and Mississippi Home Corporation

Population Forecast

Population forecasts for the Western planning area were produced by the Ohio State University planning team. While data was available from various sources, including the Gulf Regional Planning Commission, the *Gulf Region Water and Wastewater Plan*, and the Mississippi Home Corporation, projections required further analysis. Accurate projections are important for planning the provision of housing, infrastructure, and other services.

In 2007, there are a number of housing developments throughout the planning area with houses under construction. These developments are expected to continue, with construction activity adding approximately 220 housing units between 2007 and 2012. These population forecasts are based on reasonable expectations of Western Harrison County's share of regional growth. There have been numerous large scale development projects approved. If one or more of these are built in the near future, it could shift the timing and degree of population growth.

A critical issue is the phasing of development. There are currently a number of housing projects proposed, but they are waiting on the availability of water and wastewater infrastructure. Water and wastewater lines are expected to be constructed in portions of the planning area by 2011. Based on the number and type of residential development projects approved but not yet constructed, it is possible that more than 2,500 new housing units could be built in the years following the completion of infrastructure extensions (between 2012 and 2017). These developments are expected to primarily meet the demand for higher density and more affordable housing located close to major highways and in water and wastewater service areas.

After 2017, the growth rate is expected to slow to typical historical levels of approximately 2 percent. Using an assumed 2 percent growth rate produced a population of 32,460 with an accompanying 13,075 housing units. This is a total increase of 5,827 housing units. The results of the population forecast are included in Table A-2.

Table A-2. Western Planning Area Population and Housing Forecast

Time Period	Population Period End	Population Increase from Previous Period	Housing Units Period End	Housing Units Increase from Previous Period	Average Annual Growth Rate
2007	17,994	589*	7,248	237*	3.1%
2008-2011	18,725	731	7,542	294	1.0%
2012-2017	25,093	6368	10,107	2,565	5.0%
2018-2030	32,460	7367	13,075	2,968	2.0%
Total Increase		14,466		5,827	

**Estimated based on average annual growth rate.*

Source: US Bureau of the Census, 2000 Census of Population and Housing, Mississippi Home Corporation

There is expected to be a total population of 32,460 by 2030, with 13,075 housing units and a net gain of 5,827 housing units. In the short term, the Western planning area can expect to see a gain of approximately 294 housing units by the year 2012, a reasonable projection given existing housing projects already under construction. An additional 2,565 housing units are expected to be added to the market, again assuming the completion of planned infrastructure improvements and extensions. The final addition of almost 3,000 housing units is expected in the years between 2018 and 2030. The location and density of these developments is in part governed by the recommendations of this plan, which can be found in chapter two.

Race

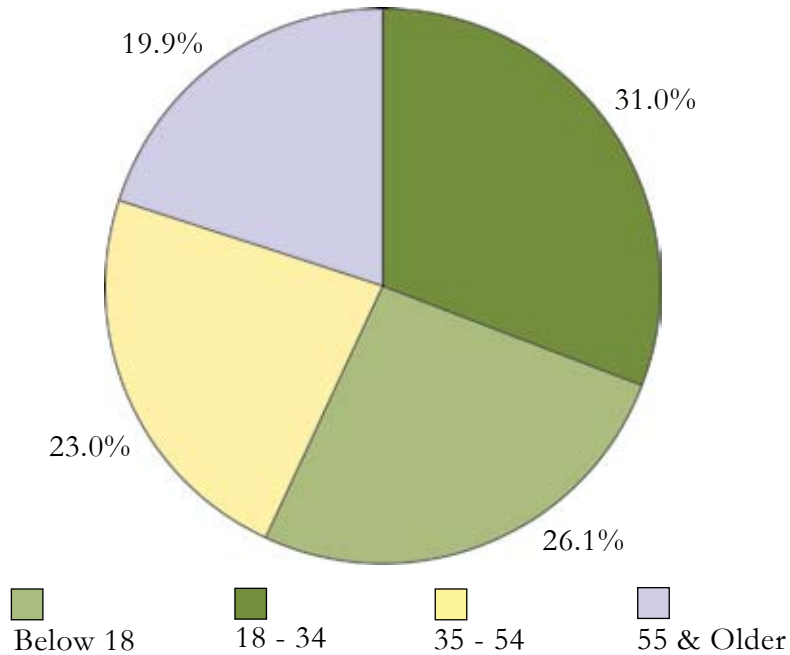
According to 2007 estimates, the Western planning area was primarily comprised of residents who identify themselves as Non-Hispanic White and African American. Eighty-seven point nine percent of the population consisted of Non-Hispanic White residents, while African Americans constitute the largest minority group at 8.6 percent of the total population. Those of Hispanic origin total 2.1 percent of the population. Other racial groups were equally represented at 1 percent or less of the total population.

Age

When broken out into typical marketing segments, the Western planning area’s age composition is similar to that of Harrison County. According to 2007 MHC estimates, the median age of residents in the Western planning area is 35.7. This is similar to the median age of Gulfport City and Harrison County, 34.7 and 35.1, respectively. The majority of residents in the Western planning area are of working age, between 18 and 55. The Western planning area has a significant number of children, with over one quarter of the population under the age of 18. Table A-3 shows the distribution of population by age group within the planning area.

From 2000 to 2007, the age distribution in the Western planning area changed only slightly, indicating that the population characteristics of the planning area are relatively stable. The percent of working age population decreased by 0.9 percentage points, while the population below 18 years of age experienced a decrease of 2.4 percentage points. The high percentage of residents under the age of 18 indicates a need for childcare services, educational facilities, and recreational opportunities. As this population ages, there will potentially be increased demand for youth activities, educational facilities, and employment for young adults.

Figure A-17. Age Composition, 2007



Source: U.S. Bureau of the Census, 2000 Census of Population and Housing, Mississippi Home Corporation

Table A-3. Age Composition

Age Group:	2000	2007
Below 18	28.5%	26.1%
18-34	31.6%	31.0%
35-54	23.3%	23.0%
55 and older	16.6%	19.9%

Source: US Bureau of the Census, 2000 Census of Population and Housing, Mississippi Home Corporation

Notably, the percent of the population age 55 and older increased by more than 3 percentage points. This results in an increased proportion of non-working citizens to working age citizens. A rising dependency ratio is a concern with an aging population, since it becomes difficult for pension and social security systems to provide for a significantly older, non-working population. As the predominant age group (18 to 54 years of age) grows older, there will likely be a need for increases in health care services and senior citizen activities.

Education

Table A-4 shows the educational attainment for the Western planning area compared to nearby cities and Harrison County according to MHC and the US Census Bureau. Approximately 76.1 percent of Western planning area residents have at least a high school diploma, slightly lower than the percentages of neighboring cities and Harrison County as a whole.

Thirty percent of residents 25 years and older in the Western planning area have attended some college, in comparison to 32 percent for Gulfport City and 33.5 percent among all Harrison County residents. Other neighboring cities, and Harrison County as a whole, have a higher level of education attainment. The development of the University of Southern Mississippi Campus will eventually bring an additional 10,000 students within the Western planning area, leading to both an increased education level for the transient population, as well as potential increases for the permanent population as some students remain in the planning area after graduation.

Income

According to 2007 MHC estimates, the Western planning area’s median household income in 2007 was \$41,239. In terms of local comparisons, The Western planning area’s median household income is slightly higher than the median income of Gulfport, but less than other nearby incorporated communities (see Table A-5). Per capita income is the result of total aggregated income divided by population. The

Table A-4. Educational Attainment for the Population 25+ Years, 2000

	Western planning area*	Gulfport	Long Beach	Pass Christian	Harrison County
Less than a High School Diploma	23.8%	20.8%	13.7%	14.8%	19.7%
High School Diploma	33.2%	28.2%	26.1%	22.8%	28.4%
Some College	30.1%	32.0%	35.9%	34.6%	33.5%
Bachelor's Degree	7.8%	12.3%	16.3%	18.0%	11.8%
Graduate Degree or Higher	5.1%	6.8%	8.0%	9.7%	6.6%

Source: US Bureau of the Census, 2000 Census of Population and Housing. *ESRI forecasts for 2007 and 2012.

Western planning area's per capita income was \$20,731 in 2007, lower than Gulfport (\$21,184), Long Beach (\$22,407), Pass Christian (\$30,729) and countywide values (\$22,328).

Table A-6 illustrates the household income distribution in 2007, with more than 50 percent of the households in the community earning between \$25,000 and \$75,000 annually. Nearly one third of households earn less than \$25,000 per year, comparable to Gulfport City and Harrison County.

Table A-5. Median Household Income, 2007

Western planning area	Gulfport	Long Beach	Pass Christian	Harrison County
\$41,239	\$36,236	\$47,286	\$44,361	\$39,312

Source: US Bureau of the Census, 2000 Census of Population and Housing. ESRI forecasts for 2007 and 2012.

Table A-6. Household Income Distribution, 2007

Total Household Income	Western planning area	Gulfport	Long Beach	Pass Christian	Harrison County
Less than \$15,000	14.2%	20.9%	13.0%	17.3%	17.9%
\$15,000 - \$24,999	13.1%	13.6%	10.3%	12.5%	13.0%
\$25,000 - \$34,999	14.2%	13.9%	11.2%	11.3%	13.7%
\$35,000 - \$49,999	19.2%	16.4%	19.3%	13.8%	17.7%
\$50,000 - \$74,999	17.8%	17.3%	21.3%	17.7%	18.3%
\$75,000 or more	21.6%	17.9%	25.0%	27.4%	19.4%

Source: US Bureau of the Census, 2000 Census of Population and Housing. ESRI forecasts for 2007 and 2012.

HOUSING

The majority of households in the Western planning area consist of families. Among these, over 60 percent are married couples, half of whom have children living with them. Over three quarters of non-family households are comprised of single head households. Forty-two percent of all households include related children. Notably, 16.1 percent of households include seniors.

Table A-7. Household Characteristics, 2007

Household Type	Percentage
Family Households	77.2%
Nonfamily Households	22.8%
Households with Related Children	42.8%
Households with Persons 65+	16.1%

Source: US Bureau of the Census, 2000 Census of Population and Housing. ESRI forecasts for 2007 and 2012.

Methods and Sources

An analysis of housing in the Western planning area is important in order to classify the existing housing stock as well as to identify the community's future housing needs. This analysis provides a detailed explanation of housing in the Western planning area prior to Hurricane Katrina. Current conditions should not vary dramatically from pre-Katrina data, as the majority of housing within the Western planning area was not severely affected by the storm. An exception is the sizeable number of temporary FEMA manufactured homes and trailers located within the planning area.

This housing analysis of the Western planning area includes information from the 2000 US Census. Additionally, data compiled by Environmental Systems Research Institute (ESRI) and provided to the Mississippi Home Corporation (MHC) is used.^{aw} The Western planning area is compared to neighboring Gulfport, Long Beach, Pass Christian, and Harrison County as a whole. This assessment allows for better

decision making in the overall planning process for the future of the Western planning area.

Housing Characteristics

Most homes within the Western planning area are located in rural, scenic settings. The majority of the housing stock can be described as single-family, detached structures on large lots. Lawns, pasture, and timber set many homes far apart. Many newer homes have brick or partial brick exteriors. In other areas, often close to major roadways, older clapboard homes are common and are in close proximity to one another. The most common housing styles include ranch and colonial styles, as well as manufactured homes. Some areas, particularly those experiencing more recent development, contain housing that is closer together.

Figure A-18. Single family housing is found throughout the planning area.



Source: Chris Cunningham

Housing Types

Based on the 2000 U.S. Census, there were 5,508 housing units in 2000. This constitutes 6.9 percent of the housing units in Harrison County (79,636). Neighboring Gulfport had 29,449 housing units.

According to the 2000 U.S. Census, of the housing units in the Western planning area, more than 61 percent were classified as single-family homes. Manufactured homes represented 36.4 percent of total housing units in 2000, and just over 2 percent were classified as multi-family units. The two neighboring communities of Long Beach and Pass Christian exhibited a small proportion of manufactured housing units, 0.9 and 2 percent, respectively. This is indicative of the rural character in the Western planning area.

Figure A-19. Manufactured housing is common in the Western planning area.



Source: Matthew Leasure

Table A-8. Distribution of Housing Type (2000)

Housing Type	Western planning area	Gulfport	Long Beach	Pass Christian	Harrison County
Single Family	61.2%	67.50%	73.70%	77.90%	65.20%
Duplex	0.6%	3.40%	4.00%	2.00%	2.90%
Multi-Family	1.5%	21.50%	21.40%	18.10%	19.40%
Manufactured Home	36.4%	7.60%	0.90%	2.00%	12.40%
Other	0.3%	0.10%	0.00%	0.00%	0.20%

Source: US Bureau of the Census, 2000 Census of Population and Housing. ESRI forecasts for 2007 and 2012

Age of Housing

Over 80 percent of existing housing in the Western planning area in the year 2000 was constructed within the last 40 years. According to this data, the median year of construction for houses in the Western planning area is 1987. This is considerably more recent than that of both the county and the state. Two-thirds of structures were constructed between 1980 and March of 2000, the most recent category from the current census information. Fewer than 20 percent of units were built before 1940.

Pockets of older homes exist throughout the planning area. Some are concentrated in the older community settlements, and other homes of historical interest can be found on individual family farms.

Figure A-20. This historic family home was built in 1904.



Source: David Reeves

Housing Occupancy and Ownership Status

According to the Mississippi Home Corporation estimates for the year 2000, there were an estimated 5,085 households in the planning area and 5,526 total housing units. Over three-quarters of the housing units in the Western planning area were owner occupied. Of the remainder, 14.2 percent were renter occupied and the remaining 7.9 percent were vacant (see Table A-10). There was a similar distribution for the 2007 estimates, with a slight increase in the number of renter-occupied housing and a minor decrease in the overall vacancy rate.

Table A-9. Housing Units by Year Structure Built, 2000

Time Period	Percentage
2000 to 2007	24.0%
1990 to 1999	32.1%
1980 to 1989	18.2%
1970 to 1979	11.3%
1969 and Earlier	14.4%

Source: US Bureau of the Census, 2000 Census of Population and Housing, Mississippi Home Corporation

Table A-10. Occupancy and Vacancy Status

	2000	2007
Housing Units	5,526	7,248
Owner Occupied Housing Units	77.9%	76.9%
Renter Occupied Housing Units	14.2%	15.9%
Vacant Housing Units	7.9%	7.1%

Source: US Bureau of the Census, 2000 Census of Population and Housing, ESRI forecasts for 2007 and 2012

Table A-11. Owner Occupied Housing by Value, 2000

Total Units	4,309
Less than \$50,000	26.2%
\$50,000 - \$99,999	34.5%
\$100,000 - \$149,999	19.1%
\$150,000 - \$199,999	10.7%
Greater than \$200,000	9.4%

Source: US Bureau of the Census, 2000 Census of Population and Housing. ESRI forecasts for 2007 and 2012

Housing Values

The average value for owner-occupied housing units in the Western planning area for the year 2000 was \$106,837, according to MHC estimates. Among the total 4,309 owner-occupied units, over 60 percent were valued at \$100,000 or less.

New Residential Construction

Following Hurricane Katrina many property owners and developers have sought to develop their land for housing to meet the demand of residents relocating after the storm and new residents moving to the county. A total of 3,244 acres for approximately 4,470 housing units have been approved or are pending rezoning. Additional property owners are contemplating potential development. Given the population forecast, explained further in the population section, it is likely that not all of the properties rezoned will ultimately be built out by 2030. The market will determine the extent to which existing proposals will be built and future proposals will be needed.

Newer homes, those built since the 2000 Census, include those in the Windance subdivision. Several middle-income subdivision developments have been constructed around the many small ponds in the eastern part of the planning area. Among the single-family home developments that have been approved and are partially or fully constructed are those near the intersection of the Landon and County Farm Roads. Many of these homes are set closer to one another and

to the road than was previously common in the Western planning area. Construction of additional subdivisions on smaller lots is anticipated in areas where water and wastewater lines are extended.

Effects of Hurricane Katrina

Hurricane Katrina resulted in wind damage and some flood damage in the planning area. Flood damage was limited to the areas along the Wolf River. Wind damage surfaced primarily in the form of shingle or roof damage. Maximum wind speeds over the Western planning area were well over 100 miles per hour. Natural disasters, such as Hurricane Camille (1969) and Hurricane Katrina, have a significant effect on the demographic trends and the housing needed to accommodate these changes. While damage displaced few existing residents from their homes in the Western planning area, the area has absorbed a large number of new residents fleeing the damaged areas along the coast. The Western planning area should continue to expect an increase in population as people from other areas of the county move northward, away from Hurricane devastated areas. Additionally, a large FEMA trailer site placed on County Farm Road resulted in an influx of residents to the area.

FEMA

Following Hurricane Katrina, FEMA located a temporary FEMA Trailer Park on County Farm Road. This park contains a total of 180 units. Almost all of these units are three bedrooms that are housing families of four or more people. The people living in the FEMA Trailer Park primarily lived in Gulfport and the unincorporated county. The park will continue operation until March 2009 at which time it will be closed.

Under the proposed program, beginning spring 2008, HUD would use a transitional approach to help families continue along the path to self-sufficiency. The approach calls for successive decreasing amounts of assistance according to a FEMA formula based on income with the goal of complete housing independence at the end of the program. FEMA is also developing a process to allow FEMA trailer

residents to purchase currently occupied units at a reduced cost, in hopes of facilitating their return to self-sufficiency.

Housing Affordability

In this plan, housing that is affordable to the residents of Western Harrison County is considered to be any housing options that meet minimum building codes and require no more than 30 percent of a household's income for rental or mortgage payments. Housing, so defined, encompasses households of all income levels. The housing may or may not be subsidized and it may include owner occupied or rental units. Inherent in this broad definition is the assumption that the housing is physically adequate and not overcrowded.

In general, housing is rendered unaffordable through a combination of household income levels and external factors, such as land and other development costs, insurance rates, taxes and maintenance. The effects of Hurricane Katrina have further compounded the shortage of housing that is affordable by decreasing the existing supply and increasing the cost of production.

Providing an adequate supply of quality housing that is affordable for households of multiple income levels is a key component of this plan. By committing to the goal of developing sufficient housing options near employment opportunities, Western Harrison County will help to minimize the burden on working families, lessen the potential for lengthy commutes, ease traffic congestion on roadways and reduce the environmental impacts of such commutes. This is in line with the approach that at least 50 percent of workers should have access to housing that they can afford within the community of their workplace.

Western Harrison County is experiencing new development resulting in the growth of employment, with the USM campus serving as an example. Encouraging the long-term development of housing that is affordable to those of the moderate or lower income brackets in the vicinity of employment centers may also be referred to as Regional Fair Share Housing. This includes households earning 80 percent or less of the Area Median Income which is estimated at \$41,239 in 2007.

If every community with employment centers allows for housing that is affordable for employees that work in the area, the region as a whole can meet housing needs.

Fair Market Analysis

In March 2007, the median market rent for a two-bedroom apartment in Harrison County was \$779.56^{ax}. For a household to be able to "afford" such an apartment, assuming a maximum allowable spending of 30 percent of monthly income, the household would need to earn over \$31,000 annually. Using this figure, approximately one quarter of households within Western Harrison County could not afford a two bedroom apartment, let alone a larger unit or stand-alone home. Please refer to page A-88 above for further analysis of area income levels.

The same analysis applied to homeownership reveals similar issues. Assuming that the cost burden of homeownership, including principal and interest, taxes, and homeowner's insurance should not exceed 30 percent, many households in the Western Planning Area cannot afford homeownership. The figures in Table A-12^{ay} also do not account for property maintenance and utility issues. Most importantly, the initial investment needed for a home purchase substantially increases the affordability gap and underscores the need for both a stable and adequate amount of rental housing, single family or otherwise and increased opportunities for affordable homeownership.

The differential between Average Home Values and current market prices for housing is also notable. According to the Mississippi Sun Herald, only 20 percent of homes sold by November 2007 were priced below \$100,000. The majority sold between \$100,000 and \$200,000.^{az} Combined with increased costs of living, homeownership affordability has been greatly reduced since Katrina.

According to the Rand Corporation, Harrison County's coastal cities are among the areas facing the largest challenges to the reconstruction of housing that is affordable to its residents. It is in these coastal areas where rental housing was concentrated, where

Table A-12. Basic Housing Affordability Scenario.

Average Monthly Rent (Two Bedroom)	\$779.56
Maximum Percent of Income Towards Housing to Maintain Affordability	30%
Minimum Monthly Household Income to Maintain Affordability	\$2,598.53
Minimum Annual Household Income to Maintain Affordability	\$31,182.40

Source: Gulf Regional Planning Commission, The Ohio State University, 2007

damage was the most severe, and where citizens have limited income to devote to reconstruction. Thus many property owners may find it more financially viable to reinvest in other areas, including those north of I-10. A significant number of developments have already been either proposed or approved in the Western Planning Area, corroborating these predictions. The gap between the projected sales price of these new homes and the amount that is affordable to most households is significant. Moreover, few rental or multifamily developments have been proposed, leaving that segment of the market underserved.

Although statistics are unavailable for the Western Planning Area, Mississippi Coastal cities have experienced a consistent increase in average monthly rents since 2004. As investment in Western Harrison County intensifies, it is likely the value of quality homes will increase as well, pricing more households out of the market. Moreover, more stringent building codes have increased home costs, while improving resistance from hurricane damage. The shortage of affordable housing will affect middle income and low income families alike.

Table A-13. Coastal Cities Average Percentage Increase in Rents.

	One Bedroom	Two Bedroom	Three Bedroom
Biloxi	44.4	34.1	29.3
Gulfport	40.8	32.6	22.8
Pascagoula	29.1	32.7	16.8

Source: Gulf Regional Planning Commission, 2007.

Table A-14. Homeownership Affordability Analysis.

Average Home Value for Western Harrison County	\$106,837
Minimum Down Payment	\$21,367.40
Loan Amount	\$85,469.60
Principal and Interest	\$526.25
Monthly Taxes	\$52.83
Home Owner's Insurance	\$160.00
Monthly Mortgage Amount	\$739.08

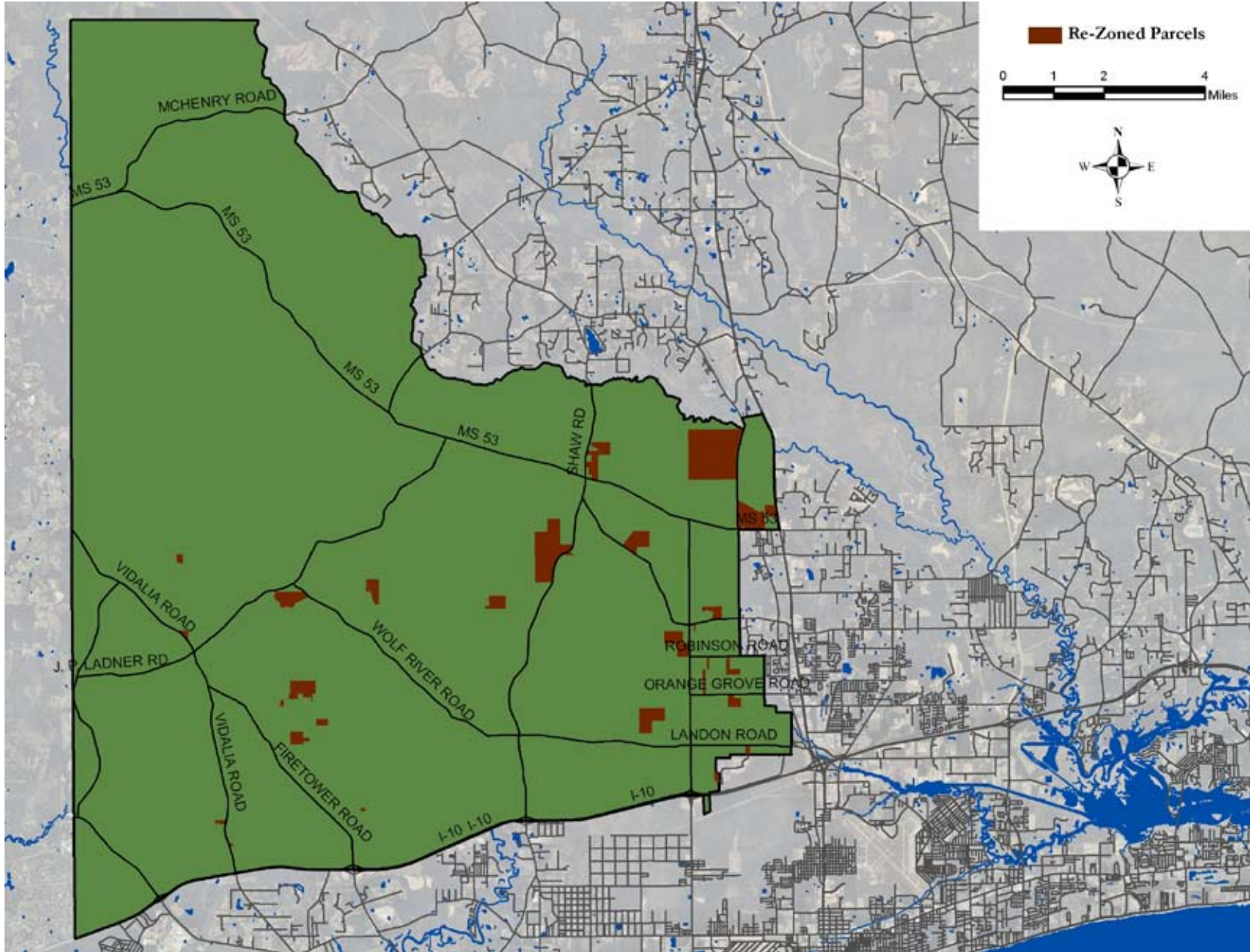
Source: Gulf Regional Planning Commission, The Ohio State University, 2007

Figure A-21. The house shown below is typical of many homes in Western Harrison County.



Source: Nathan Harber

Map A-1. A significant number of parcels have been rezoned for housing following Hurricane Katrina through 2007 in the Western Planning Area.



Source: The Ohio State University

LAND USE

Development History

This area is dominated by southern pine forests and agriculture, which make up almost 73 percent of the planning area. The area consists primarily of single family houses and some commercial and industrial development.

Dedeaux is centered at the intersection of Vidalia Road and Cable Bridge Road.^{ba} The former Dedeaux School sits close to the county line and is currently used as a pre-school.^{bb} Neco's Grocery and Market replaced the Cable Bridge Lounge more than ten years ago, and after Hurricane Katrina the gas station and corner market expanded to a 35,000-square-foot grocery.

Dubuisson is a community centered between Firetower Road and Vidalia Road just north of Interstate Highway 10. This is a rural portion of the planning area with acreage lot homes. Before Hurricane Katrina, there was a new manufactured home park located on Vidalia Road and Edwin-Ladner Road with approximately 50 homes. After Katrina the park was able to place an additional 30 FEMA-manufactured homes in the park.^{bc}

The community of Landon is centered at the crossroads of Canal Road and Landon Road. This area is sometimes referred to as "New Hope" and "Side Camp".^{bd} It includes a mix of residential homes on smaller lots, churches, and small commercial businesses. The Landon community recently saw the development of the Hancock Bank Data Center.

Lizana is centered at Lizana School Road and State Highway 53, a location that also features a commercial center. The center is home to Fazzio's Home and Farm Center, Fazzio's Car Wash, Kountry Kolours Automotive Sales, and Necaise Well Drilling. Lizana is also home to the County Farm and the County Fairgrounds on County Farm Road just north of James Bond Road. Surrounding the commercial area are acreage homes and agricultural activities.

The community of Lyman is located north of Gulfport on US Highway 49. Lyman includes a mix of acreage lots and suburban style subdivisions, with a mix of commercial businesses along US Highway 49 and State Highway 53.

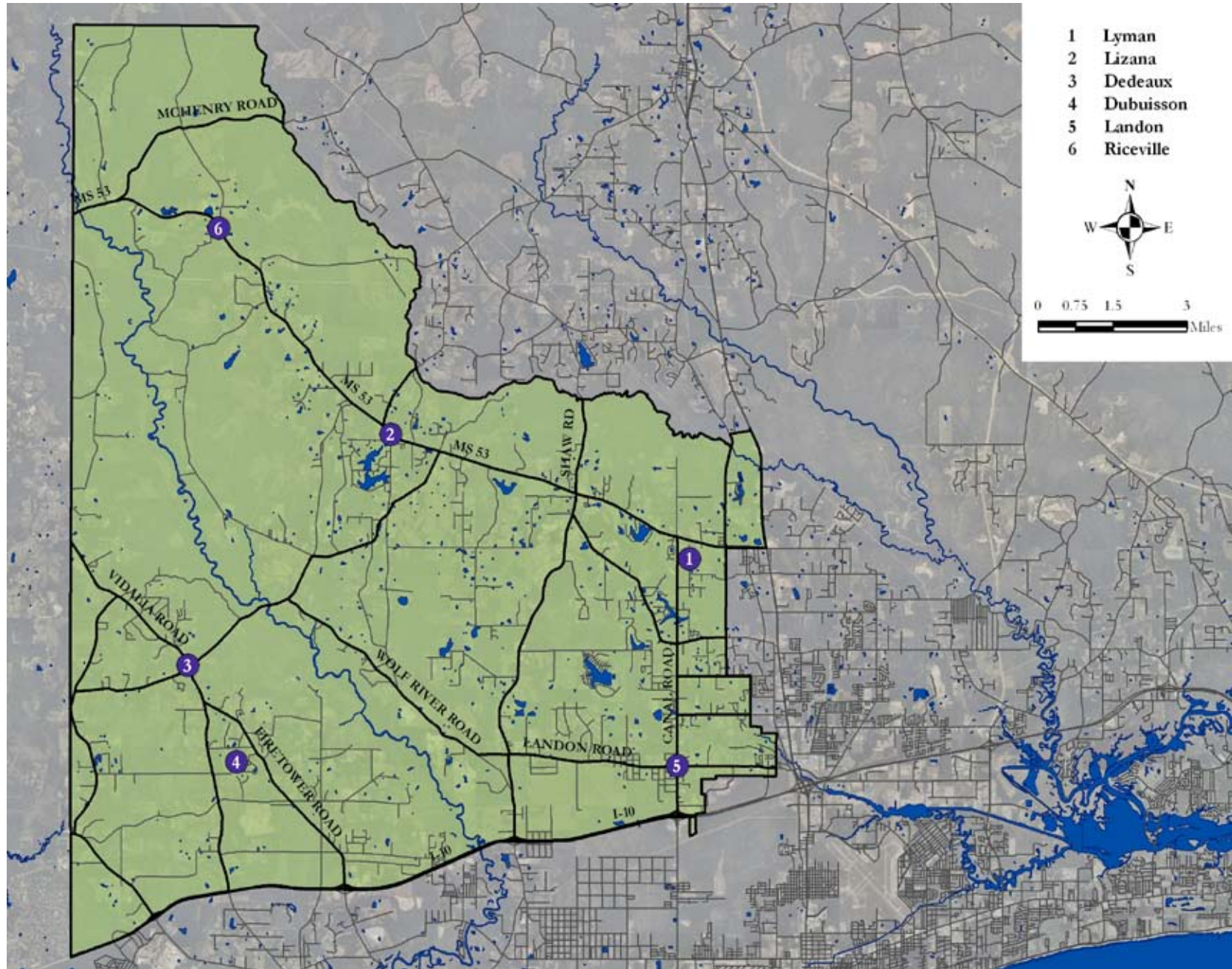
Riceville is a rural community located 2.5 miles east of the county line and two miles north of State Highway 53. It is almost exclusively agricultural and residential in nature.

Existing Land Use

In order to create an inventory of land uses in the Western planning area, aerial photography was examined. The planning team then confirmed US Census data through use of parcel data, windshield surveys, and consultation with the steering committees. The uses were divided into six categories: forest, agriculture, residential, commercial, beach/sand, and surface water. The categories were then divided into two larger groups: developed and undeveloped land. In addition, the developed land was further detailed by creating a map and table showing the developed land uses. The developed land is categorized by agriculture, community facility, general commercial, general industrial, light industrial, manufactured homes, recreational vehicle park, and single family.

