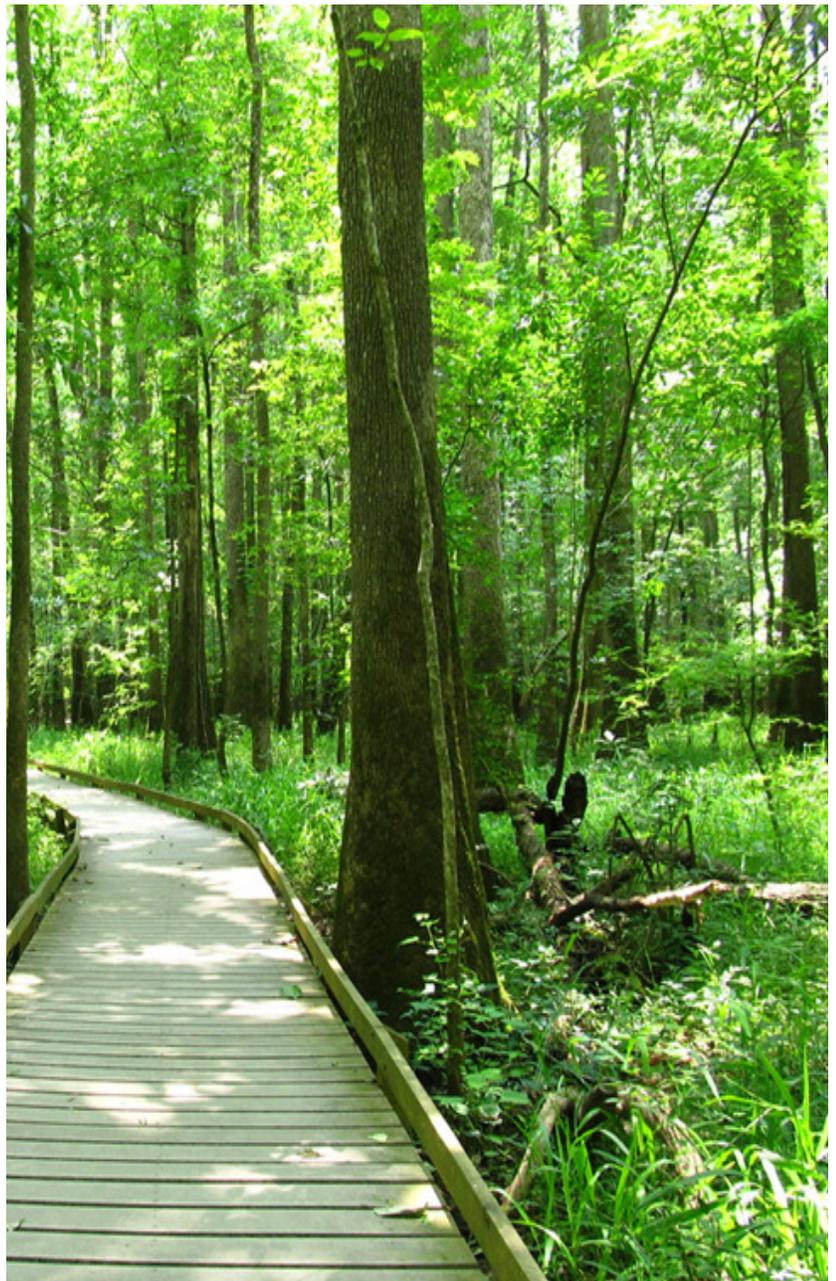
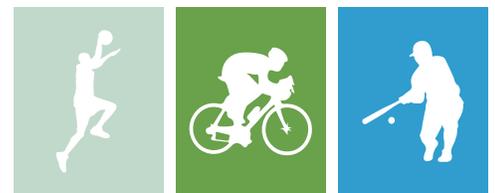


# JACKSON COUNTY, MISSISSIPPI

# PARKS, RECREATION, AND OPEN SPACE MASTER PLAN



2022 - 2032



Jackson County,  
Mississippi  
Recreation Department

Prepared By: Lose Design



Lose Design would like to thank all the elected officials, board members, commissioners, staff and citizens, who participated in the development of this master plan. Through your commitment and dedication to the parks and recreation in Jackson County we were able to develop this plan to guide the delivery of recreation services to the citizens of Jackson County.

## **ACKNOWLEDGMENTS**

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# 01 Introduction

Master plan documents develop a comprehensive vision for a park system. This vision will serve as a framework for the long-term use and development of parks and recreation needs over the next ten years. The purpose of this master plan is to evaluate the public parks and recreation system for the Jackson County, Mississippi (the County) Recreation Department (the Department). Afterward, the plan will offer and submit recommendations to enhance and improve the level of services provided to citizens over the next decade. The master planning process identifies the recreation needs of a community, predicts future demand, and recommends operational improvements pertaining to budget, staffing and programmatic concerns of the Department. This master plan was developed through a combination of public input, focus groups, interviews, and professional analysis.

The process included several public engagement activities, demographic research, facility, program, and staffing assessments. This document serves as both a master and strategic plan. It provides Jackson County with guidelines and strategies for future program planning efforts and funding for a Capital Improvement Program (CIP). Jackson County recognizes the value of strategic planning and is committed to actively working with internal staff, stakeholders, and the public, to ensure a successful plan.

This master plan reviews Jackson County's history, covers the results from public input sessions, incorporates demographic trends, contains park distribution and gap analysis maps, reviews department policies, park, and facility inventories, and analyzes the County's green infrastructure connectivity. The Jackson County Master Plan is a document that is shared with the public to demonstrate how the agency plans to meet community needs and expectations through measurable goals and objectives. To ensure relevancy, a fluid set of primary goals and specific objectives has been established, and is reviewed periodically and updated as necessary, to ensure the Department's programs and services are aligned with critical planning elements.

Jackson County Recreation Department's primary service goals are to provide safe parks and facilities that support recreational programming such as sports leagues. The Department features one of the largest and most diverse facility offerings in the state. Its goal in conducting this master plan study is to review whether the robust offerings are meeting community needs and which new investments in growth and development are desired by the community.

**" Jackson County Recreation Department's primary service goals are to provide safe parks and facilities that support recreational programming..."**

## Methodology

The master plan document is based on a literature review of reports and data, best practices, analyses, and interviews with stakeholders, focus groups, elected officials, department staff, and the citizens of Jackson County. The planning team developed a detailed inventory of existing programs, policies, and services related to parks and recreation facilities, in addition to numerous state, regional, and local planning reports. Interviews conducted with stakeholders provide a snapshot of the community's level of utilization and individual perception of the quality of experiences. This is key when determining the needs of residents as well as prioritization of parks and recreational physical improvements or program offerings. To ensure a nuanced understanding of feedback, interviews were conducted with public-private partnerships, recreation management associations, service providers, van pool operators, and federal, state, regional and local agencies. Finally, to benchmark the recreation programs and facilities in Jackson County, several programs from around the country were examined using the National Recreation and Park Association's (NRPA) Park Metrics data as a base.

## History

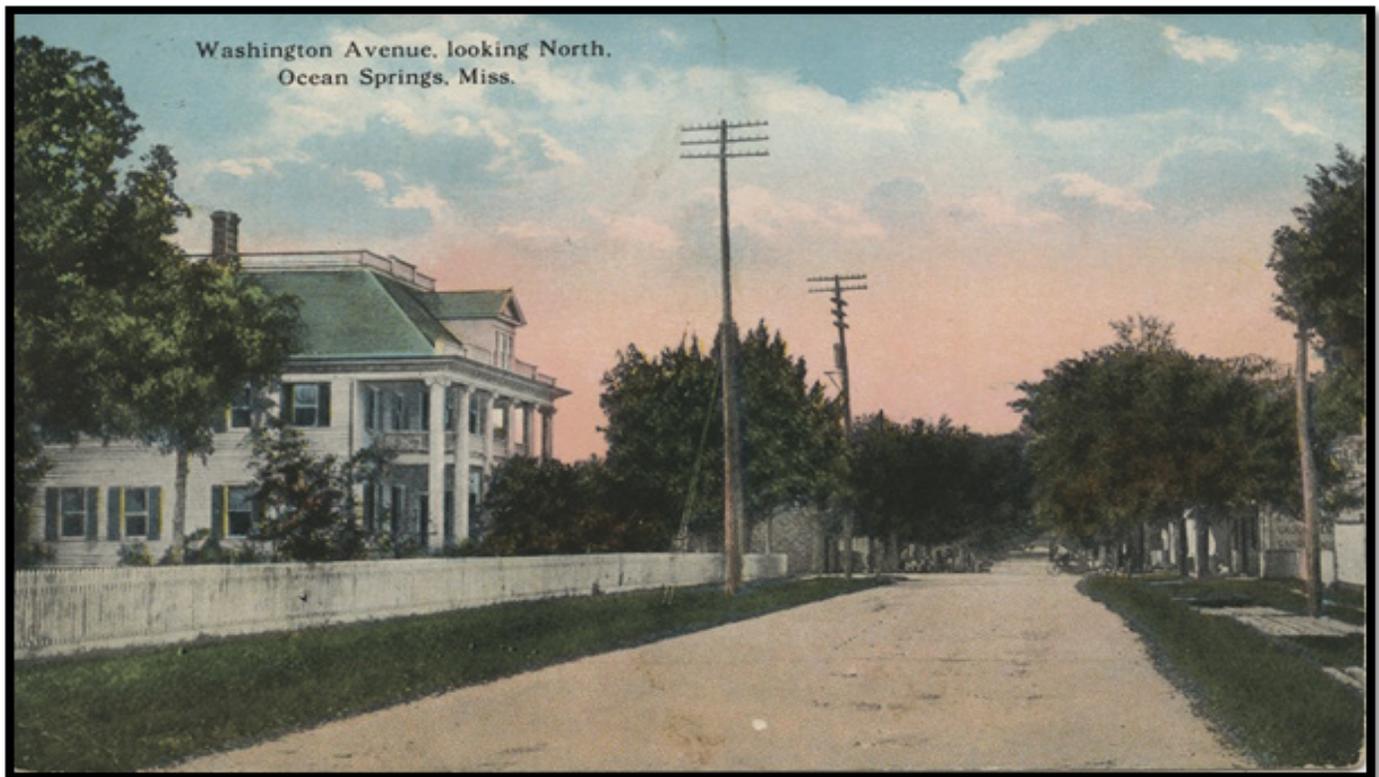
Jackson County is a coastal county in southeast Mississippi and was founded on December 14, 1812. Its name was given in honor of President Andrew Jackson. Alabama also neighbors Jackson County directly to the east. Jackson County and its history are rooted in leadership that is progressive and capable of adjusting along with new time periods. Because of Jackson County's place along waterways, it has used it as a major strategic resource – even prior to its founding.

The earliest settlements were by French, then Spanish colonizers in the late 1600s. The French established numerous settlements such as Gautier and Ocean Springs. Jackson County transitioned to American rule from the Spanish as a part of the Mississippi Territory under the United States Constitution. Shortly after Spanish rule, Jackson County at that time was part of Mobile County. Later, Hancock, Jackson, and Mobile counties were created from the division of Mobile.



By the mid-1800s, Jackson County began to rely heavily on the booming sawmill and timber industry, which later made way for the launch of the wood treatment industry in Mississippi. In 1861, Mississippi seceded from the Union and troops shortly after overtook Fort Massachusetts, located on Ship Island. Prior to the Civil War ending, 160 Black Union soldiers positioned at Ship Island, where they later raised a Federal Flag after fighting their way to the East Pascagoula Hotel.

Railway construction in the late 1860s was stimulated because of the state's strong history of industrial production in Jackson County. It helped reinforce development that is still prevalent. The new railways connected Pascagoula to major cities in Alabama, Louisiana, and Tennessee. The connections to other regions help explain continuous interest in Jackson County's diverse assets and influences on the southern United States.



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# 02 Community Profile

The Mississippi Coastline has a history of storms and hurricanes, which has led Jackson County to regularly reevaluate their needs and resource management. Today, waterways and other water resources continue to prove to be an invaluable benefit to development. Benefits of water resources are proven by local, regional, and state investment. Jackson County is the fifth largest county in Mississippi by population, and fourteenth by land area. The county's location along the Gulf Coast and its proximity to state parks and wildlife preserves has made Jackson County a draw for residents and tourists alike.

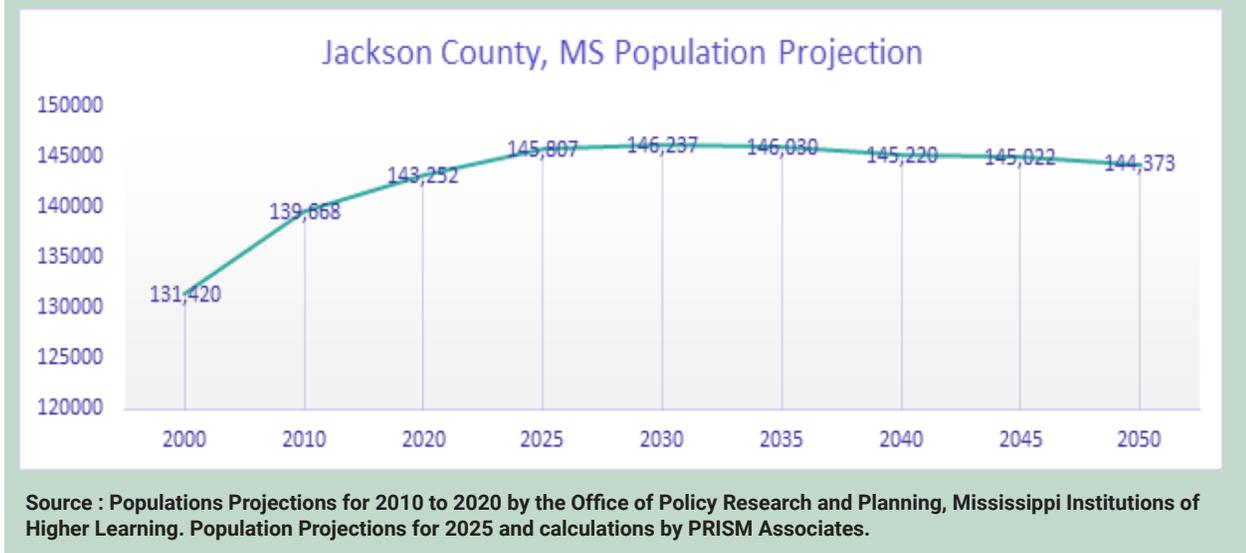
It is important to understand a community's population in order to plan for what it will need over the next ten years. The data collected in this section describes the County population. Recreation preferences and lifestyles are often dependent on age, gender, education, and socio-economic status. Demographics are the population characteristics of an area. Public desires can be anticipated by collecting demographic data and public input. Activities that will likely be popular in the future can also be predicted by reviewing demographic data.

Although accurate data is available every ten years from the U.S. Census, demographic factors such as age, are constantly changing. Age is the top factor in determining recreation trends. For example, a child who is ten years old when a plan is developed may be interested in team sports like baseball or soccer; however, at the end of the plan's timeframe, they may have taken an interest in individual recreation activities such as running or cycling. Knowledge of age and its predicted changes are useful when a large percentage of the population will soon reach an age at which their recreation preferences are likely to change. This trend is now noticeable with the large number of baby-boomers who are reaching retirement age across the country.

Long-term demographic studies help local elected officials identify trends and show how a population is changing. A clear understanding of these trends is necessary to understand Jackson County's needs. The current and projected population establishes the type of facilities and services needed in the future.

**2 - Community Profile**

Figure 2.1 Jackson County Population Projections



## Population Trends

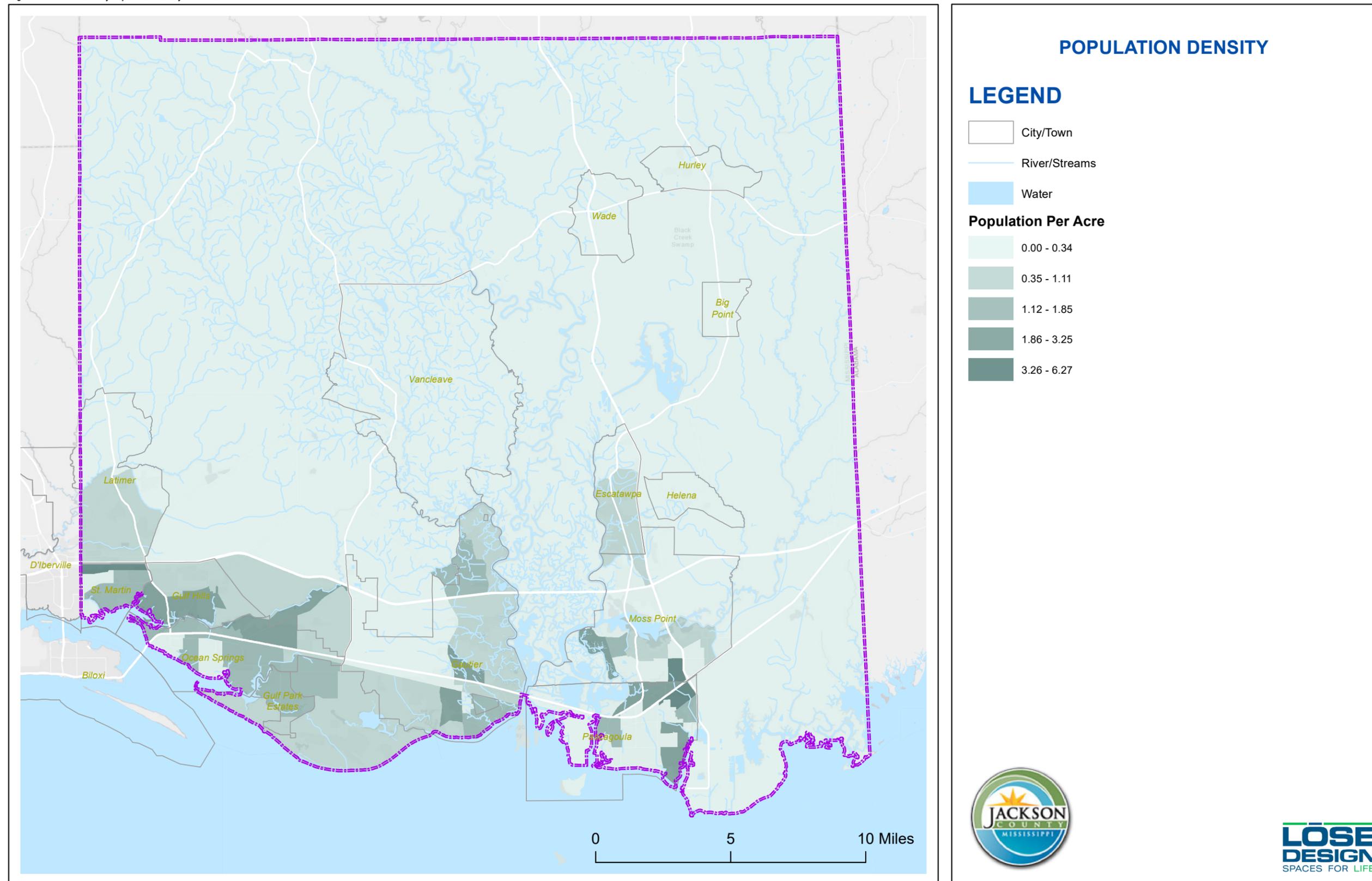
Historic population data was gathered from the U.S. Census Bureau. Population projections for Jackson County were gathered from the State Data Center of Mississippi. Jackson County's population has increased the last two decades. The population grew at a rapid rate of 9% between 2000 and 2020. The population is projected to continue to grow for the next decade at a slower rate (1.39% increase). Much of this growth has occurred in unincorporated portions of the County. After 2030, the County's population is projected to remain relatively stable. Figure 2.1 illustrates the projected population through the year 2050.

## Population Density

Population analysis of where citizens in the community are located helps inform where to best prioritize resources during the master planning process. Cultural and social influences impact the distribution of people in the community as well. How those influences have impacted physical distribution are shown in Figure 2.2. Historical influences of industrial production and the ship building industry on the coast are illustrated by high population densities near Pascagoula. Currently, a higher density is concentrated close to other coastal cities south of Interstate 10 (i.e., Gautier, Moss Point, and Ocean Springs). The current population trend also shows lower populations of people at more inland locations. The variation in population density is shown by increased development patterns south of Interstate 10 (I-10) and less development north of Interstate 10. Previous planning studies allude to households' migration to areas north of I-10, and away from the coastline in future years – more inland development is anticipated because of that. The area's shared experience with hurricanes and resulting flooding is a contributing factor. Awareness of the consequences of major weather events helped the planning team form the gap analysis and recommend locations of future parks and recreation facilities.

The planning study also compared current population counts against the Department's park inventory. When compared, both provided a good understanding of where the Department may not be sufficiently meeting the community's needs based on location.