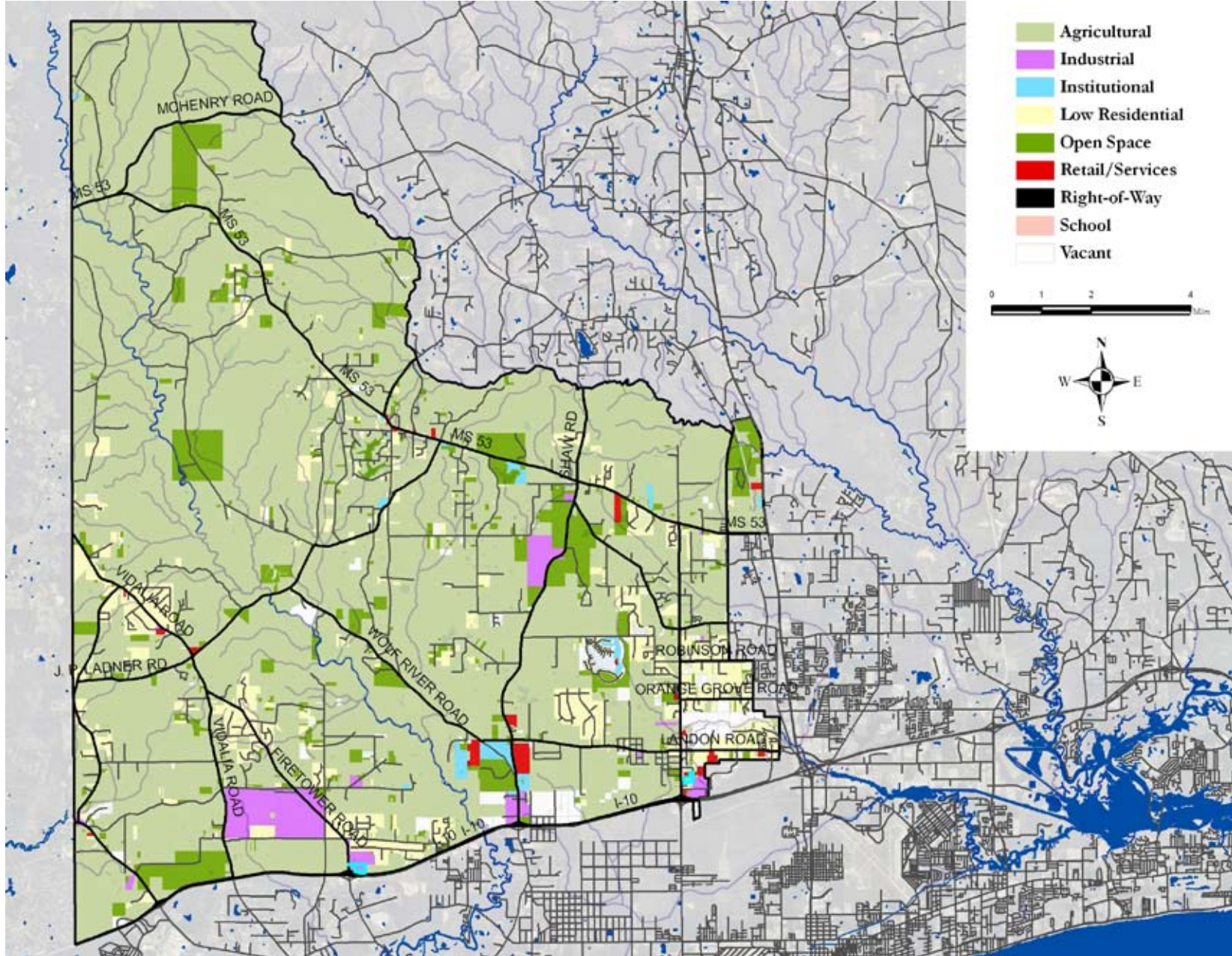
The majority of the land use in the planning area, 72.4 percent, is forest. More than 20 percent of the land area is classified as agricultural. The farms in the planning area average 60 acres, with uses including pecan orchards, berry orchards, hay fields, and grazing pastures with typically 10 to 15 head of cattle.^{be} Residential development represents 4.7 percent of land area. This is typically large lot development; however, subdivisions with lots under three acres are becoming more common. Subdivisions with smaller lots are typically in the southeast quadrant of the planning area, while larger lot subdivisions are typical in the north and west. Commercial land use makes up about 1.3 percent of the Western planning area. Commercial uses can be found along Landon Road, Canal Road, Interstate Highway 10, State Highway 53, and at Vidalia Road and Cable Bridge Road.

Map A-2. Western Planning Area Communities



Source: The Ohio State University

Map A-3. Existing Land Use Map



Source: Southern Mississippi Planning and Development District

Table A-15. Land Use Classification for All Land

Land Use	Total (Acres)	Percent
Agriculture	21,236	20.16%
Commercial	1,407	1.34%
Forest	76,134	72.28%
Residential	4,893	4.65%
Beach/Sand	986	0.94%
Surface Water	630	0.60%
Other	51	0.05%
Total	105,337	100.00%

Source: Harrison County Zoning Office

Future Development

The desire of some residents in Harrison County to move to areas with higher land evaluations and lower insurance costs has led to new development in the Western planning area.

In the Dubuissou community Bocage, a new 365-acre mixed use project, is located to the east of Diamondhead and to the north of Interstate Highway 10. It has frontages on Kiln-DeLisle Road, Vic Faye Road, and Kapalama Drive. At full build out, Bocage could have as many as 1,300 housing units and several commercial areas.^{bf} The Isle of Capri has proposed a new casino just south of Dubuissou on the south side of Interstate Highway 10. Based on experience from elsewhere along the Gulf Coast, it can be expected that the new casino is likely to result in proposals for development in Dubuissou.^{bg}

The Harrison County Utility Authority is responsible for solid waste management in the entire county. Presently, the authority has contracted with BFI Waste Systems to collect solid waste throughout the area. BFI utilizes Waste Management’s Pecan Grove Landfill and Recycling Center, which is located on Firetower Road north of Menge Avenue and is the only active Municipal Solid Waste Landfill in Harrison

County. This landfill is utilized to collect both commercial and residential solid waste and is 177 acres. Waste Management owns an additional 1,500 contiguous acres, which provides for the possibility of expansion of the current facility.^{bh}

The Landon community is home to the Hancock Bank Data Center as part of an 1,800-acre proposed development that lies mostly north of Interstate Highway 10 at County Farm Road and is expected to include a University of Southern Mississippi campus.^{bi}

In Lyman, an 800-acre project, River Hills, would adjoin Old US Highway 49, north of Jeremy Road and east of Mark West Road. Plans for River Hills include a mix of residential and retail uses.

Zoning Summary

The Harrison County Zoning Ordinance governs land use in the Western planning area. Zoning, a relatively new tool in Harrison County, is the method by which government manages the physical development of land and the types of uses permitted for each individual property. The zoning ordinance specifies the areas in which residential, industrial, commercial, and retail activities may take place.

Nearly 80 percent of the land in the Western planning area is zoned for General Agriculture. The A-1 General Agriculture District is intended to provide an area primarily for farming, agriculture, silviculture, dairying, livestock, poultry, forestry, and other similar enterprises or uses. Multiple uses of a single parcel are allowed provided such uses are consistent with uses normally permitted in the A-1 district. Regulations permit single-family dwellings on one acre. One of the leading agricultural producers in the Western planning area is timber production, with Weyerhaeuser as the major contributor. There are at least two berry farms in the Western planning area, including the Live Oak Farm, which has 4.5 acres open for certified organic blueberry picking. Most of the visitors to Live Oak Farm come from out outside Harrison County.^{bj} The Lyman Fish Hatchery is located north of Lyman off US Highway 49.

The E-1 Very Low Density Residential District is the next largest zoning district in the Western planning area, with 11.0 percent. The purpose of the E-1 is to provide for very low density, estate type, residential development while allowing limited scale or hobby agriculture and farm uses adjacent to areas where the character of development is established as or is planned to be predominantly residential. The principle use of the land is for single-household dwellings.

The R-1 Low Density zoning district accounts for 3.67 percent of the area. The principal use of land is single-household dwellings and recreational, religious, and educational facilities normally required to provide basic elements of a balanced and attractive residential area. This zoning provision allows development of lots as small as 6,000 square feet.

The R-2 Medium Density Residential District accounts for 2.71 percent of land in the Western planning area. This district designation is to provide for medium density residential uses on smaller lots with reduced setbacks. The principal use of land is for single-household and two-household dwellings.

The General Commercial District C-2 represents a little more than 1 percent of the Western planning area. The purpose of this district is to serve high volume retail and service type trade. These types of establishments serve a market beyond the community or neighborhood. The majority of this type of zoning is in Landon and the area just west of Orange Grove. The uses in this area are primarily small retail.

The Western planning area has a little over 1 percent designated as I-2 General Industrial District. This district provides suitable areas for firms engaged in general manufacturing and for the storage and distribution of raw materials as well as finished goods.^{bk} The Pecan Grove Landfill and the two corridors at Menge Road and County Farm Road just north of Interstate Highway 10 are the primary examples of industrial uses for the planning area.

Table A-16. Zoning Designations

Zoning Category		Acres	Percent
A-1	General Agriculture	82,247	78.81%
C-1	Neighborhood Commercial	116	0.11%
C-2	General Commercial	1,162	1.11%
E-1	Very Low Density Residential	11,875	11.38%
I-1	Light Industry	184	0.18%
I-2	General Industry	1,076	1.03%
O-1	Office	14	0.01%
R-1	Low Density Residential	3,835	3.67%
R-2	Medium Density Residential	2,828	2.71%
R-3	High Density Residential	234	0.22%
MPC	Master Planned Community	795	0.76%
Total		104,336	100.00%

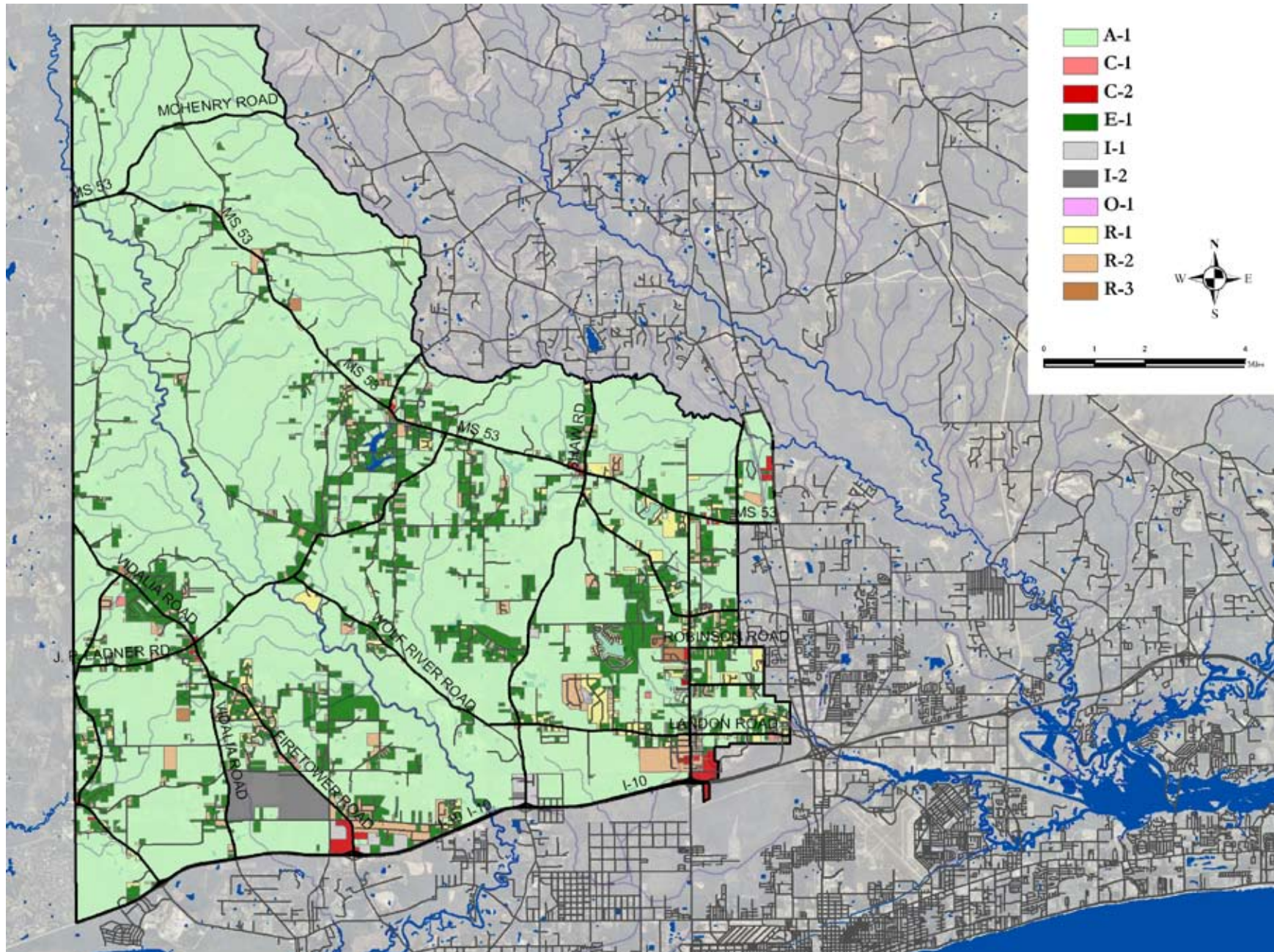
Source: Harrison County Zoning Office

Figure A-22. This residential area is an example of an area zoned as R-1.



Source: Brandon Mark

Map A-4. Existing Zoning as of November 2006



Source: Harrison County Zoning Office

Economics

The Western planning area is primarily a rural area with limited local employment opportunities. Residents work in a variety of occupations and commute to employment centers, such as the commercial and office development along US Highway 49 to the east of the planning area.

The largest local employers in the Western planning area are retailers. The 2002 Gulf Regional Planning Commission Traffic Analysis Zones (TAZ) provided information on retail and non-retail employment within the planning area.^{bl} Retail employment was 685, while non-retail employment was 1,382 (see Table A-20). In total, retail employment accounted for about one-third of the 2,067 jobs in 2002 in the planning area.^{bm} Two of the larger (and most well known) retailers include Neco’s Market Place, which opened in 2007, has 25 employees, and Fazzio’s Farm and Home Center, which has seven employees.^{bn}

Other employers include the Lizana Elementary School, which employs about 62 faculty and staff,^{bo} the Lyman Elementary School, which employ about 50 faculty and staff,^{bp} and the Magnolia Plantation Hotel, which employs approximately 10 people.^{bq} Hancock Bank opened a data processing center in 2007 at Interstate Highway 10 and County Farm Road, and once it reaches full capacity it could have 100 employees.^{br}

It is important to note that the County Equestrian Center has a significant economic impact on the Western planning area, although it is not a large, full-time employer. Each winter the Harrison County

Fairgrounds hosts the Gulf Coast Winter Classics (Winter Classics). The Winter Classic is a Grand Prix Horse Jumping Show. According to the Gulf Coast Classic Company, who markets and organizes the event, the economic impact of the Winter Classics is estimated at \$42 million each year.^{bs}

Future employers include the University of Southern Mississippi, which has plans for a 200-acre campus with an additional 50 acres set aside for future expansion. The university plans to build a new campus on the site near Landon Road east of Canal Road.

Just south of the planning area, the Isle of Capri plans to build Pine Hills Casino, a \$250 million to \$300 million casino resort in western Harrison County. Based on the employment information of similar casinos in the area, the projected employment at the Isle of Capri will be near 1,000 workers. This project may also create future service and retail jobs to support the casino.

Employment Characteristics of Residents

According to the 2000 Census^{bt}, just over 85 percent of the working population works in Harrison County (see Table A-17).^{bu} This statistic highlights that most of the employment centers are located within the county, but not necessarily in the planning area.

Of the working population, a little more than 98 percent are employed in a location other than their home (see Table A-18). A little over half of the working population commutes between 10 and 24 minutes to work each day and about 45 percent commute more than 25 minutes to work. These statistics indicate that there is limited local employment in the planning area. To put this into perspective, the approximate travel time, according to Google Maps, is 12 minutes between Lizana and Lyman—an 8.3 mile journey on State Highway 53.^{bv} This means that almost 95 percent of the working population is commuting farther than this distance for employment.

In 2000, the unemployment for the planning area was relatively low at only 3.8 percent (see Table A-19). Due to Hurricane Katrina, though, the unemployment rate rose in the planning area. Estimates by

Table A-17. Workforce Description

Workers 16 years and Over, 2000	
Worked in state of residence	96.1%
Worked in state of residence; Worked in county of residence	85.1%
Worked in state of residence; Worked outside county of residence	11.0%
Worked outside state of residence	3.9%

Source: US Census Bureau

the Mississippi Home Corporation show that the planning area had a 7.4 percent unemployment rate in 2007. Only 1.1 percent of the employed population is a current member of the armed forces, despite being located near the US Naval Reserve Station and Keesler Air Force Base (see Table A-19).

According to 2007 statistics, nearly 70 percent of the working population in Western Harrison County is employed in the service, construction, and retail industries (see Figure A-25). Almost 50 percent of the working population is employed in the services, professional, and construction occupations (see Figure A-26).

Jobs/Housing Balance

Jobs/housing balance is a measure of the balance between the number of employees and housing units in a specific area. In Harrison County, there are approximately 0.70 jobs for every one (1) house.^{bw} This metric is known as the jobs/housing ratio. It is simply the number of jobs in a community divided by the number of housing units in that community. A low jobs/housing ratio indicates a housing-rich or “bedroom community”, while a high jobs/housing ratio indicates an employment center. Due to today’s nature of household employment in the U.S., where more than 50 percent of households have more than one worker, a ratio of 1.0 would not be considered balanced. In other words, one job for each housing unit is not a realistic ratio.^{bx}

The purpose of a jobs/housing balance is to shorten citizen commuting distances, reduce transportation-related environmental impacts and an improved quality of life.^{by} In a rural to suburban setting, such as Western Harrison County, a jobs/housing ratio of 0.5 is appropriate. Using this ratio, the number of new, local housing units that will create a jobs/housing balance at the two proposed employment centers can be determined.

When the Hancock Bank Data Processing Center, the USM Campus^{bz ca}, and the Interstate Highway 10 employment center are at full employment capacity there could be a total of 1,952 new jobs added to the area near the intersection of Interstate Highway 10 and County

Farm Road. Given the projected employment, approximately 3,904 new housing units within a 15-minute drive radius should be added to create a job/housing balance 0.5 for this employment center. Many of these units should be concentrated in the immediate vicinity of the USM campus to create convenient access to this employment center and to protect the rural character of the areas to the northwest of the proposed campus.

The proposed casino near Interstate Highway 10 and Vidalia Road will produce an estimated 1,000 new jobs. Again using the job/housing ratio of 0.5, approximately 2,000 new housing units within a 15-minute drive radius should be added to create a job/housing balance for this employment center.

Table A-18. Commute Times, 2007

Did not work at home	98.30%
Less than 9 minutes	4.9%
10 to 19 minutes	20.0%
20 to 24 minutes	20.7%
25 to 34 minutes	28.9%
35 to 59 minutes	16.8%
60 or more minutes	7.1%
Worked at home	1.70%

Source: US Census Bureau, ESRI forecasts for 2007 and 2012

Figure A-23. Most citizens of Western Harrison County drive between 25 and 34 minutes to work.



Source: Brandon Mark

Table A-19. Employment Status, 2007

Employment Status	% of Total
In labor force	66.2
In Armed Forces	0.8
Civilian:	66.2
Employed	61.9
Unemployed	3.5
Not in labor force	33.8

Source: Mississippi Home Corporation

Table A-20. 2002 TAZ Information

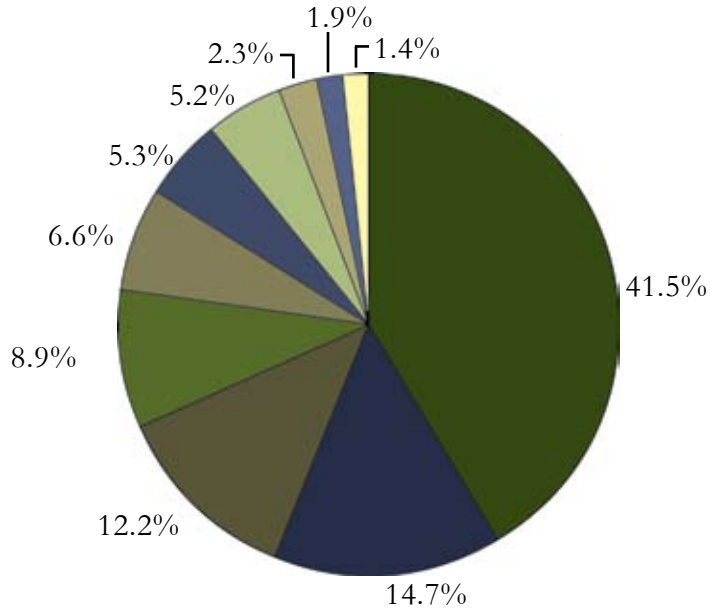
TAZ	Retail Employment	Non-retail Employment
430	22	36
431	10	38
432	11	10
433	1	15
434	17	20
435	29	76
436	5	8
437*	98	84
438*	261	485
439*	0	134
440*	9	12
442*	79	175
443	1	21
444	58	32
446*	37	100
447	34	96
448*	13	40
Total	685	1,382

* Denotes zones that are patially outside the planning area.

Note: TAZs 349, 398, and 445 were excluded because only a small portion of the zones were inside the planning area.

Source: Gulf Regional Planning Commission

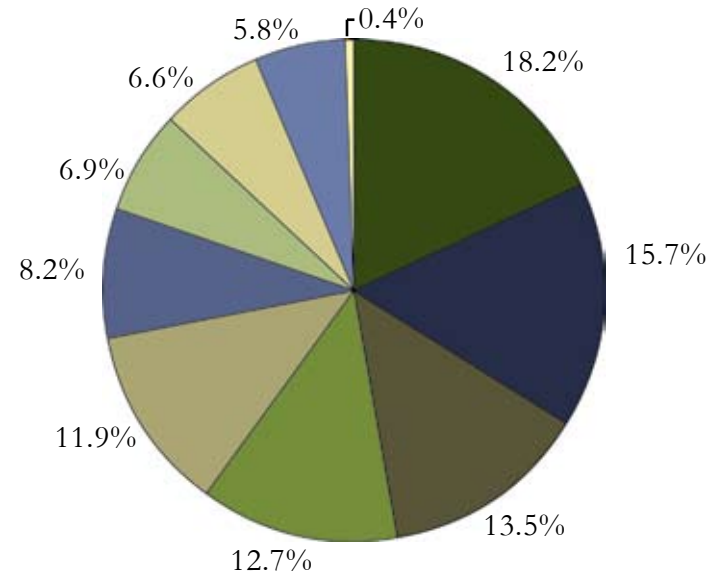
Figure A-24. Employment by Industry, 2007



- Services
- Construction
- Retail Trade
- Manufacturing
- Transportation/Utilities
- Public Administration
- Financial/Insurance/Real Estate
- Wholesale Trade
- Agriculture/Mining
- Information

Source: Mississippi Home Corporation

Figure A-25. Employment by Occupation, 2007



- Service
- Professional
- Construction/Extraction
- Administrative Support
- Sales
- Management/Business/Financial
- Production
- Transportation/Material Moving
- Installation/Maintenance/Repair
- Farming/Forestry/Fishing

Source: Mississippi Home Corporation

NATURAL RESOURCES

Geography

The Western planning area is approximately 165 square miles and bound by the Little Biloxi River to the north, Interstate Highway 10 to the south, US Highway 49 and the Gulfport city limits to east, and Hancock County to the west. The water bodies of the planning area are located in the Coastal Stream Drainage Basin and flow west into the Saint Louis Bay or east into the Back Bay of Biloxi. The topography of the area slopes to the southeast, with elevations as high as 218 feet above sea level near Riceville and as low as 75 feet above sea level near Lyman. The rivers and streams located in the northwest portion of the planning area have moderately sloped banks, whereas the rivers and streams to the southeast are gently sloping and surrounded by wetlands.

Hydrology and Watersheds

The Western planning area of Harrison County lies entirely in the Coastal Stream Drainage Basin, which ultimately flows into the Mississippi Sound through either the St. Louis Bay or Back Bay of Biloxi. The planning area contains only two major rivers and many perennial and intermittent streams and bayous. The Wolf River has seven tributaries: Mill Creek, Sandy Creek, Fox Creek, Boar Branch, Polar Branch, Pole Branch, and Big Creek. The perennial streams and bayous are the De Lisle Bayou, Bernard Bayou, and the Flat Branch, which flows into the Turkey Creek outside of the planning area. The Little Biloxi River is geographically the north border and has no tributaries located in the planning area. The watersheds of the planning area are the Lower Wolf River-Cane Creek, Turkey Creek-Old Fort Bayou, Rotten Bayou, and the DeLisle. These water bodies provide economic benefits, habitat for wildlife, and recreational activities for the citizens of Harrison County and surrounding areas. Map A-5 illustrates the water bodies and watersheds located in the planning area.

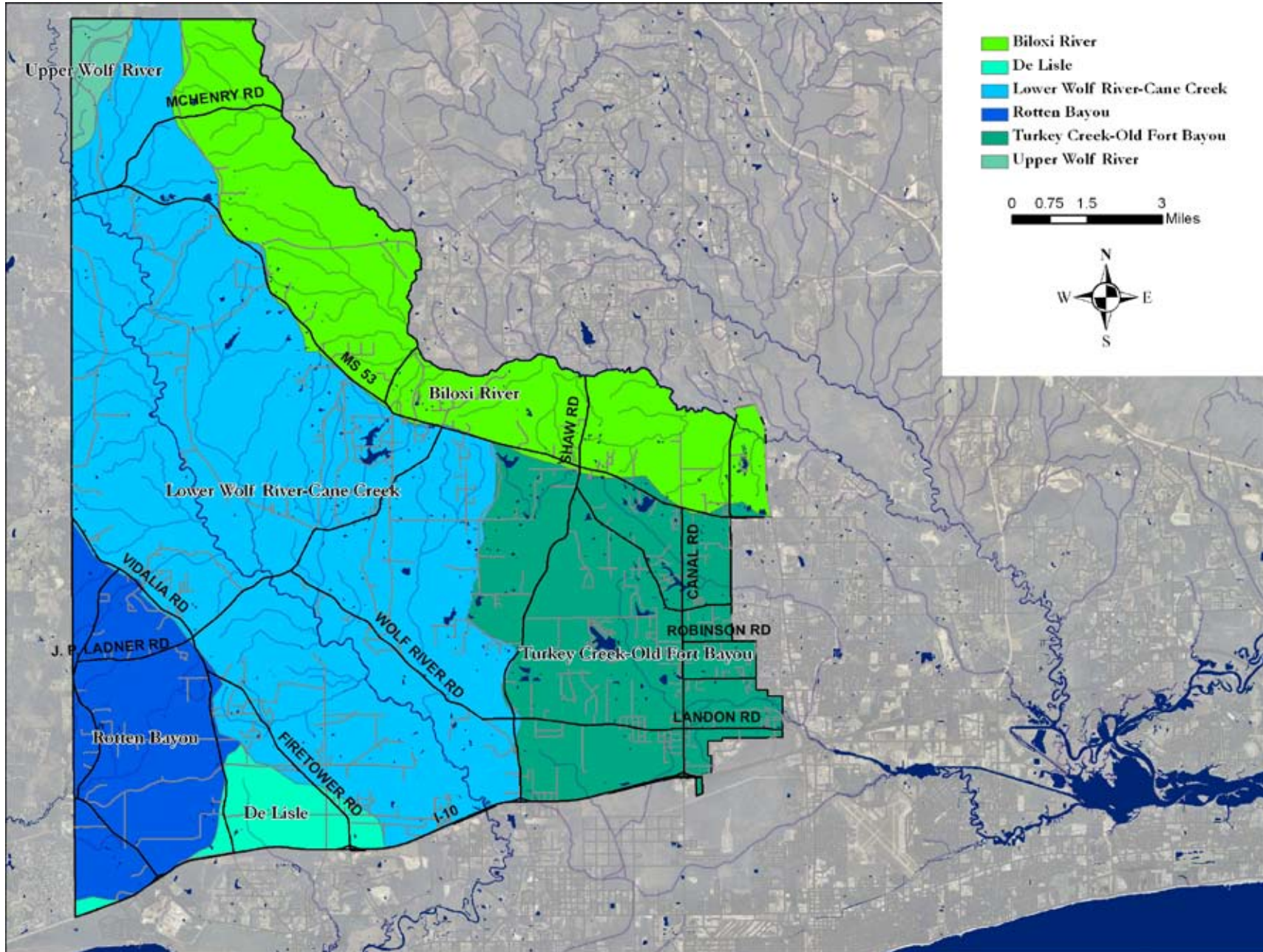
The Wolf River meanders through the planning area for approximately 19 miles, providing habitat for over 250 species of plants, fish, and wildlife in the Gulf Coast Flatwoods region of the county.^{cb} From the headwaters located in Pearl River County, the river flows southeast

through the planning area, bends southwest at Interstate Highway 10, and flows into the St. Louis Bay. The preservation of the Wolf River and the Lower Wolf River-Cane Creek Watershed is important due to the surrounding wetlands and dense forests that act as natural buffers to help control flooding along the St. Louis Bay and Back Bay of Biloxi. There are several efforts to protect the integrity of the Wolf River, including the Scenic Streams Stewardship Act, which plays a vital role in voluntary private conservation of the riparian areas of the tributary.^{cc} Thousands of acres have been preserved by The Conservation Fund, the Wolf River Conservation Society, the State of Mississippi, the Little Biloxi Wetland Trust, and the Harrison County School Board (see Map A-6). The Land Trust for the Mississippi Coastal Plain (LTMCP) considers “sand and gravel mining, non-point source pollution from development and eroding stream banks” as major threats to the Wolf River.^{cd} LTMCP notes that while land is being preserved in the Wolf River watershed, that it is “suffering from invasive species such as cogon grass and Chinese tallow trees,” which will be addressed in future restoration plans.^{ce}

The northern boundary of the Western planning area adjoins the Little Biloxi River, the only other major tributary located within the planning area other than the Wolf River. The Little Biloxi flows southeast from Stone County and drains into the Biloxi River east of US Highway 49 and terminates at the Back Bay of Biloxi. The Little Biloxi snakes through the planning area for approximately 16 miles and is part of the Biloxi River Watershed. As of the summer of 2007, the Little Biloxi was difficult to impossible to navigate by canoe due to fallen trees and debris from Hurricane Katrina.

There are four perennial streams and bayous located in the Western planning area: DeLisle Bayou, Bernard Bayou, Rotten Bayou and the Flat Branch, which flows into Turkey Creek. DeLisle Bayou flows south between Vidalia Road and Firetower Road for approximately two miles until crossing Interstate Highway 10. It is located in the DeLisle Watershed. Bayou Bernard flows southeast for approximately eight miles.

Map A-5. Water bodies and watersheds in the Western planning area



Source: Southern Mississippi Planning and Development District

Figure A-26. The Wolf River meanders through the Western planning area for approximately 19 miles.



Source: Brandon Mark

Figure A-27. Cogon Grass is an example of an invasive species in area forests.



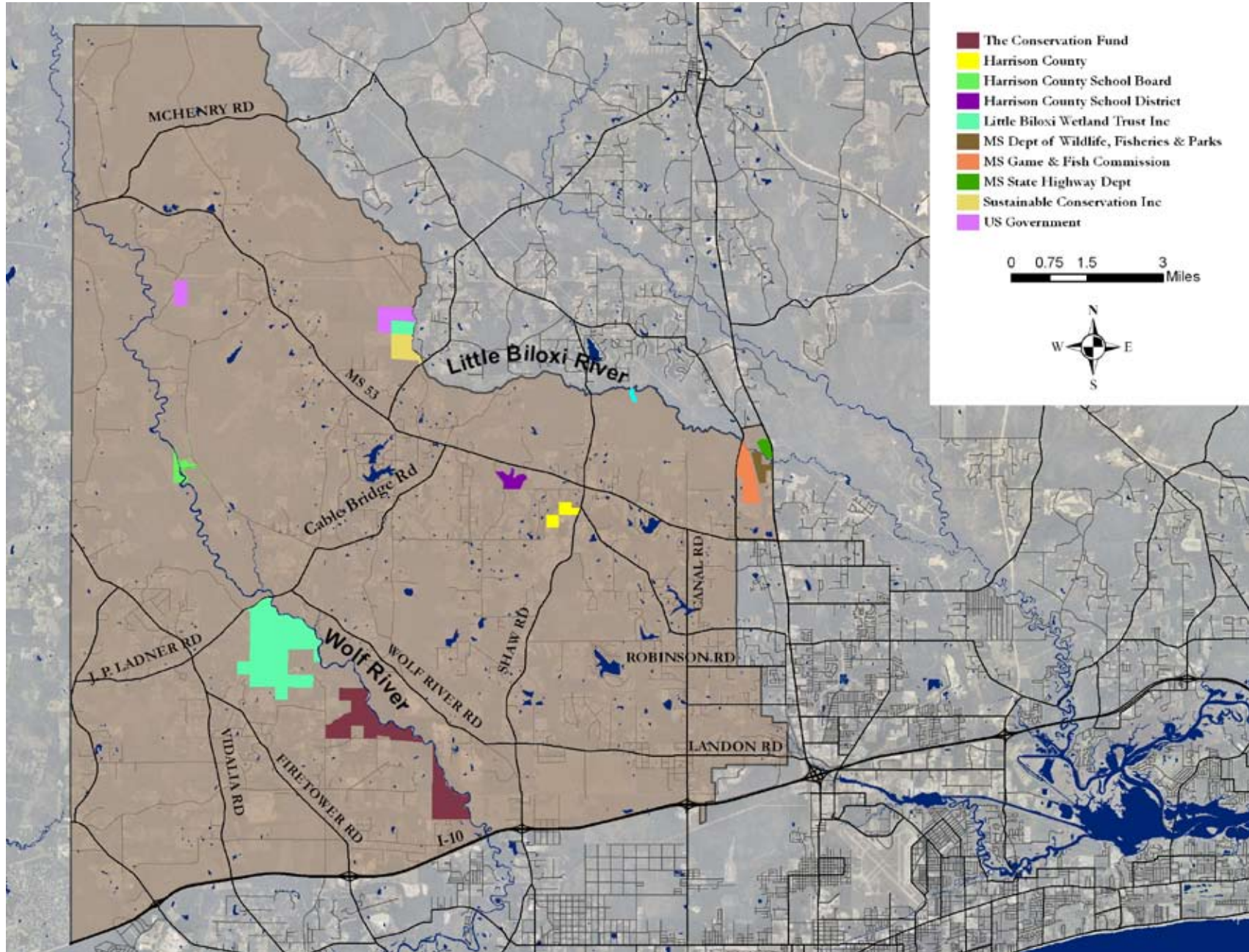
Source: Babe Buckley

Figure A-28. Chinese Tallow is an invasive species commonly found in the area forests.



Source: Babe Buckley

Map A-6. Publicly Owned Parcels along water bodies



Source: Southern Mississippi Planning and Development District

It is located within the Turkey Creek-Old Fort Bayou watershed, and it ends in the Back Bay of Biloxi. The Flat Branch is located within the planning area for approximately three miles. It flows in a southeastern direction for about five miles until meeting Turkey Creek. The Turkey Creek flows south for approximately five miles in the planning area and is eventually channeled by canals into either the St. Louis Bay or Back Bay of Biloxi. Flat Branch and Turkey Creek are found in the Turkey Creek-Old Fort Bayou Watershed. According to the Mississippi Department of Environmental Quality (MDEQ), Turkey Creek currently has a cap for the pH level allowable.^{cf} This means that the acidity and alkalinity is controlled to a healthy level for the stream ecology. Lastly, the Rotten Bayou, located in the Rotten Bayou Watershed, flows southwest approximately three miles in Harrison County into the Jourdan River in Hancock County, eventually draining into the St. Louis Bay.

The flood plains of Harrison County are generally flat, low lying lands adjacent to rivers and streams. When the water bodies overflow, floodplains collect, store, and soak up the water that exceeds the water channels' capacity. As shown below in Map A-7, the flood zones are located primarily in the southern region of the planning area adjacent to Wolf River, the Little Biloxi River, Turkey Creek, and Bayou Bernard.

The Mitigation Division of the Federal Emergency Management Agency has recently updated the flood-elevation maps and made changes to the National Flood Insurance Program (NFIP). The delineation of new floodplain boundaries occur because of changes that have altered the physical environment that changed the flow of streams and rivers. Nearly 20,000 communities across the United States participate in the NFIP by adopting and enforcing floodplain management ordinances to reduce future flood damage.^{cs} Community participation in the NFIP is voluntary, but in exchange FEMA makes subsidized flood insurance available to homeowners, renters and business owners of these communities.

The western planning area will be affected by the new FEMA flood-elevation maps that have been recently released to public officials. It is estimated that the communities that comply with the NFIP reduce flood damage by approximately 80 percent and save nearly \$1 billion

in damaged properties.^{ch} The maps have not yet been adopted by the Harrison County Supervisors, but if they become final, property owners will have the ability to apply for grants to make their properties NFIP compliant.^{ci}

The main recreational uses of the water bodies are fishing, boating, and birding. According to the Mississippi Department of Environmental Quality, all of the water bodies in the state are classified according to recreational use and potability of the water. These classifications are listed below.^{ci}

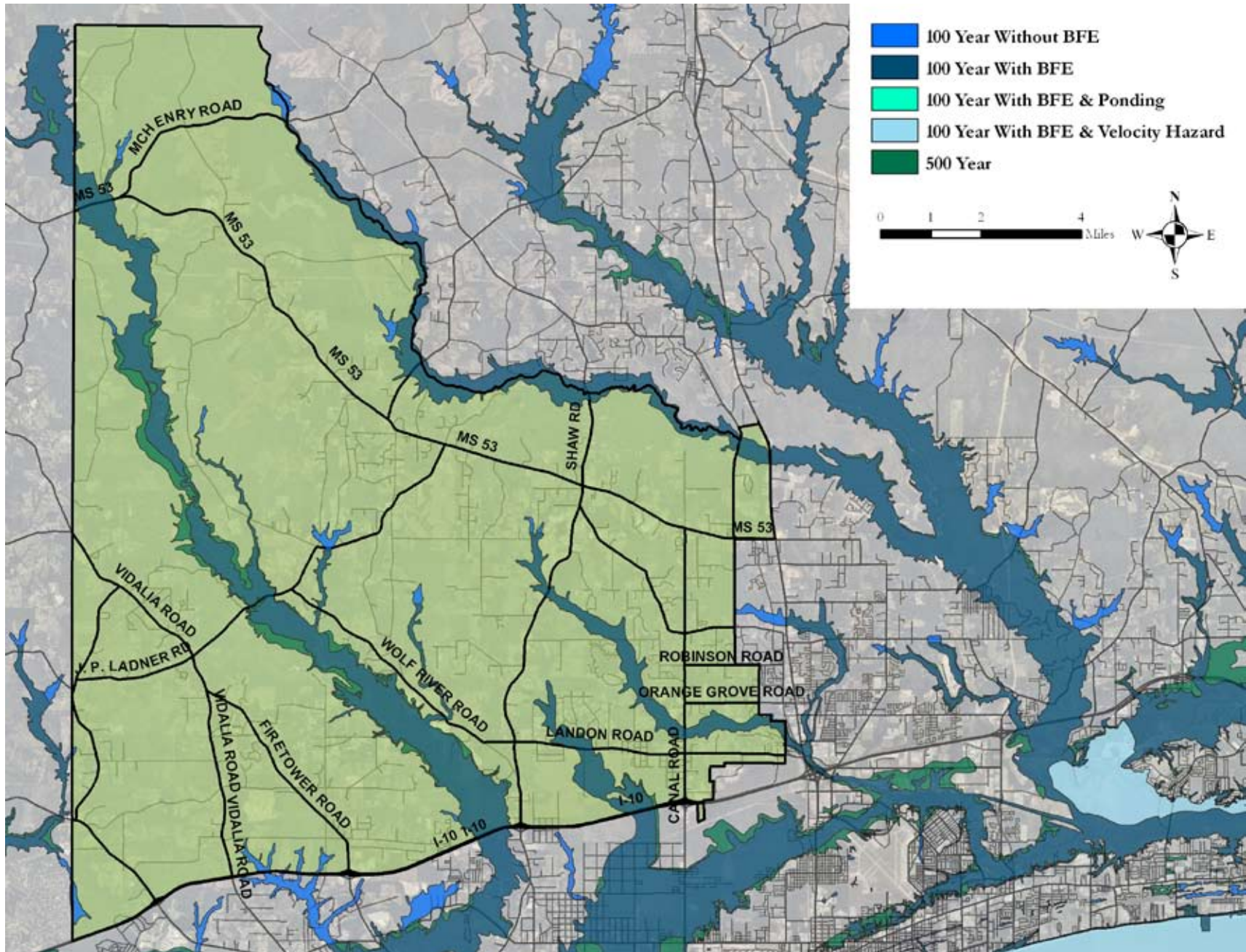
The Mississippi Department of Environmental Quality has set caps on pollution levels of 393 water bodies in the state, and several affect the unincorporated portions of Harrison County. Levels controlling "harmful pathogens such as bacteria are being controlled for the waters of the St. Louis Bay, the Back Bay of Biloxi and the Wolf River."^{ck} Non-point source pollution, such as storm water runoff, is the major contributor to pollution of the surface waters. The Mississippi Department of Environment Quality has plans to modernize water and sewage systems that will decrease many of the contaminants getting into waterways.^{cl} The Land Trust of the Mississippi Coastal Plains also plans to control surface water pollution and the integrity of water bodies. Through this effort, the LTMCP has selected six watersheds, including the Turkey Creek-Old Fort Bayou Watershed, which is located in the Western planning area, as part of a watershed planning effort.^{cm}

Groundwater and Supply Sources

The primary water source for the Western planning area is from aquifers. There are two primary aquifers that service the area, including the Mississippi Embayment Aquifer and the Coastal Lowlands Aquifer. The Mississippi Embayment Aquifer overlays and is separated from the younger Coastal Lowlands Aquifer by the thick, clay Vicksburg-Jackson confining unit.

The Mississippi Embayment Aquifer system ranges in thickness from 0-6,000 feet deep, and recharge occurs through porous marine sediments. The aquifer is capable of yielding water to properly constructed wells at a rate that ranges from 100-300 gallons per minute.

Map A-7. Flood Zones in 1988



Source: Federal Emergency Management Agency

The water is replenished by infiltration through recharge areas, which typically range from 100-400 feet higher than the low, flat terrain of locations where the water discharges.^{cn} It is important to keep these recharge areas free of toxins and pollutants to minimize contamination of the important aquifers that supply the public with drinking water. In order to prevent contamination of the aquifers, the State Source Water Assessment Program (SWAP) requires the delineation of a 500-foot radius for Priority Protection Areas.^{co}

Wetlands

Seven percent of the Western planning area of Harrison County is comprised of wetlands (7,826 acres), all of which are palustrine, meaning that they are inland and consist of underwater plant life (see Map A-8). Wetlands play a vital role in social, economical, and environmental aspects of communities. They provide flood control by functioning similar to a sponge, absorbing large quantities of water quickly, and then gradually releasing it to groundwater or streams. They also improve water quality because they have the ability to filter and eliminate sediment, pollution, and nutrients through plants and microorganisms. Wetlands serve as excellent groundwater recharge areas by collecting water and allowing it to percolate into aquifers that serve as public water sources. The roots of wetland plants bind the soil, which prevents erosion during storms and floods. The high nutrient content found in wetlands fosters great habitats for fish and wildlife. Lastly, wetlands provide resources such as fish, shellfish, wildlife, and tourist attractions that promote economic stability.^{cp} Wetlands are strictly controlled and monitored by four federal agencies: the Army Corps of Engineers, the Environmental Protection Agency, the US Fish and Wildlife Service, and the Natural Resources Conservation Service.

SOILS

Soils play an important role when distinguishing appropriate land uses for development and agriculture. When analyzing soils for development suitability, hydric soils, poorly drained soils, severe slopes, shallow water

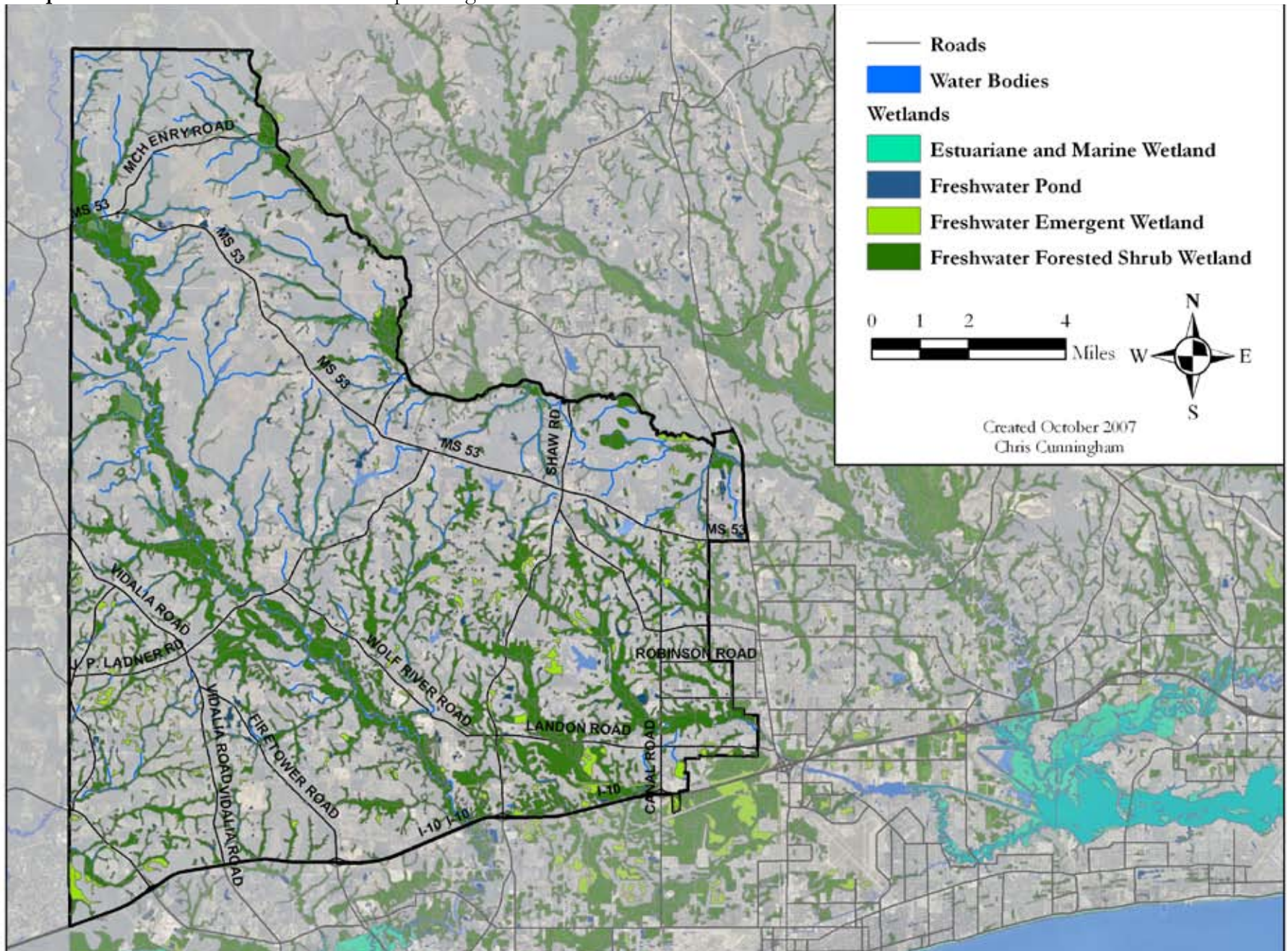
tables, and limitations for cement foundations and septic absorption should not be considered for development. The Western planning area is located in the Southern Coastal Plain and is comprised of nine soils: Atmore, Bibb, Harleston, Mclaurin, Plummer, Poarch, Ruston, Smithdale, and Smithton.^{cn} Table A-21 describes each soil.

Agriculture

In 2002, the land area in farm production in Harrison County equaled 25,248 acres, roughly 7 percent of the total land area. The average farm size is 60 acres, with the total market value of production \$3,336,000 for all farms. Out of the 418 farms, 197 listed farming as their principal occupation, the average value per farm being \$240,000 (\$3,800 per acre).^{ct} As observed during a windshield survey and confirmed by Mississippi State University Extension, the Western planning area has not had an active full-time farm operation since Hurricane Katrina.^{cs} No one in the planning area is listed by the census as relying upon farming alone as their main source of income.^{ct} The area contains many hobby farms containing pecan orchards, hay fields, and grazing pastures with typically 10 to 15 head of cattle.^{cu}

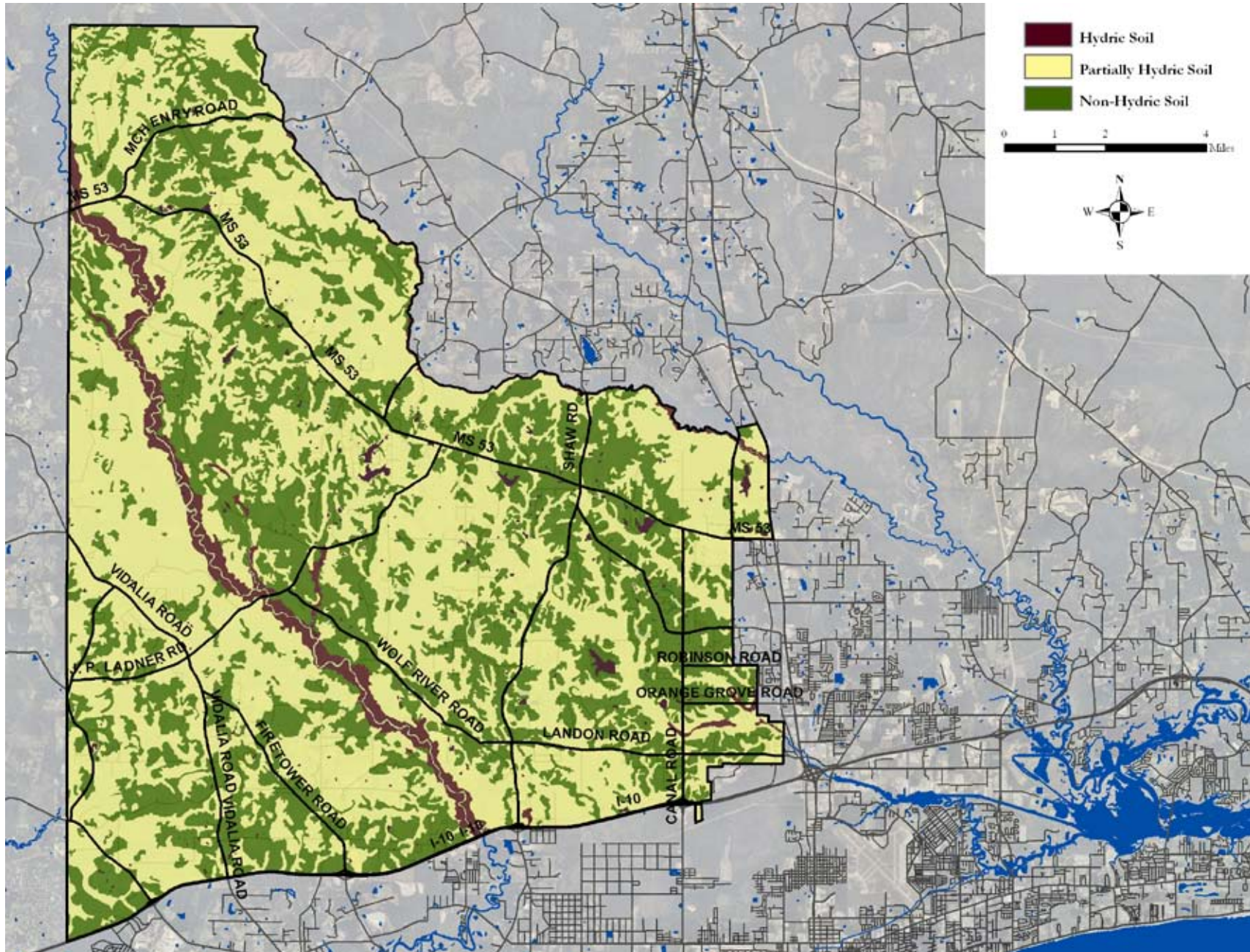
The National Agriculture Statistic Service reported that in Harrison County during the year of 2002, the value of sales by commodity group sales from largest to smallest were nursery and sod, milk and dairy, fruits nuts and berries, horses and ponies, vegetables, poultry and eggs, and other crops and hay. The value of sales by livestock sales from largest to smallest are quail, cattle and calves, ducks, horses and ponies, and pheasants. The value of sales by crop sales from largest to smallest are forage (hay), pecans, field and grass seed crops, and all vegetables.^{cv}

Map A-8. Wetland areas in the Western planning area



Source: Southern Mississippi Planning and Development District

Map A-9. Map of the hydric soils



Source: Southern Mississippi Planning and Development District

Table A-21. Soils of the Western planning area

Soil	Location	Drainage and Permeability	Use
Atmore silt loam 0-5 percent slope	Coastal Plain depressions and gently sloping interstream divides	poorly drained, slow runoff, moderately slow permeability	woodland or pasture
Bibb sandy loam 0-2 percent slope	flood plains of streams in the Coastal Plain	poorly drained, very slow runoff, moderate permeability. The water table is within 8 inches of the surface from 6 to 11 months each year.	dominantly native woodlands, few areas are cleared and drained for pasture.
Harleston loam 0-12 percent slope	level to strongly sloping terraces and uplands of the southern Coastal Plain	Moderately to well drained; slow to medium runoff and moderate permeability. Some of the low terrace areas overflow occasionally for very brief duration during periods of high rainfall	woodlands, cleared areas are used for pasture, hay, corn and soybeans
Mclaurin sandy loam 0-8 percent slope	broad ridgetops and upper hillsides of ridges dividing major streams	well drained, runoff is slow to medium, moderate permeability	woodlands and pasture. Cotton, corn, soybeans and small grains
Plummer sandy loam 0-5 percent, dominantly less than 1 percent slope	flats and depressions of the Coastal Plains	poorly drained, long frequent ponding in depressions	woodland or pasture

Table A-21. Soils of the Western planning area (cont.)

Soil	Location	Drainage and Permeability	Use
Poarch sandy loam 0-8 percent slope	nearly level to gently sloping uplands of the Coastal Plain	well and moderately well drained, slow to medium runoff and moderate to moderately slow permeability	corn, cotton, soybeans, peanuts, small grains woodlands and pasture.
Ruston sandy loam 0-2 percent slope	flood plains of streams in the Coastal Plain	poorly drained, very slow runoff, moderate permeability. The water table is within 8 inches of the surface from 6 to 11 months each year.	dominantly native woodlands, few areas are cleared and drained for pasture.
Smithdale sandy loam 5-40 percent slope	gently rolling to steep soils in hillslopes and ridgetops in dissected uplands of the Southern Coastal Plain	well drained, slow to very rapid runoff, moderate permeability	woodlands
Smithton sandy loam 0-3 percent slope, dominantly less than 1 percent slope	level to nearly level southern Coastal Plains	poorly drained, ponded to slow runoff, moderately slow permeability. During wet seasons depressions and flat areas pond for several days. A seasonally high water table is within 12 inches of the soils surface from December through April	woodlands. Few areas have been cleared for pasture and cropped soybeans and small grains.

Source: Natural Resource Conservation Service

Figure A-29. Weyerhaeuser is the largest property owner in the Western planning area



Source: Brandon Mark

Forestland

Forests provide many functions and benefits, such as wood products, air quality, aesthetics and scenic beauty, wildlife habitats, and a variety of recreational activities. The forests of the region are mainly conifers, but live oak stands are rare and precious to the community. The forestland is habitat to many species, including the white-tailed deer, turkey, raccoon, and squirrel. The Western planning area consists of 73 percent forestland (76,134 acres). The majority of this land is under private ownership, but public lands such as De Soto National Forest and conservation areas do exist.

One of the leading industries in the Western planning area is timber production. Weyerhaeuser, an international pulp and paper producer, specializes in products from softwood timber and had net sales of \$22.6 billion in 2005 nationwide.^{cw, cx}

Impacts from Hurricane Katrina

On August 29, 2005, Hurricane Katrina and its devastating winds severely damaged the Gulf Coast of Mississippi. Due to their location on the windward side of Katrina's path, Harrison, Jackson, Stone, and George Counties were impacted the most.^{cy} Within the Western planning area, the 125 mile per hour winds destroyed forestlands, and storm surge inundated the southern portion of the Wolf River (see Map A-10). The greatest environmental and economic impact to the planning area was the tree damage in the forests.

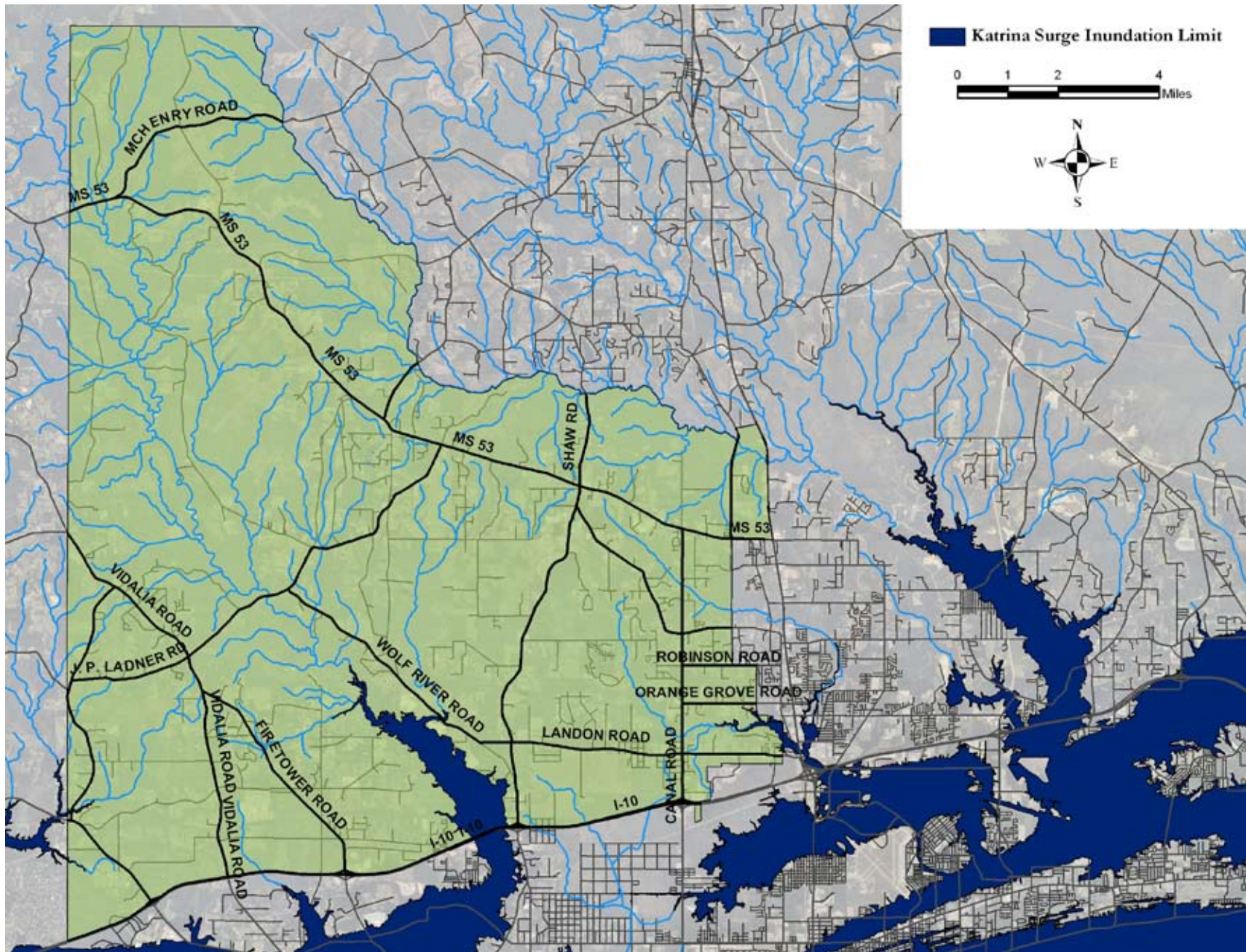
Nearly 90 percent of the forestland that was inventoried by contractors and federal forest crews after Katrina sustained long-lasting damage.^{cz} Harrison County contained the largest percentage of tree damage, where 8 percent of the trees were leaning, 28.7 percent experienced blowdown, and 12.7 percent were sheared.^{da} Commonly, the deciduous forest types were affected mostly by blowdown, and stands of conifers experienced the majority of the shearing. Due to the significant damage, there is great concern that the susceptible tree stands will encounter an increase in insect, disease, and non-native invasive plant activity.^{db}

Figure A-30. The forestland below shows examples of leaning and sheared conifers affected by Hurricane Katrina.



Source: Brandon Mark

Map A-10. Hurricane Katrina Storm Surge



Source: Southern Mississippi Planning and Development District

Recreation and Conservation Areas

Outdoor recreational activity improves the quality of life for citizens and provides economic stimulation from tourism. Hiking, fishing, birding, canoeing, and kayaking are some of the most popular activities for locals and tourists.^{dc} Fishing is a very popular recreational activity, and almost all of the waterways in the Western planning area can support it. The Wolf River and other tributaries provide excellent habitats for many sport fish and hunting. Fishing is accessible along public shorelines, by motor boat, or canoe and kayaks. The common game fish include bluegill, sunfish, crappie, largemouth and smallmouth bass, walleye, sauger, yellow perch, and pickerel.^{dd}

The backdrop of the Wolf River and similar water bodies of the planning area provide facilities for canoeing and kayaking. Currently, there are three public access points for paddlers within the planning area: State Highway 53, Cemetery Landing, and Cable Bridge. Most non-motorized boating activities, such as canoeing and kayaking, are limited to areas with public access.

Central Harrison County is rich with bird habitat. Currently, there are six public locations in the region that can accommodate birding. Unfortunately, there are no publicly accessible birding areas in the Western planning area. Public areas such as De Soto National Forest, rivers, streams, wetlands, and other areas under conservation have potential to accommodate birders. Lyman Fish hatchery is recognized as the only public birding area in the Western planning area, but due to unauthorized entry into the facility by birders, birding there is prohibited.^{de} The birds of the region include the Bachman's Sparrow, Brown Creeper, Brown-headed Nuthatch, Dark-eyed Junco, Fox Sparrow, Hooded Warbler, Prairie Warbler, Red-breasted Nuthatch, Winter Wren, Yellow-breasted Chat, and Yellow-throated Warbler.^{df}

Figure A-31. The Lyman State Fish Hatchery is recognized as the only public birding area in the Western planning area, but due to unauthorized entry, birding is prohibited.



Source: Chris Cunningham

COMMUNITY FACILITIES

Schools

The Western planning area is serviced by both the Harrison County School District and the Pass Christian School District. The Harrison County School District services an area of approximately 450 square miles and 12,400 students.^{dg} The Pass Christian School District services the far southwestern corner of the planning area, west of the Wolf River to the County line and from Interstate Highway 10 to Cable Bridge Road and Vidalia Road. The Western planning area is serviced by five Harrison County School District elementary schools: one located in the community of Lizana, one located in the community of Pineville, one located in the community of Saucier, one located in the community of Lyman, and one located in the community of Orange Grove.^{dh} The students that are located within the Pass Christian School District attend DeLisle Elementary School.

Upon completion of the sixth grade, students that attend Lizana Elementary move on to West Wortham Middle School (a Kindergarten through eighth grade facility), then to Harrison Central Ninth, then to Harrison Central High School.^{di} All of these schools are located either in the city of Gulfport or in the Saucier or Eastern planning areas. The students that attend Orange Grove/Harrison Central Elementary, Pineville Elementary, and Lyman Elementary attend North Gulfport Middle School, then Harrison Ninth Grade, and then Harrison Central High School.^{dj} Students from the Pass Christian School District located in the Western planning area attend DeLisle Elementary, then Pass Christian Middle School, and then Pass Christian High School.

Construction has begun on West Harrison High School, located at the intersection of County Farm Road and Landon Road.^{dk} This school will be operational in August 2009 and will have a capacity of 1,000 students.^{dl}

Lizana Elementary is located on Lizana-School Road at the corner of Lizana-School and Cable Bridge Roads. The elementary school services students from Kindergarten through sixth grade. It has an 18.7-to-1 student/teacher ratio. According to statistics from 2005-2006, 99 percent of the student body was Caucasian.^{dmm}

Lyman Elementary is located within the city limits of Gulfport. This elementary school services students from Kindergarten through sixth grade and has been operational since 1928. The school building has been through many renovations and additions, most recently in 1999.^{dn} Lyman Elementary has a 17.7-to-1 student/teacher ratio. The student body at Lyman Elementary is 50 percent African American and 48 percent Caucasian, with the other two percent of different ethnic backgrounds.^{do}

Orange Grove/Harrison Central Elementary are two separate elementary schools located on Orange Grove Road. Harrison Central Elementary services Kindergarten to third grade and Orange Grove Elementary School services grades four to six.^{dp} Orange Grove Elementary has a 16.2-to-1 student/teacher ratio. Of those students, 49 percent are Caucasian, 46 percent are African American, and 5 percent are of other ethnic backgrounds.^{dq} Harrison Central Elementary has an 18.5-to-1 student/teacher ratio. Of those students, 52 percent are Caucasian, 43 percent are African American, and the other 5 percent are from other ethnic backgrounds.^{dr}

Pineville Elementary is located in the community of Pineville off of Menge Avenue. The elementary school services students from Kindergarten to sixth grade and has a 14.2-to-1 student/teacher ratio. Of the students enrolled at Pineville Elementary, 67 percent are Caucasian, 31 percent are African American, and the other 2 percent are of other ethnic backgrounds.^{ds} Pineville has the smallest enrollment of any of the Harrison County Elementary Schools, and it takes in only a very small portion of students from the Western planning area around County Farm Road and Interstate Highway 10.

West Wortham Elementary and Middle School is located on West Wortham Road in the community of Saucier. This school services Kindergarten to eighth grade. The school has a 17.4-to-1 student/teacher ratio. Of the 1,134 students that attended West Wortham Elementary and Middle School in 2005-2006, 95 percent were Caucasian, 3 percent were African American, and the other 2 percent were of other ethnic backgrounds.^{dt}

Table A-22. Enrollment Data by School and Year

School	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07
Pineville Elementary	157	235	233	249	194	202
West Wortham Elementary and Middle School	1,134	1,103	1,122	1,180	1,134	1,227
Lyman Elementary	494	547	530	467	455	513
Harrison Central/Orange Grove Elementary	1,460	1,230	1,298	1,331	1,284	1,324
Lizana Elementary	546	580	550	572	523	560
North Gulfport Middle School	1,015	1,091	1,097	1,066	995	898
Harrison Central 9 th Grade and High School	2,333	2,317	2,363	2,444	2,424	2,540

Source: Demographic Study, Harrison County School District, 2007.