Figure 2.2 Jackson County Population Density Per Acre



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

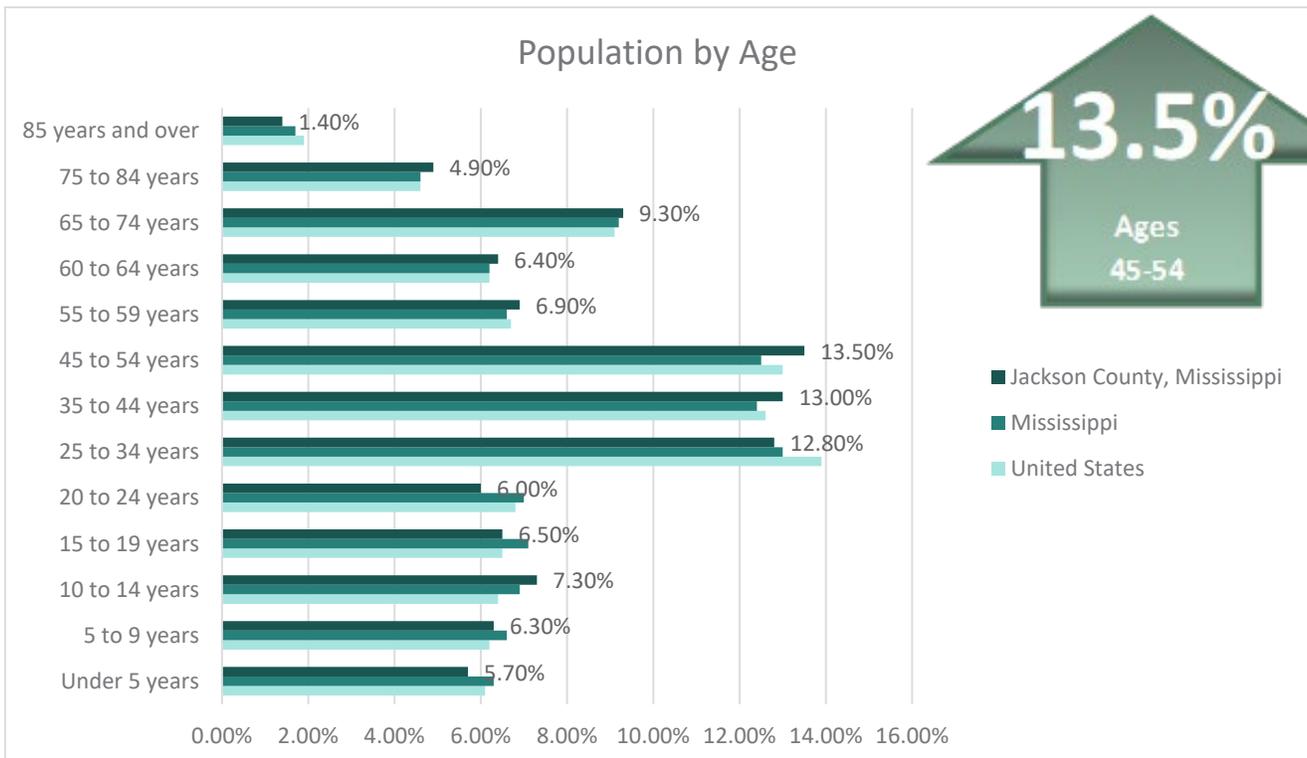
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## County Population by Age

Age is an important demographic identifier for master planning to understand future needs. Understanding the age distribution of residents living in Jackson County is a critical element to providing the proper amounts and varieties of recreational programming to all age groups. Over 38% of the population in Jackson County is comprised of adults ages 25-54. The distribution of the population's age trends is illustrated in Figure 2.3 below. These age groups typically include active, working adults and young families. Of these groups, Jackson County has more middle-aged populations than the rest of Mississippi, as well as the United States.

Figure 2.3 Jackson County Projected Population Age Distribution by Percent



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

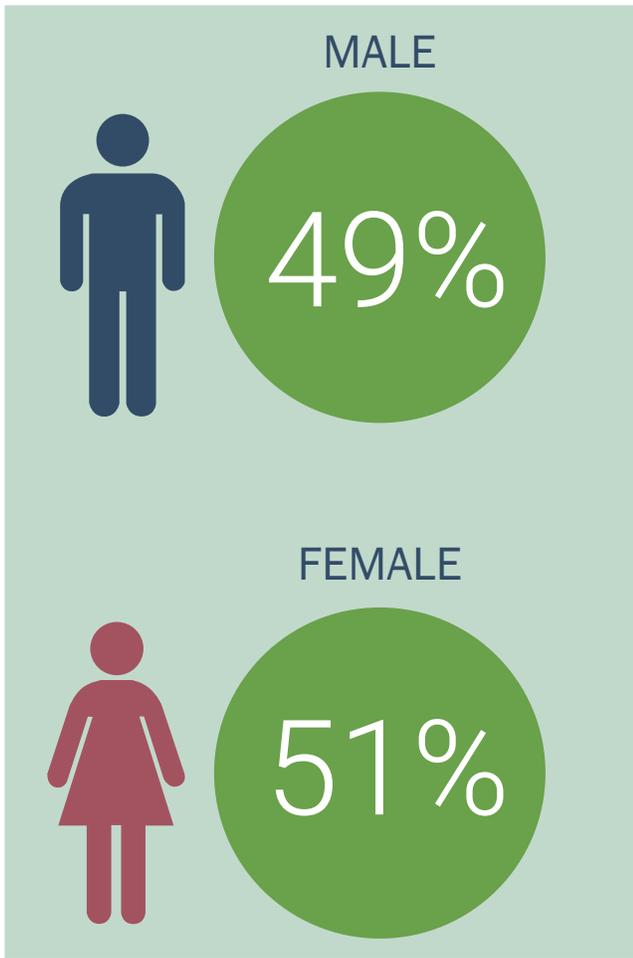
Figure 2.4 Jackson County Projected Population Age Distribution by Percent

Age Cohort	2015	2020	2025
25-29	6.5%	5.9%	5.9%
30-34	6.1%	6.4%	6.4%
35-39	6.1%	6.0%	5.8%
40-44	6.1%	5.9%	5.6%
45-49	6.4%	5.9%	5.0%
50-54	7.3%	6.1%	5.7%
55-59	7.1%	6.9%	7.3%
60-64	5.9%	6.6%	7.0%
65-69	5.1%	5.4%	6.0%
70-74	3.7%	4.4%	4.9%
75-79	2.8%	3.1%	3.4%
80+	5.0%	6.0%	6.9%

Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates



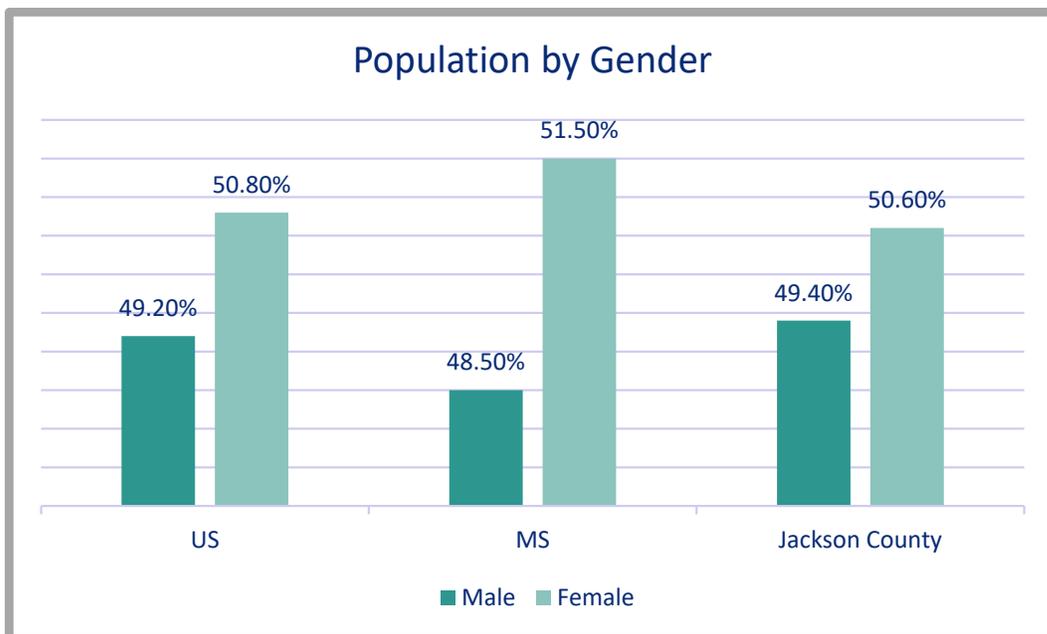
People between the ages of 45 to 54 comprise 13.5% of Jackson County's population and is the highest of all the age groups. These adults are typically preparing for retirement and engage in recreational activities which are less physically demanding. It creates a unique set of needs for a parks and recreation system. Estimates from Prism Associates project adults 45 to 54 years old will decrease in 2025. However, ages 55-59 will make up the largest group of adults (7.3%) 25 years of age and older in 2025; ages 60-64 will make up the second largest group of adults (7.0%). This demographic shift, shown in Figure 2.4, may influence demand for specific types of recreation facilities and programs for senior adults and should be considered when expanding facility variety.



### Population by Gender

The gender ratio of Jackson County residents is estimated by the U.S. Census to be 49.4% male and 50.6% female. This ratio is comparable to the national ratio but has a slightly higher male population compared to Mississippi. In general, females exceed males, which is true for Jackson County as well. In the United States, Mississippi, and Jackson County, women account for over half of the total population.

Figure 2.5 Jackson County Projected Population Age Distribution by Percent



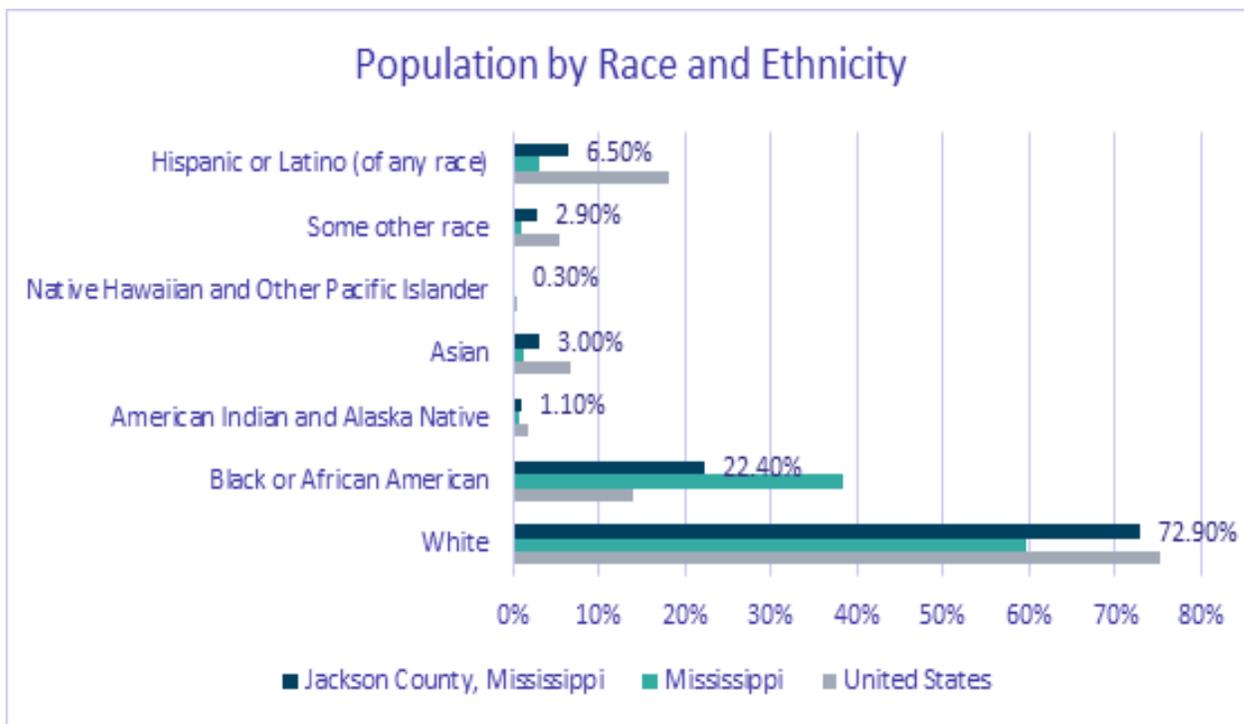
Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

## County Diversity by Race and Ethnicity

Jackson County has a unique coastal location and history, which shaped its racial and ethnic composition. The U.S. Census Bureau estimates Jackson County's population in 2019 was nearly 73% Caucasian. This is much higher in comparison to the state which is 59.6%. The County had a 22.4% African American population, 6.5% Hispanic or Latino, and 3.0% Asian. A summary of Jackson County's population is provided in Figure 2.6. Further analysis of Jackson County's diversity, specifically race and ethnicity, reveals its high Caucasian population as well as a unique Asian population. Both are an indication of past immigration to the coast from various Asian and European countries in the nineteenth and twentieth centuries. Overall, the diversity of race and ethnicity in Jackson County is diversified and representative of large communities with older residents in the southern United States.

While preferences for park facilities and programs can be similar among all ethnicities, the Jackson County Recreation Department should increase outreach to minorities if participation in recreation programs does not reflect the racial diversity observed within the community. The fourth largest ethnic group in Jackson County, Asian residents, is unique compared to nearby counties within the area. Therefore, outreach should reflect input regarding parks and recreation desires of this demographic. Jackson County has the highest population of Asian residents compared to the four surrounding counties.

Figure 2.6 Jackson County Projected Population Age Distribution by Percent



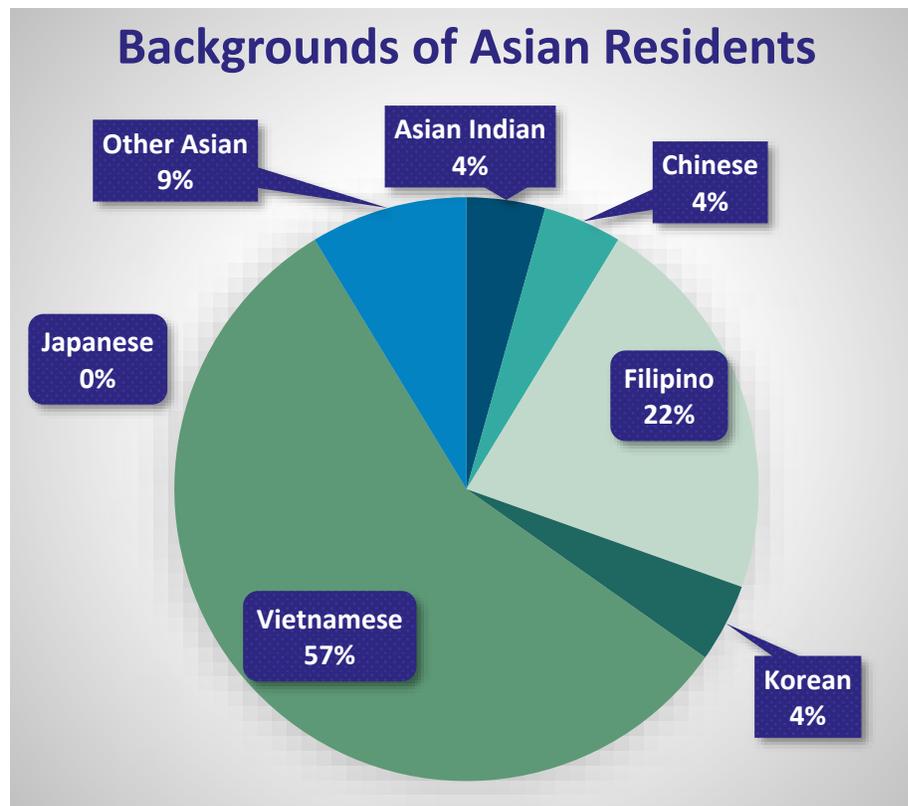
Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

## Coastal Mississippi – Asian Immigration

Immigration is still a part of the county's diversity. According to the U.S. Census, Asia is the second most common region of foreign-born residents (after Latin America). Figure 2.7 shows the backgrounds of Asian residents in the county with Vietnamese being the most common Asian ethnicity. Over half (57%) of Asian residents identify as Vietnamese. To adequately reflect recreational needs of this specific community, planning staff may consider potential activities such as walking, bicycling and chess which are culturally popular. There is a notable Filipino population as well, which makes up nearly a quarter (22%) of the Asian community.

Asian immigration drastically increased in the late 1970s because of resettlements by Vietnamese residents to places along the Gulf Coast of the U.S., including Houston, Mobile, New Orleans, and Jackson County. Cultural desires also encouraged relocation to locations along the Gulf Coast, including Jackson County. The climate along the Gulf of Mexico in the United States is similar to southeast Asia, which could have been very appealing. Additionally, commercial fishing industries are significant in both Jackson County and southeast Asia. Jackson County's water resources are also leveraged for recreation and appeal to a large portion of Jackson County's population.

Figure 2.7 Backgrounds of Asian Residents by Percent



## Economic Trends

Median Household Income, Population of Unemployed, and Persons Below Poverty Level were all reviewed for Jackson County’s economic profile. These numbers are important to compare to averages to understand if Jackson County numbers are higher or lower than surrounding communities and state numbers. Mississippi is the poorest state in the nation.

### Median Household Income

In the table below, Median Household Income and Persons Below Poverty Level are compared to state and surrounding counties (George, Harrison, and Stone). Overall, Jackson County’s economic trends show better performances, which are in the table below. The County has the second highest Median Household Income (\$46,339), behind George County.

Figure 2.8 Median Household Incomes

	Mississippi	Jackson County	George County	Harrison County	Stone County
Median Household Income	\$40,630	\$46,339	\$48,212	\$42,370	\$42,295
Persons Below Poverty Level (%)	22.1%	16.1%	17.1%	22.0%	20.5%
Population of Unemployed	5.9%	6.5%	6.5%	5.6%	6.7%

Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

Income levels are notable because they relate to a resident’s ability to pay for participation fees and other costs related to recreation programs. In communities with low-income levels, local governments typically play a major role in meeting resident needs by providing funding to subsidize recreation programs. This information may inform decisions regarding fee structure, which should be set at rates that do not limit participation. Reduced program fees may, in turn, impact revenue recovery efforts if alternate sources of revenue are not identified.

### Poverty

There is also an improved percentage of persons living in poverty when compared to the state – a difference of 6.0%. Mississippi’s Persons Below Poverty Level is 22.1%, while Jackson County’s is 16.1%. However, Jackson County is tied with George County for the second highest Population of Unemployment (6.5%), even though George County has a significantly low population count in comparison to Jackson County and other surrounding counties. When master planning for the County, the Department should take into consideration how the projected decline in population and information on poverty may impact use of proposed parks, recreation, and programming. Fee requirements should reflect the financial climate and may need to be adjusted, or even decreased, to not exclude certain demographics from participation.

## Health Statistics

People are generally less active than in the past and tend to lead sedentary lifestyles. This inactivity has led to an obesity epidemic, which continues to grow in many parts of the United States. The most dramatic increases in obesity are in the southern United States. This affects life expectancy and has economic impacts related medical spending and productivity in the workplace. According to the Center for Disease Control (CDC) in 2015, “an estimated annual medical cost of obesity in the U.S. was \$147 billion in 2008 U.S. dollars; the medical costs for people who are obese were \$1,429 higher than those of normal weight.”

Physical activity not only helps maintain a healthy weight, but it also benefits mental health. According to a 2006 article from the *Primary Care Companion to the Journal of Clinical Psychiatry*, exercise improves mental health by reducing anxiety, depression, negative mood, and by improving self-esteem and cognitive function. Exercise has also been found to alleviate low self-esteem and social withdrawal (Source: *Exercise for Mental Health* by Ashish Sharma, M.D., Vishal Madaan, M.D., and Frederick D. Petty, M.D., Ph.D.). Research from the University of East Anglia (UEA) and the Centre for Diet and Activity Research (CEDAR) in 2014 also reveals that commuters who regularly walk or bicycle to work have noticeably better mental health than those who commute by car.