DeLisle Elementary School is in the Pass Christian School District and services the students located in the far western corner of the Western planning area. The DeLisle Elementary School acted as the site for all students in the school district after the storm. The School District owns approximately 70 acres on Vidalia Road and is considering the future use of this site for School District operations.

DeLisle Elementary is located on West Wittman Road and has a student/teacher ratio of 8.5-to-1. According to 2005-2006 enrollment numbers, the student body is 76 percent Caucasian, 22 percent African American, and the other 2 percent are of other ethnic backgrounds.^{du} For a look at the areas covered by each elementary school in the Harrison County and Pass Christian School Districts, see Map A-11.

Churches

The Western planning area has a diverse religious community. Among its various communities are churches for those who worship as Baptists, Catholics, and with the Church of God.

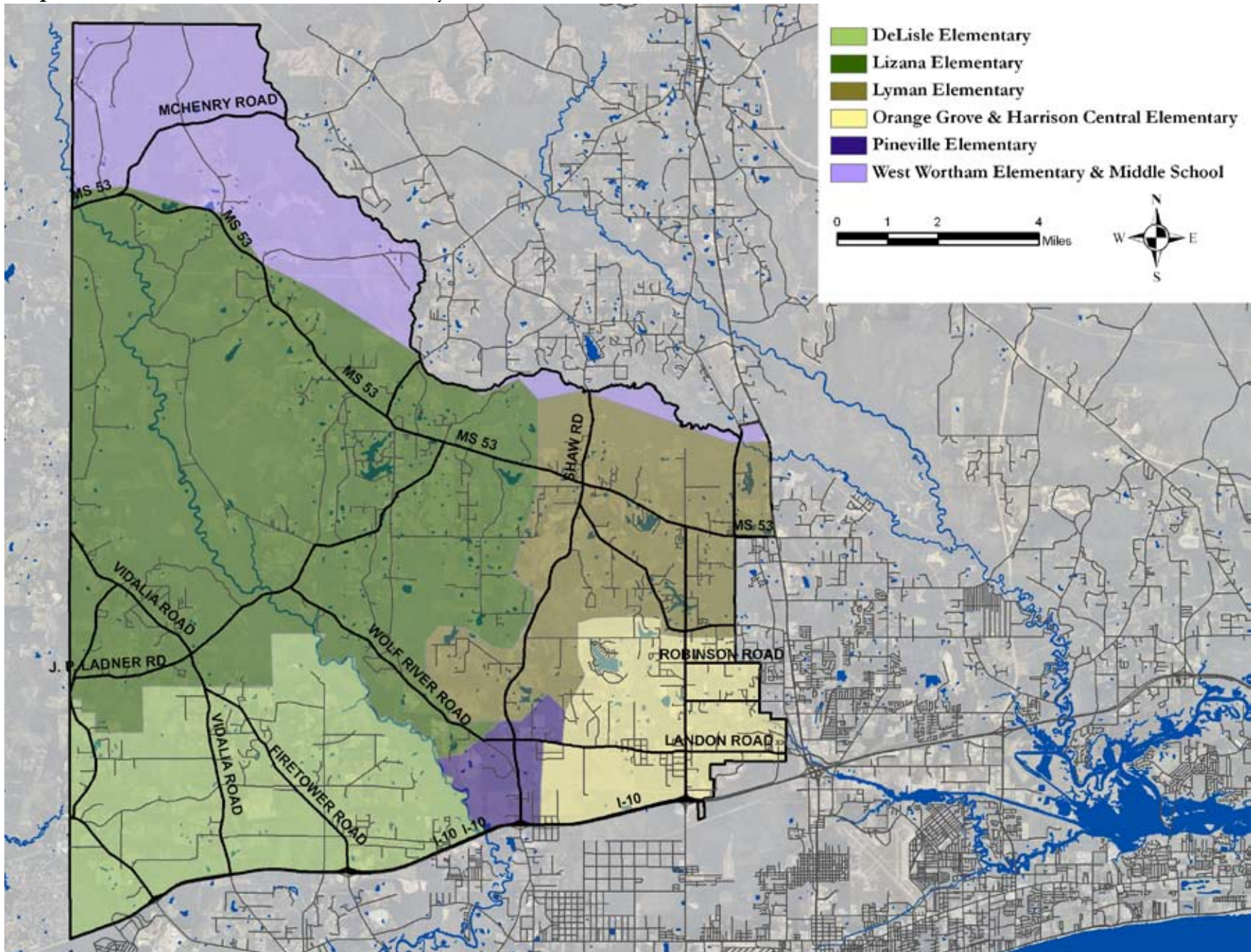
The New Hope Baptist Church is located in the small community of New Hope. Since Hurricane Katrina, the church has received funding

Figure A-32. Michael Memorial Baptist Church



Source: Matthew Leasure

Map A-11. Service Areas for Harrison County and Pass Christian School Districts



Source: Harrison County School District Superintendent

from Enterprise Corporation of the Delta/Hope Community Credit Union (ECD/HOPE) to help with the relocation of families in the Western planning area. Since receiving funds, the church has helped 10 families furnish their new post-Katrina apartments.^{dv}

Michael Memorial Baptist Church is located on John Clark Road between Canal Road and County Farm Road. The church was started in 1955 by residents of John Clark Road who had a vision for a community church. It currently has a facility that will accommodate 1,000 worshippers.^{dw}

Other Baptist churches in the area include the Robinson Road Baptist Church, Lizana Baptist Church, Mt. Calvary Baptist Church, Lakeview Independent Baptist Church, Grace Baptist Church, Highland Baptist Church, and Campground Baptist Church.

St. Ann's Catholic Church has been a part of the Lizana Community since it was established in 1901 as a missionary church. The church continued mission work for 40 years until the condition of the building called for the erection of a new facility. On July 17, 1938 Bishop Gerow blessed the new church of St. Ann at its present location in Lizana. Currently, the church is under the direction of Reverend Peter Mockler.^{dx} The church sponsors an annual Catfish Festival in May and has also organized a Men's and Women's Club to support the programs of the Church and promote spiritual growth, social growth, and growth of community service.

Other Catholic Churches located in the area include Our Lady of Chartres Catholic Church and Sacred Heart Catholic Church, located on Vidalia Road between Wolf River Road and Cable Bridge Road.

Fire Service

The Western planning area receives fire and rescue services from the Harrison County Fire Services.⁸ Within the Service Area, two fire districts, the Lizana Fire District and the West Harrison Fire District, and four Fire Stations provide for the Western planning area. These four stations are the West Harrison Volunteer Fire Department (located on Vidalia Road between Interstate Highway 10 and Firetower Road),

Figure A-33. This church on Mennonite Road is an example of the local religious facilities.



Source: Chris Cunningham

the Lizana Volunteer Fire Department (located on Lizana School Road about one mile north of Lizana Elementary), the County Farm Road Fire Department (located on County Farm Road between John Clark Road and Landon Road), and the West Wortham Fire Department (located on West Wortham Road Southeast of Saucier-Lizana Road and West of US Highway 49). Each fire station is designed to cover all areas within five road miles of its location, but depending on the area, some of the fire stations service more.^{dy} Each station is staffed with one full-time firefighter. The rest of the staff at each fire station is pulled from a pool that consists of approximately 120 volunteer firefighters countywide who are on call seven days a week.

The West Harrison County Fire Stations also serve as substations for the Harrison County Sheriff's Department.^{dz} The sheriff deputies can utilize these stations for phone calls, break areas, or for other uses they may need while patrolling Western Harrison County.^{ea}

According to the Fire Chief, George Mixon, since Hurricane Katrina, all of the stations located in the Western planning area have

Figure A-34. This fire station serves the Lizana Community

Source: Chris Cunningham

been repaired or rebuilt. Also, all of the fire trucks that were damaged during the storm have been repaired and are in service. There are plans for a new fire station in the Western planning area that will be located in the 10,000 block of County Farm Road, north of the Interstate Highway 10 Long Beach Exit, near the West Harrison County High School.^{eb} This facility began construction in August 2007. The Fire Department will also need to build stations near the future University of Southern Mississippi campus and near the new Isle of Capri Casino location.

Emergency Shelters

Harrison County is required to prepare for a natural, technological, or man-made emergency or disaster that threatens life, property, or the environment of the citizens of the County.^{ec} This requirement was enacted by the Mississippi Emergency Management Law of 1995 and requires Harrison County Emergency Management officials to work with state and national authorities to develop criteria for and designate emergency shelters. In the Western planning area, there are two buildings classified

as “Shelters of Last Resort” that are to be utilized after a storm event for emergency services and temporary housing for displaced residents.^{ed} Those two buildings are the Lizana Elementary School and the Lyman Elementary School.

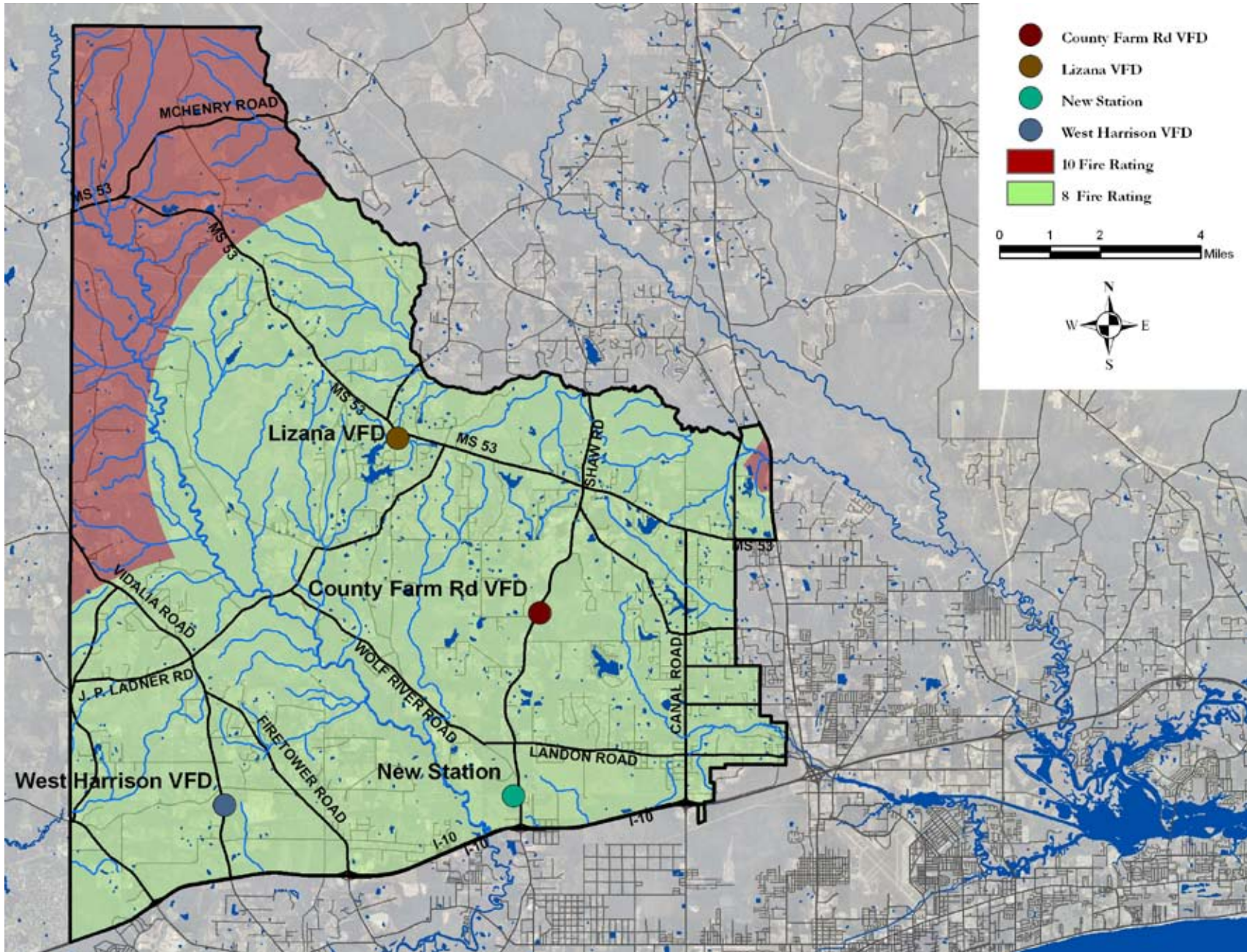
For shelters during a hurricane or natural disaster, FEMA has set up a certification system, and buildings must be classified as FEMA-361 to be considered storm proof. This classification also means that FEMA-361 buildings can be utilized as storm shelters during a hurricane event.^{ee} The West Harrison High School is being constructed so that it will meet the FEMA-361 standard and will be considered as an emergency shelter during a storm event once complete.^{ef} Another FEMA-361 shelter will be built on State Highway 53 close to CC Camp Road. This will be a stand-alone shelter, which means that it will only be utilized in the event of a major storm event.^{eg} A third shelter has been discussed, but would be built by an independent group. This shelter would be located on Kiln-DeLisle Road. Approximately 5,000 people will be able to seek shelter during a storm event at these three locations.^{eh}

Recreation and Community Facilities

There are a wide variety of recreational options in the Western planning area of Harrison County. There are three community parks, including the Harrison County Fairgrounds, which are utilized for sports, playgrounds, and other community activities. The Harrison County Fairgrounds, located on County Farm Road, is a 640-acre multipurpose facility. The grounds are home to the County Farm, the Lyman Senior Center, 16 soccer fields, and a County Fairgrounds Complex utilized for equestrian activities, family activities, civil war re-enactments, and festivals.^{ei} The facilities offered at the fairgrounds complex include a covered arena, a public announcement system, 46 recreational vehicle sites with electric and water, 1,000 bleacher seats, concession stands, and lighting.^{ej}

Hurricane Katrina destroyed many of the facilities at the Harrison County Fairgrounds. The vinyl fencing was destroyed, part of the covered arena was blown off, and the new veterinary facility was

Map A-12. Harrison County Fire Stations



Source: Jen Washco

destroyed. The damage has been estimated at between \$300,000 and \$350,000.^{ek} As of August 2007, the fairgrounds are approximately 90 percent repaired.^{el} One major repair that still needs to be completed is replacement of the roof at the main arena.

The County Farm is located across County Farm Road from the Harrison County Fairgrounds. This facility houses approximately 100 hogs, 45 cows, 10 horses, and many sheep, goats, and chickens.^{em} The County Farm receives many of its animals through donations or from rescue efforts made since Katrina. The County Farm was utilized as a sanctuary for abandoned farm animals and a petting zoo and educational tool for many of the local schools in the area. All of the buildings on the County Farm site received heavy damages during Hurricane Katrina. Some of the animals were killed as well. As of August 2007, many of the buildings have yet to be repaired.^{en} Due to ongoing cleanup, the County Farm is open to the public on a limited basis.

The Lyman Senior Center is another community amenity located on the County Fairgrounds property. This center provides services and activities for seniors in the community. Some of the activities include social functions, monthly trips to Wal-Mart, and on-site indoor recreational activities.^{eo}

One of the community parks in the Western planning area is the Lizana Community Park located on the corner of Firetower Road and Vidalia Road.^{ep} The park offers three baseball fields, a playground, a walking track, and a concession stand. The other community park is the West Harrison Community Park located on Vidalia Road. This park offers two baseball fields for residents, along with a walking track, a small playground, a pavilion, and a concession stand.¹⁶

The Windance Country Club has an 18-hole golf course that was opened in 1986 and offers 6,600 yards of golf.^{eq} The course is located just north of Interstate Highway 10 in between Canal Road to the east and County Farm Road to the west within the Windance Estates subdivision.

Lonesome Duck Stables, located approximately 3.5 miles north of Interstate Highway 10 on Road 534, offers wooded trail rides and full

Figure A-35. The Harrison County Fairgrounds is a popular attraction for residents inside and outside of Harrison County.



Source: Chris Cunningham

Figure A-36. The County Farm houses a variety of animals.



Source: Chris Cunningham

moon trail rides for riders of any experience level. They offer family rides as well and ask that patrons make reservations before enjoying a scenic tour of rural Harrison County.^{er} A map of the locations of the recreational facilities located in and near the Western planning area of Harrison County can be seen in Map A-13.

Other stables are located in the area, including Foxwood Farm, La Questa Stables, and Wildwood Stables. These facilities offer private riding lessons in the disciplines of English hunter and jumper. Most provide an indoor arena that is used during the lessons. These facilities are private and any use of the stables must be arranged with their owners and/or operators.^{es}

The University of Southern Mississippi (USM) is planning to build a new campus that will be located south of Landon Road and east of County Farm Road. The site consists of 1,800 acres, of which 200 acres will be designated for the USM campus. The other 1,600 acres are to be used for a mix of uses including a technology park, mixed-use town center, and residential housing.^{et}

Figure A-37. The Lyman Senior Center is located on the County Farm.



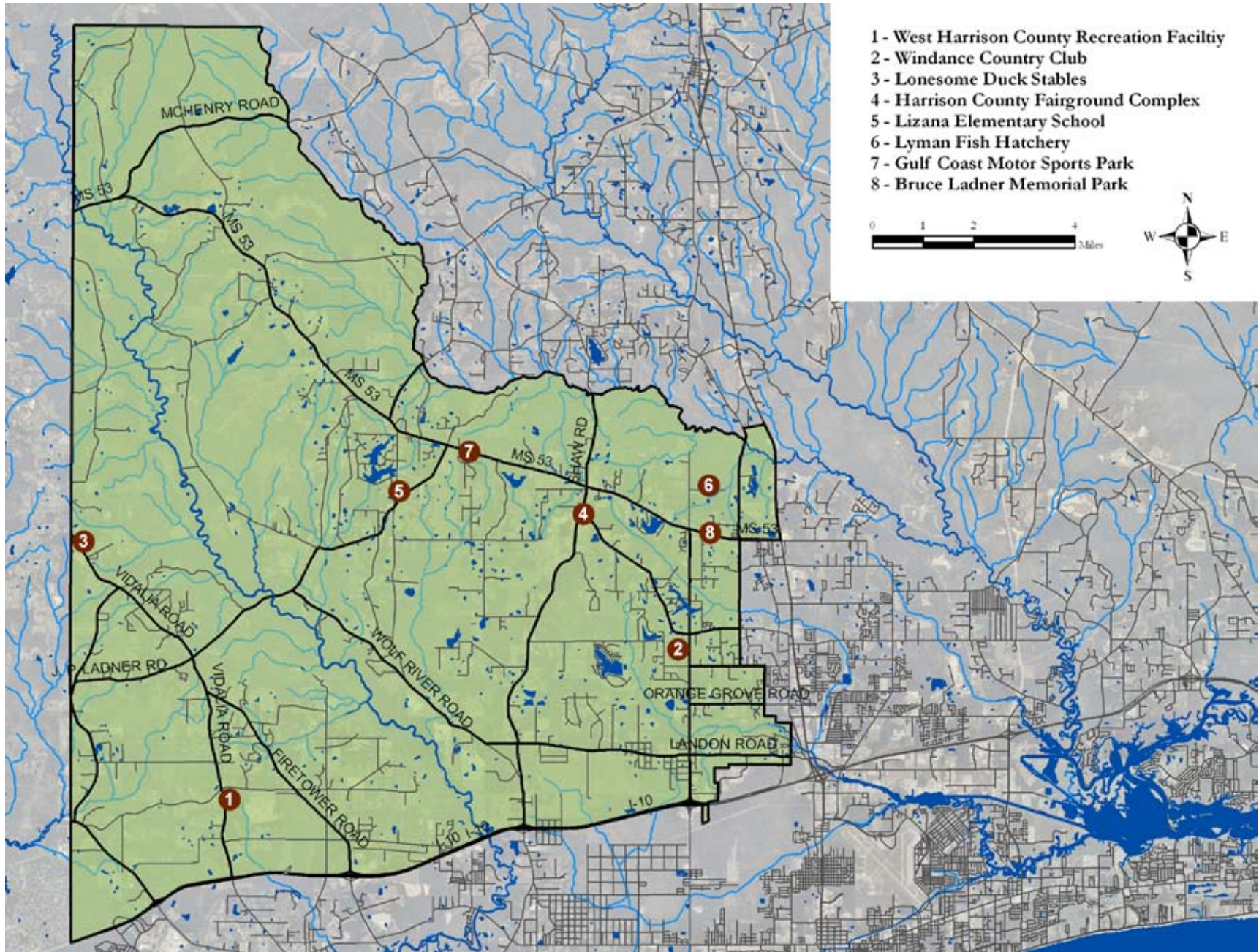
Source: Chris Cunningham

Figure A-38. The County Farm provides opportunity for school children to interact with farm animals.



Source: Chris Cunningham

Map A-13. Location of Recreational Facilities



Source: Harrison County, Ohio State University

INFRASTRUCTURE

The Western planning area of Harrison County, Mississippi contains four general types of roadways. The Mississippi Department of Transportation (MDOT) defines three types, and one type—local roadways paved and unpaved—has been classified by the planning team.^{eu} The primary types of roadways found within the planning area are principal arterials and collectors. The other types are minor arterials and local roadways (See Table A-23). The 2006 Estimated Annual Average Daily Traffic (AADT), prepared by MDOT, illustrates which roads are most heavily traveled (See Map A-14).^{ev} Roadway maintenance in the Western planning area is the responsibility of Harrison County and MDOT, depending on the designation of the roadway. US Highways and State Highways are maintained by MDOT, while other public roadways within the planning area are maintained by Harrison County. Harrison County has work centers in Lyman and Orange Grove that are responsible for roadway maintenance in the planning area. The integration of bicycle and pedestrian infrastructure is minimal within the planning area.

Highways

Interstate Highway 10 is a divided and limited-access highway that has the following exits in the Western planning area: 20 or DeLisle/Pass Christian Exit, 24 or Menge Avenue Exit, 28 or Long Beach Exit, and 31 or Canal Road Exit. The forecasted increase of freight along Interstate Highway 10 is going to influence the flow of goods and traffic on roads within the Western planning area, particularly those running parallel to or in close proximity to the interstate.^{ew} The *National Interstate 10 Freight Corridor Study* shows that trucks parking on exits and entrance ramps or at particular locations near interchanges in this area present a safety hazard and accelerate the deterioration of the shoulders and roadways. The primary items transported along the highway include lumber and wood products, petroleum and natural gas, nonmetallic minerals, and farm products.^{ex}

US Highway 49 is a four-lane divided highway with at grade

crossings and an average speed limit of 65 miles per hour. US Highway 49 is a dedicated north/south evacuation route in Harrison County.^{ey} No traffic lights, stop signs, or sidewalks exist along the portion of US Highway 49 running through the planning area. Crossings are not marked on the pavement nor indicated by flashing signals, although a limited number of crosswalk signs exist. The level of Service along US Highway 49 in the planning area is a level D, indicating that there is significant traffic congestion.^{ez}

Local Roads

All other roads within the planning area are considered local roads. They primarily connect residential areas and are two-lane streets with a general right of way width of 30 to 50 feet in range. These roads tend to be designed around geographical features (e.g., bayous), are paved, have no side walks, and are narrow.

Highway Bridges

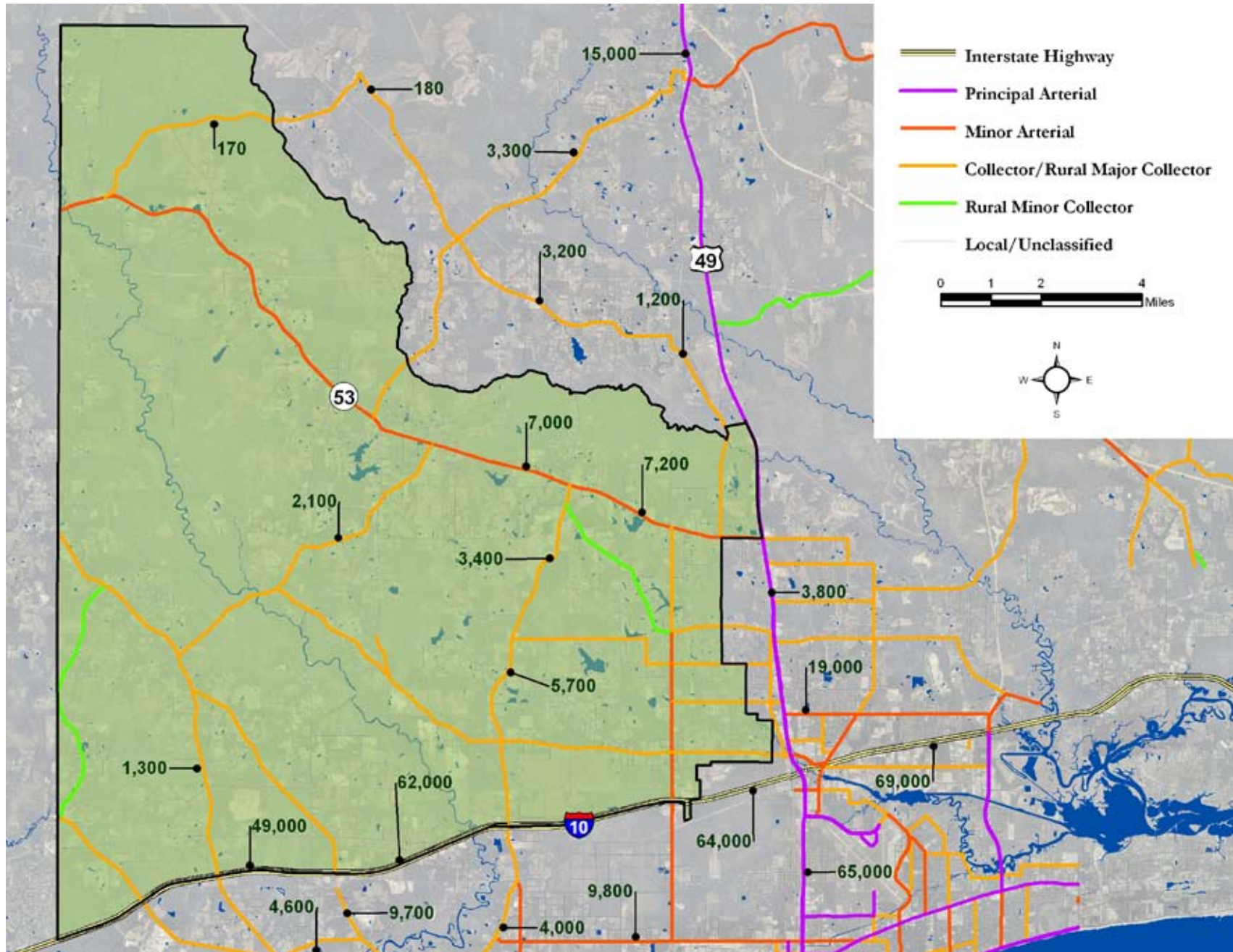
Research indicates that across the Western planning area there are a total of 26 bridges. Of these, 24 are classified as bridges of fifty feet and over. The other four are classified as highway interchanges. None of the state highway bridges have weight restrictions.^{fa}

Future Transportation Improvements

The Gulf Regional Planning Commission prepares a five-year Transportation Improvement Program (TIP) that provides transportation improvements that will be funded between 2007 and 2012. The TIP identifies two projects in the planning area: improvements to State Route 53 and US Highway 49.

The MDOT State Transportation Improvement Program from 2007-2012 identifies projects in the Western planning area. State Route 53 is slated to have two lanes added from US Highway 49 to Lizana in 2012.^{fb} US Highway 49 through the Western planning area is scheduled to have two lanes added in 2009.^{fc}

Map A-14. 2007 Average Annual Daily Traffic and Functional Roadway Classifications, Western Area



Source: Gulf Regional Planning Commission and Mississippi Department of Transportation

Table A-23. Roadways of the Western Planning Area

Road	Traffic Count	Speed Limit (MPH)	Right of Way (feet)	Length (miles)
Highway				
Interstate Hwy 10 ^a	49,000 between Vidalia Road and Menge Avenue; 62,000 between Menge Avenue and County Farm Road	70		
Principal Arterial				
US Highway 49 ⁹	38,000 south of the planning area; 15,000 north of the planning area in Saucier	55-65		
Minor Arterials				
Canal Road ^b	2,000 south of State Hwy 53; 3,700 south of John Clark Road, and 5,600 south of Robinson Road (2004 count)	45	40-60	6.3
State Hwy 53	7,200 between Canal and County Farm Roads; 7,000 between County Farm and Cable Bridge Roads	25-45		
Rural Major Collectors				
Cable Bridge Road	2,100 (2006 count)	25-30	40-60	7.0
County Farm Road	9,800 north of I-10; 5,700 between Landon and Robinson Roads; 3,400 south of State Hwy 53 (2006 Count)	35-50	80	3.4
Firetower Road	3,400 north of Dubuissou Road (2006 Count)	25-30	80	6.5
John Clark Road		25-30	60	4.8
Kiln-DeLisle Road		30	60	5.2
Vidalia Road ^c	2,400 north of Edwin Ladner Road (2006 count)	25-45		
Landon Road		30-35	60	5.5
McHenry Road		30		4.0
Old Hwy 49		30-45	100	8.6
Orange Grove Road		30	50	2.2
Robinson Road		30	50	5.5
Saucier-Lizana Road	2,200 north of Carlton Cuevas Road (2006 count)	30-40	70	7.3
Vidalia Delisle Road	1,300 (2006 count)	n/a	70	11.0
Wolf River Road	1,200 south of Cable Bridge Road (2006 count)	25		6.1
Rural Minor Collectors				
Edwin Ladner Road	830 south of Vidalia Road (2004 count)	35-50		5.2
John Clark Road		25-30	60	4.8

Source: Mississippi Department of Transportation and Gulf Regional Planning Commission

Figure A-39. County Farm Road is one of the scenic roadways in Western Harrison County



Source: Chris Cunningham

Proposed GCATS Projects

The Gulf Regional Planning Commission has developed the 2030 Long Range Transportation Plan. Embodied in the plan is the 2030 Mississippi Gulf Coast Area Transportation Study (GCATS). GCATS has established a list of potential projects to be evaluated for development.⁶⁴ The study includes the construction of an extension of John Clark Road connecting to Robinson Road. There are a number of roadway improvements that are proposed including: 1) Landon Road from County Farm to Highway 49; 2) Canal Road from Landon Road to Interstate Highway 10; 3) improvements to the frontage road along Interstate Highway 10 from the outlet mall at US Highway 49 and Canal Road; 4) Shaw Road from Highway 53 to Wortham Road; 5) Kiln-Delisle Road from Interstate Highway 10 to Highway 53; and 6) County Farm Road from Interstate Highway 10 to Beatline Road.

State Route 601

The Mississippi Department of Transportation (MDOT) is proposing to construct State Route 601, a four-lane, divided, full control of access facility between Gulfport and Wiggins. It will begin in the planning area at a proposed fully-directional interchange at Interstate Highway 10 east of Canal Road and extend through the planning areas northward to State Route 26 near Wiggins.

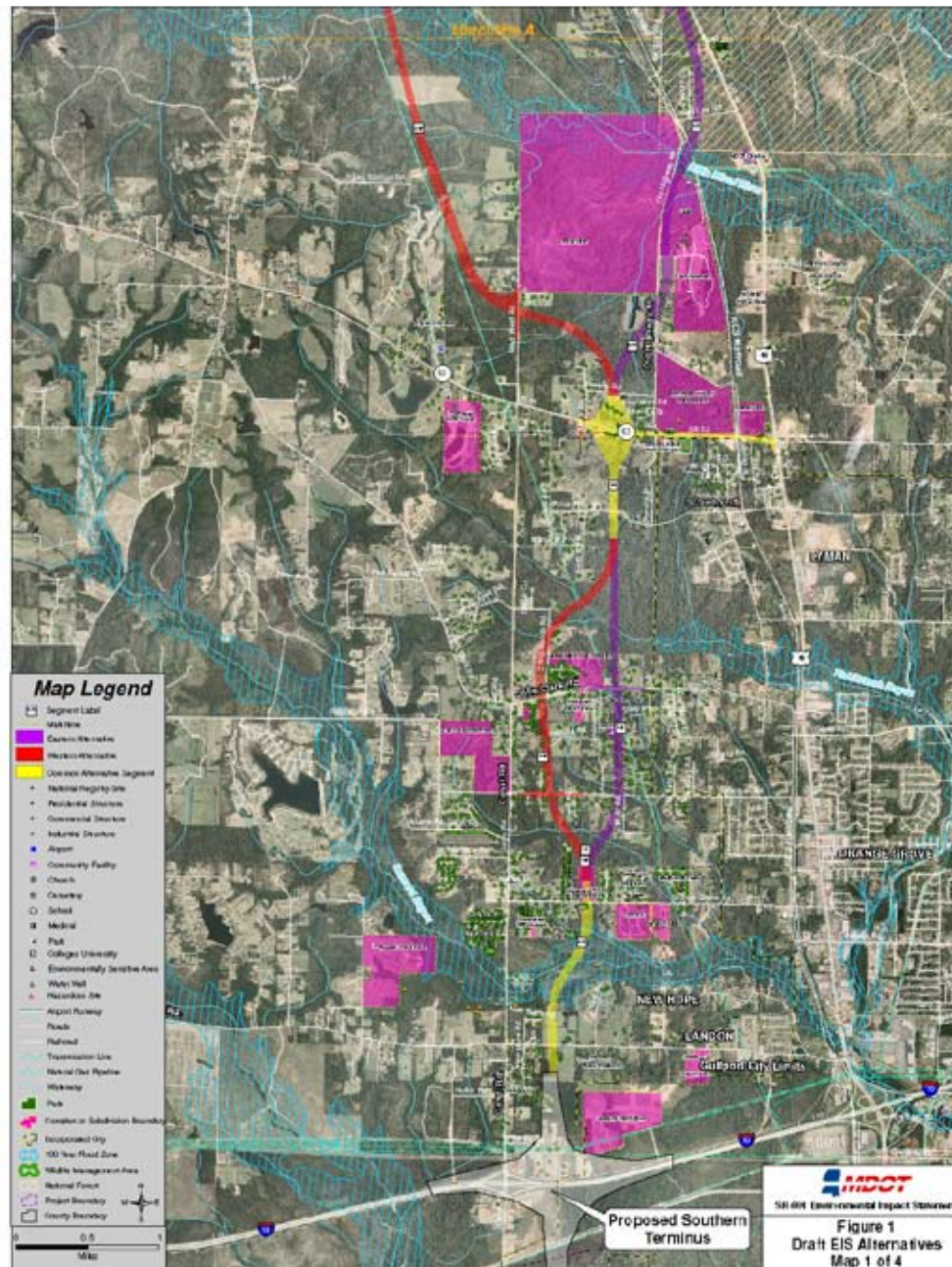
Located within the southern portion of the state, the proposed State Route 601 Corridor would parallel and/or utilize existing segments of US Highway 49 and would function as a limited access freeway providing a bypass of US Highway 49 in its most heavily congested areas, particularly in the urbanized area of Gulfport northward to Lyman.