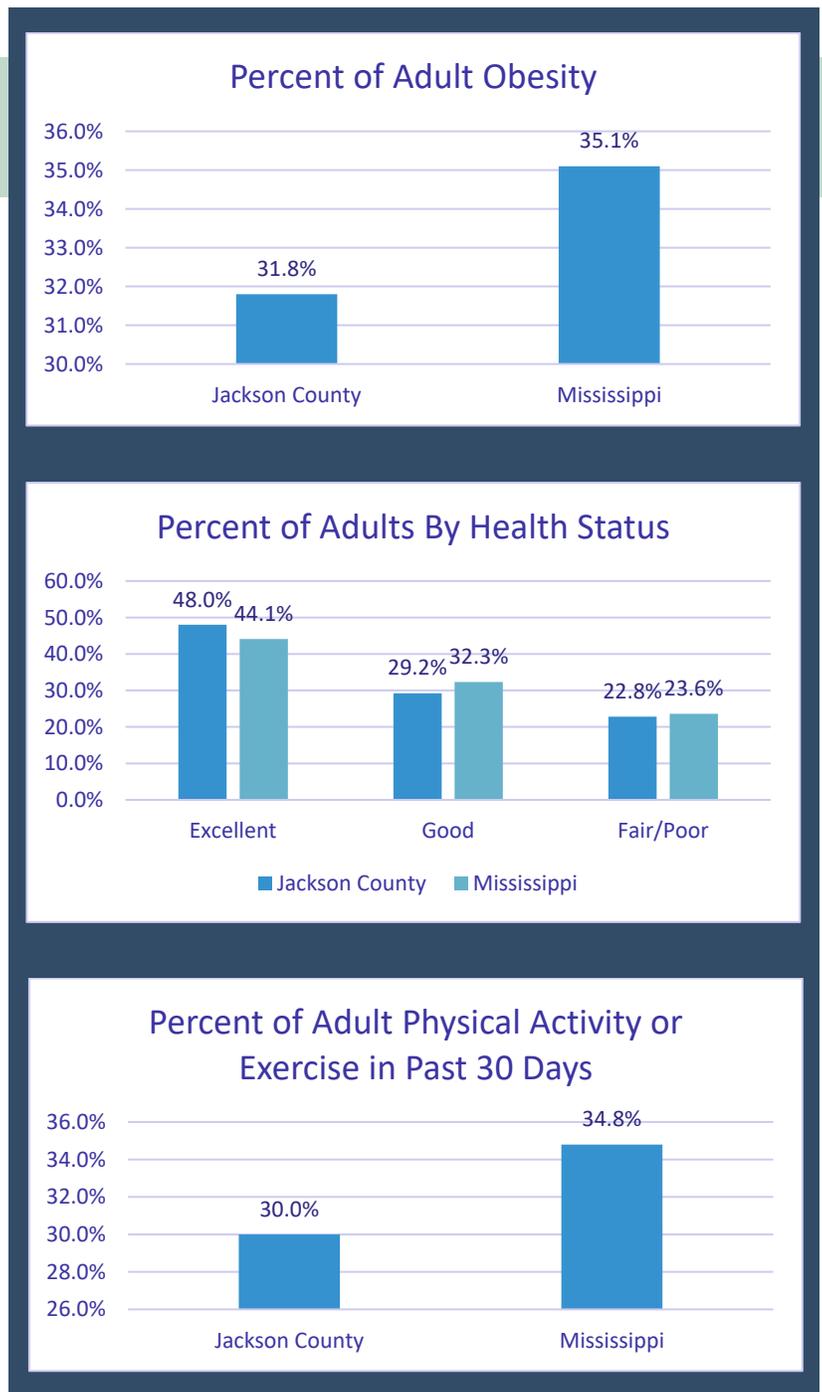
Elected and appointed officials, as well as residents, should understand the risks associated with obesity and inactive lifestyles. Strong action at the community level is critical to addressing chronic disease trends by providing facilities and recreational programs that attract residents and establish healthy lifestyles at an early age. The goals of creating healthy lifestyles from early ages should also include continuing physical activity through adulthood. This may include youth sports, exercise programs for working adults, and passive activities for those age 65 and older. A well-rounded parks and recreation system that offers opportunities for all age groups and interests is key to establishing healthy lifestyles.

A contributing factor to poor health rankings may be affected by Mississippi being the poorest state in the country. Obesity in adults is reported as a Body Mass Index of 30 or greater. The 2016 Mississippi adult obesity rate (37.3%) is an indication of the state’s poor health ranking. It is also an increase from the 2011-2015 Mississippi Behavioral Risk Factor Surveillance System rate (35.1%). Although Jackson County reported a lower obesity rate (31.8%) in 2011-2015, the Mississippi Department of Health’s County Health Profile supports evidence of high obesity rates that are characteristic of southern states. The Department of Health also categorized adult health into three statuses: excellent, good, and fair/poor. Jackson County has more adult residents who are of “excellent” health status (48.0%) compared to the state, and fewer residents who are of “fair/poor” health status (22.8%) compared to the state. Jackson County health statuses compared to Mississippi are illustrated in Figure 2.9. Understanding the County’s health trends highlights an opportunity to improve the community’s health and wellbeing through parks and recreation improvements.

Increased physical activity is associated with lower risks of Type 2 Diabetes, cancer, stroke, hypertension, cardiovascular disease, and premature mortality. The Planning Team reviewed Department of Health’s statistics for Jackson County. When compared to the State of Mississippi, Jackson County performs worse in adult physical activity, but better in adult obesity.

The built environment, which includes streets, sidewalks, buildings, and parks, is important in encouraging physical activity. According to the University of Wisconsin Population Health Institute, individuals who live closer to sidewalks, parks and gyms are more likely to exercise. Improved parks, recreation amenities, sidewalks, bicycle lanes and greenways can help support the County’s overall physical and mental health. Continued strategic investment in parks and recreation should be a priority.

Figure 2.9 Health Rankings



## Summary

Jackson County has a diverse population and is a community rich in natural resources. A large portion of the population is made up of middle-aged adults who are reaching retirement age. Overall, the County does not perform well when comparing adult physical activity to the rest of the state. Investments into recreation facilities and programs may help improve performance in this area. There are also potential challenges in household income that will need to inform future decisions pertaining to costs associated with recreation programs and facilities. The demographic data described in the preceding text was used to formulate recommendations contained in this document.

# 03 Public Participation

Public input is a critical component in developing a comprehensive master plan. Jackson County residents play an important role in the master plan since residents are the primary users of the park system facilities and programs. For the master plan to be effective in improving facilities and services, the plan must accurately reflect the facilities and programs most desired by the community. The recommendations provided in this plan were driven by public input gathered through pop-up engagements, interviews, focus groups, and a community survey. These activities allowed for spontaneous, casual conversations about park and recreation needs across the County.

The in-person public input process began with a kick-off planning meeting with Department staff and other officials to convey constituents' concerns and an overview of long-term goals. The meeting allowed review of master plan project goals, the planning process as well as the proposed project schedule. Focus groups and pop-up engagements were held with community members in various neighborhoods. An online survey was also conducted to gather input from the public. Participation may have been affected due to concerns related to the Covid-19 pandemic, and one focus group was made virtual.

## **General Comments**

Participants provided many general comments throughout the public outreach process related to desires and concerns regarding the Department's efforts. These comments addressed many different categories of concern. While youth sports emerged as a common theme, other topics included the need for a water recreation facility (indoor or outdoor), as well as more walking trails around the County. Interestingly, no facilities or programs received zero votes. The planning team was able to capture diverse opinions from a wide audience; many residents expressed varying needs in addition to the trends.

## Interviews

The public input process began with interviews conducted by the Lose Design planning team September 29-30, 2020. Interview participants included upper and middle management staff as well as various elected officials including Jackson County District Supervisors. Interviews provided insight into their opinions as local leaders for needed programs and facilities. Interviewees were offered the opportunity to share concerns over current park conditions and what they felt were important projects to undertake from a county-wide perspective.

These interviews provided a historical perspective of the evolution of parks resources and facilities in the County as well as additional information about relationships with local cities, nonprofits, and other recreation-based organizations. One-on-one interviews were necessary to not only develop an understanding of how Jackson County functions but also gain an understanding of what it does successfully, and issues that impact the delivery of recreation services within the community.

Feedback from elected officials and Recreation staff highlighted some trends in the park system. Opinions about the parks and recreation system is that overall, it has seen many improvements over recent years – that includes with internal staff, satisfaction with public services, as well as external perception. Jackson County is making positive efforts toward goal-setting. To continue the positive trend, interview feedback suggested increasing diversity of recreation programming. There should be a greater mix of facilities for populations that are served the least - specifically, adding more facilities for seniors. Additionally, interviews mentioned adding more multigenerational recreation to serve several of the unserved populations, to include seniors. Some comments suggested improving collaborations with the community; an approach suggested is to increase community volunteers and outreach. There is some, but limited training for facility maintenance, however staff would benefit from more robust training for preventative processes. The Department seems to be one of the top priorities of the County, but is limited by its reliance on the general fund. Therefore, the Department should seek out creative ways to generate revenue for parks and recreation to support needed expansion of recreation programming, which was identified by interviews and the public community survey.



## Community Survey

An online community survey open to the public was conducted to gather additional information about the park and recreation needs of Jackson County. The survey consisted of fifteen questions and was available online. Responses were collected between January 11, 2021, and May 31, 2021. Eight hundred and sixty-six (866) website users and forty-two (42) individual survey responses were collected during this period. A full summary of survey results is detailed in the appendix.

The survey results provided additional understanding of public perception. Interestingly, sixty percent (60.0%) consider Jackson County park facilities to be in 'good' or 'high' quality condition. Over a quarter of survey respondents (32.5%) stated the facilities' conditions 'vary by park'. This highlights an overall positive perception of the County parks and recreation system as well as an opportunity to make improvements. The planning team noted these opinions and compared them to more specific feedback provided during the focus group and pop-up engagements.

Residents were also asked about their preferred parks by ranking the community's most desired facilities. The survey showed two parks that best meet the community needs are Jackson County Soccer Complex and Lum Cumbest Park. Another survey question asked the community which park types best reflect their households' interest; 58.5% of households are most likely to visit a sports park, and secondly, 51.2% are likely to visit a neighborhood park. Both survey questions clearly highlight the value residents place on team sports and sports facilities. This is especially true for youth sports.

Survey results show the sixty-four percent (64%) of respondents travel outside the County for parks and recreation. However, analysis of the survey indicates travel outside of Jackson County is not due to a lack of suitable parks and recreation facilities. Reasons for travel outside the County appear to be due to a lack of awareness of facilities and programming – 48.6% and 42.9% respectively. The survey results indicate a need for additional marketing to promote the Jackson County parks, recreation and programming. Respondents indicated needs for the following facilities: more paved trails for walking, running, and biking; and creek/river parks that include water recreation facilities such as boat ramps or fishing docks.

When asked whether "parks and recreation are important compared to other Jackson County priorities" nearly all respondents (97.6%) agreed. Most respondents are willing to volunteer (53.6%) or pay some monthly fee (89.7%) to benefit the Jackson County parks and recreation system.

**60% rate park facilities good or high quality**

**92% feel an indoor recreation facility is needed.**

## Focus Groups

An in-person public engagement process was conducted April 19 and April 20, 2021, by the Lose Design planning team. Public input was collected from four focus groups: Central Youth Athletics and Arena, East Athletics and Arena Users, Conservation Groups and Trails, and St. Martin Youth Athletics.

The focus groups were open to the public and were available to subject matter experts by invitation as well. Each group's attention concentrated on how to best improve parks and recreation. Brief introductions were made, and then the meetings were formatted to address the strengths, weaknesses, opportunities, and threats – a S.W.O.T. analysis – of the subjects as they relate to the County parks and recreation system. This brainstorming format was beneficial to encourage out-of-the-box idea sharing. Participants were able to share opinions as both consumers and service providers. It helped allow room for transparent discussion of problems as well as outline feasible solutions.

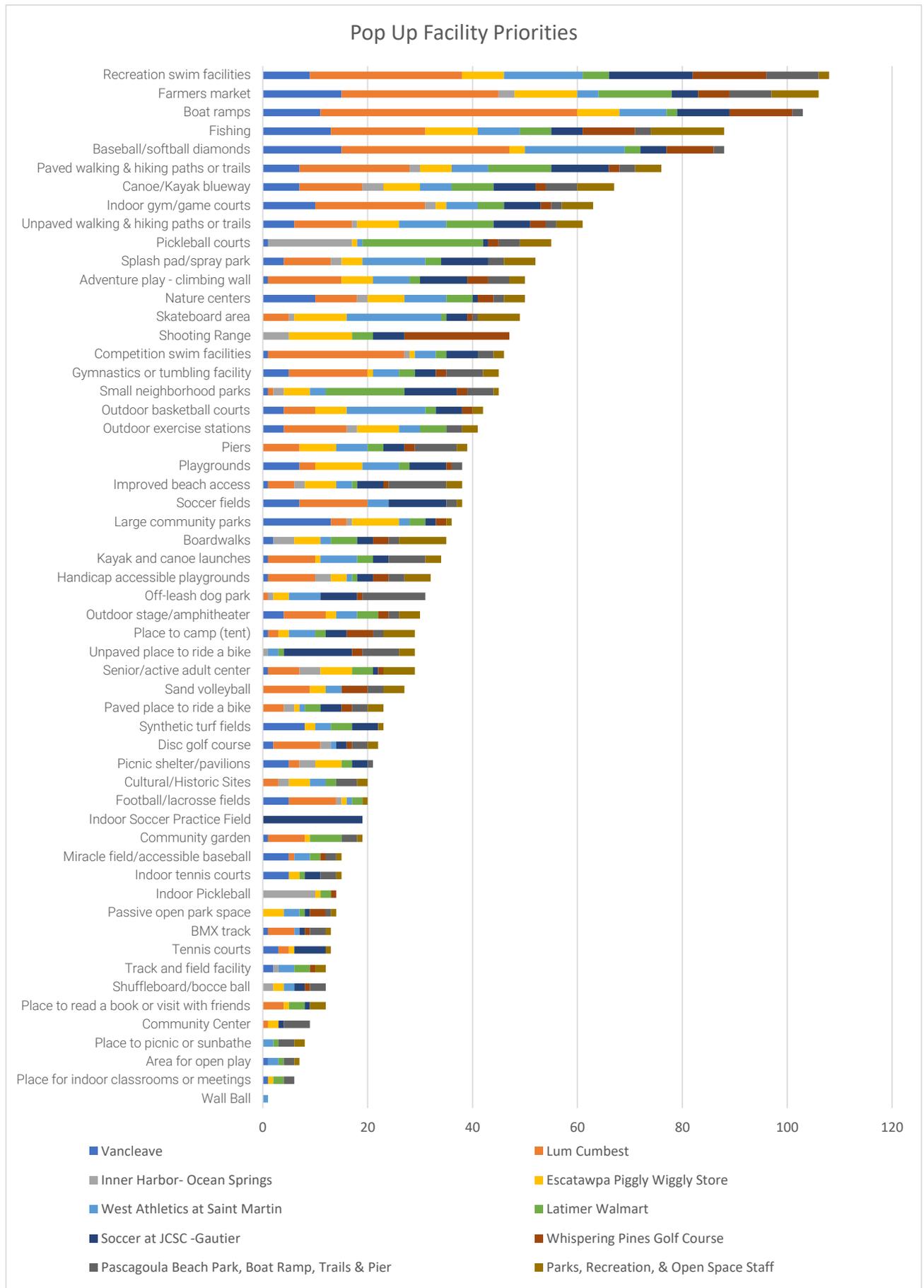
## Pop-Up Engagements

In addition to the interviews, ten pop-up engagement events were hosted to collect information about residents' recreation needs and priorities. Pop-up attendees were given stickers and asked to choose the facilities and programs they felt are needed but not provided adequately – or at all – in the County system. The results of the pop-ups were consistent with the online survey. Survey responses describing the County's strengths also appeared as top needs during the pop-ups.

The ten pop-ups were held at ten different locations around Jackson County to collect varying opinions that were representative of the diversity across the County. Options were extensive and included 56 types of facilities and 74 different programs to choose from. The combined results from the ten pop-up locations indicated which facilities and programs and activities were consistently prioritized at each pop-up, then votes were recorded and then tallied.



Figure 3.1 Pop-Up Engagement Facility Ranking





## Facilities

The top ten facility needs specified were: recreation swim facilities (108), farmers market (106), boat ramps (103), baseball/softball diamonds (88), fishing (88), paved walking & hiking paths or trails (76), canoe/kayak blueway (67), indoor gym/game courts (63), unpaved walking & hiking paths or trails (61), and pickleball courts (55). The full results of the facilities pop-up engagement results can be found in the appendix.

Valuable information was gathered related to existing and needed recreation facilities and included the volume of participation by location. A desire for various types of water recreation was strongly expressed. The Department should consider adding an indoor recreation facility with an aquatics component for residents from around the County to enjoy. A feasibility study may be a wise first step in developing such a facility as there are concerns that similar private facilities have excess capacity. This could potentially address the expressed need for indoor recreation space and swimming facilities. Baseball and softball diamonds appearing as the fourth highest need reiterates the importance of these sports to the community and should be maintained at existing or expanded conditions. That input was consistent with what was provided via the online community survey. The need for the Department to continue to prioritize funding and maintenance of baseball and softball fields was also expressed.

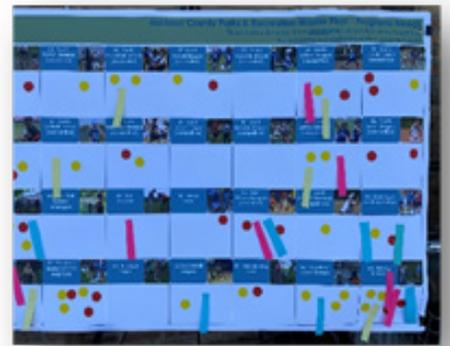
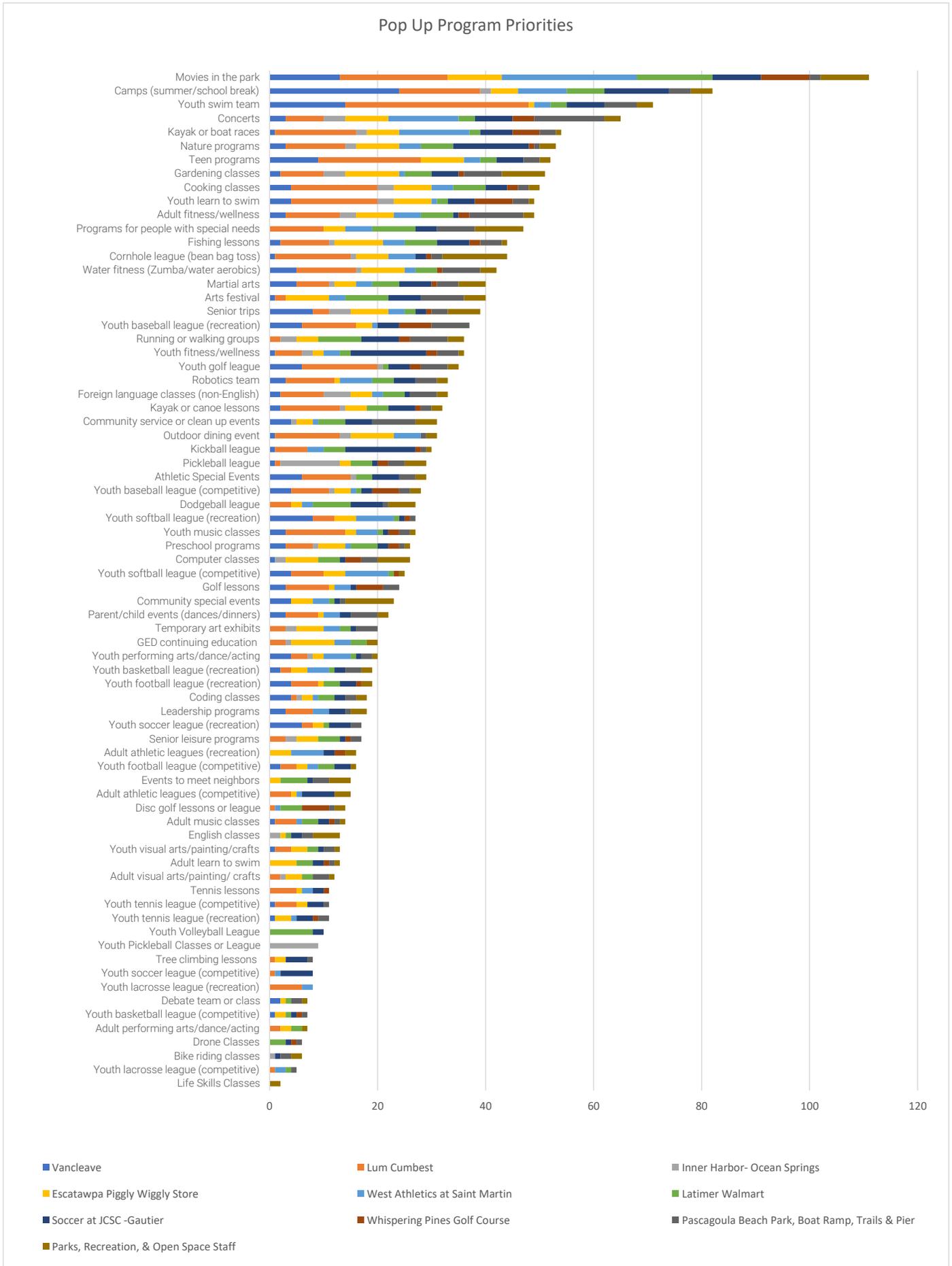


Figure 3.2 Pop-Up Engagement Program Ranking



## Programming

Pop-up attendees had an opportunity to vote for recreational programs they felt were important to their community. Options were extensive and included 74 different programs. Choices varied from concerts and special events to programs for specific populations as well as wellness and youth sports activities. The top ten program priorities residents voted for included: movies in the park (111), camps for summer/school break (82), youth swim team (71), concerts (65), kayak or boat races (54), nature programs (53), teen programs (52), gardening classes (51), cooking classes (50), and adult fitness/wellness (49). Similar to voting for facility needs, the desire for swim programming was represented. The voting results indicate participants are overall satisfied with the current availability of athletic programs but would like additional opportunities for more robust programming.

The complete count from the pop-up engagement results is shown in the appendix. Overall, results indicated strong support for water-based and multigenerational programs. Programs serving educational and personal development needs (such as cooking classes and life skills courses) are also valued.



## Summary

All forms of public input generally correspond since survey responses and pop-up feedback identify similar concerns and interests. Many participants feel that most parks and facilities are in good repair but (in some cases) maintenance varies by park. Some feel they have good access to parks, but most feel there is room for improvement. However, it is necessary to note many survey participants travel outside of Jackson County for certain recreation opportunities.

Input suggests the need for an indoor recreation facility with gym and classroom space. This facility would include multiple courts and space for athletic competitions. This recreation center should also include an indoor or outdoor pool to meet the demand for swim and aquatics programming. Feasibility of an aquatics facility should be assessed. Partnerships with existing facilities could be explored as well. Water-based facilities are also desired and could be developed as part of the County's existing boat ramp and blueway inventories. The County's rivers and waterways should be further leveraged for expanded outdoor recreation needs. Population projections for Jackson County indicate the population will be relatively the same in 2050 - twenty years after the publication of this master plan. Any new developments should plan to meet current local and regional population demands.

# 04 Park Classifications and Service Criteria

A primary task of the planning team for this Master Plan includes an assessment of facilities identified as they relate to overall access and quality of recreation services being provided. Twenty (20) parks and recreational facilities were visited, and individual site assessments were conducted. These assessments serve as the basis for system-wide recommendations and determine the diversity of facilities, service distribution patterns, maintenance practices, age, condition, and compliance with accessibility requirements of the Americans with Disabilities Act (ADA). Supplemented by public input summarized in Section 3, these assessments have been compiled in this section to address existing conditions, use patterns, and the potential for redevelopment and expansion.

## Park Classifications

Possessing a variety of parks and recreation facilities as outlined by the NRPA has many benefits that include health, economic development, and environmental protection. Parks create an identity for a community and promote community pride and improve quality of life standards. This identity can also serve as an economic benefit to the community. Many corporations relocate their headquarters and facilities to areas that offer high qualities of life, to which parks and recreation are central (for more information on the benefits of parks and greenways, including information on how to calculate economic benefits, see the NRPA website).

For many years, communities across the country have developed parks within a basic classification system developed by NRPA to offer balanced parks and recreation opportunities to residents. The standard park system is made up of the following park classifications:

- Mini-/Pocket Park
- Neighborhood Park
- Community Park
- Regional/Large Urban Park
- School Park
- Natural Resource Area/Preserve
- Special-Use Park
- Greenway
- Sports Park/Complex
- Private Park/Recreation Facility



Critical to the service delivery system of any parks and recreation department is the provision of the four basic park categories: Mini-/Pocket, Neighborhood, Community, and Regional/Large Urban Park. In urban or high-density areas where the proper level of Neighborhood and Community Parks are not adequate to meet the community needs, a larger hybrid park has developed in recent years known as the Regional/Large Urban Park. These parks are larger in size and provide activities commonly found in Community Parks but also offer areas that preserve natural settings and provide community open space. Beyond these five basic park types are School Parks, Natural Resource Areas/Preserves, Special-Use Parks, Greenways, Sports Complexes, and Private Parks/Recreation Facilities that complete the system of parks in most communities. Each is classified differently based upon the types of amenities, size, service area, and how access is gained to the facility. The following gives a description of the different types of parks and facilities common to a system.

#### Mini-/Pocket Park

The smallest type of park, a Mini-Park, is typically less than 5 acres. Another term, "Pocket Park," has been used in some instances to identify a Mini-Park. These parks are designed primarily to attract residents who live within a quarter mile of the park. Vehicle parking facilities are typically limited or not provided. Mini-Park service levels range from 0.25 to 0.50 acres per 1,000 residents.

Size normally prescribes these parks to be passive, limited-activity park facilities. Common elements include benches, playgrounds, and tables in an attractively landscaped setting. The parks are sometimes themed to blend in with the surrounding neighborhood. Designs sometimes match the existing homes, fencing, sidewalk pavers, etc. A park of this size is not developed with fields for league play or community-wide events.

#### Neighborhood Park

Neighborhood Parks are found in most county and city systems. These parks normally include 2 to 10 acres and typically serves a population living within a half-mile of the park. Neighborhood Parks concentrate higher volume recreation activities and facilities into a limited amount of space. Facilities typical for this park classification include:

- Parking Facilities
- Playgrounds
- Playing Fields
- Restrooms/Concessions
- Shelters
- Swimming Pool
- Walking Paths

Vehicular parking is necessary for this park classification due to its scope of activities and size. The standard for parking is a minimum of seven spaces for the first 10 acres and one additional space for each acre over 10. This may vary based upon intended activities and program appeal. If team sport facilities or special features (such as a swimming pool) are included, 40+ parking spaces per field will be needed.

Although the park is termed as a “Neighborhood” Park, the scope of people served can vary based upon densities and the number of other parks available. Typically, one Neighborhood Park should serve between 10,000 to 20,000 residents, or 1 to 2 acres per 1,000 people. Many neighborhood parks in Jackson County are less than 5 acres and typically do not include athletic fields. This is reasonable because of the lower population densities in the vicinity of these parks.

### Community Park

Community Parks are needed within a system to ensure all users’ recreation needs and interests are met. This type of park expands beyond a local neighborhood and may sometimes include several neighborhoods. The concept for Community Parks is to include essentially a “one-stop-shop” for all recreation users. It should include a mix of active and passive activities and attract users of all ages. From sports fields to a community center, the park should provide as many recreation and support services as possible. A park of this size and scope commonly includes 30 to 50 acres.

Community parks have both day and night activities. Large facilities, such as an indoor fitness/recreation center or multi-field sports complex, can be placed in such a facility because of the amount of space available and ability to buffer from the surrounding community.

The service area for such a park can vary based upon the size and scope of activities offered. However, a community park may serve anywhere from 50,000 to 80,000 people or 5 to 8 acres per 1,000 people. User analyses are often based upon a service radius, while others in more urban areas may be based upon drive times.

### Regional/Large Urban Park

A Regional/Large Urban Park is typically the largest park within a system. These parks are normally found in the park systems of major urban cities, highly populated communities, or communities with pockets of high populations. The size of these parks varies from a minimum of 50 to 75 acres up to several hundred acres, depending on the type of activities and the amount of use.

The service radius for this park classification is related to the facilities provided in the park and the overall community composition. In many large urban systems where multiple Regional/Large Urban Parks exist, each park will serve a 5-mile or 15- to 30-minute drive time for core recreation services. Each regional park may also serve an entire community if a unique facility is being provided or if hosting regional competitive sports teams.



#### 4 - Park Classifications and Service Criteria

##### School Park

School Park sites are an excellent way to combine resources and provide accessible recreation amenities to the community. Depending on the school type (i.e., elementary, middle, high school), the size of the park will be dictated by the available land adjacent to the school. Typically, middle, and high schools are constructed with youth athletic fields to support team sports. School Parks provide the basis for developing a community park or at the very least, youth athletic fields for recreation programs. The selection of school sites is determined by the school district, as well as the county-wide or city-wide distribution of students. The school site selection criteria may or may not meet the needs for parkland distribution. When School Park development is possible, guidelines for Neighborhood and Community Parks should be followed to meet the needs of residents. When joint developments occur, features common to other parks in the county and surrounding cities (e.g., signs) should be used to identify the property as a public facility.



##### Natural Resource Area/Preserve

According to the NRPA, Natural Resource Areas are defined as “lands set aside for preservation of significant natural resources, remnant landscapes, open space, and visual aesthetics/buffering.” These lands consist of:

- Individual sites exhibiting natural resources.
- Lands unsuitable for development but offering natural resource potential (e.g., parcels with steep slopes and natural vegetation, drainageways and ravines, surface water management areas, and utility easements).
- Protected land, such as wetlands, lowlands, and shorelines along waterways, lakes, and ponds.

Acquisition of Natural Resource Areas/Preserves serves to enhance the quality of the community by maintaining a portion of its natural amenities.

##### Special-Use Park

Special-Use Parks are designed to meet the needs of a specific user group. Examples include golf courses, zoos, and museums. Special-Use Parks are often good revenue generators. If maintained and properly staffed, these parks can provide a substantial cash flow for the designated entity.

These facilities can vary in size according to the demand and type of layout. For example, a regulation size golf course (par 72) needs at least 140 acres, while an executive style layout (par 60) requires only 100 to 120 acres based on amenities such as driving ranges and practice facilities.

##### Greenway

Greenways have become one of the most popular family recreation activities across the country. The value of greenways in terms of recreation, education, and resource protection is invaluable. Greenways serve as links between cities, parks, schools, commercial areas, and neighborhoods. They provide a safe mode of transportation that preserve the environment.



Typically, greenways vary between 10 to 14 feet wide of paved or natural surfaces. When developing a greenway system, corridors should be identified where people will access the area easily. Greenways connect elements within the community and incorporate all the characteristics of the Natural Resource Areas/Preserves. Greenway corridors should be no less than 50 feet wide (except in neighborhoods, where 25 feet may be acceptable). In his article published in 1995, Julius Fabos, a former professor of Landscape Architecture at the University of Massachusetts, divides greenways into three categories – ecological, recreational, and cultural. While each group maintains its own definition, many greenways share characteristics of each.

- Ecological greenways are typically located along natural environments such as rivers, ridgelines, and coastal areas. These trails provide connections to nature, protect, and maintain biodiversity, minimize development, and provide for wildlife migration across natural and human-made boundaries.
- Recreational greenways commonly link elements that have diverse and significant landscapes. Many connect rural areas to more urban locales and range from local trails to larger systems. Most are paved trails that accommodate pedestrians, skaters, and bicycles.
- Cultural greenways connect areas of significant historic value and culture. Economic benefits from these types of trails may be significant if linkages can be directed toward areas of commerce to provide an infrastructure for commuting.

### Sports Park/Complex

Sports Parks/Complexes are parks that are dominated by athletic facilities. Most of these types of parks will also include a small amount of support facilities (e.g., walking tracks, playgrounds, and picnic facilities), but the primary function of the park is to facilitate organized sporting activities.

Sports Parks/Complexes vary greatly in size, depending on the types of facilities being programmed. Rectangular fields can range between approximately 1 to 2.5 acres while individual tennis courts are not even a tenth of an acre. Once the programming needs of a Sports Park/Complex is determined, a more accurate area requirement can be calculated.

**4 - Park Classifications and Service Criteria**



Private Park/Recreation Facility

As described by the NRPA, Private Parks/Recreational Facilities meet one of the two following characteristics:

*“Private Parks, such as swimming pools, tennis courts, and party houses, are generally within a residential area developed for the exclusive use of residents and are maintained through a neighborhood association. They are not, however, a complete substitute for public recreation space. Private Recreation Facilities that are for-profit enterprises, include health and fitness clubs, golf courses, water parks, amusement parks and sports facilities. Not-for-profit private providers include the YMCA, churches, and private schools and colleges that offer sports and recreation facilities.”*

# Level of Service Analysis

## Benchmarking

National Recreation and Park Association (NRPA) Park Metrics were used to compare facility inventories in Jackson County to national trends of other U.S. counties. This comparison is used to identify potential deficits and surpluses in the mix of facilities. The inventory includes facilities owned by the County as well as municipally-owned facilities geographically *in* Jackson County, which support local demand. Park tours, data from the Department, and desktop reviews of aerial photographs were used to develop the facility inventory. While helpful, this comparison may not reflect local demand for facility types (i.e. field hockey) and should be adjusted based on priorities and interests of local communities. For this study, Jackson County facility inventories were considered along with municipal inventories from the cities of Pascagoula, Moss Point, Gautier, and Ocean Springs in an effort to illustrate a more complete picture of recreation facilities that are available in Jackson County.

The largest deficits in the Jackson County inventory are the miles of trail (-14.1), totlots (-5), multiuse courts for basketball or volleyball (-3), lacrosse (-3), field hockey (-2), and multiuse synthetic field (-1). Public interest expressed the desire for multigenerational recreation or programming; multigenerational facilities should be considered when prioritizing new development as well. Another deficit identified by this exercise was in acres of parkland per 1,000 residents. In order to meet averages reported to NRPA by county park agencies, Jackson County would need approximately 702 parkland acres. However, Jackson County is fortunate to have significant state and federally managed parks and wildlife management areas which help to offset the need for significant acreage.

Several strengths were identified by this comparison. The following county-wide surpluses were identified when considering county and municipal inventories: playgrounds (+40), outdoor tennis (+32), community centers (+16), and youth baseball (+29). The community centers are not managed by the Recreation Department but are available for use by the public. The County exceeds expectations at providing these facilities.

Current needs for Jackson County indoor facilities are outlined in Table 4.1 and include: recreation center (-2), nature center (-1), senior center (-1), and stadium (-1). When analyzing the metrics for indoor facilities, it is important to note the cities of Moss Point, Ocean Springs, and Pascagoula each operate public recreation centers, which help to meet the regional need. Based on population, Jackson County may be able to support a nature center. However, the need for nature centers appears to be met by the Audubon Center, Grand Bay NEER and Sandhill Crane Refuge facilities.

### Top outdoor facilities surpluses:

- Playgrounds (40)
- Tennis (32)
- Youth baseball (29)
- Youth soccer (24)
- Youth softball (20)

### Top outdoor facilities deficits:

- Miles of trail (-14.1)
- Totlots (-5)
- Lacrosse field (-3)
- Multi-use basketball & volleyball courts (-3)
- Overlay field (-3)

Additionally, the planning team noticed an opportunity to meet the specific needs of the aging population. Currently, there are zero (0) senior centers managed by the County although 55–59-year-old adults are projected to be the largest age group by 2025.

There are three senior centers currently serving this growing demographic in the cities of Ocean Springs, Gautier, and Pascagoula. However, the Department should look to meet the needs of older residents by providing a center in northern Jackson County. There may be an opportunity to meet the deficit through partnership for senior adult programming. A partnership which utilizes another organization's programming resources in combination with an existing community center should be considered.

Input from the public prioritized the desire for recreational swim facilities, indoor gym/game courts and pickleball courts. These recreational facilities are very complementary when provided at a recreation center. Jackson County does not currently have a recreation center. The cities of Moss Point, Ocean Springs and Pascagoula do have recreation centers in their park systems. While the NRPA comparison does not indicate a need for a recreation center, the planning team would point out this math does not consider the geographic size of Jackson County or the distribution of these recreation centers. The planning team recommends that Jackson County consider developing a recreation center with aquatics in the central part of the county along the I-10 or new Cook Road connector. This general location would not duplicate services provided by the existing recreation centers and could potentially attract choice users who are regular commuters or travelers along I-10.

Tennis, baseball, softball, and soccer represent many of the largest surpluses identified in Figure 4.1. Positive feedback provided in the community input reflects the community's desire for league sports, particularly youth sports. These, and other surpluses, demonstrate the Department's focus on age-specific recreation. However, planning to add more acres of parkland or miles of trail would further demonstrate the Department's effort to address public need. There is a small local demand for lacrosse fields, however youth lacrosse in Jackson County is fulfilled by city recreation programming through affiliate groups. There may not be a need for the County to focus on providing this type of programming since the demand is fulfilled by others.

Although not specifically included in the NRPA metrics, disc golf courses are becoming a more sought-after recreation activity and the County is considering development of disc golf courses.

### Top indoor facilities deficits:

- Recreation center (-2)
- Senior center (-1)
- Stadium (-1)

Table 4.1 NRPA Outdoor and Indoor Facilities Metrics

Outdoor Facilities	U.S. County Agencies		Jackson County Inventory	City of Gautier Inventory	City of Moss Point Inventory	City of Ocean Springs Inventory	City of Pascagoula Inventory	County + Municipal Inventory	Current Need (Based on NRPA Averages)	Surplus/Deficit
Miles of Trail Average		27.5	3.2	8.0	0.9	0	1.3	13.4	27.5	-14.1
Adult baseball	1 per	47,754	2	1	0	3	0	6	3	3.0
Adult soccer	1 per	28,000	12	0	0	4	0	16	5	11.0
Adult softball	1 per	32,531	2	1	0	7	3	13	4	9.0
Basketball courts	1 per	21,523	8	1	3	3	3	18	7	11.0
Community gardens	1 per	146,783	0	0	0	0	1	1	1	0.0
Dog park	1 per	132,656	2	1	0	1	1	5	1	4.0
Field hockey	1 per	73,325	0	0	0	0	0	0	2	-2.0
Football field	1 per	49,471	4	1	0	2	0	7	3	4.0
Lacrosse field	1 per	48,000	0	0	0	0	0	0	3	-3.0
Multipurpose synthetic field	1 per	84,472	0	0	0	1	0	1	2	-1.0
Multi-use courts: basketball & volleyball	1 per	46,376	0	0	0	0	0	0	3	-3.0
Outdoor swimming pool	1 per	103,832	0	0	0	0	1	1	1	0.0
Outdoor tennis courts	1 per	10,899	23	0	2	8	12	45	13	32.0
Overlay field	1 per	49,500	0	0	0	0	0	0	3	-3.0
Playgrounds	1 per	12,900	26	5	4	10	6	51	11	40.0
Skatepark	1 per	189,244	0	0	0	0	1	1	1	0.0
Totlots	1 per	31,637	0	0	0	0	0	0	5	-5.0
Youth baseball	1 per	12,945	20	4	0	11	5	40	11	29.0
Youth soccer	1 per	21,969	19	0	0	0	11	30	6	24.0
Youth softball	1 per	20,208	15	2	0	7	3	27	7	20.0

Indoor Facilities	U.S. County Agencies		Jackson County Inventory	City of Gautier Inventory	City of Moss Point Inventory	City of Ocean Springs Inventory	City of Pascagoula Inventory	County + Municipal Inventory	Current Need (Based on NRPA Averages)	Surplus/Deficit
Recreation Center	1 per	77,007	0	0	2	1	2	5	2	3
Community Center*	1 per	58,952	15	0	1	2	0	18	2	16
Senior Center	1 per	116,185	0	1	0	1	1	3	1	2
Performance Amphitheater	1 per	196,450	1	0	0	0	1	2	1	1
Nature Center	1 per	235,806	2**	0	0	0	0	2	1	1
Stadium	1 per	207,469	0	0	0	0	0	0	1	-1
Ice Rink	1 per	317,226	0	0	0	0	0	0	0	0
Teen Center	1 per	390,918	0	0	0	0	0	0	0	0
Arena	1 per	226,789	2	0	0	0	0	2	1	1

\*Community Centers are not currently managed by Jackson County Parks.

\*\*Nature Centers provided by the Pascagoula River Audobon Center and Grand Bay National Estuarine Research Reserve.

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# Park Locations and Gap Analysis

## Distribution

Jackson County has a park system that is relatively well distributed through the more populated areas. The county park system is mapped in Figure 4.1. There are several regional parks and sports parks whose distribution complements locations of national parks and wildlife refuges, and wildlife management areas.

The sports parks are supplemented by neighborhood parks, mini parks, and a community park that provides an amphitheater as well as multigenerational facilities to support community wellbeing. The County's parks, recreation offerings, and programming are draws for community members of the larger region, which includes surrounding counties *and* Alabama.

## Gap Analysis

The Jackson County Gap Analysis in Figure 4.2 shows the distribution of the parks by evaluating their service areas. To determine the level of access to park facilities, the planning team mapped reasonable service areas that correspond with each park type. Neighborhood parks were assigned a ½-mile service area while the community parks received a 2-mile service area and sports complexes were given a 5-mile service area. By doing so, areas without high levels of access to parks are revealed. Some of the service gaps in Figure 4.2 are served by the Cities of Moss Point and Pascagoula. The most densely populated areas are along the southern portion of Jackson County, especially Pascagoula. While higher population densities are concentrated south of Interstate 10, the planning team understands there is evidence of households migrating north of Interstate 10. When combined, the park service areas appear to provide decent coverage across populated areas of the county. Community members are dispersed across the county's expansive land area and sports parks provide service to most of these areas.

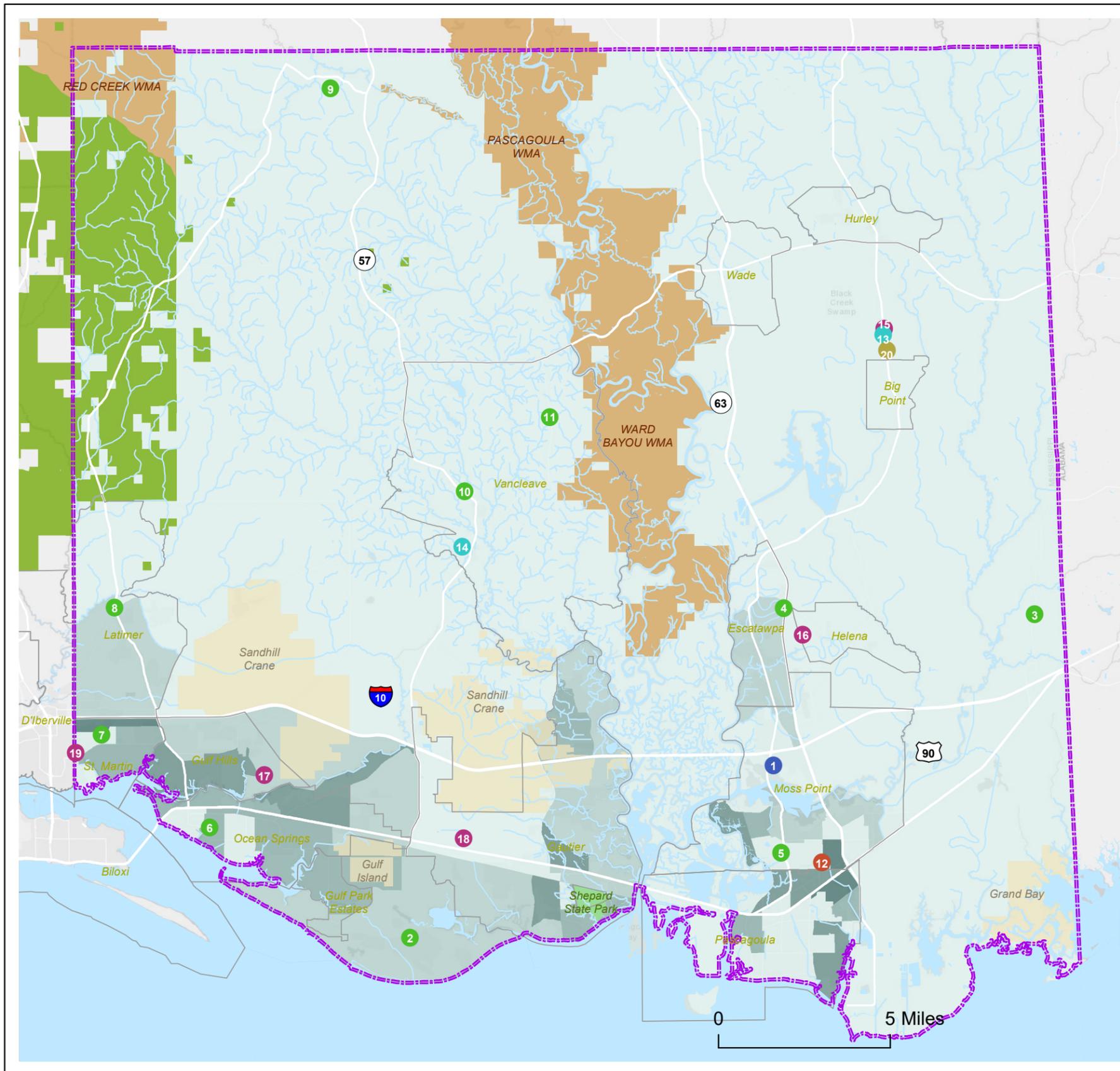
There is an area in western Moss Point that appears to lack good access to Jackson County parks. Part of this area is however, served by the City of Moss Point's mini park, Danny Ray Clark Memorial Park. There is an opportunity for the County to advise the City of Moss Point and possibly collaborate/partner with the Recreation Department to provide increased access in that area. It is recommended that an additional neighborhood park be developed to increase service to residents south of Bellview Avenue, north of Prentiss Avenue, and west of Main Street/Highway 63.