An MDOT Environmental Impact Statement (EIS) for this project was initiated with 1,000-foot-wide corridors, but after public meetings the corridor alternatives were reduced to 500 feet. A further evaluation resulted in plans for a detailed study of 300- to 400-foot-wide alternatives (see Map A-15). These width revisions are the result of major concerns of agencies involved in or impacted by the projects. Major concerns include the impacts of the project on natural and water resources, communities, recreational facilities, and right-of-way (ROW).

In addition, there are other concerns that are of paramount concern to community residents throughout the duration of the project. These include the utilities affected, railroad crossings, hazardous materials and sites, wetlands directly impacted, floodplains, prime and unique farmland soils, impaired water bodies impacted, and perennial and intermittent streams traversed. There are three proposed alternatives as to the location of the proposed State Route 601.

The section of the project that most directly impacts the Western planning area is that around the southern terminus just east of the existing Interstate Highway 10 and Canal Road interchange extending up to Lyman. From the proposed Interstate Highway 10 interchange, there are five main tie-in locations/connections to the existing US Highway 49. These locations include south of the Little Biloxi River, south of the Biloxi River, just south of Saucier, near the proposed State Route

Map A-14. Proposed Alternatives for Route 601



Source: Mississippi Department of Transportation

67, and the US Highway 49 interchange near Wiggins. The Kansas City Southern (KCS) Railroad line runs north to south through the study area and is crossed by several of the alternatives. All of the alternatives, excluding one, cross the KCS rail line twice. The proposed highway would be grade separated over the KCS Railroad tracks.^{fe}

Safety, Maintenance, and Conditions

Road safety, maintenance, and conditions are a significant issue in the Western planning area of Harrison County. Across the planning area most of the roads are paved. These roads are not regularly or routinely maintained and serviced. This results in problems that include narrow roads, no controlled turning, open ditches, steep banks, inadequate signage, inadequate striping, and high speed traffic. Concerns about pedestrian safety arise due to the combined factors of high speed motor vehicles, poor signage, and the absence of sidewalks on most roads. The impact of each of these problems and the degree of their presence varies from community to community across the planning area. Many of the roads within the area are of a rural nature but tend to see use above that considered for a rural road.

The high concentration of rural roads in these areas makes the issues of open ditches, steep banks, narrow roads, poor signage, poor striping, and pedestrian safety more imminent. The community of Lizana has the issue of inadequate signage and safety as it relates to the intersections of its local roads with State Highway 53. Such intersections have been cited as high risk zones and pose a threat to both pedestrians and vehicular passengers. The same is experienced to a higher degree in the community of Lyman with the intersection of rural roads and US Highway 49. Lyman and Landon, due to their locations on urban fringes, experience higher vehicle counts and congestion as a result of their proximity to urban centers, US Highway 49, and Interstate Highway 10. These contribute significantly to the issue of school pedestrian safety in these areas.^{ff}

School Bus System

The Harrison County School District owns, maintains, and operates a fleet of 200 school buses and transports more than 10,000 students to 19 different schools each day. The annual mileage for the buses is 1,500,000 miles with a daily average of 5,881 miles.^{fg} Within the Western planning area the communities of Landon, Vidalia, Lyman, and Lizana are served by school bus service. The school bus service in these communities comprises both direct and feeder route services at the beginning and ending of school on weekdays. The schools that are serviced within the planning area include Harrison Central Elementary, Orange Grove Elementary, Lyman Elementary, and Lizana Elementary. The community of Riceville is not serviced by the school bus system.^{fh}

Trucking and Freight

The Mississippi Department of Transportation indicates the truck weight limits permissible on particular roads throughout the state. Within Harrison County, three of these roads—Interstate Highway 10, US Highway 49, and State Highway 53—are all listed with a maximum weight limit of 80,000 pounds. These three roads all fall within the Western planning area. Truck weight information is important to planning commissions in determining the types of local roads built and the vehicular weight limitations placed on them as trucks carrying freight that move off major highways may utilize local roads as they transverse alternative routes.

Emergency Response and Management

The Mississippi Department of Transportation (MDOT) has developed a hazardous materials response plan to describe operational concepts for the preparation, response, and recovery activities associated with hazardous materials accidents and/or incidents affecting the State Highway System and/or the State Rail System. History indicates that most incidents occur more frequently and with greater risk to the public and environment in transportation-related accidents (i.e., highway or railroad) than in accidents from fixed facilities. The MDOT has played

a major role, since most transportation accidents take place on state-maintained roadways. The map for the Harrison County evacuation zones and routes illustrates that the county has three shelters and six highways associated with evacuation response. Three of these highways and two of the shelters are in the Western planning area. US Highway 49, State Highway 53, and Interstate Highway 10 are designated for hazardous materials evacuation routes.

The Gulf Coast area is prone to hurricanes, the last of which was Hurricane Katrina. In response to these natural phenomena, the MDOT has developed a hurricane-response plan delineating preferred evacuation routes in the event of a hurricane. Three highways that are within the Western planning area have been designated as evacuation routes.^{fi} These highways are US Highway 49, State Highway 53, and Interstate Highway 10. There is normally traffic congestion on US Highway 49 during hurricane evacuations. As a result of this forecasted congestion, the MDOT has developed alternative routes from varied roadways within Harrison County. One such alteration is the route of State Highway 53 to State Highway 26 at Poplarville to State Highway 43 to Highway 13.^{fi}

Transit

The Coast Transit Authority (CTA) currently does not provide public transit in the Western planning area.^{fk} However, development plans are being pursued by the CTA. The Gulf Coast Transit Development Plan (TDP) has been initiated by the CTA in cooperation with the Federal Transit Administration and the Gulf Regional Planning Commission (GRPC) to research and develop a plan of future transit service and investment needs. Service has been forecasted to be available in three classes. Buses, among which options would be local, commuter, bus rapid transit, resort trolley, resort double-decker, and sightseeing buses. Rail, among which options would be street car/tram, light rail transit, and regional rail. Demand services, among which options would be para-transit, van pool, and park and ride. On analysis of the proposed Long Term Multimodal Transit Program, the Western planning area is not earmarked to be directly serviced, but the southeast section of the

planning area is scheduled to receive feeder bus services.^{fl}

Pedestrian/Bicycle

Cycling is practiced throughout Mississippi. In Harrison County there are a number of local clubs, including the Gulf Coast Bicycle Club, whose members join for the cycling-conducive landscape including state parks and lakes, national forests, and other attractions.^{fm} Relative to the Western planning area, the closest of these amenities is the Desoto National Park and bike lanes on Lorraine Road (Mississippi State Route 605). There are also sidewalks and multiuse paths across Western Harrison County, but no facilities are currently under consideration as part of the Gulf Coast 2030 Long Range Transportation Plan.^{fn} Compounding the issue for the introduction of cycling infrastructure and facilities is the condition of local roads. Problems include narrow roads, no controlled turning, open ditches, steep banks, inadequate signage, inadequate striping, and high speed traffic. All of these contribute significantly to the challenges associated with efficiently and effectively implementing cycling and pedestrian facilities across the planning area.

Rail

A segment of the Kansas City Southern Railroad line runs in a north-south direction through the eastern boundary of the Western planning area from the Little Biloxi River to State Highway 53.

Water, Wastewater, and Solid Waste

Water

Water in the Western planning area is provided primarily by private wells owned by individual property owners. In some instances, as in communities just north of Gulfport, community wells have been developed that provide water for entire subdivisions. River Bend Utilities provides service to customers located just off the US 49 corridor within the planning area. However, the population density in most Western planning area communities poses challenges to the development of centralized water systems.^{fo}

The Western planning area is serviced by four water utility companies: Deerwood Utility Association, Riverbend Utilities, Inc., Sutter Water Services, Inc., and Total Environmental Solutions, Inc. These companies provide service to approximately 25 percent of the Western planning area. There are eight community wells registered under the Mississippi Office of Land and Water Resources. All others receive water from private wells.^{fp}

The quality of the water supply in the planning area is considered excellent by the Mississippi EPA. The limited development located within unincorporated Harrison County has largely been responsible for the quality of the water. However, as areas develop, maintaining the water quality will become an increasing challenge.

Wastewater

Septic tanks are the primary source of sewage treatment in Western Harrison County. The Harrison County Utility Authority holds the permits for publicly owned sewage treatment plants. One such facility serves some areas in the Western planning area through a 7.7-million-gallon-per-day facility in Gulfport just south of Interstate Highway 10 that has collection lines that run through Orange Grove. The areas served are those concentrated along the US Highway 49 corridor. Private utility companies in Harrison County are regulated by the Mississippi Public Service Commission. There are privately owned sewage treatment companies that operate within the planning area. These companies include River Bend Utilities and Total Environment Solutions, Inc. (TESI). River Bend Utilities operates two facilities, one with a 100,000-gallon-per-day capacity and the other with a 86,000-gallon-per-day capacity that presently operates at 29,000 gallons per day. Both of these River Bend Utilities facilities are located in areas along US Highway 49 between Lyman and Landon and service several subdivisions and schools. TESI operates a facility off of Landon Road. This facility, known as the Wind Dance facility, services the Lake Village subdivision and has a capacity of 80,000 gallons per day.^{fq} The City of Gulfport provides service along the eastern border of the planning area running

parallel with US Highway 49. Elrod Utilities, Inc. provides for the area east of the intersection of County Farm Road and Landon Road, and MCC Enterprises, Inc. provide services to the area just west of County Farm Road from Gulf Haven Road to D’Herde Road. Diamondhead Water and Sewer provides service on the southwestern corner of the planning area. Robinwood Forest Utilities services the northeast tip of the planning area.

Future Water and Wastewater Infrastructure

Communities in the Western planning area are scheduled to receive water and waste water treatment facilities as part of the *Mississippi Gulf Region Water and Waste Water Plan*. Map A-18 illustrates the projects proposed in the short term for the Western planning area.

The following short-term projects have been recommended for funding in the plan and began engineering design work in 2007. The County will work with the Regional Water and Wastewater Authority to develop a water supply system to service the area north of Interstate Highway 10 in the West Harrison Utility District including areas north of DeLisle. This project will include the construction of water supply wells and storage tanks north of Interstate Highway 10 near County Farm Road and Firetower Road and at Firetower Road and Katie Drive. Transmission mains will be located from the supply line on County Farm Road north to Landon Road in the planning area. Another supply line will be located along Firetower Road from Interstate Highway 10 northwest to Katie Road.

The DeLisle wastewater treatment facility will be expanded and a transmission system installed to serve areas north of Interstate Highway 10. A series of pump stations and force mains will allow for wastewater service north of Interstate Highway 10. An interceptor will be constructed along County Farm Road north of Interstate Highway 10 and will connect into the North Long Beach Interceptor.

A transmission main and pump station are planned along Landon Road in the planning area. The transmission main will run south to Interstate Highway 10 and connect to the Gulfport North Wastewater Treatment Plant.

Over the long term there are additional plans for the extension of water and wastewater into the planning area. The Gulf Region Plan calls for these projects to be complete by 2025, but no specific funding has been allocated to support these expansion projects.

There are a number of long-term water supply expansion plans. The plan proposed supplies and transmits water along the major transportation corridors in the Western planning area including Interstate Highway 10, US Highway 49, and State Highway 53.

The West Harrison County Wastewater Treatment Facility in DeLisle would be expanded to support additional development along the Interstate Highway 10 corridor. This expansion would include the construction of a transmission system to allow flow from north of Interstate Highway 10. Also as part of this project, a North Long Beach Interceptor would be constructed to serve the area north of Long Beach and north of Interstate Highway 10 and transport waste to the Long Beach/Pass Christian Wastewater Treatment Facility.

In Lyman, a gravity wastewater main is planned along State Highway 53 to service development west of US Highway 49. In Orange Grove, a gravity main would be built north of Landon Road and south of State Highway 53 to deliver waste to the Gulfport North Wastewater Treatment Facility. In Landon, a wastewater transmission system is planned along Landon Road to service the area south of Landon Road to Interstate Highway 10. In order to service the additional waste generation, the Gulfport North Wastewater Treatment Facility would undergo a 14-million-gallon-per-day expansion in capacity.

Solid Waste

The Harrison County Utility Authority is responsible for solid waste management in the entire county, including the Western planning area. Presently the authority has contracted Allied Waste (BFI) to collect solid waste throughout the area. BFI, though collecting the solid waste, does not own a landfill site in the state and utilizes Waste Management's landfill, which is located on Firetower Road north of Menge Avenue. This landfill is called the Pecan Grove Landfill and has been operational

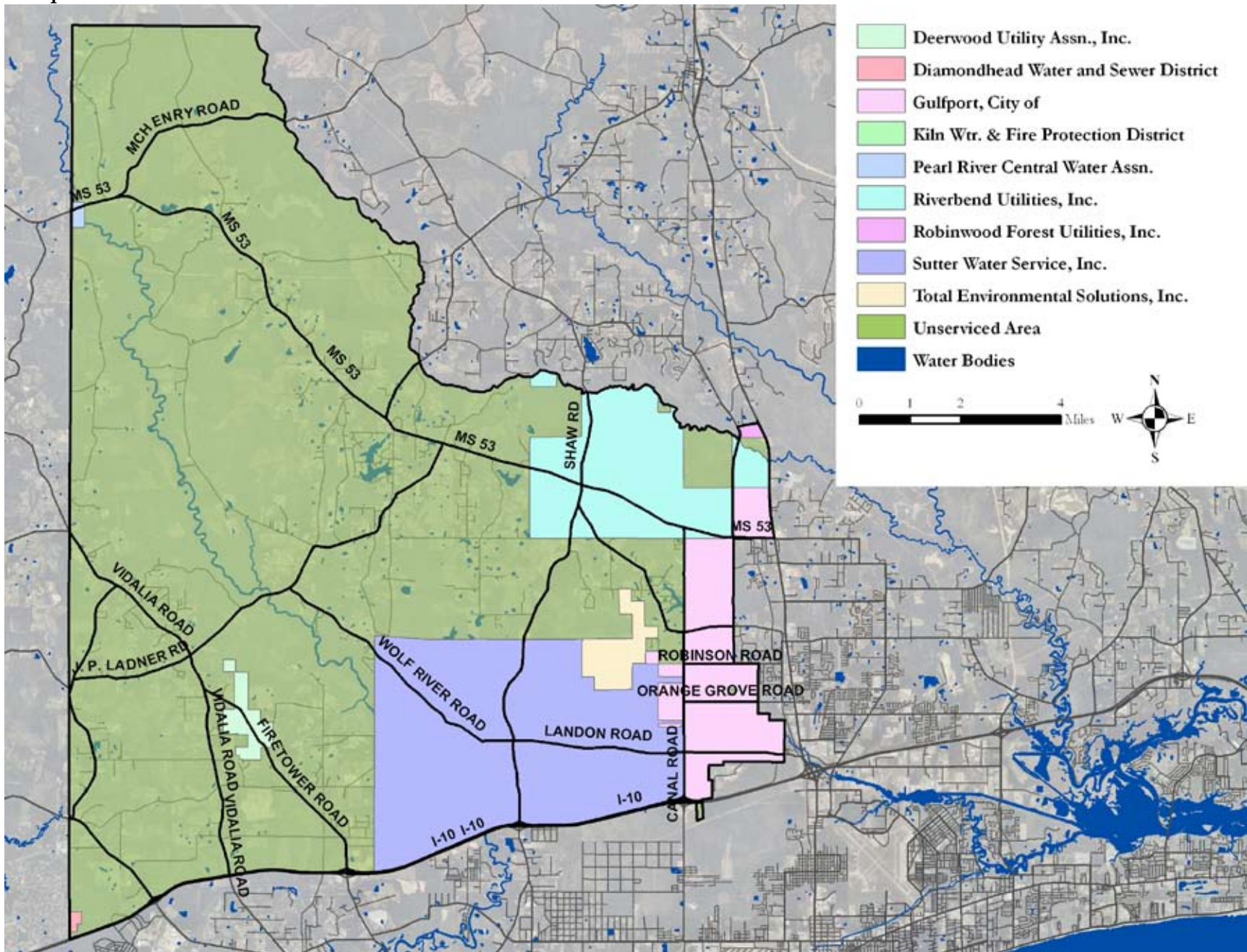
since 1987.^{fr} The current landfill utilizes 177 acres and there are 1500 adjacent acres on the site for future expansions.^{fs} This landfill is utilized to collect both commercial and residential solid waste.^{ft}

The landfill used prior to 1987 is located on the County Farm site in Township Six South, Section 22, Range 12 West. This landfill, known as the Harrison County Beat Four Landfill, received its first Board of Health permit in May of 1979. The Mississippi Department of Environmental Quality records show that in June of 1990, the Harrison County Board of Supervisors properly closed the landfill in accordance with the rules and regulations of the time.^{fu}

Other Utilities

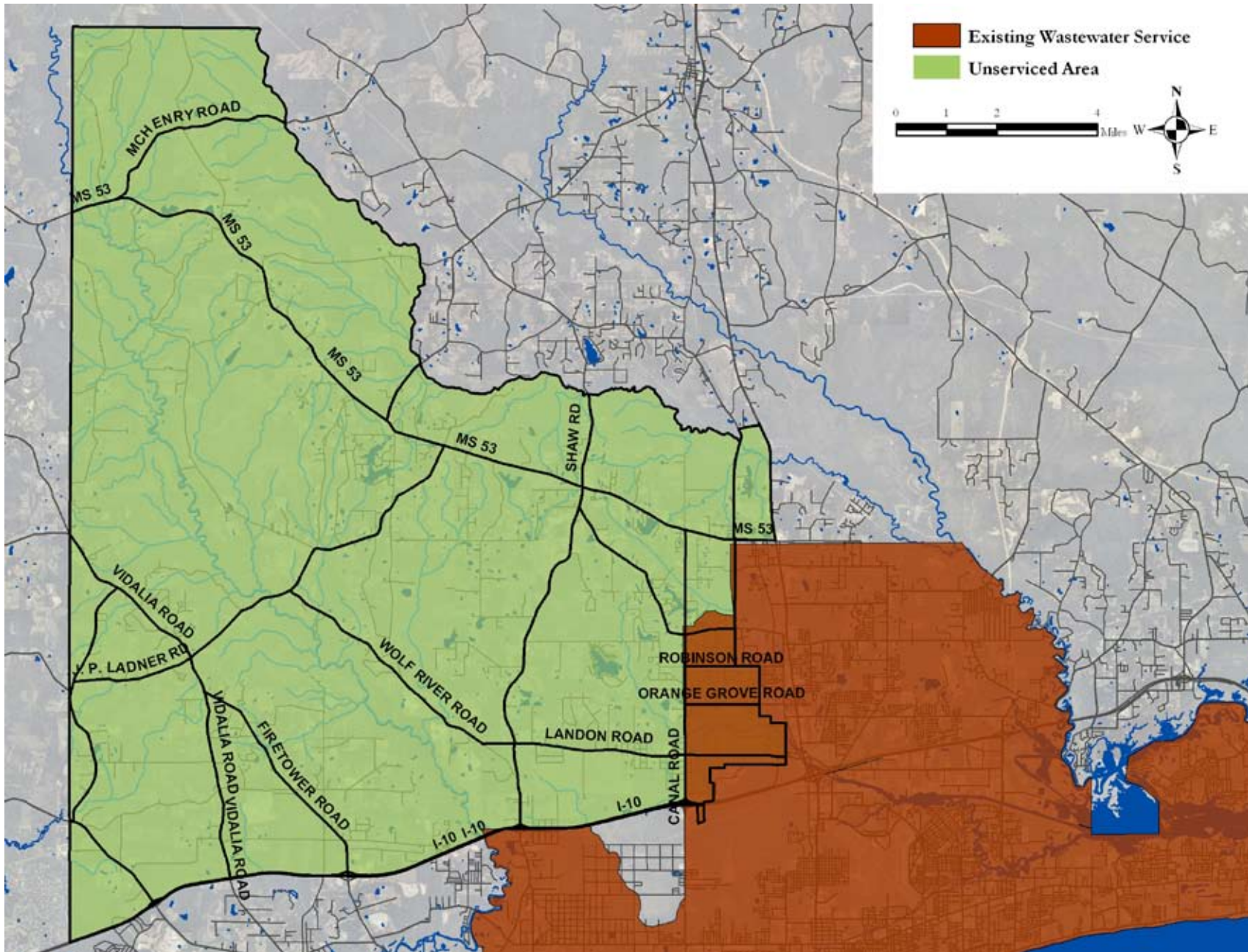
Telephone service throughout the entire Western planning area is provided by BellSouth. The area is primarily serviced by Coast Electric Power Association. The northeastern portion of Landon receives service from Mississippi Power Company. Natural gas service is available through Reliant Energy Resources in the Landon and southern communities of the planning areas. Natural gas service is not available in the northern portions of the planning area.

Map A-14. Water Service Areas



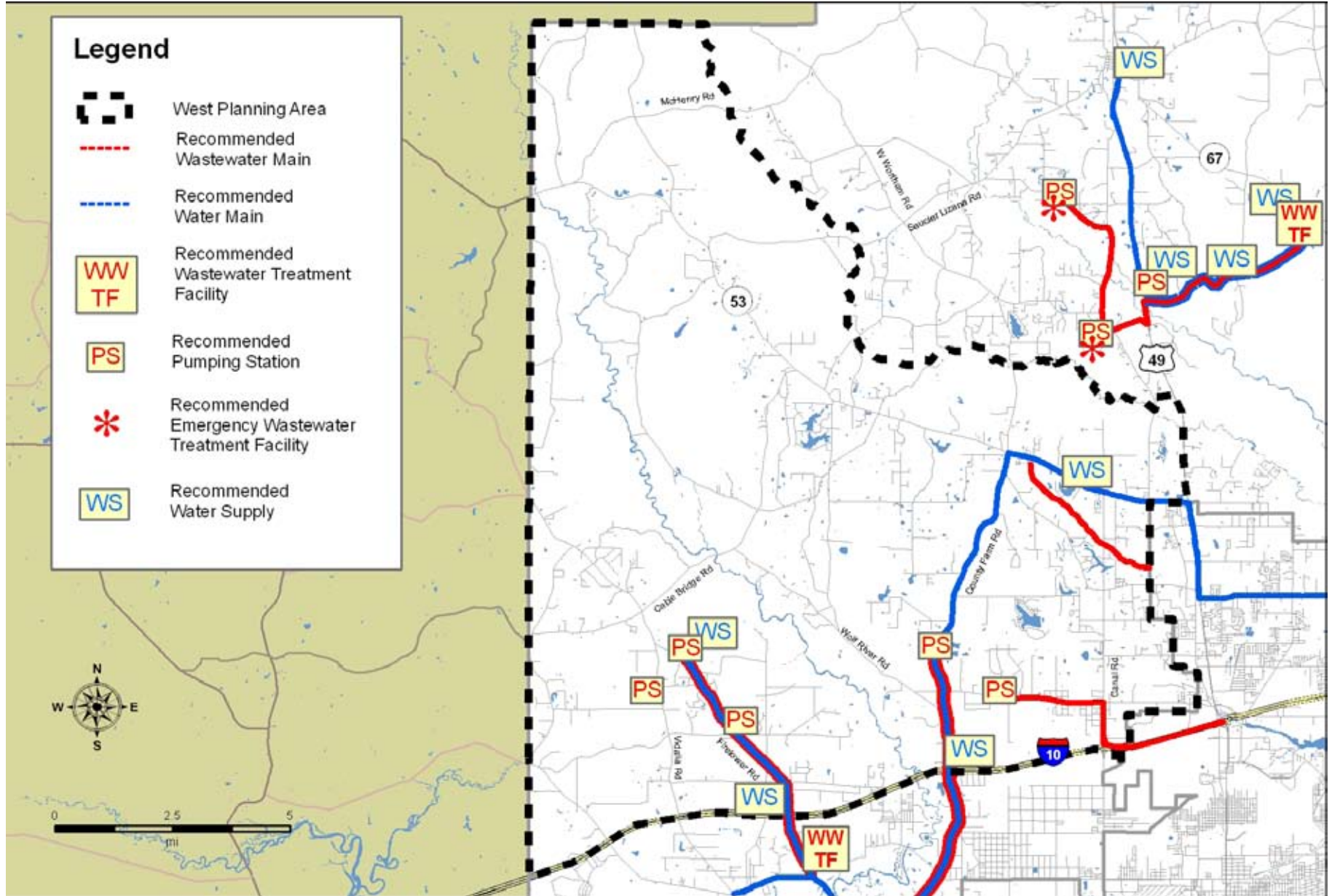
Source: Southern Mississippi Planning and Development District

Map A-15. Wastewater Service Areas



Source: Southern Mississippi Planning and Development District

Map A-16. Proposed Gulf Region Water and Wastewater Projects in Western Harrison County



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av ESRI compiled data available from the Federal Emergency Management Agency FEMA and the American Red Cross on the extent of damage to homes and residents needing assistance. The Red Cross estimated housing damage from fieldwork and FEMA data. To associate the condition of the housing with population displacement, ESRI further examined FEMA data, including maps of the impacted areas, damage polygons, and summary counts of applications for assistance. The U.S. Postal Service USPS provided summary counts from their National Change of Address NCOA file. To complete the population and household totals in 2006, the destination of evacuees and whether they returned to their homes or relocated elsewhere was estimated using data retrieved through the Address-Based Allocation system. The techniques are designed to capture change in the distribution of household population and uses information from postal carrier routes. By incorporating data released later in 2006, ESRI was able to integrate past and current changes in the distribution and characteristics of the population along the Gulf Coast.
aw Using a time series as base that includes county estimates through 2005 from the U.S. Census Bureau, ESRI employs a time series of building permits and housing starts, plus residential postal delivery counts. Local data sources are also incorporated. ESRI tracked the change in home value through December 2005 using the House Price Index from the Office of Federal Housing Enterprise Oversight and supplemented this with local home sales data. This data was further checked against the new residential construction database from Hanley Wood Market Intelligence, which identifies construction projects by location and conversions of apartments into condominiums.
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Appendix B. *Citizen Involvement*

On the evening of September 4, 2007 the citizens of Western Harrison County were invited to share their vision for the community in a two hour Town Hall Meeting that included several activities designed to obtain information from them. The meeting which was held at Lizana Elementary School, was attended by approximately 400 people. After signing in and locating their places of residence, property, and/or place of employment on a map of Western Harrison County, attendees filled out surveys about past and current development patterns in the planning area and Harrison County. The meeting began with a welcome from Harrison County Supervisors Ladner and Benefield, Harrison County Zoning Administrator Patrick Bonck, and Ohio State University Professor Jennifer Cowley.

Robert Cowell, team leader for producing this plan, presented the planning process to attendees. He explained the purpose of the information being gathered and presented a timeline for completion. Citizens were provided with a copy of the meeting agenda, which also had contact information, including a phone number and an online forum website, that allowed them to continue to contribute opinions after the meeting concluded.

A written Community Survey asked respondents for their current housing and household characteristics. The greater part of the survey dealt with likes and dislikes in the Western Harrison County area. Citizens were asked to identify problem issues and deficit services in Western Harrison County. Finally, citizens were asked a series of open-ended questions about their ideas for potential development and improvements in Western Harrison County.

Figure B-1. A member of the planning team assists a citizen in mapping his place of residence.



Source: Chris Cunningham

A Community Preference Survey (CPS) was conducted during which a series of images on which attendees could vote were projected on to the wall. Votes were cast by selecting a number from one to five on a survey form that corresponded to the choices shown. Citizens were asked to vote on the acceptability of seeing the type of development somewhere in their communities rather than specifically on their properties.

Figure B-2. Citizens of Western Harrison County gather for the Town Hall Meeting



Source: Chris Cunningham

Figure B-3. Citizens discuss an image from the Community Preference Survey



Source: Chris Cunningham

Introduction

At the Town Hall Meeting on September 4, 2007, each household received an opinion survey focusing on the past and current trends of development in Harrison County and their communities. A version of the survey was also made available online for those unable to attend the town hall meeting and several community members utilized this option. Their comments have been incorporated into the summary. The following is a synopsis of the results from the 168 households who submitted surveys and who identified themselves as current residents of the planning area. Surveys from outside of the planning area were omitted from the results. All results are calculated as a percent of total responses for each question. The results are part of several considerations in the formation of this plan.

Analysis

The tables are organized by question, and each question is listed as it was presented in the survey. Two sets of results are provided for Likert-type scale questions that warrant a response based on varying degrees of opinion toward a topic. The first set of results is described as “disaggregated,” meaning that averages were calculated for each of the possible response opinions. The second set of results is described as “aggregated,” meaning that the responses with similar sentiment were added together to become one generalized, combined group and then averaged as a whole. For example, disaggregated response choices would include “strongly agree”, “agree”, “neutral”, “disagree”, and “strongly disagree”, while aggregated response choices for the same question would include “agree” (the combination of “strongly agree” and “agree”), “neutral”, and “disagree” (the combination of “disagree” and “strongly disagree”). This aided in interpretation because it is useful to understand the general sentiment of the respondents toward a topic.

Majority opinions held the most weight when setting goals and objectives and providing recommendations. For each question, the response with the highest percentage of responses is bold-faced. It is important to note that in some circumstances the highest percentage

does not indicate a majority opinion (greater than 50 percent of the total number of responses). In such cases, the respondents' opinions were divided between the response choices, making it difficult to determine the overall opinion of the community.

The identified communities were assigned to general regions of the planning area as identified by the surveys and steering committee members. For some questions, results were compiled based on respondents' region. See Table B-1 below.

Results

1. How long have you lived in Harrison County?

Length of Time	Percentage
Less than one year	1.2
One to five years	3.6
Six to ten years	5.9
Eleven to twenty years	12.4
More than twenty years	76.9

2. Where did you live before Hurricane Katrina and where do you live now?

Community/ Location	Percentage Before Katrina	Percentage After Katrina
Dedeaux	3.0	3.6
Dubuisson	3.7	2.4
Lizana	55.5	54.8
Lyman	14.6	14.5
Orange Grove	9.8	9.0
Riceville	3.0	3.0
Unincorporated Harrison County	0.6	0.6
Gulfport	1.2	0.0
Landon	5.5	6.0
Finley	1.2	1.2
Long Beach	1.2	0.0
Other	0.6	4.8

Table B-1. Communities by Region of Western Harrison County

	Northern Region	Northeastern Region	Central Region	Southeastern Region	Southwestern Region
Communities	Riceville	Finley Lyman	Lizana Delmas	Orange Grove Landon New Hope	Dedeaux Dubuisson

3. If you work, do you work in a city/community that is different from the community you live in?

Work in a different community?	Percentage
Yes	52.0
No	48.0

Commute Distance	Miles
Average	17.3
Median	15

Miles to Work	Percentage
<10	25.0
10-19	41.7
20-29	15.3
>30	18.1

Community of Workplace	Percentage
Gulfport	46.88
Pascagoula	1.56
Long Beach	3.13
Biloxi	6.25
Lyman	1.56
Hancock County	3.13
Delisle	3.13
Lizana	9.38
Woolmarket	1.56
Orange Grove	6.25
Stennis Space Center	3.13
D'Iberville	3.13
Ocean Springs	1.56
Findley	1.56
Standard	1.56
Elsewhere in Harrison County	4.69
Other	1.56

4. What type of housing did you live in before Hurricane Katrina and what type of housing do you live in today?

Housing Type	Percentage Before Katrina	Percentage After Katrina
Single-family home	78.2	75.8
Modular home	0.6	1.2
Manufactured home	20.6	19.9
Duplex or fourplex	0.6	0.0
FEMA trailer on own property	0.0	2.5
FEMA trailer on someone else's property	0.0	0.6

Housing Type	Percentage Before Katrina	Percentage After Katrina
Own	98.2	98.1
Rent	1.8	1.9

5. To what extent was the home you lived in prior to Hurricane Katrina damaged?

Damage Level	Percentage
Completely Destroyed	3.8
Damaged	72.5
Not Damaged	23.8

6. What major roads would you consider to be the geographic boundaries of your community?

Roads	Percentage
Hwy 49	5.3
I-10	4.7
Hwy 53	20.6
County Farm Road	17.7
Canal	5.3
Little Biloxi River	0.3
Shaw	1.6
Landon Road	7.9
John Clark	0.8
Vidalia	3.2
Cable Bridge	4.7
Firetower	1.1
Wolf River Road	6.1
Other	20.8

Long answer comments:

Northern Region

Boundary Roads Crane Creek, Mack Pete Rd, Ridge Rd, 53
Crane Creek, Riceville, Ridge Rd, 53

Northeastern Region

Boundary Roads CC Camp
Dawnland
Mark West road
Gulf Haven Road
Robinson
West Wortham Road (3)

Central Region

603
Boundary Roads (W)County Line; (N) Robertson Rd; (S) N. Wortham Rd.
Ashlieh Drive, Lizana School Road, Northrop Cuevas Road
Bells Ferry
CC Camp Road and Gulf Haven Road Cemetery Road (2)
Cemetery Rd. and Northrup-Cuevas Cemetery Road and the Wolf River Cemetery Road, CC Road, Down Saucier Lizana to Houston Ladner Road
Cemetery, Shaw, Herman Ladner, and Wortham Rds
County Line
Edwin Ladner
Gail Road W, CC Camp W, Herman Ladner Gulphaen
Herman Ladner Road (2)
Lizana-School Road
Lizana School Rd. and Northrup-Cuevas Rd.
Menge Road
Mennonite Road (2)
Moran Road (2)
Robinson Road (3)
Saucier-Lizana Rd. and Lizana-School Rd.
Saucier-Lizana Road (4)
Saucier-Lizana Road, Moran Road
Warren Road
West Wortham Road (3)
West Wortham Road and Hancock Co line
Wolf River and Big Creek Road
Wolf River and St. John
Wortham Road, JP Landon Road

Southeastern Region

Boundary Roads East 49, South Landon, West Beatline/
County Farm
Gulf Haven Road
Hutter Road
Hutter Road, New Hope
Hutter Road to the west, New Hope Road to
the east, Orange Grove to the north, I-10 to
the south Robinson Road

Robinson, County farm
Wade Ln

7. Where would you say the center of your community is located?

Northern Region Community Center

Riceville Rd.
NW corner of Harrison County (2)
Talley Shaw Road (2)

Northeastern Region Center

Intersection of Hwy 53 and County Farm Rd. (3)
Intersection of Hwy 53 and Lizana-Saucier
Intersection of Highway 53 and Shaw Road
Intersection of Landon Road and County Farm (2)
Intersection of Landon Road and Highway 49
Low Density Development off of D'Herde Road
Lyman (4)
Lyman School
Robinson Road

Central Region Community Center

Canal and Robinson Rd
County Farm Road
Fazzio's (10)
Gulphaven and Mennonite
Highway 49
Highway 53 (2)
Hwy 53 and John Clark Road
Highway 53 and Saucier Lizana Road (4)
I have no idea.
Lizana
Lizana School Road and Hwy 53 (5)
Lizana-School Road (6)
Lizana Elementary School (36)
Lizana Quick Stop
Our Lacy of Chartres Catholic Church
St. Annes Church (3)
St. Ann's Church and Hwy 53
Wendy Hills Subdivision

Southeastern Community Center

Canal and Hutter
Canal and I-10
Hwy 49 and Northwood Hill Area
Hwy 53 and Hwy 49
Hwy 53 and Landon rd
I-10 and Hwy 49
Landon Lake Estate
Landon Road
Mt. Calvary Missionary Baptist Church
Old 49 and Landon
Orange Grove (2)
Robinson and County Farm Rd
Windance subdivision area

Southwestern Community Center

.25 mile south of St. Ann’s Church
 1.4 miles north of Kiln-Delisle Rd, all of Kiln Delisle Rd
 Cable bridge and Vidalia
 Dedeaux Rd
 Deerwood is a 4 phase residential community
 Exit 24 Menge ave, Firetower, Lobough rd
 Lizana
 Lloyd Ladner Rd
 Neco’s (4)
 West Harrison Fire Station

8. What do you think about the pace of land development in Western Harrison County?

Development Pace	Percentage
Too slow	12.3
Just right	23.2
Too fast	46.5
I don’t know	18.1

Figure B-4. Many citizens identified Lizana Elementary as the geographical center of their community



Source: Chris Cunningham

Figure B-5. Neco’s is commonly considered to be the center of the Southwestern region of Western Harrison County



Source: Chris Cunningham

9. To what degree do you support or oppose the following:

Disaggregated Results	Percentage Strongly support	Percentage Support	Percentage Neutral	Percentage Oppose	Percentage Strongly Oppose
Development of housing that is affordable for residents in my community	15.9	29.3	18.5	17.8	18.5
Construction of new shopping centers	13.0	29.8	16.1	21.7	19.3
Construction of new office and industrial parks	5.2	17.6	26.1	25.5	25.5
Development along proposed State Route 601	8.6	24.3	47.1	10.7	9.3
Development of a community park near the new High School	29.1	46.2	17.1	3.2	4.4
Development of additional athletic fields	27.1	40.0	23.2	3.9	5.8
Development of a walking/ biking trail	36.1	38.6	14.6	6.3	4.4
Rebuilding the County Farm	23.3	32.7	28.0	8.0	8.0
Development of a senior/community center in Lizana	35.8	37.1	18.9	4.4	3.8
Preservation/Conservation of land along the Wolf River and Bayous	49.7	31.0	12.9	0.6	5.8
Creation of public canoe launch points along the Wolf River and Bayous	34.2	34.2	21.3	3.2	7.1
Preservation/Conservation of wetland areas	42.9	31.4	12.2	6.4	7.1
Expansion of water service in Western Harrison Co.	22.3	19.1	20.4	15.3	22.9
Expansion of sewer service in Western Harrison Co.	21.4	19.5	25.3	12.3	21.4
Increased employment opportunities in Western Harrison Co.	29.0	31.6	25.8	8.4	5.2

Aggregated Results			
	Percentage Support	Percentage Neutral	Percentage Oppose
Development of housing that is affordable for residents in my community	45.2	18.5	36.3
Construction of new shopping centers	42.9	16.1	41.0
Construction of new office and industrial Parks	22.9	26.1	51.0
Development along proposed State Route 601	32.9	47.1	20.0
Development of a community park near the new High School	75.3	17.1	7.6
Development of additional athletic fields	67.1	23.2	9.7
Development of a walking/ biking trail	74.7	14.6	10.8
Rebuilding the County Farm	56.0	28.0	16.0
Development of a senior/community center in Lizana	73.0	18.9	8.2
Preservation/Conservation of land along the Wolf River and Bayous	80.6	12.9	6.5
Creation of public canoe launch points along the Wolf River and Bayous	68.4	21.3	10.3
Preservation/Conservation of wetland areas	74.4	12.2	13.5
Expansion of water service in Western Harrison Co.	41.4	20.4	38.2
Expansion of sewer service in Western Harrison Co.	40.9	25.3	33.8
Increased employment opportunities in Western Harrison Co.	60.6	25.8	13.5

10. What kinds of services do you really want and need in your community?

All types of housing
Auto Services (33)
Bank (34)
Barber or beauty shop (2)
Bowling Alley (2)
Cable tv (2)
Car wash (2)
Child care
Cleaners (5)
Community Center (14)
Convenience Store
Employment Opportunities
Grocery Store (23)
Hardware store (2)
Harrison Co Substation
Hospital/ Urgent Care (6)
Improve Beautification Program
Improve Schools (6)
Improved Fire and Safety (11)
Improved Garbage Collection
Library (3)
Limit any new business
Medical/ Dental (23)
Movie Theatre
Nursery /Greenhouses (2)
Offices
Parks and Recreation (19)
Pharmacy (13)
Pizza delivery
Post Office (4)
Pro/minor league sports team (2)
Public parks & rec (2)
Public River Access
Public Transportation
Recreation for seniors
Recreation for Youth (11)
Restaurant (54)

Retail/ Shopping (21)
Revised Recycle Program
Roads and Bridge Improvements (16)
Senior Care/Retirement center (4)
Service Stations (7)
Sidewalks (2)
Skate park
Small business (2)
Theater (4)
Town hall
Transportation for elderly
Walking/bike trail (3)
Water and sewer (2)
Wildlife conservation (2)

Figure B-6. A significant number of citizens cited the need for more small restaurants throughout the planning area



Source: Meghan Gough

11. For the top three services that you identified in question 10, where would you suggest locating them?

Alcede-lizana rd
Around “town centers”
Between Dedeaux and County Farm
Cable Bridge road
Canal and Landon
Canal Road (4)
Canal Road and County Farm Road
Canal Road, North of I-10, West of Canal
Canal, Highway 53, Landon
Close to Lizana School (3)
Commercial areas
County Farm Road (5)
Crossroads mall and Highway 49
Downtown Lizana
Highway 49
Highway 49 and O’neal rd
Highway 53 (14)
Highway 53 & Canal Rd.
Highway 53 & County Farm Road (4)
Highway 53 & Highway 49 (2)
Highway 53 and Menge Ave.
Highways and interstates
I-10
John Clark
Landon and County Farm (3)
Lizana School Rd and Highway 53 (2)
Near new school (3)
Neco’s
New Highway 601
Orange Grove
Orange grove, Highway 49
Robinson rd
West Wortham Road & Highway 49
Within Lizana Vol. Fire Dept.

Figure B-7. Highway 53 was often identified as an appropriate location for the development of needed retail and services.



Source: Brandon Mark

12. Are you aware of the plans for the new State Route 601 which would run east of Canal Road and north towards Stone County?

Aware of 601	Percentage
Yes	50.0
No	50.0

12a. Do you have any concerns or suggestions related to the proposed State Route 601?

Concerns - Northern Region

Need more info

Concerns - Northeastern Region

Intersection at 53 is already dangerous
 Too much traffic (3)
 Route placement and affected property (2)
 Drainage, Increased Traffic and Noise
 Unnecessary (3)
 Stay east
 53 dangerous enough
 Traffic and More Lights

Concerns - Central Region

Proceed with adopted plans (2)
 Unnecessary (2)
 4-lanes, Wal-mart/Target, Toys-r-Us, etc, various restaurants, medical, etc.
 Stop it
 Route placement and affected property (2)
 Keep it scenic
 Increased traffic in our rural area
 Bottlenecks at major intersections
 Don't allow billboards; do measured, planned growth - not will nilly
 Allow compatible housings like Traditions in its design
 Need more info (2)
 Negative

Concerns - Southeastern Region

Need more info (4)
 Increased commercial/industrial development
 Would it affect the small community of which we can lie and will it affect the churches (i.e.: New Hope and Mt. Calvary)?
 Ensure it remains limited access and terminates at Wiggins or preferably further north
 Keep it free of commercial buildings and billboard
 Route placement and affected property (4)
 601 should be considered on Canal Rd to 53 to old 49.

Concerns - Southwestern Region

Lizana
 Needed (2)
 I think it should go all the way to Wiggins before coming back onto hwy 49. This will help so much when traveling north

13. What characteristics of your community are especially important to you?
Please explain.

Important Characteristics

Accessibility to shopping (2)	Rural (39)
Balance between country community and semi-development	Safety (3)
Bedroom community (2)	Security and privacy of a subdivision
Livestock/ animals	Single-family homes (4)
Churches, School, Feedstore	Small town atmosphere (5)
Clean (2)	Upscale home community
Close Community (8)	Upscale, adhere to codes, no trailers next to stick built homes
Codes, covenants	
Communication	
Country living (2)	
Easy going place to live (2)	
Farms/Agriculture (7)	
Good community (3)	
Green/woods (6)	
Hancock Bank Data Center	
Isolation/ Privacy (4)	
Keep as much history as possible involved	
Keep it simple	
Keep Lyman Country	
Large lots (17)	
Low crime (3)	
Low Density (16)	
Minimal traffic (4)	
Natural resources (3)	
No mobile homes	
No low income housing	
Open Spaces (2)	
Parks and Recreation (2)	
Police/safety, fire protection, hurricane shelter	
Preserve land usage for farms	
Quality of life (2)	
Quiet (28)	
Roads (2)	

14. Are there an acceptable recreational opportunities available in your community?

Acceptable Recreational Opportunities	Percentage
Yes	33.1
No	47.9
Not Sure	19.0

14a. If not, what recreational opportunities should be added?

4H at county farm
 All in one! Community meeting place w/rec facility for families, indoor pool, gym, walking and bike trail, community education classes provided.
 Anything that supports the young, old, and seniors
 Athletic fields (6)
 ATV trails
 Basketball courts (2)
 Bike paths/lanes (12)
 Bowling alley
 Community center (6)
 Community theater
 Equestrian uses
 Fairgrounds
 Football Fields (3)
 Game reserves for hunting
 golf course
 Improved Parks (2)
 Indoor stadium at fairgrounds
 Kayak the Wolf River
 Lake fishing
 Lighting tracks
 More soccer fields (6)
 Movie theatre
 New Baseball Fields (9)
 Ongoing maintenance and improvement of equine center at the county fairgrounds

Outdoor sports to include our children
 Playground (3)
 Pool and Gym- next to fire department
 Pools (2)
 Public access to Wolf River (4)
 Public parks (9)
 Restore the county farm
 Rock climbing
 Senior center/activities (3)
 Sidewalks along the street
 Skate park
 Skating rink
 Sports complex
 State parks (2)
 Swings
 Tennis courts (6)
 Walking trails (12)
 Water park
 Youth related/teenage activities (5)

15. Would you support an increase in your taxes to support the addition of recreational amenities in your community?

Support increased taxes for recreational amenities	Percentage
Yes	31.5
No	48.3
Not Sure	20.1

16. Are you concerned with existing environmental hazards in your neighborhood?

Concerned with existing environmental hazards?	Percentage
Yes	51.7
No	37.9
Not Sure	10.3

16a. If yes, what environmental hazards are you concerned about?

Environmental Hazards	Percentage
Water	44.4
Land Fill	55.6

Environmental Concerns - Northern Region

Water (2)
Polluted water, dumping waste (2)

Environmental Concerns - Northeastern Region

Water (6)
Land Fill (5)
Noise and air pollution
Encroaching City Limits
Old Landfill at County Farm (2)
Environmental cleanup areas
Pollution and water table (2)
Trailers and Double Wides

Environmental Concerns - Central Region

Water (9)
Land Fill (13)
Litter (2)
Large mobile home lots with 1 septic tank
Chemical plants or anything loud
Landfill on Menge and Katrina fill on Wolf River Road
Pollution
Water and sewer
All or any hazards
Debris from Katrina
New construction in wetland that would cause more flooding
DuPont
Faulty septic systems
Neighbor runs sewer into pond, buries old trailers and debris
Monitoring, notification day to day run off
Well water contamination
City waste, factory waste, landfills, overpopulation, subdivisions
What will become of dirt pits? More dump sites?
Dumping on road sides

Environmental Concerns - Southeastern Region

Water (7)
Land Fill (8)
Landfill w/hazardous substances, factory and polluted water can be related. Also, development on wetlands causing increased flooding
Leaking/breaking of the dam at Landon Lake
The old landfill north-east of the intersection of Landon & Canal Road
Landfill, polluted water, gravel pit
No green spaces
Contamination from dumping into existing wells if water and sewage is not available for the properties
Dumping, existing wells contaminated by public utilities
All hazards
Future and current uncontrolled land development. Industrial area being built south of Robinson Toad along County Farm Road

Environmental Concerns - Southwestern Region

Land Fill (8)
 Misuse of wetlands. We all have large bodies of land 2acres minimum and mostly 3 to 40 acres.
 DuPont
 Dangerous chemical that harm the people
 Pecan Grove (2)
 Commercial trailer park w/o adequate sewage
 Waste management
 Dump on Menge!

17. Is there a natural feature in your community you consider to be of importance?

Natural features of importance?	Percentage
Yes	59.2
No	22.5
Not Sure	18.3

17a. If yes, what is this feature and where is it located?

Important Natural Feature - Northern Region

Wolf River (5)

Important Natural Feature - Northeastern Region

Finley (Lyman) highest elevation in County
 Wooded areas and streams (2)
 Protect peace and quiet
 Adams lake
 Large Lots, no manufactured homes
 Peace and Quiet, Quality of Life
 Wetlands, woods
 Large Farms and Natural Settings
 Agricultural and rural atmosphere
 Old community; needs to be left as it is
 Forest and Pasture Land throughout the community

Important Natural Feature - Central Region

Adams Lake (2)
 Fish ponds on large properties
 All-natural features
 Big oak trees
 Country living Lizana
 Existing green space
 Large farm and ranch areas
 Rivers
 Rural Character (3)
 Space; no close neighbors
 The density and the wolf River just the way it is. The land is green with trees and other greenery.
 Timberlakes area
 Water and wooded areas
 Wide open spaces
 Wolf River (20)
 Wolf River needs access to
 Wolf river under utilized
 Cable bridge road's Wolf River; because of hunting clubs we cant get to anymore
 Wetlands
 Woodlands

Important Natural Feature - Southeastern Region

We used to have a peaceful community when every inch of land was not developed. That's why so many of us moved out here.
 Landon Lake
 Wolf river
 Cow pasture, pine trees
 Drainage creek passing under County Farm Road just north of D'Iberville
 Natural streams and rivers
 Lakes, ponds near Canal & Dedeaux rd.
 Trees (2) landscape to be left in developed areas
 Wetland areas
 Adams Lake (2)

18. What other suggestions do you have for how Harrison County can plan for the future?

Please explain:

Suggestions - Northern Region

Develop existing heavily populated areas; redevelop areas destroyed by Katrina so people displaced can go back home instead of moving into our communities because of lack of options; help individuals rebuild instead of taxing everyone to build stuff we don't want or need

Four lane 53

Suggestions - Northeastern Region

Preserve the small family farms.

Increase Parks and Recreation (2)

No condo, major subdivisions or trailer parks (4)

Maintain single family residential housing (2)

Keep industry south of I-10

Keep shopping on Highway 49

Traffic control (2)

Adhere to zoning code,

Green space in new housing developments

No low income housing (2)

Allow people to live the country life; see no need for more subdivisions when the homes in the current ones can't sell

Leave the Lyman area alone; it has good hunting

Low density developments (2)

Wastewater Treatment Facilities

Community involvement (2)

Stop light at Canal Road and Highway 53

Suggestions - Central Region

Maintain quality of life

Increase opportunities for community involvement (6)

Limit outside involvement in planning (3)

Keep industry south of I-10. No commercial along Robinson Rd. between Canal and County Farm.

Smart planned growth. Smart planning and ordinance.

Leash laws for dogs.

Maintain rural character (4)

No Trailer Parks (2)

Need traffic lights at Highway 53 and County Farm Rd. (2)

Need traffic lights at Highway 53 and Saucier-Lizana Rd.

No dumping on CC Camp Road

New Baseball Fields

Street lights, 4 way caution lights throughout community, bigger and better street signs.

Limit small lot development, subdivisions, larger setbacks, enforce aesthetic goals for the community

Leave me alone; fine and doing well.

No city water and sewer.

Planned utilities all underground, more roads

Low Density

Be selective

Clean and develop the current natural parks

A place for people on social security - low income

Beautification and preservation of the "country" feeling

We need mid-income housing in sub-divisions. We need to reserve nature areas, hunting areas, and add boating areas. Yet, we need to keep the country look and feel.

keep it more "pre-Katrina" zoning

Clean up the commercial uses and junk yards

Public access to Wolf River

Fewer housing developments, it causes more hard to deal with zoning

Do it slowly, don't rush into things-plan, plan, plan

Need own post office and zip code

No low income development (2)

No more heavy industry, chemical plants, casinos should be enough for our entire tax base

Establish water or sewer systems, improve existing roads, eliminate illegal dumping, establish and enforce zoning codes, enforce leash laws, restrictions on dirt pits, remove abandoned vehicles

Limited expansion of incorporated areas

Don't over flood one area with growth, build evenly outward, incorporate small communities inside a large community

We need things for the kids besides Lizana school sports, have more meetings and discussions, put out more advanced information on future planning, no mobile home parks, need another land fill, roads need work bad, no subdivisions on county farm road, update and improve and add more sports fields i.e. county farm road soccer fields need lights, no building in flood zones along the waterways and low lying areas that typically flood during heavy rains

We need a bridge across wolf river between I-10 and Cable Bridge, a golf course, maintain the residential appeal of the community and supporting commercial activity

Suggestions - Southeastern Region

Have more public meetings, listen to the citizens and encourage more of them to play a part in the future. Politicians seem to follow the dollars! Start meetings on time if we are to meet in the heat!!

More information and opinions from community; focus on areas not mentioned on survey; specifically the area west of canal road, bordered by Landon and Hutter Rds.; better upkeep of landscaping; What types of development I don't want to see in my community? Hwy 601, manufactured home communities, a recycled center on canal road, industrial businesses. What types of development I would like to see in my community? community/ rec centers, walking/jogging trails, better water purification systems

Zoning should be more definite. What type of development would you like to see or not see in your community? To see: a park with walking/biking trails either close to new high school or by the river. Not to see: no industrial; no landfills: no apartments or condos.

We live in the Lizana community- why do we vote in Pineville? What type of development would you like to see or not in your community? No commercial or industrial development in residential areas in our community. We have no problem driving to Hwy 49 + I-10 to do shopping. Keep Western Harrison County residential & rural.

No industrial area development (i.e.: industrial park or waste management area)

A survey submitted directly for the specific communities. Mail out surveys. What type of dev't you like to see or not see in your community? No affordable duplex are recommended. No recycle plant. No refinery plant. No treatment plant.

Improve roads

Hurricane shelter

Do not put housing developments close together

Growth that is in accordance with maintaining a rural community, low density, small farms intact, don't let the county, city, government decide what is best for the community

Publicity regarding plans

Maintain trees. Leave green space.

Larger roads; better flow of traffic to hwy 49; when subdivisions are built along the existing main road, need fencing and landscaping!

Wider roads (2)

Senior Retirement Homes (2)

Code enforcement to protect property owner's investments, code for 4 wheelers/ATV's enforcement. To stop the use of ATV's on open land. Restrict the use to area's allowed by county code

Build infrastructure for expansion and business growth

Enforce housing code.

Suggestions - Southwestern Region

Publish any thoughts in the Sun Herald on specific days such as the 7th or on the 30th. Make known on WLDX

Plan for the future by respecting the rights of residents already in established developments. We bought because we wanted acreage and do not appreciate the county's effort to force changes to our area. This survey does not address the issues surrounding the building zoning and planning department errors.

Maintain the rural aspect of the area. Do not adopt ordinance that relate more to suburban areas. Do not restrict uses of land more than necessary- make zoning simpler to understand
Central Water and sewer.

Wider roadways. Firetower, Vidalia, same as state hwy Like 53 - 603 interchange on Vidalia I-10

Online Survey Comments and Suggestions

Concerns regarding the zoning process and administrative procedures related to planning.

Concerns regarding adequate public input.

Limit clear cutting land for development.

Create natural parks with hiking and biking trails from unused land.

Manufactured home should be required to place an "apron" around its' base as is required in many other areas.

Improve the appearance of manufacture home subdivisions.

Community Preference Survey

To understand Western Harrison County citizens' vision for their community, the planning team conducted a Community Preference Survey (CPS) at the Town Hall meeting on September 4, 2007. Approximately 220 people participated.

A CPS consists of a series of different types of images of development. Participants in the Town Hall Meeting voted using a written survey form regarding whether the types of development depicted would be acceptable for their community. Participants rated images on a scale of one to five (one being very unacceptable, three being neutral, and five being very acceptable).

The Western Harrison County CPS measured preference for housing setback from the road, housing density, single-family housing style, elevation style, multi-family housing style, streetscapes, commercial development style, other development uses and walking/bike paths.

Community Preference Survey Results

Participants were asked to evaluate the level of acceptability for the following images, 1 being very unacceptable and 5 being very acceptable. The results of the survey are summarized below. Majority responses are italicized.

The results of the survey further emphasized the community's preference for rural residential development; the aerial photo with low density was found the most acceptable for Western Harrison County residents. The single-family brick ranch home was the most popular style in this category. The results of the survey indicated that the majority of citizens have a preference for large setbacks. Eighty percent of citizens found Figure B-8 to be acceptable or very acceptable. The community's preference for single-family development was evident from the results of the Multi-Family Residential section. The results of the survey highlighted the community's inclination towards small scale, traditional commercial development with limited on street parking. Citizens of Western Harrison County demonstrated a preference for separate use walking and biking paths. The majority of residents found

paths located on the shoulder of the road to be unacceptable in their community. Small businesses were found to be the most acceptable by the citizens of Western Harrison County. The community had varying opinions regarding large scale development.

Figure B-8. This single family home was found to be very acceptable to residents of Western Harrison County



Source: Matt Hinkle

Table B-2. Single Family Residential

Single Family Residential

	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
H1	5.77%	3.85%	20.67%	47.12%	22.60%
H2	23.08%	29.81%	23.08%	17.31%	6.73%
H3	50.00%	24.04%	14.90%	3.37%	5.29%
H4	3.85%	1.44%	18.75%	50.00%	24.52%
H5	21.15%	16.35%	21.63%	33.65%	6.73%
H6	33.65%	27.88%	14.42%	19.23%	3.85%

H1



H2



H3



H4



H5



H6



Table B-3. Multi-Family Residential

	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
MF1	24.52%	25.00%	19.23%	21.63%	9.62%
MF2	44.71%	28.37%	14.42%	9.13%	3.85%
MF3	34.62%	29.33%	21.63%	13.46%	2.40%
MF4	39.90%	22.60%	23.56%	12.98%	1.92%
MF5	31.73%	20.19%	21.15%	23.08%	4.33%
MF6	68.75%	12.02%	10.58%	5.77%	3.85%

MF1



MF2



MF3



MF4



MF5



MF6



Table B-4. Distance from the Road

	Distance from the Road				
	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
D1	3.37%	4.33%	13.46%	37.50%	43.27%
D2	2.88%	11.06%	28.85%	48.56%	9.13%
D3	29.81%	33.17%	23.08%	12.98%	2.88%
D4	60.58%	18.75%	9.13%	9.62%	2.40%

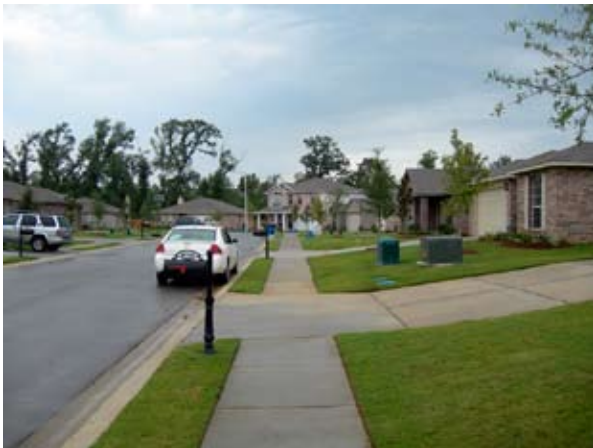
D1



D2



D3



D4



Table B-5. Streetscape

Streetscape	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
ST1	42.31%	16.35%	19.71%	16.35%	4.81%
ST2	14.90%	18.75%	30.29%	28.37%	6.25%
ST3	33.65%	24.04%	18.75%	14.42%	5.29%
ST4	26.44%	20.19%	24.04%	20.67%	7.21%

ST1



ST2



ST3



ST4



Table B-6. Walking and Bike Trails

Walking and Bike Trails					
	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
WB1	7.21%	4.81%	20.19%	37.98%	29.81%
WB2	8.17%	3.85%	9.62%	33.65%	45.19%
WB3	39.42%	16.35%	18.27%	14.90%	10.10%

WB1



WB2



WB3



Table B-7. Small Scale Commercial

Small Scale Commercial

	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
SC1	7.69%	6.25%	16.35%	50.00%	19.23%
SC2	13.94%	15.38%	24.52%	35.58%	8.17%
SC3	5.77%	16.35%	35.10%	33.17%	8.65%
SC4	12.98%	16.83%	24.04%	32.21%	12.50%

SC1



SC2



SC3



SC4



Table B-8. Large Scale Commercial

Large Scale Commercial					
	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
LC1	22.60%	16.83%	22.12%	29.33%	9.62%
LC2	22.12%	18.75%	22.60%	30.29%	6.73%
LC3	27.40%	16.35%	23.56%	23.08%	10.10%

LC1



LC2



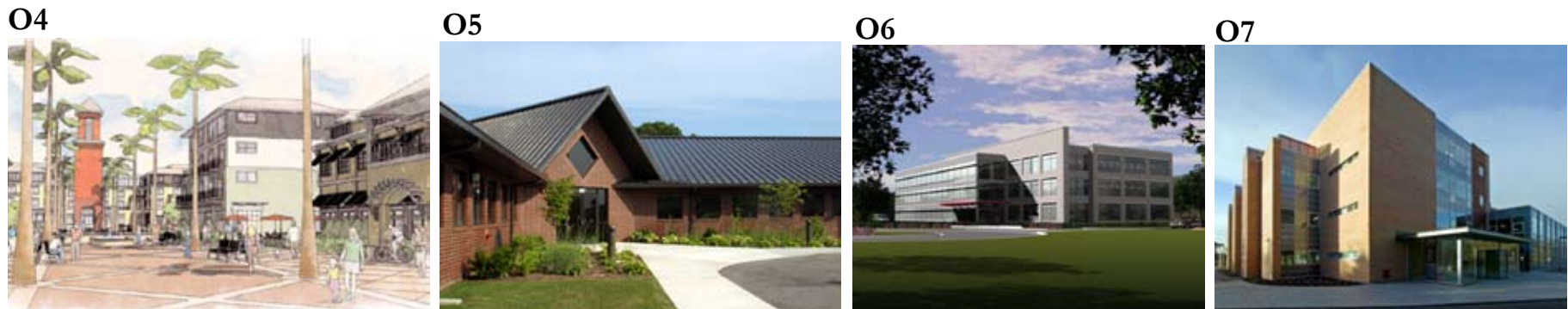
LC3



Table B-9. Other Development

Other Development

	Very Unacceptable	Unacceptable	Neutral	Acceptable	Very Acceptable
O1	23.08%	16.35%	28.37%	22.60%	7.21%
O2	21.15%	16.35%	30.29%	25.00%	7.21%
O3	26.92%	28.37%	28.85%	9.62%	4.81%
O4	28.85%	18.27%	18.75%	25.96%	8.17%
O5	16.83%	12.98%	27.40%	34.62%	7.69%
O6	27.40%	13.94%	22.12%	27.88%	8.65%
O7	34.62%	19.23%	17.31%	17.31%	10.10%



Planner's Day In School

During the first week of September, members of The Ohio State University planning team visited the 4th and 5th graders Lizana Elementary School. The Planner's Day in School allowed students to learn about community planning. One way to understand community planning is to talk about the fundamental questions planners seek to answer when developing a community plan: what do people like best about their community, what do they like least or would like to change about their community, and what are new things the community would like to have in the future?

When asked these questions, the children provided their own vision of the community. Most children said they liked living in a rural area, but didn't like living so far from shopping areas and parks. The most popular new amenity requested was a skate park.

The children also participated in a map exercise. The map depicted the area that surrounds their respective schools. During the exercise the children learned about elements of a map and where and why certain things are placed where in a community. The exercise also allowed the children to use their imagination about how their community could be. Students created imaginative neighborhoods that include popular shopping destinations, recreational areas, and houses. They want to preserve the farms in their community as well.

The ideas expressed in the classes were recorded by the team members and have been used in the development of the Harrison County community plans.

Figure B-9. Students at Lizana Elementary School requested increased recreation opportunities near their school.



Source: Chris Cunningham

Figure B-10. Students at Lizana Elementary School enjoyed planning amusement and skate parks near their community.



Source: Nathan Harber

Phone Comments

Citizens were invited to use a toll free 1-800 number and an online discussion forum to voice their input on this planning process. Many citizens called to confirm interest in the planning process, while others were more explicit in voicing their concerns. Common topics included zoning changes, infrastructure improvements, and the preservation of rural character.

Town Hall Meeting Small Group Discussions

Citizens of the Western Harrison County planning area were invited to discuss planning issues facing their community and Harrison County, Mississippi at the Town Hall Meeting through small group discussions. Participants envisioned what they wanted Western Harrison County to look like in the future and what amenities they wanted to add or expand on in the community.