The Latimer community in west Jackson County is currently only served by a small neighborhood park (Latimer Park) and the St. Martin Youth Complex, which is several miles away and across Interstate 10 from this populated area. A second neighborhood park located near the residential subdivisions along Tucker Road would improve access to recreation in this part of the County.

**4 - Park Classifications and Service Criteria**

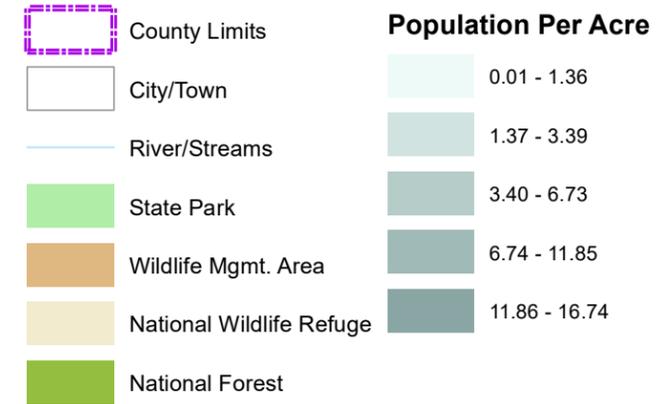
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Figure 4.1 Jackson County Current Park Inventory



## CURRENT PARK INVENTORY

### LEGEND



### Park Inventory

- |                                      |  |
|--------------------------------------|--|
| Mini Park                            | Sports Park                            |
| 1. Simmons Park                      | 15. Roy Crane Adult Complex            |
| Neighborhood Park                    | 16. Helena Youth Complex               |
| 2. St. Andrews Park                  | 17. St. Martin Youth Complex           |
| 3. Franklin Creek Park               | 18. Jackson County Soccer Complex      |
| 4. Hwy 63 Walking Trail              | 19. West Jackson County Soccer Complex |
| 5. Joseph Street Park                | Special Use                            |
| 6. Inner Harbor Park and Pier        | 20. Whispering Pines Golf Course       |
| 7. Cedar Grove Park                  |  |
| 8. Latimer Park                      |  |
| 9. Vestry Park                       |  |
| 10. Martin Luther King Memorial Park |  |
| 11. Old River Road Park              |  |
| Community Park                       |  |
| 12. Edward Khayat Park               |  |
| Regional Park/Sports Park            |  |
| 13. Lum Cumbest Park                 |  |
| 14. Vancleave Youth Complex          |  |



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

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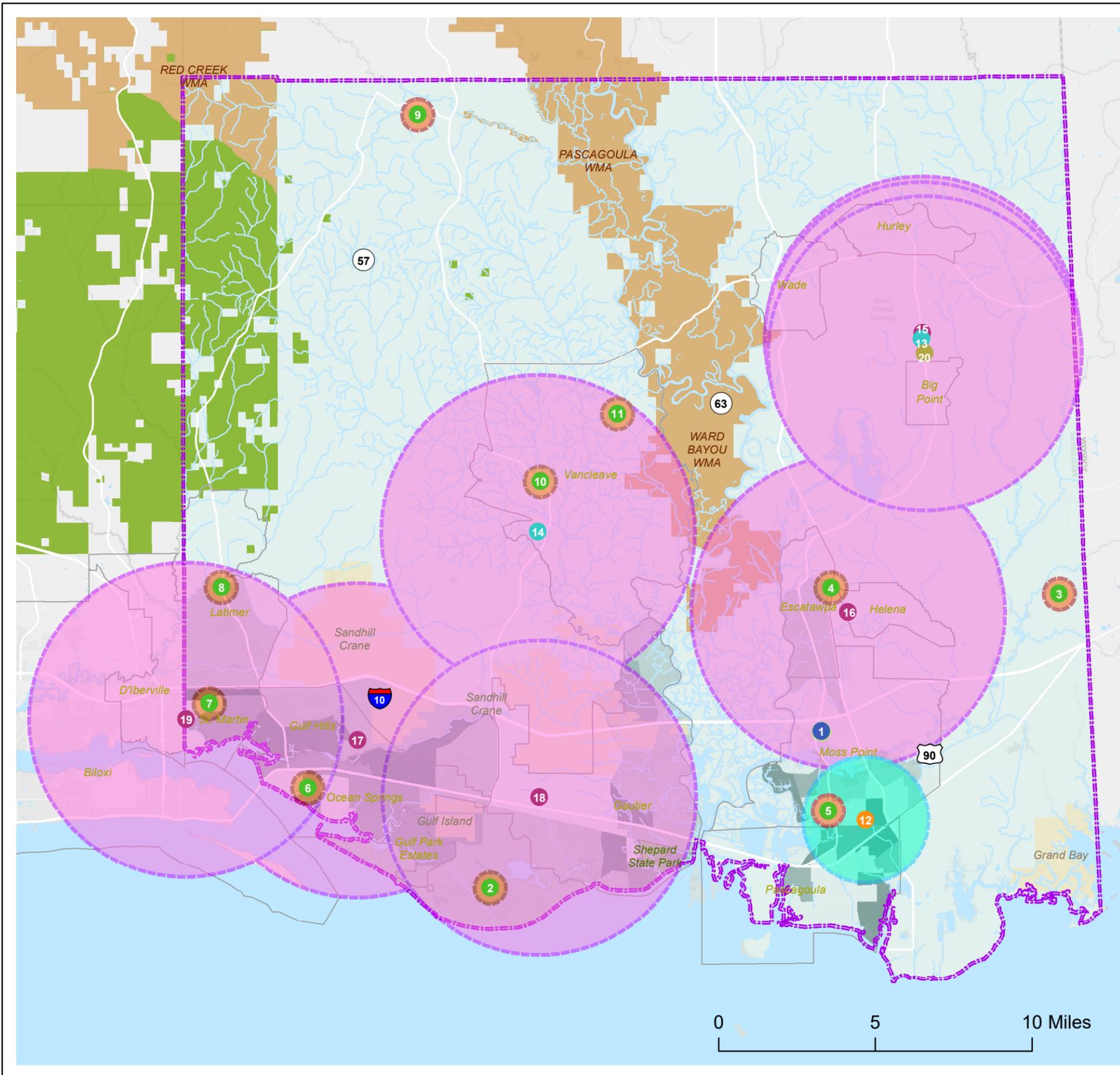
The needs for an indoor recreation facility and a pool were consistent through the public input phase of this project. The benchmarking exercise supports this sentiment as well. The planning team recommends the addition of a large indoor recreation center with basketball/volleyball courts, a wellness area, classrooms, an indoor and outdoor pool. Many residents would benefit from a facility of this type. Developing an indoor recreation center with the proposed offerings could meet benchmarks in several areas. This facility could also become a regional destination for pickleball which has a strong level of participation in Jackson County and along the Gulf Coast. This facility should be located along Interstate 10 in the central portion of Jackson County to maximize accessibility by Jackson County residents. A location along the interstate will also encourage out-of-county guests who travel the interstate frequently to use this facility. A feasibility study examining market demand for this type of facility could determine the optimal size and specific offerings that should be provided to maximize the success of the facility.

The recommended locations of where to close gaps in park service areas are shown in the Service Area Gap Analysis map. The Gap Analysis map shows Jackson County Park service areas by park type as well as how an indoor recreation can increase service in the county. Although the gap analysis study proposes developments away from the most populated areas to follow migration trends, it will help provide more equitable access for rural communities. More Jackson County residents will benefit from the suggested increase in service.

**4 - Park Classifications and Service Criteria**

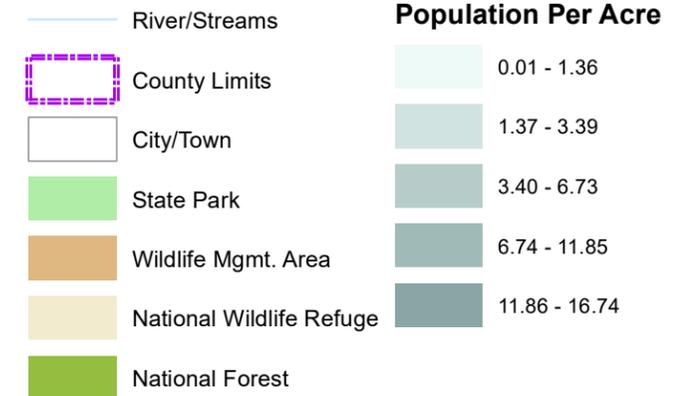
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Figure 4.2 Jackson County Park Service Area Gap Analysis



## CURRENT GAP ANALYSIS

### LEGEND



### Existing Park Inventory

- |                                      |  |
|--------------------------------------|--|
| Mini Park                            | Sports Park                            |
| 1. Simmons Park                      | 15. Roy Crane Adult Complex            |
| Neighborhood Park                    | 16. Helena Youth Complex               |
| 2. St. Andrews Park                  | 17. St. Martin Youth Complex           |
| 3. Franklin Creek Park               | 18. Jackson County Soccer Complex      |
| 4. Hwy 63 Walking Trail              | 19. West Jackson County Soccer Complex |
| 5. Joseph Street Park                | Special Use                            |
| 6. Inner Harbor Park and Pier        | 20. Whispering Pines Golf Course       |
| 7. Cedar Grove Park                  |  |
| 8. Latimer Park                      |  |
| 9. Vestry Park                       |  |
| 10. Martin Luther King Memorial Park |  |
| 11. Old River Road Park              |  |

- ### Park Service Areas
- |  |
|--|
| 0.25 Mile Mini Park Service Area         |
| 0.50 Mile Neighborhood Park Service Area |
| 2 Miles Community Park Service Area      |
| 5 Miles Sports Park Service Area         |

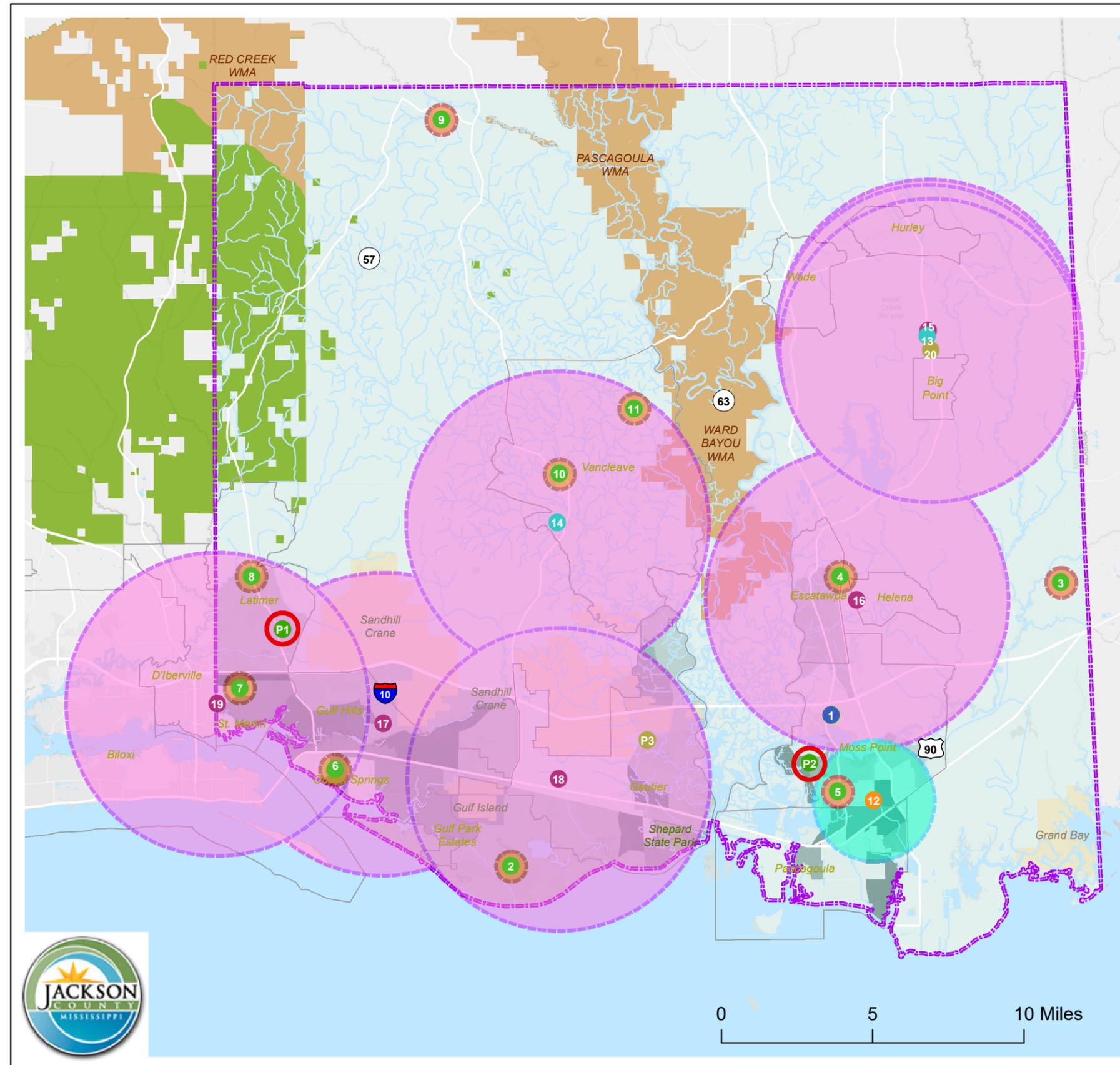


Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

Note: Cities of Gautier, Moss Point, Ocean Springs, and Pascagoula provide additional facilities and services in the gaps mentioned.

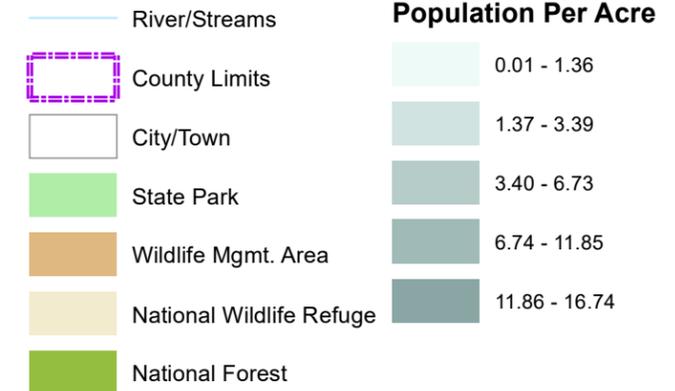
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Figure 4.3 Jackson County Proposed Facilities



## PROPOSED FACILITIES

### LEGEND



### Existing Park Inventory

- |                                      |  |
|--------------------------------------|--|
| Mini Park                            | Sports Park                            |
| 1. Simmons Park                      | 15. Roy Crane Adult Complex            |
| Neighborhood Park                    | 16. Helena Youth Complex               |
| 2. St. Andrews Park                  | 17. St. Martin Youth Complex           |
| 3. Franklin Creek Park               | 18. Jackson County Soccer Complex      |
| 4. Hwy 63 Walking Trail              | 19. West Jackson County Soccer Complex |
| 5. Joseph Street Park                | Special Use                            |
| 6. Inner Harbor Park and Pier        | 20. Whispering Pines Golf Course       |
| 7. Cedar Grove Park                  |  |
| 8. Latimer Park                      |  |
| 9. Vestry Park                       |  |
| 10. Martin Luther King Memorial Park |  |
| 11. Old River Road Park              |  |

### Park Service Areas

- |                            |   |
|----------------------------|---|
| Community Park             | 0.25 Mile Mini Park Service Area                  |
| 12. Edward Khayat Park     | 0.50 Mile Neighborhood Park Service Area          |
| Regional Park/Sports Park  | 2 Miles Community Park Service Area               |
| 13. Lum Cumbest Park       | 5 Miles Sports Park Service Area                  |
| 14. Vanleave Youth Complex | 0.50 Mile Proposed Neighborhood Park Service Area |

### Proposed Facilities

- |                   |  |
|-------------------|--|
| Neighborhood Park | P1. Neighborhood Park (Latimer Area)             |
| Special Use       | P2. Neighborhood Park (Moss Point Area)          |
| Recreation Center | P3. Recreation Center (County-wide Service Area) |



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

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## Barrier Identification

Access to the County's different parks is decent. When analyzing the effectiveness of the parks' service areas, the planning team also identified possible limitations and barriers to service. Because of the diverse landscapes unique to southern Mississippi, including Jackson County, it is important to consider which natural or built structures are barriers to County parks and recreation. There are several waterways, rivers, and marshes that limit connectivity between the east and west. Although Interstate 10 and US Highway 90 are major east-west connections, they are also physical barriers to certain parks and recreation facilities. The planning team suggests future facilities be developed with accessibility to east-west transportation corridors in mind. This may mean locating major facilities along I-10 or U.S. 90 until populations in northern Jackson County increase to a level to support such investment.

### Connectivity Analysis

The National Recreation and Parks Association (NRPA) has established the "three pillars," which are guiding principles for creating a better life for everyone to build strong, healthy, and resilient communities. One of these pillars, equity, establishes the principle of ensuring all people have fair and just access to the benefits of high quality, local parks and recreation. One way that parks and recreation providers strive to provide equitable service is to enhance the overall connectivity between public spaces, schools, places of business, and residential areas. Over the last few decades, community planners across the nation have begun a shift in mindset to facilitate this access through safe pedestrian corridors, rather than vehicular infrastructure. In keeping with this trend, the Transportation Analysis of the 2014 Comprehensive Plan also provides recommendations for an expanded network of multi-modal corridors or bike/pedestrian facilities to improve the overall connectivity within the County.

During the survey portion of the public engagement process, the planning team asked residents for input on both their current utilization of Jackson County's parks as well as their preferences on accessing park facilities. Most respondents (60%) rated a County park facility at 'good' or 'high' quality. When survey participants were asked about their travel preferences to County parks, over 45% of respondents indicated that they would walk up to one mile to visit a facility; 26% of respondents would walk one to two miles; nearly 24% are willing to walk two or more miles. Additionally, over half the participants indicated their willingness to bike two or more miles (56%). Since more than eighty-five percent of participants are willing to bike to County parks, it is important the master plan analyzes connectivity across Jackson County.

In order to ensure equitable access for all Jackson County residents, the Department should take a two-pronged approach to addressing service deficiencies. Development of new or expanded park and recreation facilities in potentially under-served areas will bring recreation opportunities to residents with limited access for improved access. The development of these facilities should occur along existing major transportation corridors. Planned bike and pedestrian corridors should supplement connectivity to parks and recreation while also diversifying facility offerings. Notably, survey participants mentioned impediments to use of County parks and facilities. Impediments included: safety, concerns about lack of wheelchair access, unsafe to walk or ride a bicycle to local parks, and busy roads. Recommendations for improved connectivity should address public input concerns. Analysis of the County's connectivity should be directed by the Bicycle and Pedestrian Design Guide from the Jackson County Bicycle, Pedestrian and Trails Master Plan. Complete street designs should also be incorporated where possible.

Some goals and objectives elected officials and Department executives should consider incorporating into the Parks and Recreation Master Plan from the Transportation Analysis are:

Objective 2.3: Secure and reserve land needed for anticipated future improvements in existing transportation corridors and for the eventual construction of new facilities.

Goal 3: Increase the safety of the transportation system for all travelers, including users of both motorized and non-motorized modes.

Objective 3.1: Plan for and support the development of bicycle and pedestrian facilities.

Objective 3.2: Give priority to safety-related improvements on routes with a higher-than-average frequency of accidents involving motorists, pedestrians, or bicyclists.

Goal 5: Improve regional access to community facilities, including civic centers, libraries, recreation sites, hospitals, clinics, and cultural resources.

Objective 5.1: In evaluating proposed improvements, give due consideration to how they will affect access to sites and facilities associated with the health and welfare of the people who live or work in the area.