Recurring themes included the need to maintain the rural character of the communities, increase recreational opportunities, provide for the senior population, increase citizen input in county decision making, and implementation of needed infrastructure and road improvements. Many groups emphasized a desire for low density development and single family homes. Preservation of and access to natural resources was also identified as an important issue for the planning area. A summary of responses is found below.

Northern Region Small Group Discussion

Positive Attributes

Rural character
Quiet
Low-Crime
Close community
Country life

Exclude, Limit or Prevent

Trailer Parks
Subdivisions
Section 8
Casinos
Limit manufactured homes to 3 acre lots

Protect

Privacy
Isolation
Land
Natural resources
Former gravel pit pond

Needs, Wants, or Changes

Community center
Fishing pond
Playground
Walking trail
Public notification of development and zoning
Family owned businesses
Horse Trails
Farming oriented businesses

Other Comments

Weyerhaeuser should sell to neighbors
Long term residents

Central Region Small Group Discussion

Positive Attributes

Far from Gulfport
 Wooded areas (2)
 Small Community (2)
 Rural Character (8)
 No Streetlights
 Open space
 Fair grounds
 Nature (2)
 No Traffic (2)
 Quiet (5)
 Low Taxes
 Good Schools
 Close community (3)
 Country Living
 Wetlands
 Large Parel's
 Privacy
 Wildlife
 Proximity to city
 Small local businesses
 Safe
 Fire Department
 Low density (2)
 Low Crime
 Changes
 Equestrian Friendly
 Neco's

Exclude, Limit or Prevent

Multi-family (4)
 FEMA trailers (2)
 Low Income housing (2)
 Subdivisions (2)
 Trailer Parks (5)
 Retail in specific zones only (2)
 Development along major roads only (4)
 Water service (4)
 Sewer Service (2)
 Limit placement of public safety substations
 Non-vehicular use of roads
 Inconsistent land-use
 Limit development to 3-5 acre lots (3)
 Traffic
 Over development of infrastructure
 Restrictive zoning
 Growth (5)
 Limit multi-family to specific areas
 Large scale commercial (2)
 Small lots
 Industry (2)
 Dirt pits
 Limit trailers to large lots
 Multiple units on single plot
 Additional subdivision approval before current developments built out and sold.

Protect

Single family Residential Character (2)
Wolf River (3)
Open space
Rural Character (5)
Wetlands (2)
Wooded Areas
Large setbacks
Green space
Landowner's rights
Heritage sites
Night sky
County Farm (2)
Natural resources
Little Biloxi River
Agricultural Character (2)
Low density covenants
Taxes
Quiet

Needs, Wants, or Changes

Multi-family on specific focused sites
Farmers market
Commercial in small designated areas only. (3)
Widen Roads (4)
Pave Roads (2)
Street Signs
Enforce zoning (2)
Traffic lights (4)
Walking/Bike lanes & trails (8)
Post Office (4)

Zip Code (2)
Street lights
Playgrounds (3)
AC/ heat in Gym
New gym
Sewer service (3)
Water service (5)
Caution lights
Restaurants (4)
Grocery Store (5)
Public notification of development (2)
Youth Activities (7)
Access to Wolf River (4)
Clean up Wolf River
Get rid of youth prison
Senior center expansion
Recreation (3)
Crossroads Center (3)
Increase access to Desoto
Consistent Zoning (2)
General Road Improvements (5)
More like Neco's (3)
Health code enforcement
Zoning for trailers & multi family
enforce leash laws
Upscale housing only
ATV (2)
Parks (4)
Community Center (5)
Larger School

Bank (2)
Commercial development
Quality affordable housing
Better spending of public money
Senior housing
Pharmacy
Horse Trails
Full time public safety (2)
Infrastructure improvements
Self-contained village style development
Access roads of highways
Baseball fields (3)
Unkempt property
Litter abatement
Sports complex (2)
Preservation areas
Small Retail (3)
New School
Public participation (2)
Country architecture
Infrastructure before development
Rotate the steering committee
Cable
Improve soccer fields

Other Comments

Change okay on main highways
Dislike narrow roads
Conservation development acceptable
Development should be like Tradition

Keep growth south of Landon Rd.
Keep it country (2)
Don't annex us!

Northeast Region Small Group Discussion

Positive Attributes

Large lot sizes
Rural character
Trees
Low Traffic
Quiet
Low density
Equestrian Friendly

Exclude, Limit or Prevent

Water service (2)
Sewer service (2)
Trailers (3)
Subdivisions
Large commercial buildings
Limit modular homes to large lots
Growth (2)
Widen 53
Limit parcels to 2+ acres
Low Income Housing
Multifamily homes
HUD homes
Industrial Uses

Protect

Natural character
Wolf River
County Farm
Cemeteries
Wetlands
Private property rights
Rural Character
Small farms
Fishing ponds
Zoning

Needs, Wants, or Changes

Community Center (2)
Senior Center (2)
Youth Activities (2)
Baseball Fields
Playgrounds
Walking/Biking Trails (2)
Age restricted town homes (2)
Public transportation (2)
Farmers market
Grocery store (2)
Modify modular/trailer exteriors
Better code
traffic signals (2)
public input
Widen roads
Dry Cleaners
Parks
Street lights

Southeast Region Small Group Discussion

Positive Attributes

Wooded areas
Farms
Close Community
Low Taxes
Horses
Historic homes
Minimal traffic
Rural character
Quiet
Low Density
Large lots
Nature

Exclude, Limit or Prevent

Trailers
Limit large scale commercial south of Landon Rd.
Population growth
Traffic
Subdivisions (2)
Low-Income housing (2)

Protect

High end single family development
Natural resources
Trees
Large Setbacks

Needs, Wants, or Changes

Tree ordinance
Outdoor mall
Buried utilities (2)
Hospital
Fire stations
Park
Community center
Street signs
Street lights (2)
Senior community
Walking/biking trails
General road improvements
Tennis courts
Grocery stores
Public transportation
Postal service
Hurricane shelters
Social services
Stricter development standards
Condos/ duplexes
Infrastructure before development
Market studies
Scatter subdivisions
Employment opportunities for locals
Deed restrictions to limit development
Paved roads
Enforce code
Increase public safety
Library
Easements for road widening (2)

Large retail
County farm facility improvements (2)

Southwest Region Small Group Discussion

Positive Attributes

Peace & Quiet
Minimal Development
Historic school
Current amenities
Rural Character
Churches
Schools

Exclude, Limit or Prevent

City sewer
Multi-Family (2)
Relaxed zoning
Trailer Parks (2)

Protect

Rural Character
Minimum Lot Size
Natural Resources
Churches
Schools
Old Cable Bridge

Needs, Wants, or Changes

City Water (2)
Clean roadways
Clean properties

Minimum Age for trailers
Enforce code (2)
Better law enforcement
10-15 Acre Lots
Youth Center
Walking Trail
Better infrastructure
Traffic control
Public notice of zoning hearings
Increased School Capacity
City Sewer
Access to River

Other

Keep it Country!
If you want the City, move to the city.

Key Issues

Zoning

Other or Mixed Regions Small Group Discussion

Positive Attributes

Quiet (2)
Rural Character (2)
Large Lots (2)
Gentle Covenants
Nonrestrictive Zoning
Close Community (2)
Low Traffic
Proximity to city
Wooded Areas

Exclude, Limit or Prevent

Limit commercial to larger roads
Limit trailers to large lots
Landfills (2)
High density
Limit Growth
Mixed use development
Influence of zoning administration
Subdivisions (2)
Trailers (2)
Restrictive covenants
Low Income Housing (3)
Town homes
Multifamily
Casinos
Dumps
Water Service

Protect

Wolf River (2)
Section 16 Land
Single Family Residential Character
Lakes
Natural Character
Environment
Rural Character

Needs, Wants, or Changes

Acreage requirements
Lessen taxes

- Sewer service (2)
- Water service (2)
- School Improvements
- Closer commercial opportunities
- Infrastructure before development
- Some small lots for affordability
- Affordable housing (2)
- Simplified zoning
- Senior center (2)
- Hurricane Shelter
- New School
- Traffic control
- Grocery Stores
- Representation on Steering Committee
- Street Lights
- Sports team
- Public access fishing
- Parks
- Ball Fields
- Small Businesses
- Walking/Biking Trails
- Track
- Health facility
- Medical Facility
- Public Safety services
- Public notification of zoning

Figure B-11. Wider roads and other general roadway improvements were a frequently mentioned concern among the citizens of Western Harrison County.



Source: Chris Cunningham

December Town Hall Meeting

On December 15th, 2007 a Town Hall Meeting for Western Harrison County residents was held at the Lizana Elementary School. This meeting provided an opportunity for the citizens of Western Harrison County to provide feedback on the draft community plan and assist in clarifying what the community wants for the future. More than 110 residents attended this Town Hall Meeting. Citizens participated in electronic voting and dot voting as described below.

Electronic Voting

Western Harrison County residents were asked practice questions and questions about their participation in the planning process. One of the opening practice questions asked residents who would win the National Championship on January 7th, everyone enjoyed a good laugh and nearly 60 percent of participants said Louisiana State University would win. Almost half of the participants at the Town Hall Meeting reported participating in the community planning process up to this point.

Participants at the Town Hall Meeting were asked to indicate whether they supported several of the policy suggestions in the draft plan developed in response to citizen comments. These policy options were developed to guide future growth in Western Harrison County and to support the six goals of the plan. As shown in the following tables, several of the policy options received overwhelming support; others did not receive the support of the community.

First, participants were asked whether they would support interchange enhancements at Highway 53 and State Route 601. Each element of the potential design was described and after a full discussion of the components, participants voted on whether they would support or oppose the concept. The results of the voting can be seen in Table 10. The majority of participants supported interchange enhancements at Highway 53 and State Route 601.

Participants were then asked to vote on the creation of equestrian bridle trails within Western Harrison County. After aspects of the equestrian trails were presented, including potential locations, sources of land and funding, and management options, participants voted to indicate their preference. With nearly three quarters of the vote, the majority of participants supported the creation of equestrian bridle trails within Western Harrison County.

The creation of walking and biking pathways in specific locations was voted on next at the Town Hall Meeting. Participants were asked whether they would support such pathways along current Wolf River Conservation Easements, along public right of ways and utility easements, as well as connecting walking tracks which could be created at local parks. The majority of residents (eighty-four percent) voted in support of walking and biking pathways as proposed.

Next, Western Harrison County residents Robert Tannen and Jeanne Nathan presented on the concept and importance of conservation in Western Harrison County. They addressed issues regarding the conservation of the Wolf River, as well as emphasizing many of the recommendations and suggested land use patterns contained within the plan. His presentation underscored the significance of land planning and reiterated many of the concerns commonly expressed by the citizens of Western Harrison County. Participants were asked whether they would support river basin planning as presented; over eighty percent showed their support.

The use of conservation subdivisions in certain areas of Western Harrison County was the next policy issue discussed. The differences between traditional subdivisions and conservation subdivisions were explained. A majority of participants indicated their support (fifty-five percent) through electronic voting, however there were a range of opinions.

Next, citizens voted on whether they would support an alternative to the current A-1 Agricultural Zoning District. This proposal

was to make it easier for citizens to divide their property to allow a family member to live on their land. This zoning would allow a maximum of one new home built per 10 acres of original parcel, but would maintain a minimum lot size of one acre. After lengthy and lively discussion, participants were asked to vote on the alternative discussed. Opinions ranged, however a majority supported the proposed alternative.

Participants were then asked to vote on the use of water way buffers in Western Harrison County. After aspects of the buffers were presented, including potential locations and the purpose of such buffers, participants voted to indicate their preference. A majority of participants either did not support, were not sure or had no opinion regarding the use of waterway buffers in Western Harrison County.

Participants also voted on whether they would support a scenic corridor ordinance. Potential locations were discussed as well as characteristics of the proposal. Seventy percent of participants supported this policy option. Next the discussion moved to a potential Employment Center near Interstate Highway 10. After details regarding

the potential site were presented, an overwhelming majority voiced their support for an employment center along Interstate Highway 10, south of Cunningham Road.

Finally, the development of the Landon Community was voted on. Participants were asked to voice their opinions regarding the extension of commercial uses along Landon Road westward into the community. Opinions varied, however a majority did support the expansion of commercial uses in the area.

After a brief break, the community reviewed potential design ideas for key locations and intersections in the community. These included the County Farm, and the development of community nodes at the following intersections: State Highway 53 and County Farm Road; State Highway 53 and Lizana School Road; Cable Bridge Road and Vidalia Road; and, South County Farm Road and Interstate Highway 10. The development of the Concept Plan and the Sector Map was also discussed. This was followed by a break where citizens were invited to provide comments on the design ideas and sector map.

Table B-10: Town Hall Meeting Electronic Voting Results

Policy Voting Issue	Support	Oppose	Not Sure / No Opinion	Totals
Would you support interchange enhancements at State Highway 53 and State Route 601?	75.61%	13.41%	10.98%	100%
Would you support the creation of equestrian bridle trails within Western Harrison County?	73.91%	8.70%	17.39%	100%
Would you support the creation of walking and biking pathways in the locations discussed?	84.09%	5.68%	10.23%	100%
Would you support River Basin Planning?	81.61%	9.20%	9.20%	100%
Would you support the use of conservation subdivisions in certain areas of Western Harrison County?	55.06%	29.21%	15.73%	100%
Would you support the use of alternatives discussed to the current A-1 Zoning in Western Harrison County?	51.65%	35.16%	13.19%	100%
Would you support the use of waterway buffers in Western Harrison County?	41.76%	45.05%	13.19%	100%
Would you support the use of a scenic corridor ordinance along certain roadways in Western Harrison County?	70.24%	23.81%	5.95%	100%
Would you support an employment center along Interstate Highway 10, south of Cunningham Road?	80.23%	11.63%	8.14%	100%
Would you support the expansion discussed for the Landon community?	55.38%	27.69%	16.92%	100%

Dot Voting

Once the community had voiced their opinion on the potential policy options for the plan, they were asked to prioritize the strategies that they believe are most important to achieve and indicate any that they do not support. Participants were provided with green dots which they were asked to place next to the strategies that they believe are the most important to achieve. They were also provided with red dots which they could vote for any strategies that they did not support. Some participants placed multiple dots on particular strategies emphasizing their strong support or opposition. This is not a scientific poll, but is designed to identify issues the community views as especially critical. The feedback from the dot voting was used to refine the strategies that appear in the community plan. The dot voting results are shown in Table B-11.

Figure B-12. Citizens participated in electronic voting and dot voting in the December Town Hall Meeting



Source: Nathan Harber

Table B-11. Dot Voting Results

Goal 1	ENSURE THAT WESTERN HARRISON COUNTY PREPARES FOR GROWTH.	Support	Support (%)	Oppose	Oppose (%)	Total Votes
Strategy A	Use the Community Plan as a guide for future growth and development.	26	84%	5	16%	31
Strategy B	Promote growth as specified in the designated zones of the Sector Map and in the manner described in the Concept Plan.	20	54%	17	46%	37

Goal 2	MAINTAIN THE RURAL CHARACTER OF THE COMMUNITY	Support	Support (%)	Oppose	Oppose (%)	Total Votes
Strategy A	Promote low density uses in designated rural areas.	29	91%	3	9%	32
Strategy B	Preserve the quiet residential areas and scenic nature of appropriate portions of Western Harrison County.	35	100%	0	0%	35
Strategy C	Encourage the preservation of open space within new residential developments.	25	89%	3	11%	28
Strategy D	Restore the connections between Western Harrison County and its heritage.	30	100%	0	0%	30
Goal 3	ENHANCE AND PRESERVE THE ENVIRONMENT	Support	Support (%)	Oppose	Oppose (%)	Total Votes
Strategy A	Protect the natural features of Western Harrison County.	39	100%	0	0%	39
Strategy B	Encourage landowners to plant or restore storm-resistant, native species.	30	79%	8	21%	38
Strategy C	Encourage the expansion of the greenway along the Wolf River to establish environmental preservation and recreational amenities.	39	76%	12	24%	51
Strategy D	Encourage the remediation of previous industrial sites.	34	100%	0	0%	34
Strategy E	Protect the public from environmental hazards of septic system failures.	35	95%	2	5%	37
Goal 4	DEVELOP AND EXPAND RECREATIONAL OPPORTUNITIES.	Support	Support (%)	Oppose	Oppose (%)	Total Votes
Strategy A	Create, maintain, and expand public facilities and parks.	40	98%	1	2%	41
Strategy B	Promote the development of recreational trail connections.	40	98%	1	2%	41
Goal 5	SUPPORT A VARIETY OF ECONOMIC ACTIVITY	Support	Support (%)	Oppose	Oppose (%)	Total Votes
Strategy A	Promote a strong tax base and economic vitality.	26	58%	19	42%	45
Goal 6	CREATE DIVERSE, QUALITY HOUSING OPTIONS	Support	Support (%)	Oppose	Oppose (%)	Total Votes
Strategy A	Encourage the development of a variety of quality housing that is affordable to a diverse range of incomes.	24	57%	18	43%	42

Appendix C. POTENTIAL GRANT SOURCES

Economic Development				
	Funding Agency	Name of Funding Program	Description	Website
ED-1	Foundation for the Mid South	Various	Supports programs in the areas of education, economic development, and families and children.	http://www.fndmid-south.org/grants_funding.htm
ED-2	US Department of Agriculture	Rural Community Development Initiative	Provides grant funding for technical assistance in the areas of housing, community facilities, and community and economic development.	http://www.rurdev.usda.gov/rhs/rcdi/index.htm
ED-3	US Economic Development Administration	Public Works and Economic Adjustment Program	This program assists distressed areas with grants to revitalize, expand, and upgrade physical infrastructure to attract new industry, encourage expansion and generate and retail private sector jobs and investment.	http://www.eda.gov
ED-4	US Environmental Protection Agency	Brownfields Assessment, Revolving Loan Fund, and Cleanup Grants	Provides federal financial assistance for brownfield revitalization, including grants for assessment and cleanup	http://www.epa.gov/brownfields
ED-5	US Environmental Protection Agency	Brownfields Job Training Grants	Provides environmental job training projects that will facilitate the assessment, remediation, or preparation of brownfield sites. Applicants must propose to serve a community that currently receives, or has received, financial assistance from EPA for brownfields assessment, revolving loan fund or cleanup competitive grants.	http://www.epa.gov/brownfields
ED-6	US Department of Housing and Urban Development (HUD)	Brownfield Economic Development Initiative (BEDI)	Help local governments redevelop brownfields.	http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm

ED-7	The Mississippi Department of Environmental Quality's (MDEQ)	Targeted Brownfields Assessment (TBA) Program	Helps cities, counties, and eligible non-profits minimize the uncertainties of contamination often associated with brownfields. TBA supplements and works with other efforts under MDEQ Brownfields Program to promote cleanup and redevelopment of contaminated sites in Mississippi.	http://www.brownfields.ms
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Community Development				
	Funding Agency	Name of Funding Program	Description	Website
CD-1	Grantmakers in Aging	Hurricane Fund for the Elderly (HFE)	Grantmakers In Aging created the Hurricane Fund for the Elderly (HFE) to support qualifying nonprofit organizations working to re-establish the older adult service system in areas affected by the 2005 hurricanes.	http://www.giaging.org/programs/index.asp?id=133
CD-2	Weyerhaeuser Company Foundation	Weyerhaeuser Company Foundation	The mission of the Weyerhaeuser Company Foundation is to improve the quality of life in communities where it operates and to increase understanding of the importance and sustainability of forests and the products they provide to meet people's needs.	http://www.weyerhaeuser.com/citizenship/philanthropy/weyerfoundation.asp
CD-3	Mississippi Home Corporation (MHC)	Various	MHC's mission is to enhance Mississippi's long-term economic viability by financing safe, decent, affordable housing and helping working families build wealth.	http://www.mshomecorp.com/about%20mhc/about%20mhc.htm
CD-4	Assistance to Firefighters Grant Program (AFGP), US Fire Administration	Various	The programs are designed to assist local fire departments and other organizations in protecting citizens and firefighters against the effects of fire and fire-related incidents.	http://www.usfa.dhs.gov/fireservice/grants/afgp/index.shtm

Historic Preservation				
	Funding Agency	Name of Funding Program	Description	Website
HP-1	Mississippi Department of Archives and History	Certified Local Government Grant Program	Use as annual matching grants to undertake preservation projects of importance to the community: must be a county government or preservation organization	http://www.mdah.state.ms.us/clgprogram.php
HP-2	Mississippi Department of Archives and History	Community Heritage Preservation	Provide funding for a variety of historic preservation activities.	http://www.mdah.state.ms.us/
HP-3	National Trust for Historic Preservation	Various	The National Trust provides leadership, education, advocacy, and resources to save America's Historic Places and revitalize our communities.	http://www.nationaltrust.org/funding/nonprofit.html

Housing				
	Funding Agency	Name of Funding Program	Description	Website
H-1	Federal Emergency Management Agency (FEMA)	Flood Mitigation Assistance Program	Provides funding to assist communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings.	http://www.fema.gov/library/viewRecord.do?id=3027
H-2	FEMA	Increased Cost of Compliance Program	This program helps homeowners cover the cost of meeting flood hazard mitigation requirements for all new and renewed Standard Flood Insurance Policies. Flood insurance policyholders in Special Flood Hazard Areas, can get up to \$30,000 to help pay the cost	http://www.fema.gov/library/viewRecord.do?id=1477
H-3	US Department of Agriculture	Mutual Self-Help Loans, Housing Repair and Rehabilitation Loan, Rural Housing Guaranteed Loans	Provides loans for homeowners and for communities to build and repair homes and provide water and sewer service.	http://www.rurdev.usda.gov/rhs/sfh/brief_repairgrant.htm

C-191 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

H-4	US Treasury	Low Income Housing Tax Credits	Provides tax credits for the development of housing development.	http://www.cd-fifund.gov/programs/programs.asp?programID=5
H-5	Mississippi Home Corporation (MHC)	Habitat Loan Purchase Program	Provides a revolving funding source for the Mississippi based affiliates of Habitat for Humanity	http://www.mshomecorp.com/homebuyers/habitat%20loan%20purchase.htm
H-6	MHC	Mortgage Revenue Bond	Offers borrowers a competitive mortgage loan rate and a cash advance to assist with allowable closing costs and downpayment.	http://www.mshomecorp.com/homebuyers/mortgage%20revenue%20bond.htm
H-7	MHC	Down Payment Assistance Program	Provides downpayment assistance for low and moderate income first time homebuyers purchasing units below \$155,000. Up to 3% of the loan value available.	http://www.mshomecorp.com/homebuyers/
H-8	MHC	Home of Your Own Program	Provides assistance to persons with disabilities and their families in locating counseling, supports, and financial assistance which may allow them to purchase and maintain their own homes.	http://www.mshomecorp.com/homebuyers/hoyo%20project.htm
H-9	MHC	Mortgage Credit Certificate Program	Reduces federal income taxes allowing borrowers to qualify for larger mortgages. Income and Home Purchase Price limits apply.	http://www.mshomecorp.com/homebuyers/mortgage%20credit%20certificate.htm
H-10	MHC	Development Support Services (In-Kind Donation)	A housing development work group to initiate and support housing development projects using MHC's loan products. The goal of the work group is to encourage more builders to meet the needs of the affordable market segment.	http://www.mshomecorp.com/development/development.htm

C-192 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

H-11	MHC	Community Housing Development Organization (CHDO) Funds	Provides technical assistance to CHDOs. MHC received two contracts total over \$450,000 from the U.S. Department of Housing and Urban Development (HUD) to help train and construct operational seed funds to enable CHDOs to maintain, rehabilitate, and construct housing for low and moderate income families.	http://www.mshomecorp.com/development/CHDOs.htm
H-12	Financial Institutions Housing Opportunity Pool (“FIHOP”)	Financial Institutions Housing Opportunity Pool (“FIHOP”)	Fifteen (15) year fixed rate permanent loan funds for tax credit developers whose developments are completing construction and are being placed in service. These loans will pay off construction loans and have amortization periods of 20 - 30 years. Loan Size \$250,000.00 to \$5,000,000.00. To assist in the construction of residential housing in Mississippi for persons of low to moderate income.	http://www.mshomecorp.com/development/FIHOP.htm
H-13	MHC	The Mississippi Affordable Housing Development Fund (Revolving Loan Fund)	Construction loans for new owner-occupied or rental housing. Pre-development, site control, site development. Rehabilitation loans for owner-occupied and rental properties. Nonprofit Corporations, Partnerships, For-Profit Corporations, Public Housing Authorities, Planning and Development Districts, and Limited Equity Cooperatives. Individuals are not eligible.	http://www.mshomecorp.com/development/MAHDF.htm
H-14	MHC	HB530 Construction Loan Fund	Provides financing for the construction of low-to-moderate income Single-Family Eligible Residential Housing Units within the state of Mississippi.	http://www.mshomecorp.com/development/hb530.htm

H-15	Mississippi Development Authority	Small Rental Program	Provides loans to owners of small rental properties on the Mississippi Gulf Coast in order to assure these property owners provide affordable rental housing in the counties most affected by Hurricane Katrina. \$262,500,000 has been allocated for this program, which will help in the repair, rehabilitation, and reconstruction of the affordable housing stock in the areas most impacted by the storm.	http://www.mississippi.org/content.aspx?url=/page/3644&
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Infrastructure Improvements				
	Funding Agency	Name of Funding Program	Description	Website
II-1	Mississippi Development Authority	Various	Provides loans for the establishment and expansion of capital improvements, such as water and sewer.	http://www.mississippi.org
II-2	Mississippi Department of Environmental Quality	Drinking Water Systems Improvements Revolving Fund Loan Program	Provides loan funds to public agencies to improve drinking water systems.	http://www.deq.state.ms.us
II-3	Mississippi Department of Transportation	Safe Routes to School Program	The Program makes funding available for a wide variety of programs and projects, from building safer street crossings to establishing programs that encourage children and their parents to walk and bicycle safely to school.	http://safety.fhwa.dot.gov/saferoutes/overview.htm

Agriculture				
	Funding Agency	Name of Funding Program	Description	Website
A-1	US Department of Agriculture	Direct Farm Ownership and Operating Loans	Farm ownership loans may be used for acquiring or enlarging a farm or ranch, making capital improvements, paying closing costs, and paying for soil and water conservation improvements, including sustainable agriculture practices and systems. Operation Loans may be used for all operating and educational expenses associated with starting a farm. A portion of the funds are reserved for minorities and beginning farmers.	www.attra.ncat.org/guide/a_m/direct_farm.html
A-2	US Department of Agriculture Farm Service Agency	Direct Farm Ownership Loan	The program provides funding for the purchase of land, construction of buildings or other improvements, and soil and water conservation. The loan is for a maximum of \$200,000 for up to 40 years.	www.fsa.usda.gov/Internet/FSA_File/farmloanchart07.pdf

Natural Resources				
	Funding Agency	Name of Funding Program	Description	Website
NR-1	Mississippi Audubon Society	Birdhouse clinics	The Society sponsors free clinics to help families build bird houses to help protect the bird population.	http://www.msaudubon.org/
NR-2	Mississippi Department of Marine Resources		This program provides funds for the acquisition, protection, and management of coastal wetland habitats.	http://www.dmr.state.ms.us/
NR-3	Mississippi Department of Marine Resources	Aquatic Resources Trust Fund	This fund allocates at least 15 percent of the revenues collected from the taxes on the sale of fishing equipment, pleasure boats, and motorboat fuel sales to the creation and expansion of boating access.	

C-195 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

NR-4	Mississippi Department of Marine Resources	Tidelands Trust Fund	This program provides funds for tidelands management, such as conservation, reclamation, preservation, acquisition, education.	http://www.dmr.state.ms.us/tidelands/tidelands.htm
NR-5	Mississippi Department of Wildlife, Fisheries, and Parks	Mississippi Scenic Streams Stewardship Program	This program promotes the voluntary conservation efforts along Mississippi rivers and streams.	http://www.mdwfp.com/level2/scenic-streams/introduction.asp
NR-6	Mississippi Department of Wildlife, Fisheries, and Parks	Land and Water Conservation Fund	This program provides funds for the development of recreational sites and facilities. Funding for the program is provided largely from Outer Continental Shelf mineral receipts, with additional income from the Motorboat Fuels Tax, recreation user fees, and through the sales of federal surplus property.	http://www.mdwfp.com/level1/lwcf.asp
NR-7	Mississippi Forestry Commission	Urban and Community Forestry Assistance Challenge Grant	Provides funds for the development of community forestry programs.	http://www.mfc.state.ms.us/urban/uf3.html
NR-8	National Arbor Day Foundation	National Arbor Day Tree Planting Program	This program provides ten flowering or oak trees six to 12 inches tall for members.	http://www.nationalarborday.org
NR-9	National Tree Trust	Seeds and Roots Grant Programs	Provides funding for the development and operation of community forestry programs.	http://www.nationaltreetrust.org
NR-10	Mississippi Forestry Commission	Mississippi Institute of Forest Inventory	Provides forest resource inventory information	
NR-11	US Corp of Engineers	Aquatic Ecosystem Restoration	This program provides funds to restore and protect aquatic ecosystems if the project will improve the environment.	http://www.usace.army.mil/
NR-12	US Department of Agriculture, Natural Resources Conservation Service	Resource Conservation and Development	To encourage and improve the capability of State and local units of government and local nonprofit organizations in rural areas to plan, develop and carry out programs for resource conservation and development.	http://ric.nal.usda.gov/nal_web/ric/ffd.php?rec_

C-196 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

NR-13	USDA Natural Resources Conservation Service	Conservation Technical Assistance	Provide conservation technical assistance to individuals or groups of decision makers, communities, conservation districts, units of State and local government, tribes, and others to voluntarily conserve, maintain, and improve natural resources.	http://www.nrcs.usda.gov/programs/cta/
NR-14	North American Wetlands Conservation Fund	Wetlands Conservation	To provide grant funds for wetlands conservation projects in the United States, Canada, and Mexico.	http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm
NR-15	US Department of the Interior	Landowner Incentive	To establish or supplement existing landowner incentive programs that provide technical or financial assistance including habitat protection and restoration, to private landowners for the protection and management of habitat to benefit Federally listed, proposed, or candidate species, or other at-risk species on private lands; and to encourage States to enhance private landowner conservation by providing these benefits to private landowners in an efficient manner.	http://federalaid.fws.gov/lip/lipguidelines.html
NR-16	US Department of Fish and Wildlife	Landowner Incentive Program	This program establishes or supplements State landowner incentive programs that protect and restore habitats on private lands, to benefit species identified in the State's Comprehensive Wildlife Conservation Strategy (State Wildlife Action Plan) or classified as Special Concern by the State, or Federally listed, proposed, or candidate species or other species determined to be at-risk, and provides technical and financial assistance to private landowners for habitat protection and restoration.	http://federalasst.fws.gov/lip/lip.html

C-197 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

NR-17	USDA Forest Service	Forestland Enhancement Program	<p>With respect to the sustainable management of nonindustrial private forest and other rural lands suitable for sustainable forest management; provide technical and educational assistance; provide cost share for practices such as management plan development, tree planting, forest stand improvement, agroforestry implementation, water quality improvement and watershed protection, fish and wildlife habitat improvement, forest health protection, invasive species control, wildfire and catastrophic risk reduction, wildfire and catastrophic risk rehabilitation, and special practices approved within the State and by the FS Responsible Official.</p>	<p>http://www.fs.fed.us/spf/coop/programs/loa/flep.shtml</p>
NR-18	USDA, Natural Resource Conservation Service	Wildlife Habitat Incentive Program (WHIP)	<p>The Wildlife Habitat Incentives Program (WHIP) is a voluntary program for people who want to develop and improve wildlife habitat primarily on private land. Through WHIP USDA's Natural Resources Conservation Service provides both technical assistance and up to 75 percent cost-share assistance to establish and improve fish and wildlife habitat. WHIP agreements between NRCS and the participant generally last from 5 to 10 years from the date the agreement is signed.</p>	<p>http://www.nrcs.usda.gov/programs/whip/</p>

Parks and Recreation				
	Funding Agency	Name of Funding Program	Description	Website
PR-1	Conservation Fund		This program provides funds to plan greenways.	http://www.conserva-tionfund.org/
PR-2	Federal Highway Administration	Recreational Trails Program	To provide funds to the States to develop and maintain recreational trails and trail-related facilities for both nonmotorized and motorized recreational trail uses.	http://www.fhwa.dot.gov/environment/rec-trails/rtp9908_toc.htm
PR-3	Funding Factory	Funding Factory	This is a fundraising program that provides funds for playground and other recreational equipment through community recycling.	http://fundingfactory.com/
PR-4	Mississippi Department of Marine Resources	Boat Access Program	Provides funds for the development of boat access facilities.	http://www.dmr.state.ms.us/sport-fish/Boat_Access.htm
PR-5	Mississippi Department of Marine Resources	Tidelands Trust Fund	This program provides funds for enhancement of public access to the public trust tidelands or public improvement projects as they relate to those lands.	http://www.dmr.state.ms.us/tidelands/tide-lands.htm
PR-6	US National Park Service	Outdoor Recreation-Acquisition, Development and Planning	To provide financial assistance to the States and their political subdivisions for the preparation of Statewide Comprehensive Outdoor Recreation Plans (SCORPs) and acquisition and development of outdoor recreation areas and facilities for the general public, to meet current and future needs.	http://www.nps.gov/nrcr/programs/lwcf/
PR-7	Mississippi Department of Wildlife, Fishery, and Parks	Recreational Trails Program	Provide assistance for maintenance and restoration of trail systems, development and rehabilitation of trailside and trailhead facilities and linkages, and creation of new trails. Can be used for pedestrian and equine trails.	www.mdwfp.com/level1/rtp.asp

C-199 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

PR-8	US National Park Service	Rivers, Trails, and Conservation Assistance Program (RTCA)	RTCA staff provide technical assistance to community groups and local, State, and federal government agencies so they can conserve rivers, preserve open space, and develop trails and greenways.	http://www.nps.gov/nrcr/programs/rtca/
PR-9	Tony Hawk Foundation		The primary mission of the Tony Hawk Foundation is to promote high-quality, public skateparks in low-income areas throughout the United States.	http://www.tonyhawk-foundation.org/grant_application.asp
PR-10	Mississippi Department of Wildlife, Fisheries and Parks, Outdoor	Land and Water Conservation Fund	Funds the acquisition and development of land for recreational development, such as sports fields and picnic facilities.	http://www.mdwfp.com/level1/lwcf.asp

Appendix D. *Principles Of New Urbanism, Conservation Development, and Land Suitability Analysis*

Principles of New Urbanism

The Charter of the New Urbanism forms the basis of the recommendations from the Mississippi Renewal Forum. This plan integrates many of the principles identified in the portion of the Charter pertaining to the regional scale.^a The following principles, from the Charter, should guide public policy, development, and design in the Western planning area:

1. Metropolitan regions are finite places with geographic boundaries derived from topography, watersheds, coastlines, farmlands, regional parks, and river basins. The metropolis is made of multiple centers that are cities, towns, and villages, each with its own identifiable center and edges.
2. The metropolitan region is a fundamental economic unit of the contemporary world. Governmental cooperation, public policy, physical planning, and economic strategies must reflect this new reality.
3. The metropolis has a necessary and fragile relationship to its agrarian hinterland and natural landscapes. The relationship is environmental, economic, and cultural. Farmland and nature are as important to the metropolis as the garden is to the house.
4. Development patterns should not blur or eradicate the edges of the metropolis. Infill development within existing urban areas conserves environmental resources, economic investment, and social fabric while reclaiming marginal and abandoned areas. Metropolitan regions should develop strategies to encourage such infill development over peripheral expansion.
5. Where appropriate, new development contiguous to urban boundaries should be organized as neighborhoods and districts and integrated with the existing urban pattern. Noncontiguous development should be organized as towns and villages with their own urban edges and planned for a jobs/housing balance, not as bedroom suburbs.
6. The development and redevelopment of towns and cities should respect historical patterns, precedents, and boundaries.
7. Cities and towns should bring into proximity a broad spectrum of public and private uses to support a regional economy that benefits people of all incomes. Affordable housing should be distributed throughout the region to match job opportunities and to avoid concentrations of poverty.
8. The physical organization of the region should be supported by a framework of transportation alternatives. Transit, pedestrian, and bicycle systems should maximize access and mobility throughout

the region while reducing dependence upon the automobile.