Objective 5.2: In developing proposed improvements, make provision for the mobility needs of the aged, infirm, disabled and impoverished whose travel options are limited by their personal circumstances.

Goal 6: Enhance the connectivity of the regional transportation system.

The County Bicycle, Pedestrian and Trails Master Plan also cites safety hazards for cyclists and pedestrian and how to address them. Improvements for pedestrians should focus on complete street policies and guidelines outlined in the plan. Roads should complement multiple uses where pedestrian walkways and sidewalks are present; transitions between walking, biking and driving should promote safety for all users.

### Trails and Greenways

Many parks and recreation organizations provide miles of trails and greenways as a highly desired amenity for communities. Benefits of providing trails and greenways are the potential use by multiple levels of service and, depending on the surface(s), access by persons of various abilities. There was a strong interest from public input regarding the need for trails. Therefore, how to expand and maintain these facilities should be explored by the Department through this Master Plan.

The deficit of miles of trail identified by national benchmarking highlights opportunities to increase trail and greenway mileage in the County. When increasing trail and greenways, the Department should plan for as many miles as possible to be multi-use. Multiple levels of service like walking, running, biking, and skating

should have access to support multi-generational recreation opportunities. There are several County parks that do not provide trails; existing parks can add walking and fitness trails similar to other parks. Although the deficit indicates a need for 24.3 more miles of trail, it is important to acknowledge that additional publicly accessible trails are offered by some local jurisdictions. For example, the Cities of Gautier, Ocean Springs, and Pascagoula have bike trails that can be incorporated. Since the public trails offered by cities primarily serve more densely populated communities, the Department should search for ways to make access to trails and greenways in less populated areas of the county. If development and operation of new trails is not feasible, the Department may consider delegating an area(s) of responsibility where possible. A potential strategy would be to collaborate with nature parks/preserves that either do not have or provide limited trail and greenway access. Ensuring a more robust trail offering in less densely populated areas of the County will promote equitable inclusion for the aging population.

Public comments collected from the website mentioned desires for increased trails – specific mention for mountain biking trails was made as well. Comments clearly stated the need for connections/trails in smaller communities. There is interest for walking trails in smaller communities such as Hurley, Larue, and Vancleave. These trails would be the outer network of an expanded trail system. Development of more trail and greenway connections should connect small, rural communities to larger cities, popular parks and recreation destinations, and tourist attractions along the coast.

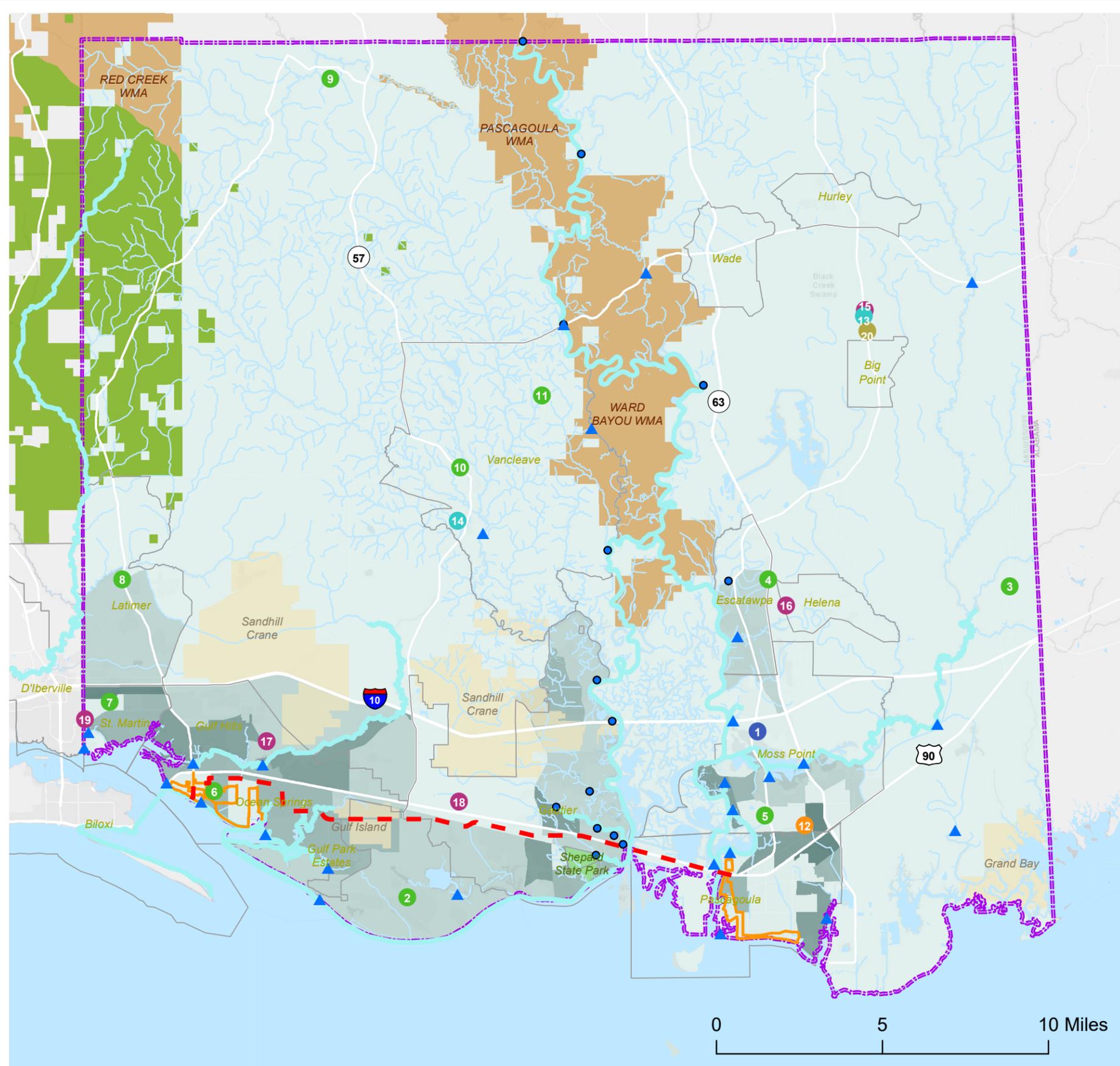
The County should consider increasing connectivity between major destinations via greenway trails. Connections to existing trails should be made when possible to minimize costs associated with new greenway development. Some existing trails that should be used are the Ocean Springs Live Oak Bicycle Trails - specifically the Front Beach Loop, and Restaurant & Retail Loop. Development of a new greenway corridor between the east and west areas of the county - Ocean Springs Beach to Pascagoula - is suggested. The proposed trail is shown in Figure 4.6. If developed, the approximately eighteen miles of greenway would begin and end at notable destinations: Fort Maurepas City Park and Nature Preserve (which has convenient access to Ocean Springs Beach), and Round Island Lighthouse in Pascagoula. From Fort Maurepas City Park and Nature Preserve, the prescribed trail heads east on Front Beach Drive to Washington Avenue, north to Porter Avenue, east to Magnolia Avenue, and north to Government Street. That 1.17 mile distance provides access to the dock at Ocean Springs Beach, Little Children's Park, Walter Anderson Museum of Art, Freedom Field, Ocean Springs Museum, and Vermont Street Park. The proposed path would then continue east along Government Street until it turns into Old Spanish Trail, continues east to Denny Avenue/US-90, and southeast to Cypress Avenue and end at Round Island Lighthouse. The remaining proposed path would provide additional convenient links to popular destinations such as: the Greyhound Stadium, Clay Boyd Park, River Dog's Park, Mississippi Sandhill Crane National Wildlife Refuge Fontainebleau Nature Trail, the Gateway Oak Tree in Pascagoula, and Lighthouse Park. The Gateway Oak Tree is a short distance north of the Round Island Lighthouse.

**4 - Park Classifications and Service Criteria**

Although the proposed trail is about eighteen miles, there are existing biking trails, particularly in Ocean Springs, which could reduce the mileage of new trail required for development, thus potentially the cost of development and maintenance as well. Continuing the trail to Lighthouse Park provides a direct connection to the Pascagoula Historic Bike Trail. Additionally, findings from the 2018 Bicycle, Pedestrian and Trails Master Plan include recommendations for improving connectivity within the county and suggested focusing improvement south of Interstate 10. It explains how to increase trails, expand connections between existing paths, and form a comprehensive network of paths in local cities. The recommendations from the Bicycle, Pedestrian and Trails Master Plan should be considered for opportunities of overlap with the proposed path in Figure 4.6. Specific recommendations should include Bicycle Recommendations and Pedestrian Recommendations from the Bicycle, Pedestrian and Trails Master Plan (sections 2.1 and 2.2, respectively) on how to best implement path connectivity.

Commentors also expressed a concern for safety along existing connections such as roads. Public safety and ADA compliance should be prioritized when maintaining or adding new trail/greenway mileage.

Figure 4.4 Jackson County Connectivity



## CONNECTIVITY

### LEGEND

-  County Limits
-  City/Town

### Connections

-  Biking
-  Hiking
-  Blueway
-  Fitness Trails
-  Wildlife Observation
-  Proposed Greenway

### Points of Interest

-  Blueway Points of Interest
-  Boat Ramps

### Park Inventory

-  Mini Park
  - 1. Simmons Park
  - 2. St. Andrews Park
  - 3. Franklin Creek Park
  - 4. Hwy 63 Walking Trail
  - 5. Joseph Street Park
  - 6. Inner Harbor Park and Pier
  - 7. Cedar Grove Park
  - 8. Latimer Park
  - 9. Vestry Park
  - 10. Martin Luther King Memorial Park
  - 11. Old River Road Park
-  Neighborhood Park
  - 12. Edward Khayat Park
  - 13. Lum Cumbest Park
  - 14. Vancleave Youth Complex
-  Community Park
-  Regional Park/Sports Park
-  Sports Park
  - 15. Roy Crane Adult Complex
  - 16. Helena Youth Complex
  - 17. St. Martin Youth Complex
  - 18. Jackson County Soccer Complex
  - 19. West Jackson County Soccer Complex
-  Special Use
  - 20. Whispering Pines Golf Course



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

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## Individual Park Assessments

In the Fall of 2020, the planning team visited the County's various park and recreation facilities to evaluate their condition and to make recommendations for improvements. The following pages are individual park assessments and recommendations based on those site visits. Information regarding the size, location, and amenities within each park and facility is listed. Planning team members have analyzed facilities for their age, functionality, and conditions and provided the following recommendations, accordingly. Information and commentary from public input has also been included as part of the analysis and recommendation process.

Generally, the following comments are applicable to nearly all facilities and can be used as a guide when planning and implementing future improvements. More specific comments for each facility follow this general list.

- ADA accessibility is as expected in facilities of this age, especially in those built prior to the ADA requirement. Newer facilities that have been designed by consultant engineers and architects, such as the Whispering Pines Golf Clubhouse and West Jackson County Soccer Complex building, are largely compliant. Other buildings and structures typically have some degree of accessibility but aren't fully ADA compliant in various ways. ADA parking is provided at most paved parking lots, but not always in the right ratios, especially in older facilities. ADA accessible routes have been added in some facilities, but others lack ADA access to fields, playgrounds, etc. It is recommended that as these facilities are improved, that consultants be employed to ensure ADA compliance.
- Mowing and weed control regimens were apparent in all facilities and there were very few cases where mowing maintenance needed improvement. Older fields, and those without 419 Bermuda, were generally in good shape. Those with 419 Bermuda were in better shape.
- Most picnic tables and benches were in good shape. ADA tables, at the correct ratios, should be placed strategically amongst other tables. Trash receptacles are generally metal or plastic barrels for ease of disposal. It is understood that these are being replaced with higher end materials. It is recommended that all lighting, site furnishings be consistent across all facilities for ease of maintenance and overall branding appearance.
- Older buildings have been maintained as well as possible over the years. It is recommended that as these buildings require more and more maintenance for upkeep that replacement should be considered.



#### 4 - Park Classifications and Service Criteria

- Some smaller structures are built by Jackson County crews. These generally work well for their purpose and handicapped access is considered, but full ADA access was not present in some cases (see ADA note above).
- Sports lighting is generally provided via older style metal halide fixtures mounted on wood poles. Given the age of these systems, it is recommended that a systemwide lighting study be performed and improvements made where possible. This will improve overall energy use and better ensure proper light levels, uniformity, etc. for play and reduced liability. Tennis lighting appears to be provided at a recreational level. If tournaments are planned, higher levels of light may be needed.
- Facility ID signs were present in nearly all cases, and are consistent with overall County branding. Some facilities had certain rules signs specific to their use (e.g., Lum Cumbest Dog Park), but in addition it is recommended that a consistent general set of rules be displayed at all facilities.
- Many playgrounds have recently received new safety surfacing. Regular monitoring of these surfaces should continue, and improvements made when needed.

## BEACHES

There are three beaches in the system. They are located along public roads and seawalls and offer a variety of recreational opportunities.

- Ocean Springs East Beach
- Ocean Springs Front Beach
- Pascagoula Beach

### Overall Beach Observations:

The beaches are located near residential neighborhoods. Front Beach should be the template for improvements to other beaches because of the well designed pedestrian and bike paths serving the beach, pedestrian scale lighting, picnic tables, fire pits, on-street parking, and beach volleyball courts. Front Beach also has a public pier.

East Beach is not as wide as Front Beach and is less accessible due to the lack of a bicycle or pedestrian trail. No parking is provided at East Beach. Several private piers are located along East Beach, making the beach appear to be privately-owned and may limit use by the general public.

Pascagoula Beach has a pedestrian path that runs the full length of the beach and a pier near the east end. Parking is provided at City Park Street and the west end of the beach. Bicycle lanes are provided on Beach Boulevard along the full length of the Beach. The beach is wide enough to accommodate activities like beach volleyball or other passive recreation.

### Beach Observations and Recommendations:

- Public access is limited at East Beach. Parking should be added at both ends of the beach with a sidewalk along the seawall to improve access to this beach.
- Parking and sidewalks should be provided to avoid conflicts with traffic at East Beach.
- See general notes about lighting, site furnishings, signage, and ADA compliance.
- Overall, the beaches are in good shape and should be improved to encourage use by the general public.



## BOAT RAMPS



Access to water is an important part of the system. It should be noted the Jackson County system has more boat ramps than were visited by the planning team. Three boat ramps (Browns Bridge Boat Ramp, Ocean Springs Harbor Pier and Boat Ramp, and Bayou Cumbest Pier and Boat Ramp) were visited to get a general understanding of what is offered. The remaining facilities were assessed by desktop review. There are sixteen boat ramps/piers in the system. Those not visited include:

- Bayou Cassotte Boat Ramp and Pier
- Barge Landing Boat Ramp
- Old Spanish Fort Pier and Boat Ramp
- I-10 Boat Ramp
- Hwy 63 Boat Ramp and Fishing Pier
- Roy Cumbest Boat Ramp
- Four Mile Creek Boat Ramp
- Ocean Springs Fishing Pier
- Old Fort Bayou Pier and Boat Ramp
- Brittany Boat Ramp
- Lake Mars Pier and Boat Ramp
- Webbs Landing Pier and Boat Ramp
- Simmons Bayou Boat Ramp
- Pollock Ferry Boat Ramp
- McInnis Boat Ramp

### Overall Boat Ramp Observations:

The boat ramps appear to be well dispersed throughout the county's blueways to serve residents and groups accessing other blueway points of interest. The following observations were observed:

- There are security cameras installed at some ramps for safety.
- More popular ramps have lighting.
- Some launches lack courtesy docks and other amenities.
- Some launches have gravel parking and drives while other parking lots at ramps are paved.
- See general notes about lighting, site furnishings, signage, and ADA compliance.
- All launches are in fairly good shape given their purpose and site-specific conditions.

# BOAT RAMPS

## Browns Bridge Boat Ramp Observations and Recommendations:

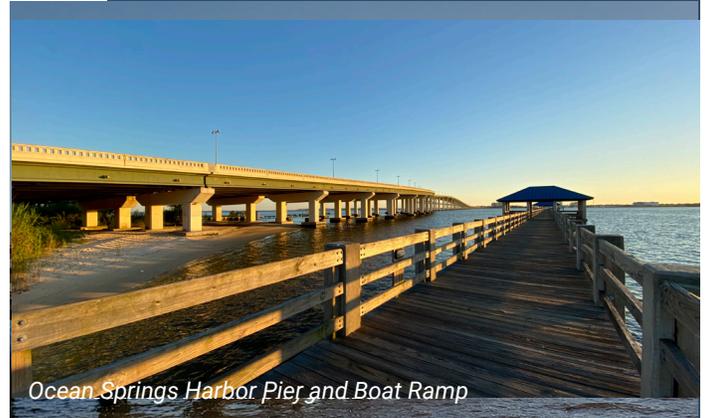
- The launch lacks courtesy docks and other amenities.
- Trailer parking and the driveway is on gravel.
- See general notes about lighting, site furnishings, signage, and ADA compliance.
- The facility is in overall fair shape, given its purpose and flood issues.

## Ocean Springs Harbor Pier and Boat Ramp Observations and Recommendations:

- A portable restroom is provided.
- The launches and courtesy docks are in good shape.
- The pier was closed for repair due to storms, but otherwise appears to be in good shape.
- Parking is paved.
- Some areas of the pier and docks are lighted.
- See general notes about lighting, site furnishings, signage, and ADA compliance.
- The facility is in overall good shape.

## Bayou Cumbest Pier and Boat Ramp Observations and Recommendations:

- The pier and courtesy docks are in good shape.
- The launch and docks are lighted.
- A portable restroom is provided.
- Trailer parking has been paved, and overflow parking is on gravel.
- Pave gravel parking as need demands.
- See general notes about lighting, site furnishings, signage, and ADA compliance.
- The facility is in overall good shape.



## CEDAR GROVE PARK

Address: 7216 Melrose Drive, Biloxi, MS 39532

Classification: Neighborhood Park

Acreage: 1.22

### Description:

Cedar Grove Park is a small neighborhood park adjacent to the Cedar Grove Community Center. It has a playground, basketball court and open lawn. The park is in a residential area.

### Observations:

The park appears to be well located to serve the neighborhood residents and groups using the community center. The following observations were observed:

- The playground has new safety surfacing.
- The basketball court has security lighting.
- Open lawn areas are regularly mowed.
- The facility is in overall fair shape.

### Recommendations:

Other recommendations to consider for this park include:

- Facilities need ADA access routes.
- See general notes about lighting, site furnishings, signage, ADA compliance.



# EDWARD KHAYAT PARK

Address: 3624 2nd St., Moss Point, MS 39563

Classification: Community Park

Acreage: 13.7

## Description:

Edward Khayat Park is in Moss Point near residential neighborhoods and community services provided by the East Jackson County Services Complex. The park contains a large walking track, fitness stations, playground, splash pad, pavilions, an amphitheater, basketball courts, restrooms and parking lot. There is also a large portion of the park property that is currently undeveloped.

## Observations:

The park is easy to access and appears to have a good parking lot that could be expanded. There are several pavilions and an amphitheater that complement more active components which include a playground, splash pad, walking track and exercise stations. The perimeter walking trail is provided in two large loops that allow for good access to different portions of the park. Additional accessible routes are needed to access some park amenities.

## Recommendations:

Other recommendations to consider for this park include:

- Playgrounds and splashpads should be contained in a seamless accessible surface to allow for improved ADA access.
- The access drive to the west of the park is unnecessary. It is also not easy to see from the public street allowing for undesirable activity to occur there. This drive should be closed.
- See general notes about lighting, site furnishings, signage, ADA compliance.
- Consider implementing recommendations from the park concept plan.



## FRANKLIN CREEK PARK



**Address:** Forts Lake Rd., Moss Point, MS 39562

**Classification:** Neighborhood Park

**Acreage:** 5.0

**Description:**

Franklin Creek Park is in the eastern part of the County near the Alabama state line. The surrounding area is primarily rural with few houses in the immediate area. The park is collocated with the Forts Lake – Franklin Creek Fire Department.

**Observations:**

The fire department facility separates the baseball/ softball field from the playground, pavilions, walking track and basketball court. The parking lot is large, but spaces are not striped. The largest portion of the parking lot is located near the playgrounds, away from the baseball/softball field. The walking track is lighted, allowing for extended hours of use. The facility is in overall fair shape.

**Recommendations:**

Recommendations to consider for this park include:

- The playground areas have new surfacing in some areas, others need refreshing.
- The walking track is lighted.
- Basketball needs ADA access route.
- Basketball nets need replacement.
- Open lawn areas are regularly mowed.
- See general notes about lighting, site furnishings, signage, ADA compliance.

# HELENA YOUTH COMPLEX

Address: 10150 Helena Ballfield Rd., Moss Point, MS 39562

Classification: Sports Park

Acreage: 20.67

## Description:

The Helena Youth Complex provides 4 baseball and 4 softball diamonds with associated dugouts, concessions, and restroom buildings. A caretaker residence is also located in the park due to the remote location of the property.

## Observations:

The property is very low, and the grounds appeared saturated. This may indicate the need to build up the fields to provide improved playing conditions. Other stormwater improvements could be made along the perimeter of the park to allow for better drainage of the field complexes.

Plaza areas between fields have a pavilion to provide shade and shelter from inclement weather. Ceilings in these structures are low, making them feel somewhat claustrophobic. Bleachers and dugouts are also under roof. These structures are primarily constructed of wood which may require more regular maintenance. More durable structures should replace these wooden buildings over time.

## Recommendations:

Recommendations to consider for this park include:

- Provide additional parking to serve this number of fields.
- Improve plaza areas between fields to provide improved circulation.
- Replace wooden support structures.
- Prioritize positive drainage for all fields and route water to new stormwater detention areas.
- Consider implementing recommendations from the park concept plan.
- See general notes about lighting, site furnishings, signage, ADA compliance.



## HWY 63 WALKING TRAIL



Address: 10825 Hwy 63, Moss Point, MS 39562

Classification: Neighborhood Park

Acreage: 4.0

### Description:

The Highway 63 Walking Trail is a small neighborhood park that primarily functions to provide a safe walking area for residents. An outdoor fitness station is also provided here. The park is served by a portable toilet.

The walking trail is approximately 0.25 mile long and is valued by the community. The outdoor fitness area is adjacent to the trail and easily accessed from the paved walkway.

The park shares its location with the Jackson County Road Department which has a large amount of heavy equipment and materials.

### Observations:

The walking trail is the primary feature of the park. The users of the walking trail presumably enjoy the curved nature of the trail. However, relocating the trail to the perimeter of the park could open new opportunities for other types of park amenities such as a pavilion or playground.

### Recommendations:

Recommendations to consider for this park include:

- Restripe the parking lot and provide ADA parking spaces.
- Consider redevelopment of this park to include more neighborhood park amenities like pavilions or a playground as a long-term goal to attract more users to this park.
- See general notes about lighting, site furnishings, signage, and ADA compliance.

# INNER HARBOR PARK AND PIER

Address: Kensington Ave., Ocean Springs, MS 39564

Classification: Neighborhood Park

Acreage: 2.25

## Description:

Inner Harbor Park and Pier is a small neighborhood park on the water in a residential area. The park includes two tennis courts, a playground, restroom building and large pier along the waterfront that leads from a central gazebo.

## Observations:

The courts are popular with pickleball players and are striped for tennis and pickleball play.

The pier and walkways provide views of the water and marina, creating a great setting for passive recreation pursuits.

The playground areas have new surfacing, and the equipment is in good shape. The tennis court surfacing is in fair shape and lighting to a low level is provided. The facility is in overall fair shape.

## Recommendations:

Other recommendations to consider for this park include:

- Better ADA access to the restroom should be provided.
- The wooden pavilion needs repair. Some repairs have been made in recent years, but more are needed.
- Broken sidewalks should be repaired.
- See general notes about lighting, site furnishings, signage, and ADA compliance.



## JACKSON COUNTY SOCCER COMPLEX



Address: 4420 Audubon Ln., Gautier, MS 39553

Classification: Sports Park

Acreage: 25.0

### Description:

The Jackson County Soccer Complex is large sports complex located in Gautier, MS adjacent to the Jackson County Animal Shelter. The complex is easily accessed from Highway 90.

The complex is large enough to host large tournaments and appears to have ample parking to do so. The facility is one of the newer complexes and is being developed according to a plan that shows warm up walls and futnet courts that are not always found in similar soccer complexes. These are great amenities that should serve complex users well. A playground is also provided near the concession/ restroom building.

### Observations:

Access to fields and buildings are good and connected by a combination of paved and concrete surfaces. Three large fields are separated by the concession/restroom building by a central drive with parking on either side. This should be monitored as it could be a safety issue. Children may run out from behind parked cars and into traffic as they try to cross the drive. The plan for the park shows two marked crosswalks connecting these fields to the concession area. The planning team understands these crossings were installed as planned after the site visit. The facility is in overall good condition.

### Recommendations:

Recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, and ADA compliance.
- Consider implementing recommendations from the park concept plan.

# JOSEPH AVENUE PARK

Address: Joseph Ave., Moss Point, MS 39563

Classification: Neighborhood Park

Acreage: 1.62

## Description:

Joseph Avenue Park is a small neighborhood park in the Moss Point community. The park has two playgrounds, pavilions, and open grassed area for passive recreation.

## Observations:

The park is easily identified with recognizable signage. A private drive runs along the edge of the park to private residences located to the rear of the park. No parking is provided at the park.

The small pavilions are in good condition. Grass areas are mowed regularly. The facility is in overall good condition.

## Recommendations:

Other recommendations to consider for this park include:

- Consider installing bicycle racks and sidewalks connecting park elements to the private drive or street.
- See general notes about lighting, site furnishings, signage, and ADA compliance.



*Joseph Avenue Park playground*

## LATIMER PARK



Address: 10908 Daisy Vestry Rd., Biloxi, MS 39532

Classification: Neighborhood Park

Acreage: 1.5

### Description:

Latimer Park is in the western part of the County next to the Latimer Community Center. The park has a playground, three pavilions, a splashpad, a restroom building and walking track. Land uses around the park are single family residential and limited commercial and industrial operations.

### Observations:

The park features are well-maintained and in good condition. The walking track is routed around the perimeter of the park and is lighted. The parking lot is in good condition and connected to the walking track with an accessible path. The facility is in overall good condition.

### Recommendations:

Recommendations to consider for this park include:

- Consider installing bicycle racks and sidewalks connecting park elements to the private drive or street.
- See general notes about lighting, site furnishings, signage, and ADA compliance.

# LUM CUMBEST PARK

Address: 18417 Hwy 613, Moss Point, MS 39562

Classification: Regional Park/Sports Park

Acreage: 125.1

## Description:

Lum Cumbest Park is a large regional/sports park primarily serving the eastern portions of Jackson County. The park contains extensive active and passive recreation features including:

- Baseball / Softball Fields
- Batting Cages
- Concession Stands
- Fitness Station
- Football Field
- Horse Arena
- Model Airplane Field
- Pavilion
- Picnic Areas
- Picnic Shelters
- Playground
- Restrooms
- Soccer Field
- Splash Pad
- Tennis Courts
- Walking Track

## Observations:

Due to the park's age, ADA access is limited to most facilities. Several buildings have recently been repainted, and other maintenance is provided on an on-demand basis. Diamond field complexes had some areas of safety netting that needed repair. The planning team understands all netting was replaced after the site visit as part of hurricane repairs. Diamond fields are turfed with grasses native to the area. They are maintained by County crews. They are not irrigated. Rectangle fields are turfed with 419 Bermuda and are irrigated. They are maintained by a contract turf company.



## LUM CUMBEST PARK



Lum Cumbest Park football field



Lum Cumbest Park baseball field



Lum Cumbest Park soccer field

Observation decks, shade coverings, small shelters, etc. are built by County crews. The arena is lighted. Where accessibility has been considered, full ADA compliance is not present in some areas. Newer additions such as the playground and splashpad lack ADA access routes. Open lawn areas are regularly mowed.

### Recommendations:

Recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, and ADA compliance.
- A larger decision should be made about whether to continue ever increasing maintenance due to the park's age, or whether large facilities should be demolished and rebuilt to modern standards.
- The facility is in overall fair shape given its age, but the user experience is poor by modern standards.
- The park has additional acreage that should be developed to meet demand for youth baseball/softball programs and disc golf.
- It is understood that pavement is detrimental to equestrian uses, but consideration should be given to ADA access for spectators in key areas.
- Arena parking is on grass and should be upgraded to gravel to ease maintenance.
- Traffic calming infrastructure should be added to roadways and parking lots.
- The arena surface could use improvements to drainage.
- Consider implementing recommendations from the park concept plan.

# MARTIN LUTHER KING, JR. MEMORIAL PARK

Address: 14152 Hwy 27, Vancleave, MS 39565

Classification: Neighborhood Park

Acreage: 2.0

## Description:

Martin Luther King, Jr. Memorial Park is a small neighborhood park near Vancleave Upper Elementary. The park contains two playgrounds, a basketball court, walking track, pavilions, and restrooms. An area for serving food is provided, making this park a popular location for family reunions and get-togethers.

## Observations:

All park features appear to be in good condition. Older elements should be monitored for possible replacement. The parking area is not striped and ADA parking spaces are not delineated.

Structures are recently painted and appear to be in good condition. Mulch playground surfaces are contained with a concrete walk and appear to be in good condition. Grass shows signs of wear and needs attention in small areas.

## Recommendations:

Other recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, ADA compliance.



## OLD RIVER ROAD PARK



**Address:** Starling Road at Old River Road, Vancleave, MS 39564

**Classification:** Neighborhood Park

**Acreage:** 3.5

**Description:**

Old River Road Park is in the northern portion of the County in an area characterized by rural residential properties. The park has a walking track, playground, fitness station, pavilions, and a basketball court. There is a small informal parking lot that serves the park.

**Observations:**

Park structures and equipment are in good condition. Mulch is in good condition and will need continued attention and maintenance.

The walking track is approximately 0.25 mile. The path is laid out with several curves. The track links most park amenities with an ADA accessible route.

**Recommendations:**

Recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, ADA compliance.

# ROY CRANE ADULT COMPLEX

Address: 18417 Hwy 613, Moss Point, MS 39562

Classification: Sports Park

Acreage: 20.08

## Description:

Roy Crane Adult Complex consists of two softball fields programmed for adult league play. The complex is located directly across from Lum Cumbest Park.

## Observations:

Due to the park's age, ADA access is limited to most facilities. Several buildings have recently been repainted, and other maintenance is provided on an on-demand basis. The diamond fields had some areas of safety netting that needed repaired during the site visit; however, the netting has since been replaced as part of hurricane repairs. The diamond fields are turfed with grasses native to the area. They are maintained by County crews. They are not irrigated. Open lawn areas are regularly mowed. The facility is in overall fair shape given its age, but the user experience is poor by modern standards.

Observation decks, shade coverings, small shelters, etc. are built by County crews. Where accessibility has been considered, full ADA compliance is not present in some areas.

## Recommendations:

Other recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, and ADA compliance.
- A larger decision should be made about whether to continue ever increasing maintenance due to the park's age, or whether facilities should be demolished and rebuilt to modern standards.
- Parking improvements are recommended and illustrated on the concept plan for Lum Cumbest Park.



## SIMMONS MINI PARK

Address: Dutch Bayou Rd., Moss Point, MS 39563

Classification: Mini Park

Acreage: 0.5

### Description:

Simmons Mini Park is in Moss Point and contains a playground and “Health Quest” outdoor fitness stations. There is a limited number of parking spaces that appear to meet the demand for this facility. The park is located near several residences and commercial business.



Simmons Mini Park playground

### Observations:

The park grounds are in good condition. The playground equipment and fitness station are in good condition as well. There appears to be room to expand this park if necessary to meet local need.

Signage is in good condition and identifies the property as a public recreation facility. Additional lighting could allow for extended hours of use while discouraging undesirable activities from occurring in the park.

### Recommendations:

Recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, ADA compliance.
- Consider the addition of a pavilion to complement the playground and provide opportunities for rental fees.

# ST. ANDREWS PARK

Address: 1401 Elm St., Ocean Springs, MS 39564

Classification: Neighborhood Park

Acreage: 5.2

## Description:

St. Andrews Park is a small neighborhood park with several pavilions or picnic shelters, exercise equipment, playgrounds, a splash pad, walking track, and a restroom building. There is a large parking lot that serves this park.

## Observations:

The park is in a largely residential area and appears to primarily be used by families who live nearby. The park has a good mix of features that appeal to a wide range of age groups. Playground equipment is covered by shade structures. All grounds, equipment, and buildings appear to be in good condition. Most park features, except for a few pavilions, have good ADA accessible routes.

Jackson County owns property adjacent to St. Andrews Park that could be used to expand the park property. A concept plan was developed for this park illustrating various ways to improve on what is already a very popular recreation facility.

## Recommendations:

Other recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, and ADA compliance.
- Consider implementing recommendations from the park concept plan.



## ST. MARTIN YOUTH COMPLEX

Address: 10609 Yellow Jacket Blvd., Ocean Springs, MS 39564

Classification: Sports Park

Acreage: 40.0

### Description:

The St. Martin Youth Complex is a large sports park that primarily serves youth softball, baseball, soccer, and football. The following amenities are provided:

- Baseball / Softball Fields
- Batting Cages
- Concession Stand
- Football Fields
- Meeting Rooms
- Pavilions
- Playground
- Restrooms
- Walking Track

### Observations:

Parking is limited for the number of fields in this park. There appears to be room for development of formal parking areas to serve the various sports. The park is adjacent to St. Martin Middle School, which has competitive athletic facilities for those students.

Field conditions are well maintained. Each field and court appear to have good lighting for the anticipated level of play. Bleachers, concessions, and support buildings are good but showing some signs of age. The plaza areas between softball and baseball fields are narrow and congested when games are being played.

A concept plan was created for this park to illustrate ways to improve on this valuable community asset. The plan includes improvements to parking areas, pedestrian circulation, playgrounds, and shade. It also proposes a system of trail in some of the undeveloped areas of the property. Although not present during the park assessment, a new restroom is currently under construction.

### Recommendations:

Recommendations to consider for this park include:

- Add trees throughout the park for shade.
- See general notes about lighting, site furnishings, signage, and ADA compliance.
- Consider implementing recommendations from the park concept plan.



St. Martin Youth Complex fields

## ST. MARTIN TENNIS COMPLEX

Address: 11401 Yellow Jacket Blvd., Ocean Springs, MS 39564

Classification: Sports Park

Acreage: 2.8

### Description:

The tennis complex is an accessory to St. Martin Youth Complex. It is northwest of St. Martin Youth Complex and St. Martin Middle School. There are eight tennis courts. There is a large parking lot and restrooms that serve this complex as well as the connected baseball/softball and soccer fields.

### Observations:

All tennis courts are lighted. Observation decks, shade coverings, small shelters, etc. are built by County crews. Where accessibility has been considered, full ADA compliance is not present in some areas. The facility is overall in fair shape. The building specifically is in fair shape, but needs ADA upgrades.

### Recommendations:

Other recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, and ADA compliance.



## VANCLEAVE YOUTH COMPLEX

Address: 5400 Ball Park Rd., Vancleave, MS 39565

Classification: Regional Park/Sports Park

Acreage: 85.34

### Description:

The Vancleave Youth Complex is a large sports park that includes facilities for baseball, softball, football, soccer, and tennis. The park also has a playground, fitness stations, walking track and a dog park. The Conrad Mallette Multi-Purpose Arena is also located in the park as is the associate RV park. A community center is located here which is not managed by the Recreation Department. Additionally, the Central Jackson Safe Room hurricane shelter and Recreation Department offices are located here.

### Observations:

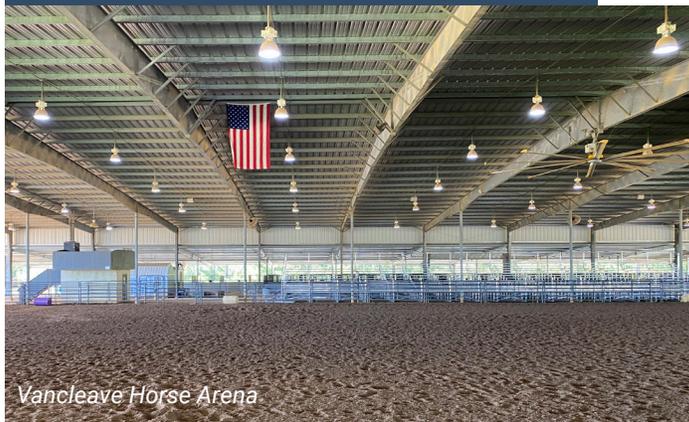
Athletic fields, fencing and lighting are in good condition and appear to be well-maintained. Concession structures and restroom buildings are in good condition as well. The walking track and playground equipment is also in good condition.

Parking is limited as with other large sports parks in the County. Small parking areas serve the softball fields/football field and tennis areas while a large parking area is provided at the arena. However, parking in the areas around the baseball fields are not well defined and very limited which encourages visitors to park on the grass and along Ballpark Road.

Ballpark Road is a lengthy straightaway which encourages speeding. Traffic calming devices would discourage unsafe driving and increase awareness that pedestrians and children are in the area.



Vancleave Dog Park



Vancleave Horse Arena

# VANCLEAVE YOUTH COMPLEX

A concept plan was created for this park to illustrate ways to improve on this important recreation facility. The plan includes improvements to parking areas, pedestrian circulation, and playgrounds.

## Recommendations:

Recommendations to consider for this park include:

- Add more covered bleachers.
- Improve drainage for the current fields.
- Complete upgrades to sports lighting.
- See general notes about lighting, site furnishings, signage, ADA compliance.
- Consider implementing recommendations from the park concept plan.



*Vancleave baseball fields*



*Vancleave football field*

## VESTRY PARK

Address: 25900 Schoolhouse Rd., Biloxi, MS 39573

Classification: Neighborhood Park

Acreage: 3.5

### Description:

Vestry Park is a small neighborhood park in a rural area of Jackson County. The area around the park is largely undeveloped except for a neighboring church and the Daisy Vestry Community Center.

The park includes two pavilions with picnic tables and grills, one mile of trail, a diamond field with a backstop, a half basketball court, a playground, a new Port-O-Let enclosure, and a recently graded parking lot with new parking bumpers.

Since visiting, several improvements were made: the water line was repaired, drainage culvert was replaced, the original pavilion was upgraded with railing, ADA accessible sidewalks were added, and the fence lines were cleaned.

### Observations:

The following was observed at Vestry Park:

- Parking is on gravel.
- The diamond field is grassed only.
- Basketball is lighted.
- The older pavilion needs painting.
- Identification signage doesn't match County standard.
- Open lawn areas are regularly mowed.
- The facility is in overall good shape.



### Recommendations:

A larger decision should be made about whether to continue ever increasing maintenance due to the park's age, whether facilities should be demolished and rebuilt to modern standards, or whether all present facilities are needed.

Other recommendations include:

- See general notes about lighting, site furnishings, signage, and ADA compliance.
- Look for ways to connect Vestry Park to the Daisy Vestry Community Center.

# WEST JACKSON COUNTY SOCCER COMPLEX

Address: 7711 Yellow Jacket Rd., St. Martin, MS 39532

Classification: Sports Park

Acreage: 30.08

## Description:

The West Jackson County Soccer Complex is the newest park in the County system. The park is in the St. Martin area serving southwest Jackson County.

## Observations:

New sidewalks have been added in several places, greatly improving ADA access. Access to team areas should be addressed. The concession restroom building is new, and although raised, addresses ADA via a lift. Portable restrooms are provided for when the building is closed.

Rectangle fields are turfed with 419 Bermuda and are irrigated. They are maintained by a contract turf company. Open lawn areas are regularly mowed. Expansion is planned with additional fields on the vacant land.

The challenge course is new and provides a unique offering for park visitors. Overall, the facility is in good condition.

## Recommendations:

Recommendations to consider for this park include:

- See general notes about lighting, site furnishings, signage, and ADA compliance.
- Consider implementing recommendations from the park concept plan.



## WHISPERING PINES GOLF COURSE



Address: 18412 Hwy 613, Moss Point, MS 39562

Classification: Special Use

Acreage: 167.0

### Description:

The Whispering Pines Golf Course is the only golf course managed by the County. The 18-hole course is in eastern Jackson County, near the Alabama state line, attracting golfers from outside the community in addition to local golfers.

The golf course includes a clubhouse and restaurant. There is also a new pavilion north of the clubhouse.

### Observations:

The clubhouse is new and is in good shape. ADA parking ratios should be reviewed and addressed. The course is overall in good shape and improvement is ongoing. Open lawn areas are regularly mowed but floods because of its flat topography. Cart paths are in need of repairs. Restrooms on the course need updating. The facility is overall in good shape.

### Recommendations:

- Construct a new maintenance facility
- Repair cart paths,
- Renovate course restrooms
- Update tee boxes.
- See general notes about lighting, site furnishings, signage, and ADA compliance.

# Park and Recreation System Recommendations

## Americans with Disabilities Act (ADA) Compliance

A large issue facing both public and private recreation providers is the ability to enhance access for disabled patrons. Park and recreation departments are not exempt from this requirement, and legislation dictates that primary park amenities be barrier-free.

Primary access routes as described in the Recommendations for Accessibility Guidelines: Recreation Facilities and Outdoor Developed Areas, by the U.S. Architectural and Transportation Barriers Compliance Board (ATBCB), are defined in the following manner:

*“Outdoor recreation access routes are the paths that connect the primary developed spaces and elements that are basic to the recreation experience being offered at the site. For example, the outdoor recreation access routes at a picnic ground are the paths linking the parking area, restrooms, picnic units, and water hydrants. While many of these elements – parking area, restroom and water hydrant – are not the primary reason for a person to visit the site, they are basic developed elements that serve all visitors.*

*Designers and managers, in consultation with users, must determine which of the developed activities and elements at a recreation site are basic to the recreation experience being offered. Further, they must ensure that there is a comprehensive system of outdoor recreation access routes that connect all primary elements and spaces with each other and with accessible parking spaces and facility entrances. This determination should be based upon visitor expectations as well as the level of development at the site.”*

The ADA regulations were updated in July of 2010, when President Obama signed the legislation that governs the design standards. The new standards offer more governance and specifics than the previous standards but still leave room for interpretation for some park facilities; however, they are very specific in their requirements for all playgrounds, hard courts, pathways, spectator areas, fishing piers, water play features, restrooms, and programming spaces to be accessible. The guidelines provide specifics on maximum vertical and horizontal slopes that can be used along access routes if they are to be compliant. Several of the key standards that will impact new park and renovation projects are as follows:

- **206.2.10 Recreational Boating Facilities.** Boat slips required to comply with 235.2 and boarding piers at boat launch ramps required to comply with 235.3 shall be on an accessible route. Accessible routes serving recreational boating facilities shall comply with Chapter 4, except as modified by 1003.2.
- **206.2.11 Bowling Lanes.** Where bowling lanes are provided, at least 5 percent, but no fewer than one of each type of bowling lane, shall be on an accessible route.
- **206.2.12 Court Sports.** In court sports, at least one accessible route shall directly connect both sides of the court.
- **206.2.13 Exercise Machines and Equipment.** Exercise machines and equipment required to comply with 236 shall be on an accessible route.