9. Revenues and resources should be shared more cooperatively among the municipalities and centers within regions to avoid destructive competition for tax base and to promote rational coordination of transportation, recreation, public services, housing, and community institutions.

SmartCode and Sector Map

The SmartCode is a model development code that uses progressive planning techniques. As an outgrowth of the Mississippi Renewal Forum, planners modified the SmartCode to meet the needs of the Mississippi Gulf Coast. This plan builds on the work of the Renewal Forum, including the SmartCode.

The SmartCode allows for planning at multiple scales, from the regional context of the countryside down to the smaller scale of local neighborhoods. At the broad countywide scale, the code recommends dividing the landscape into different sectors. The sector map is a tool derived from the Mississippi Renewal Forum and the SmartCode. These sectors provide for a range of development patterns, from the preservation of open space and rural areas deemed unsuitable for development to the encouragement of growth in more appropriate areas (see Figure D-2). Each sector can then be further subdivided into transects, which more specifically identify the appropriate styles and densities of development for different locations within the sector.

A Harrison County Sector Map is under development. When complete, it will create a common language and vision for the future development of all communities in the county. The County will ultimately determine how best to implement the development regulations contained within the SmartCode.

The sector map for the Western planning area (see Map 2-2 on page 2-46 identifies a desirable outcome for the future of the community

in terms of SmartCode principles and definitions. Application of the SmartCode along these sectors can guide development in Western Harrison County. The sectors do not change the underlying zoning district of any property. However, if a property owner seeks to rezone their property it should be consistent with the sectors identified in Chapter 2 of this plan.

The SmartCode identifies six sectors, ranging from preserved open space to urban development, as shown in Figure D-2. For Western Harrison County, five of the six sectors apply, along with Special Districts. Each of the sector designations is explained in the following paragraphs. The model Mississippi SmartCode provides a detailed explanation of how transects are used within each sector.

The (O-1) PRESERVED OPEN SECTOR consists of open space already protected from development in perpetuity. The Preserved Open Sector (O-1) includes undeveloped areas under environmental protection by law or standard, as well as land acquired for conservation through purchase or land protected from development by easement. Areas designated Preserved Open Sector (O-1) are mapped using the criteria listed below.

- a. Surface Water Bodies
- b. Protected Wetlands
- c. Protected Habitat
- d. Riparian Corridors
- e. Purchased Open Space
- f. Conservation Easements
- g. Residual to Cluster Open Space

The (O-2) RESERVED OPEN SECTOR is composed of undeveloped parcels larger than 20 acres outside of incorporated cities and wastewater service areas that are either vacant or in agricultural/

forestry use. It includes open space that should be but is not yet protected from development. The areas designated Reserved Open Sector (O-2) are mapped using the criteria listed below.

- a. Flood Plain
- b. Steep Slopes
- c. Open Space to be Acquired
- d. Corridors to be Acquired
- e. Buffers to be Acquired
- f. Legacy Woodland
- g. Legacy Farmland
- h. Legacy Viewsheds
- i. Land outside the Western Harrison County Sewer Service District

The (G-1) RESTRICTED GROWTH SECTOR consists of areas of low-density, rural development, such as is typical in Western Harrison County. This sector includes crossroads and clustered residences with parcel sizes ranging from small one-half-acre lots within the crossroads to lots of up to 20 acres surrounding the crossroads. Crossroads may also have a small amount of retail and some community facilities located at main intersections. Areas within the Restricted Growth Sector (G-1) may have value as open space, but are subject to development based on the existing zoning that enables such development. This sector also includes conservation development, where 50 percent or more of a development is reserved as open space. These areas may be outside the sewer service areas.

The (G-2) CONTROLLED GROWTH SECTOR consists of locations where development is encouraged, as it can support mixed-use by virtue of proximity to a thoroughfare. Densities may be up to three units per acre.

The (G-3) INTENDED GROWTH SECTOR consists of locations along high-capacity thoroughfares that can support substantial commercial development. Densities may be greater than three units per acre.

The **(SD) SPECIAL DISTRICT** designation covers non-residentially developed areas that are isolated from residential neighborhoods.

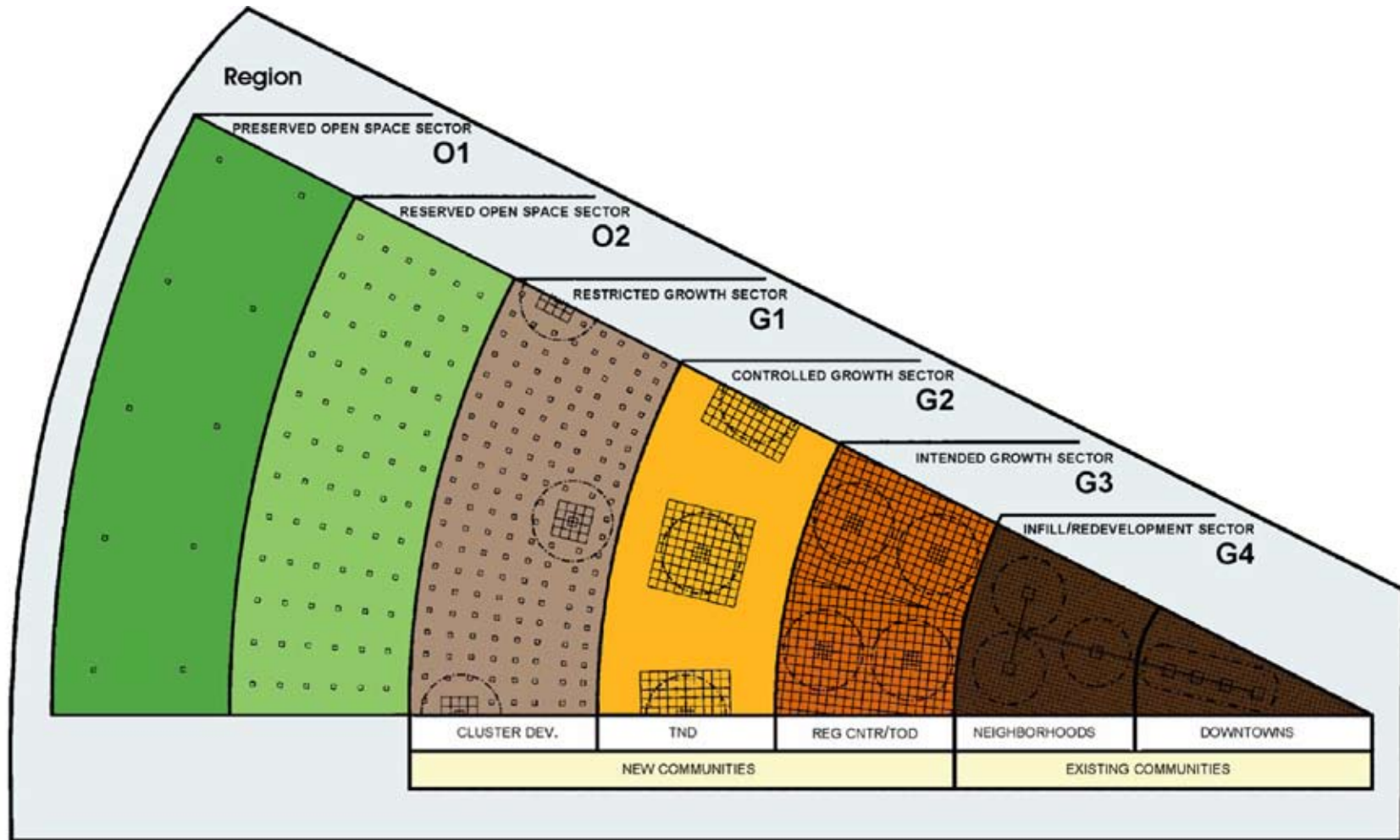
Conservation Development

Figure D-1. The Lyman State Fish Hatchery is designated as an O-1 District in the Sector Map.



Source: Chris Cunningham

Figure D-2. The sector mapping system identifies and allows communities to focus growth in appropriate areas while preserving rural land.



Source: Placemakers

Conservation development is committed to maximizing the quality of the built environment while minimizing the negative impacts to the natural environment. It often occurs through subdivision of large parcels, where environmental features are protected in perpetuity to preserve open space, farmland, wildlife habitat and the rural character of communities while allowing for new homes and businesses to enter the community.

Conservation developments, which are typically found in rural communities facing pressure of residential development, are defined as projects that dedicate a minimum of 50 percent of the total parcel as common open space. To achieve large open spaces, the use of local ordinances determines the development standards and applies clustered, compact lots to allow the same development as would have been in a conventional subdivision. This permits the maximum number of residences under current zoning and subdivision regulations while establishing conservation areas of open space.

The open space is then subject to a variety of management and ownership options. The original landowner can retain ownership of the land and continue to use it as a farm, for example. In this case, the open space is often times dedicated for agriculture use permanently. Another option is ownership through a homeowner's association, who could manage the open space by collecting fees from the homeowners for maintenance costs. The land could be donated to conservation organizations, such as land trusts, who could manage the property for conservation purposes or outdoor recreation. Lastly, the local government could take possession of the land and use the property for conservation or public recreational facilities.

It is important to note that conservation development can be a great asset to communities if planned appropriately, but it can be spoiled if the developments are isolated and the proper technical assistance is not required. Conservation developments are created by first identifying the areas where conservation is desired. These would be areas with sensitive natural features, such as, but not limited to, wetlands, floodplain, vernal pools, and steep slopes, or areas where protection is desired by the community, such as farmland or forestland. Secondly, the open space of the development is designed around the features where protection is

desired. Next, siting of the houses is oriented to take full advantage of the open spaces, creating scenic vistas and easy access to open space that increases the salability of the homes and community. Lastly, the streets, lots, and infrastructure are designed around the homes and avoid the conservation areas.

Conservation development is used as a guiding principle of this plan. Western Harrison County has a number of environmental features that the community wishes to preserve. Conservation design principles can accommodate population growth while preserving the environmentally sensitive land and protecting the rural character of the community.

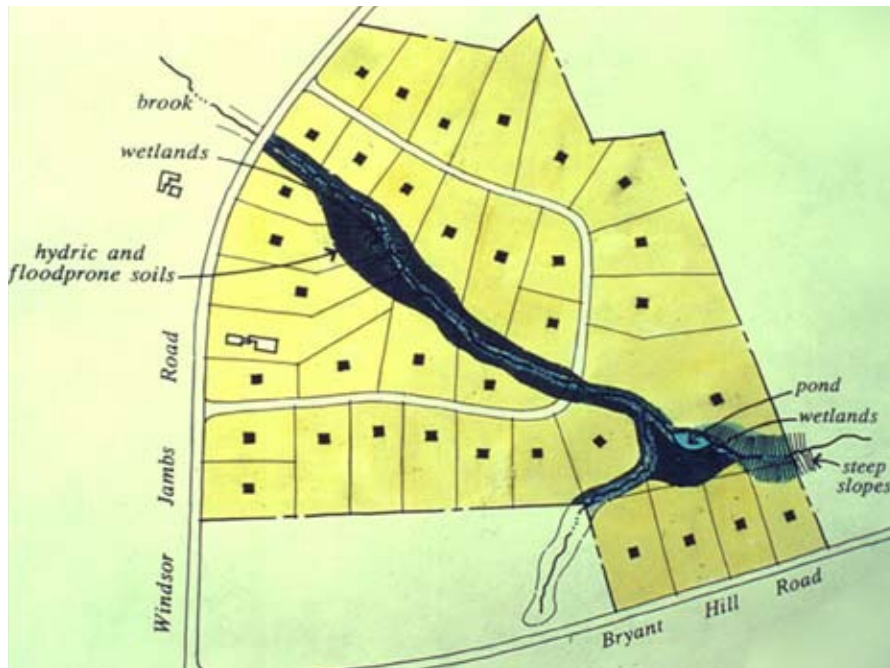
Land Suitability Analysis

Figure D-3. Conservation Development can be implemented to fit a communities needs such as a horse boarding facility.



Source: Randall Arendt

Figure D-4. This conventional subdivision creates large lots, but it does not provide the opportunity for shared open space or permanent protection of environmentally sensitive areas.



Source: Randall Arendt

Figure D-5. This figure illustrates how reorganizing the subdivision creates community accessible, preserved open space.



Source: Randall Arendt

As a part of the planning process, the team undertook a Land Suitability Analysis for the Western planning area. The purpose of a land suitability analysis is to identify the areas that are most suitable for development. Using the Land Use Conflict Identification Strategy (LUCIS) model, the team identified the areas that are most suitable for development.^b The first step in the process is to come up with a list of factors to be taken into consideration when determining the suitability of land for development. Environmental-, infrastructure-, and development-related factors were considered in conjunction with community input. The next step was to assign numerical values for each factor, which are then totaled in order to produce a ranking that can be used to determine the suitability of a certain area being developed. The values assigned are based on a scale of zero to nine, with 0 representing most unsuitable for development and 9 representing most suitable for development. It is important to note that LUCIS determines the suitability of a land area for development, but it does not determine the suitability of individual parcels. Determining the suitability of an individual parcel for development requires an examination of actual conditions of the property. These results are not site specific and should not be interpreted in this way.

The results of the study can be seen in Map D-1. Below is a list of the factors utilized in the LUCIS analysis.

Wetlands: To maintain the rural character of the planning area, development is discouraged in or on natural features, including wetlands. Wetland areas were assigned a 0 while non-wetland areas were assigned a 5.

Drainage Characteristics of Soils: Soils unsuitable for development based on drainage were assigned the following values: Excessively drained 0, somewhat excessively drained 5, moderately well drained 8, well drained 9, very poorly drained 0, poorly drained 2, and somewhat poorly drained 5.

Hydric/Non-hydric Soils: Hydric soils are generally found to be unsuitable for development. Hydric soils were assigned a value of 0, partially hydric

soils were given a 4 and non-hydric soils were assigned a 9.

Katrina Surge Inundation and Flood Zones: Areas that fall within the Katrina surge and in the flood zones are less desirable for development. Areas within the 100 year floodplain received a 0, within the 500 year floodplain a 3, and outside the 100 and 500 floodplains a 5. Areas in the Katrina surge received a 0.

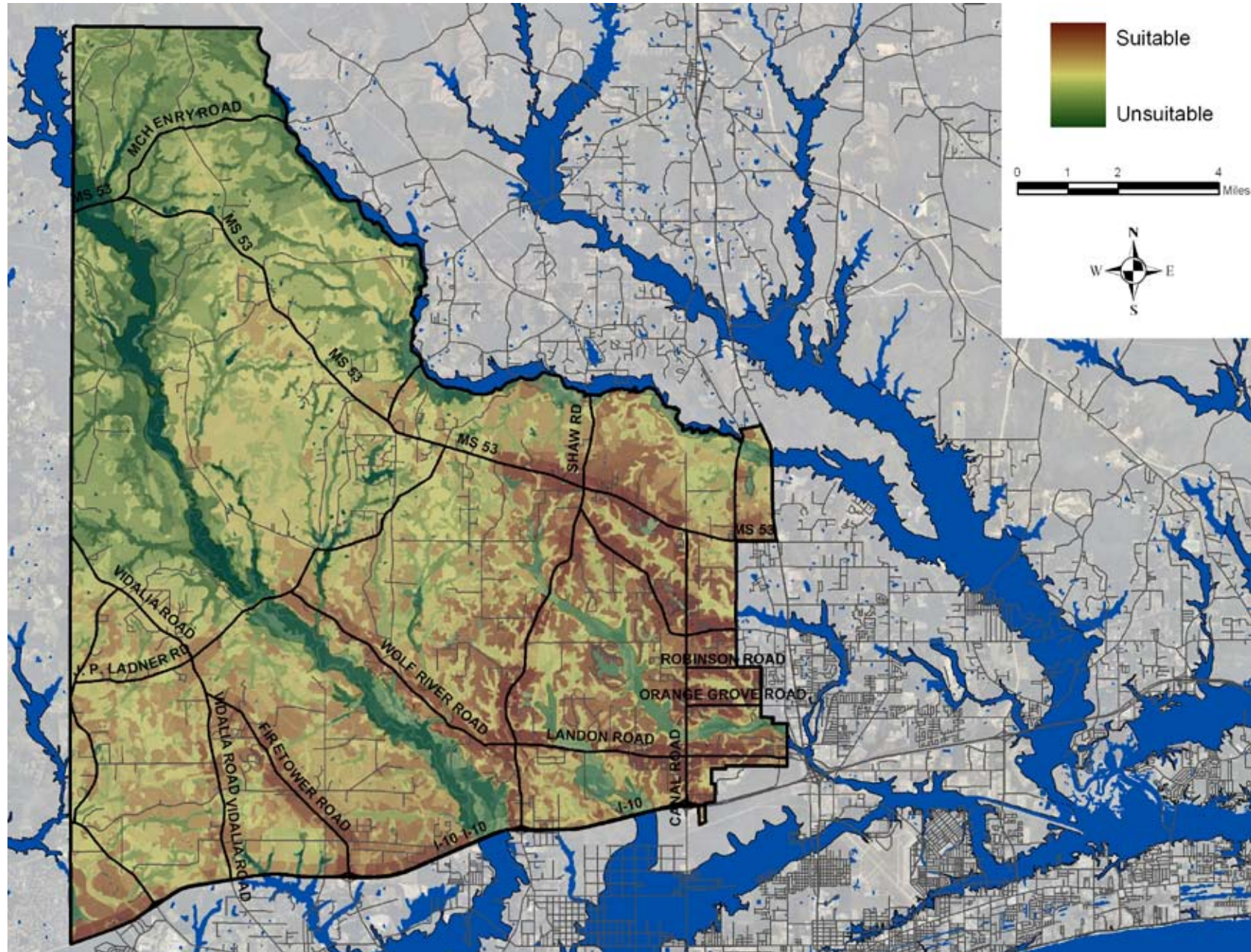
Forest: Forested regions are buffers for forest fires. Development within 100 feet of the forest line is discouraged.^c Areas that fell within the forest property or within 100 feet of the forested land received a 0, areas that fell with a quarter of a mile of the forest received a 3, and areas that fell outside of the quarter of a mile zones, received a 5.

Sewer and Water: Development is encouraged in areas where there is existing infrastructure. Areas with existing sewer and water infrastructure received a 9, those areas that were determined to have a good chance of receiving sewer or water in the near future received a 7 (this mostly included areas that were adjacent to existing sewer districts), and those with little prospect of getting sewer or water service received a 4. Additionally, areas within a quarter of a mile of proposed sewer or water lines received a 9 while areas outside of a quarter mile of these lines received a 4.

Distance to Major Roadways: To maintain the rural character of the area, development is encouraged near major roadways. Those areas within a half of a mile to a major roadway (including highways and major local connectors) received a 9 and those that fell outside of a half mile received a 4.

Proximity to Major Employment Centers: Providing housing for employment centers is a priority. Areas that were within five miles of a major employment center received a 9, those within ten miles received a 7, and those outside of ten miles received a 4.

Map D-1. The LUCIS map identifies land most suitable for development



Source: Chris Cunningham

- a Congress of the New Urbanism.2006..Charter of the New Urbanism. Accessed October 16, 2006 from: <http://www.cnu.org/aboutcnu/index.cfm?formAction=charter>.
- b Carr, M.H., and P.D. Zwick, 2007. Smart Land-Use Analysis, The LUCIS Model, Land-Use Conflict Strategy. Redlands, CA: ESRI Press
- c Schwab, James and Stuart Meck. 2005. Planning for Wildfires. Planning Advisory Service Report Number 529/530. American Planning Association: Chicago.

Appendix E. *Acronyms and Glossary*

Acronyms

AADT	Annual Average Daily Traffic	ROW	Right of Way
ABFE	Advisory Base Flood Elevation	RV	Recreational Vehicle
AICP	American Institute of Certified Planners	SMPDD	Southern Mississippi Planning and Development District
CNU	Congress for the New Urbanism	SWAP	Source Water Assessment Program
CPS	Community Preference Survey	TAZ	Traffic Analysis Zone
CTA	Coast Transit Authority	TDP	Gulf Coast Transit Development Plan
EIS	Environmental Impact Statement	TESI	Total Environment Solutions Incorporated
EPA	Environmental Protection Agency	TIP	Transportation Improvement Program
ESRI	Environmental Systems Research Institute	USM	University of Southern Mississippi
FEMA	Federal Emergency Management Agency	WHAT	Western Harrison County Action Team
FIRM	Flood Insurance Rate Map	WWTF	Wastewater Treatment Facility
GCATS	Gulf Coast Area Transportation Study		
GRPC	Gulf Regional Planning Commission		
HCDC	Harrison County Development Commission		
HUD	United States Department of Housing and Urban Development		
KCS	Kansas City Southern Railroad		
LTMCP	Land Trust for the Mississippi Coastal Plain		
LUCIS	Land Use Conflict Identification Strategy		
MDEQ	Mississippi Department of Environmental Quality		
MDMR	Mississippi Department of Marine Resources		
MDOT	Mississippi Department of Transportation		
MHC	Mississippi Home Corporation		
OSU	The Ohio State University		

Glossary

AQUIFER: A layer of permeable rock, sand, or gravel through which ground water flows, containing enough water to supply wells and springs

BIOSWALES: Landscaping elements that are utilized to remove pollution from surface water runoff before it enters groundwater or surface water supplies.

BRIDLE TRAILS: Natural or landscaped trails used strictly for equestrian riding and activities.

BROWNFIELD: Vacant, abandoned, or underutilized commercial and industrial properties, where real or perceived environmental contamination is an obstacle to redevelopment or utilization.

BUFFER: The area of open land which serves to mitigate potential conflicts between different types of land uses. Buffer zones are most commonly employed between different types of uses but, in certain circumstances, it may be appropriate to provide a buffer between a natural resource and development.

CENSUS TRACT: A small, relatively permanent statistical subdivision of a county or statistically equivalent entity, delineated for data presentation purposes by a local group of census data users or the geographic staff of a regional census center in accordance with U.S. Census Bureau guidelines. Designed to be relatively homogeneous units with respect to population characteristics, economic status, and living conditions at the time they are established, census tracts generally contain between 1,000 and 8,000 people, with an optimum size of 4,000 people.

COLLECTOR STREET: A street that provides direct service to and from local areas, routing traffic to the arterial street system. A Collector Street provides the primary means of circulation between adjacent neighborhoods and can serve as a local bus route. The Street provides for the dual purpose of land access and local traffic movement. Generally, these roadways are not used for through trips.

COMMUNITY PREFERENCE SURVEY: A tool utilized by planners to determine what a communities preference is towards housing styles, commercial development, and the use of land for development purposes. The tool shows a set of pictures, each showing a different style of the same development. The community members then vote on which image(s) they would find to be most acceptable in their community.

CONIFERS: Cone-bearing trees where the seeds are present in cones or catkins.

CONSERVATION DEVELOPMENT: Development in which individual lots may be smaller than the average lot authorized by the zoning ordinance. Buildable lots are located on a portion of rather than the entire site so that the remaining area may be preserved for recreation or environmental protection.

E-211 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

CONSERVATION EASEMENT: A legal mechanism whereby a landowner retains ownership of his/her land, but grants some right(s) to the land to a “holder” that is defined as a charitable organization declared exempt from taxation pursuant to 26 U.S.C.A. § 501 (c) (3).

CORRIDOR: Property along major roads and thoroughfares.

COUNTY FARM: The County Farm was a 640 acre property given to Harrison County. The county farm was originally used primarily for agricultural purposes, but today it is home to the Harrison County Fairgrounds, Harrison County Roadway Management Substation, the Department of Parks and Recreation office, a Juvenile Detention Center, the Lyman Senior Center, 16 soccer fields, a remote control airplane field, and the remnants of the County Farm.

CURB CUTS: A space within a curb or along a roadway that provides an access point to businesses or homes for cars, bikes, strollers, wheelchairs, and/or pedestrians.

DENSITY: The number of persons or dwelling units per acre.

DESIGN STANDARDS: Pre and Post construction requirements that incorporate specific structural and aesthetic requirements into each building project. Design standards are typically used for retail, commercial, and business type development.

FEMA-361 SHELTER: A storm shelter that meets federal FEMA requirements and can be utilized during a storm event which produces winds of up to 200 miles per hour.

FLOODPLAIN: Those land areas in and adjacent to streams and watercourses subject to periodic inundation from flood events. For instance, the 100 year flood frequency event has a one percent chance of occurrence in any given year.

FUNCTIONAL CLASSIFICATION: A system for classifying the transportation system in terms of the character of service that individual facilities are providing or are intended to provide, ranging from travel mobility to land access. Roadway system functional classification elements include Freeways or Expressways, Other Principal (or Major) Arterials, Minor Arterials, Collector Streets, and Local Streets. Transit system elements include line haul, collection and distribution, and specialized or community oriented transit services.

GATEWAY: Entrance into a community or specific areas of a community typically along major transportation corridors.

GULF ZONE OPPORTUNITY ACT (GO-ZONE): The Gulf Opportunity Zone Act of 2005 is a federal legislation that was passed by Congress and signed into law by President George W. Bush in December 21 of 2005. This legislation provides for Federal Tax Incentives to areas affected by Hurricanes Katrina, Rita, and Wilma that were designated as warranting individual or public and individual assistance. Harrison County is included

E-212 COMMUNITY PLAN *for* WESTERN HARRISON COUNTY

in the Zone for individual and public assistance.

HAMLET: A style of residential development that keeps homes close together and creates small clustered types of residential communities. This device is typically used to promote the preservation of agricultural land or open space.

HARRISON COUNTY BUILDING OFFICIAL: The building official is responsible for overseeing the approval process for building permits in the unincorporated areas of Harrison County.

HARRISON COUNTY COMMUNITY DEVELOPMENT BLOCK GRANT COORDINATOR: The grant coordinator is responsible for supervising the expenditure of Community Development Block Grant funds for housing and community development in the unincorporated areas of Harrison County.

HARRISON COUNTY PLANNER: The Harrison County Planner is a newsletter designed to keep the citizens of unincorporated Harrison County informed about the planning process underway in their communities.

HISTORIC TREE PROTECTION ORDINANCE: A tree protection ordinance ensures that historic trees, such as the live oak, can not be cut down except under specific conditions.

HYDRIC SOILS: Soil that is saturated, flooded, or ponded during the growing season.

INFILL: Development on vacant or underused sites within an established development pattern.

LOCAL STREET: A street which is primarily intended to provide direct access to properties abutting the roadway and within the immediate vicinity. A Local Street offers the lowest level of mobility and usually does not serve a bus route. Overall operating speeds are low in order to permit frequent stops or turning movements to be made with maximum safety. Service to through traffic movement is deliberately discouraged.

LAND USE CONFLICT IDENTIFICATION STRATEGY (LUCIS): A method using G.I.S. technology to identify areas most suitable for development.

MINOR ARTERIAL: A roadway that carries a mix of local and through traffic. It links Collectors, and sometimes Local Streets, with Principal Arterials. Minor arterials may carry local bus routes, and are designed with greater emphasis on traffic movement than on providing access to abutting land.

MIXED-USE AREA: A specified area which includes two or more different types of uses within its boundaries.

MULTIFAMILY HOUSING: Structures designed to accommodate several unrelated households. Multifamily residences include duplexes, garden apartments, mid rise apartment buildings, and residential condominiums.

OPEN SPACE: Land which is provided or preserved for park or recreation purposes, conservation of land or other natural resources, historic or scenic purposes, or wetlands.

PALUSTRINE WETLANDS: A system that includes all non-tidal wetlands and deepwater habitats dominated by a cover (more than 30 percent) of trees, shrubs, emergent, mosses or lichens.

PERVIOUS SURFACES: A surface that allows natural waterflow to enter the ground for the purpose of storm-water reduction and runoff pollutant reduction.

PRINCIPAL ARTERIAL: A highway that serves main travel corridors. Significant intra area travel and important intra urban and intercity bus services are served by this class of street. Some access is provided to abutting land, but the primary function of a Principal Arterial roadway is to carry through traffic.

RAIN GARDENS: The use of plants and flowers to absorb rainwater runoff from roofs, driveways, and walkways. These gardens allow the natural absorption and cleansing of rainwater and reduce the amount of runoff pollutants.

RIPARIAN: Situated or taking place along or near the bank of a river, stream, or other waterway.

SANITARY SEWER: A wastewater collection system that relies on gravity or pumps for the movement of the waste from its source to a treatment facility.

SCENIC BYWAY: A scenic byway designation includes resource protection, community recognition, economic development, community visioning and partnering. This designation may allow additional funding designated from the Mississippi Department of Transportation's Scenic Byway Program and the National Scenic Byways Discretionary Grants Program.

SCENIC STREAMS STEWARDSHIP PROGRAM: A program organized by the Mississippi Wildlife Fisheries and Parks to promote voluntary, private conservation efforts along Mississippi's unique and outstanding rivers and streams.

SETBACK: A legally enforceable buffer zone between properties that requires a minimum space remain between the property line and any building construction.

SHARED PARKING LOT: A parking lot that is utilized by more than one business. This technique is used so that the area needed for parking lots is minimized by the sharing of parking areas by many businesses.

SINGLE FAMILY RESIDENTIAL: Units designed to house one family per unit. Includes detached single family homes.

ST. LOUIS BAY: Commonly called Bay of St. Louis or the Bay.

STEERING COMMITTEE: A group of citizens that serves as a liaison between the citizens and the planning team. They provided input throughout the planning process and made sure the planning team for Western Harrison County addressed citizen's concerns and incorporated community goals into The Community Plan.

TRAILS: A pathway constructed of various materials such as asphalt, stone dust, or natural surface that is used for recreation, or as an alternative mode of non-motorized transportation, or both.

TRAFFIC ANALYSIS ZONES (TAZ): An area generally defined with specific geographic detail or edges (Road, Bayou, River etc.) and used in most transportation planning applications to summarize socio-economic characteristics and travel data for that particular area. TAZs vary in size depending on density and homogeneity of land uses, and are defined by local transportation agencies.

WEYERHAEUSER: An international forest products company producing softwood lumber, pulp, paper and packaging product.

WOLF RIVER CONSERVATION SOCIETY: A non-profit organization with the goal of conserving, managing, and protecting the Wolf River from its headwaters in Lamar County to its termination at the Bay of St. Louis.