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- **206.2.14 Fishing Piers and Platforms.** Fishing piers and platforms shall be on an accessible route. Accessible routes serving fishing piers and platforms shall comply with Chapter 4 except as modified by 1005.1.
- **206.2.15 Golf Facilities.** At least one accessible route shall connect accessible elements and spaces within the boundary of the golf course. In addition, accessible routes serving golf car rental areas; bag drop areas; course weather shelters complying with 238.2.3; course toilet rooms; and practice putting greens, practice teeing grounds, and teeing stations at driving ranges complying with 238.3 shall comply with Chapter 4 except as modified by 1006.2. (EXCEPTION: Golf car passages complying with 1006.3 shall be permitted to be used for all or part of accessible routes required by 206.2.15.)
- **206.2.16 Miniature Golf Facilities.** Holes required to comply with 239.2, including the start of play, shall be on an accessible route. Accessible routes serving miniature golf facilities shall comply with Chapter 4 except as modified by 1007.2.
- **206.2.17 Play Areas.** Play areas shall provide accessible routes in accordance with 206.2.17. Accessible routes serving play areas shall comply with Chapter 4 except as modified by 1008.2.
- **206.2.17.1 Ground Level and Elevated Play Components.** At least one accessible route shall be provided within the play area. The accessible route shall connect ground level play components required to comply with 240.2.1 and elevated play components required to comply with 240.2.2, including entry and exit points of the play components.
- **206.2.17.2 Soft Contained Play Structures.** Where three or fewer entry points are provided for soft contained play structures, at least one entry point shall be on an accessible route. Where Titles II and III - 2010 Standards - 30 60 - 2010 Standards: Titles II and III Department of Justice AMERICANS WITH DISABILITIES ACT: SCOPING ADA CHAPTER 2: SCOPING REQUIREMENTS 29 four or more entry points are provided for soft contained play structures, at least two entry points shall be on an accessible route.

Refer to the following web site for additional ADA information: [https://www.ada.gov/regs2010/titleII\\_2010/titleII\\_2010\\_regulations.htm](https://www.ada.gov/regs2010/titleII_2010/titleII_2010_regulations.htm)

The park system recommendations address how best to ensure compliance with accessibility requirements of the Americans with Disabilities Act (ADA). These system-wide recommendations address existing conditions, use patterns, and the potential for redevelopment and expansion. Based on community feedback in Section 3, it was clearly expressed that some residents' concerns around access to/at park facilities are based on ability. Equitable access should be prioritized to reduce the limitations of service. Due to the age of many of the facilities in the County's park inventory, many still contain original design elements that are not in compliance with current accessibility codes. The planning team observed multiple instances of non-compliant parking spaces and pedestrian routes to primary use areas. Many athletic facilities did not have accessible routes to team areas and lack of compliant restroom facilities was also frequently noted. In recent years, the County has made minor ADA improvements at existing parks (such as sidewalks at Khayat Park), but the planning team recommends a more comprehensive approach throughout the system to address code deficiencies. Re-evaluation of the total system on a recurring basis is recommended to continue to monitor park conditions for code compliance.

## Park Standards

Another prominent issue within some park systems is the non-compliance of playground equipment to safety standards by organizations such as the American Society for Testing and Materials (ASTM), the U.S. Consumer Product Safety Commission (CPSC), and the International Play Equipment Manufacturers' Association (IPEMA). The standards proposed by these organizations are meant to serve as a guideline to help create atmospheres that are safe and pose a minimal threat of injury. Studies show that many injuries sustained on public playgrounds are to the head – a result of falls from the play structure to the ground. For this reason, consideration has been given as to what the critical fall height would be in which a fatal head injury might occur.

Guidelines have been established measuring the impact performance of various materials. As with ADA issues, alternatives should be studied, and a standard established for implementation of safe play environments throughout the parks system.

Safety surfaces should be under specific consideration, with options lying under two main categories – unitary materials (mats, tiles, poured-in-place rubber surfacing, etc.) or loose-fill surfacing materials (engineered wood fiber, rubber mulch, pea gravel). The use of latter is common in many park systems but should be noted to require much higher maintenance requirements to maintain its safety rating. Newer poured-in-place rubber surfaces are becoming more cost effective, as they involve a higher initial cost but eliminate the need for annual maintenance and material costs. As playgrounds are added to the system and older equipment is updated, this type of surfacing should be examined as an alternative.

The Department currently has one staff member who maintains a playground safety certification (Certified Playground Safety Inspector, CPSI) and monitors and reports on playground conditions and limits liability. This is a standard practice in public park agencies across the country and is currently being met by one County Recreation Department staffperson. The Department could use a second CPSI staff member because of the number of facilities. Jackson County should evaluate current staff positions, knowledge and qualifications in order to meet this goal.

## Other General Recommendations

1. Improve ADA accessibility concerns wherever necessary. Concerns for ADA compliant walkways, parking, crosswalks, and trails should be prioritized.
2. Existing corridors should be enhanced, or new corridors developed in ways that promote cohesion between varying levels of service. This may include dedicated bike lanes with high visibility, traffic calming, lane reductions, "share the road" signage, or roadway narrowing. Consultation with the Public Safety Department should be prioritized. Additional inter-departmental collaboration (with Public Safety and other departments where possible) should be initiated for capital funding availability.
3. Increase walkability for pedestrians to parks, particularly mini and neighborhood parks. Walkability will connect residents to County facilities as well as improve community cohesiveness. Walking access to parks can also present additional opportunities to promote community health and wellness.
4. Add directional signage to Jackson County parks and facilities to improve wayfinding and connectivity.
5. The City of Moss Point should consider development of a mini park in west Moss Point to improve park access in the area. It will make accessibility feasible for the dense population in Pascagoula (south) as well as other neighborhoods via the east-west connectors.
6. Opportunities should be sought to diversify and increase multi-modal connectivity from the high population coastal area in Pascagoula. Existing County parks and facilities would benefit from increased north-south multi-modal access between Pascagoula and Moss Point to increase utilization.
7. Support multi-modal transportation accessibility by striping bike lanes, adding bike racks at various parks and facilities. The Recreation Department should support/assist with implementation of existing multi-modal initiatives of the Road Department; or the Recreation Department should seek new initiatives to create in collaboration with the Road Department.
8. Solicit a partnership with the County Community Centers Department, a private organization or nonprofit organization to provide a senior center to the northern and central areas of the County. Ideally, increased service would use east-west access (via Wade Vancleave Road) to increase connectivity to as many residents as possible. If collaborating with the Community Centers Department, then opportunities on how to make existing senior programming more robust should be considered. Furthermore, opportunities to make at least one community center a dedicated senior center should be explored.

## Summary/Conclusion of Findings

Jackson County Parks and Recreation has a limited offering of recreation programming and services, but there are opportunities for expansion. When planning for expansion, the County should consider parks and services provided to residents by local jurisdictions to avoid unnecessary duplication of offerings. It is important since it enhances service satisfaction in the County regardless of which organization(s) operate or maintain them. There are opportunities for the County to advise some Jackson County Cities of gaps in recreational access in those jurisdictions based on this planning study. Overall, the parks and recreation system is in good condition and somewhat meets County residents' needs. Prioritization of the strong demand for youth programming is demonstrated by the surplus of youth facilities and quality conditions in the individual park assessments. Walking/fitness trails are provided at many parks where possible and some double as access paths as well. On a larger scale, transportation connectivity throughout the County provides decent access to densely populated areas in the County, which should be maintained to continue to connect residents to County facilities as well as local jurisdictions' parks and recreation opportunities.

A major opportunity identified in the system is to provide an aquatic facility as part of a large recreation center, which is highly desired by the community as it's currently not provided by the County. The large recreation center could also serve as a central hub for the growing pickleball interest with a new pickleball complex.

New neighborhood parks in the Moss Point and Latimer areas identified in the gap analysis would diversity recreation opportunities in these areas. The Moss Point park may represent an opportunity to partner with the City of Moss Point.

Most facilities would benefit from small scale improvements/investments. Assessments of the parks with a focus on more preventative maintenance, in addition to the regular landscaping, would extend facilities' life spans. ADA compliance should be expanded so all parks and recreation facilities consistently meet ADA standards, especially for older infrastructure. Safety measures present at current parks and recreation facilities (such as lighting) work positively. However, improving safety measures already in place at Lum Cumbest Park, and Roy Crane Adult and Jackson County Soccer Complexes are good ways to implement more feasible enhancements. A lighting study should be conducted throughout the entire parks system to identify specific needs at each park/facility to increase safety, seek opportunities for uniformity, and accommodate facility usage at various hours.

**4 - Park Classifications and Service Criteria**

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# 05 Programming Analysis

As part of the Jackson County (the County), Mississippi (MS) Parks, Recreation, and Open Space Master Planning process, the planning team was tasked with:

- Developing an inventory of current recreation programs
- Ensuring alignment of recreation programs with public engagement and survey results
- Investigating alignment of recreation programs and event offerings with existing spaces
- Positioning future programs

Currently, the County provides very little in the way of recreation programming. A new staff position was added recently. The focus of this new position will be adding outdoor recreation programming such as kayaking, hiking, camping, and standup paddleboarding. This program area (which is supported through the regular budget) currently has 10 kayaks, fishing poles, and games for outdoor activities. Budget development, including important service delivery resources, will be a focus for staff post-COVID-19 impacts. Programs will need to include revenue appropriate to cover direct costs (at a minimum).

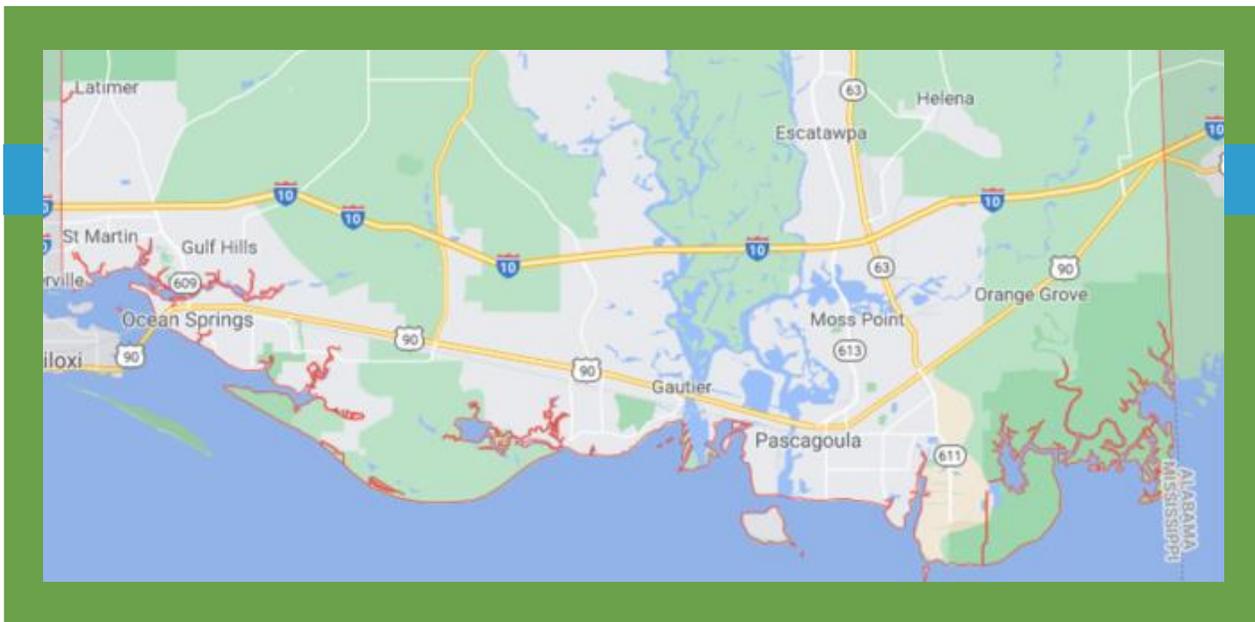
In addition to providing outdoor recreation programming, this new position is also responsible for identifying businesses and nonprofits that may be interested in becoming certified MS Gulf Coast Outpost and mentoring them through the process. This recognition program is for nature-based tourism business owners and operators. Businesses and nonprofits that are interested in becoming certified Outpost must prove that they are committed to taking steps that protect and foster the environment and cultural resources as part of their business practice. Promoting nature-based tourism is at the heart of this program, and the benefits include a resource toolkit, marketing opportunities, and eligibility to apply for MS Gulf Coast National Heritage Area Community Grants. The MS Gulf Coast National Heritage Area is a program of the National Park Service, and managed by the MS Department of Marine Resources.

The County does provide a plethora of recreation facilities that are outlined in other sections of this plan. In order to understand what recreation programming is being provided within the County, the consulting team reviewed the offerings provided by the four municipalities located within Jackson County.

## Municipal Recreation Programming

As of 2019, Jackson County's population was estimated to be 143,617. The County includes four municipalities that all offer varying levels of public recreation programming and events including: Gautier, Moss Point, Ocean Springs, and Pascagoula. All of these municipalities are located along the Gulf Coast in the southern part of Jackson County.

Figure 5.1 Jackson County, Mississippi



The County also includes 11 census-designated places:

- Big Point (611)
- Escatawpa (3,722)
- Gulf Hills (7,144)
- Gulf Park Estates (5,719)
- Helena (1,184)
- Hickory Hills (3,046)
- Hurley (1,551)
- Latimer (6,079)
- St. Martin (7,730)
- Vancleave (5,886)
- Wade (1,074)

County staff does not currently provide recreation programming for these census-designated communities, but has added an Outdoor Recreation position and is slowly including additional programming in these areas.

## Ocean Springs Parks and Recreation Department

Ocean Springs is located on the Gulf of Mexico on the southwest side of the County with Gautier to the east, Vancleave to the north, and St. Martin to the north. The 2019 population of Ocean Springs was 17,862.

The administrative offices of the Ocean Springs Parks and Recreation Department (Ocean Springs) are located in Alice Street Park, where indoor space is also available for rentals up to 110 people. Ocean Springs has a large number of athletic fields (11 baseball fields, 8 softball fields, 2 football fields, and 4 regulation soccer fields) that are available for rental—several with permanent restrooms and concessions. The Sports Complex is rented often for large tournaments. Ocean Springs also has access to the old high school gymnasium for some programs.

Youth programs offered in Ocean Springs include summer camp, volleyball, flag football, tackle football, kickball, and after-school care. Additional sports such as soccer, baseball, softball, and lacrosse are offered to the community via affiliate groups. Adult programs offered by Ocean Springs include a basketball league, pottery, and karate (which is offered by a contractor who rents the space). Ocean Springs also provides three large community events including an Easter Egg Hunt, Fourth of July Fireworks show, and a Halloween Festival.

Ocean Springs also has a historic bike trail, the Ft. Bayou Blueway, a walkable Front Beach area, beach volleyball, and a fishing pier. Gulf Islands National Seashore is located in the City limits.

Ocean Springs owns and maintains 12 park sites that include the following amenities:

- Playgrounds
- Athletic fields
- Two splash pads
- Pavilions
- One stage
- Two tennis complexes with lighted courts
- Restrooms
- Basketball courts (one lighted)
- Three walking/jogging trails
- Concessions
- The Sports Complex provides lighted athletic fields, including four softball fields, five baseball fields, four soccer fields, and two football fields. The complex also offers concessions, pavilions, a meeting room, and restrooms.

## Gautier Parks and Recreation Department

Gautier, MS is located in the center of Jackson County on the south end with Ocean Springs to the west, Moss Point to the northeast, and Pascagoula to the east. The 2019 population of Gautier was 18,572. The Gautier Parks and Recreation Department (Gautier) maintains six parks including Shepard State Park (a 395 acre site). The outdoor amenities available in Gautier include:

- RV camping sites
- Splash pad
- Boat launches
- Playgrounds
- Athletic fields
- Bike trails
- 18-hole disc golf
- Dog park
- 28-lane archery range
- Concessions
- Pavilions, picnic tables, and grills
- Restrooms
- Basketball court
- Fitness trail
- Marsh walk

For indoor recreation spaces, Gautier has a senior center that offers a variety of activities including arts and crafts, fitness, aerobics, pottery, watercolor painting, bingo, card games, and a few special events, including a Valentine's Dance/Sock Hop.

Gautier also hosts a wide variety of community events including National Day of Prayer, Earth Day, Memorial Day, Music on the Lawn, July 4, Halloween, Veteran's Day, and Christmas. It also provides family drive-in movies, a food truck event, a farmers market, an art competition, and Cruisin' on the Coast.

Except for youth sports (including football, cheer, softball, and baseball), Gautier does not offer recreation programs for youth. They do not own or utilize any indoor recreation spaces besides the senior center and a new welcome center at Shepard State Park.

## Moss Point Recreation and Community Engagement Department

Moss Point, MS is located on the east side of the County, north of Pascagoula and east of Gautier. The 2019 population of Moss Point was 13,350. The Moss Point Recreation and Community Engagement Department (Moss Point) maintains two recreation centers.

The Sue Ellen Recreation Center includes a gym, workout rooms, a place for kids to play, and a concession area. The surrounding park includes a ball field, tennis courts, a basketball court, a playground, and the Greenfield Fitness Zone. The Riverfront Community Center includes a gym and two multipurpose rooms. An art studio resides within the City Hall Community Engagement Room.

Moss Point provides recreation programs for youth (summer camp, karate, basketball, football, and cheerleading) and adults (aerobics, ceramics, Zumba, and kayaking). A number of family special events are also provided, including the Sweetheart Ball, River Jamboree, Rejuvenation Festival, boat race, Cruisin' the River City, Senior Thanksgiving luncheon, Breakfast with Santa, and a Christmas parade.

In addition to the park surrounding the Sue Ellen Recreation Center, Moss Point maintains 14 park sites that include the following amenities:

- Boat launch
- Pavilions, picnic tables, and grills
- Playgrounds and sandboxes
- Kayaking opportunities (through a private rental outfit)
- Splash pad
- Walking track
- Greenfield Fitness Zones
- Basketball and futsal courts
- Two lighted tennis courts

## Pascagoula Parks and Recreation Department

Pascagoula is the county seat of Jackson County and had the largest population of the four municipalities in 2019 at 21,669. Pascagoula is located in the very southeast portion of the County with Moss Point to the north and Gautier to the west. The Pascagoula Parks and Recreation Department (Pascagoula) is the most comprehensive municipal recreation system in the County as it owns a state-of-the-art senior center, the Andrew Johnson Recreation Center, and the Pascagoula Recreation Center.

The senior center includes a library, a small fitness center (with 12 stations), and several multipurpose rooms. Class offerings include yoga, crochet, wreath making, Bible study, Fellowship Lunch, Golden Age Club, Lunch Bunch, a bereavement group, fitness, canasta, bingo, walking, dominoes, Pickleball, line dancing, art, games, and holiday dances.

The Andrew Johnson Recreation Center includes a gym, an outdoor pool (open June and July), and a computer room. The Pascagoula Recreation Center includes a large gym with bleachers, three multipurpose classrooms, a conference room, and a playground. Pascagoula staff offices are located in this location as well.

Pascagoula offers a number of youth recreation programs including basketball, football, summer camp, sports camps, spring break camp, and Christmas camp. It also provides several youth events, including Dr. Seuss Birthday Celebration, Valentine Lock-In, Family Campout, and Ball. Several affiliate groups offer basketball and football (both flag and tackle) for the community. The outdoor pool provides opportunities for swimming lessons, group swimming, and open swim in June and July.

Pascagoula also has an historic bike trail that offers a unique tour that includes the history of the City. The Pascagoula River Blueway offers paddlers of all abilities many access points and attractions along an officially designated water trail.

The Pascagoula Sports Complex features four baseball fields (one turf), three softball fields, two T-ball fields, batting cages, shaded bleachers, meeting rooms, and two concession stands. When recreation programs are not being held, the complex is home to a variety of baseball and softball tournaments.

The Pascagoula Parks and Recreation Department maintains 26 park sites and three indoor recreation facilities (totaling over 200 acres) that include the following amenities (including the Sports Complex):

- Six concession stands
- Nine playgrounds
- Four pavilions with picnic tables and grills
- Splash pad
- Walking trails
- Fitness stations
- Beach access
- Fishing piers and fish cleaning stations
- The Hurricane Katrina Memorial
- Dog Park and Off-leash dog areas
- 12 tennis courts (8 with lights)
- Skate park
- Racquetball courts
- Covered entertainment area with seating
- Six Municipal boat launches
- Outdoor classroom
- The Pascagoula Environmental Trail
- Disc golf

- Birding trail
- Three outdoor basketball courts (one with lights)
- Two basketball courts
- 20 lighted ball fields (including a turf championship field)
- Batting cages
- 11 soccer fields (2 with lights)
- Wetlands education area
- Lighted jogging trail
- Exercise stations
- Outdoor amphitheater
- Restrooms
- Boat/trailer parking for 100 vehicles
- ADA beach and kayak access
- Fire pit
- Two-mile contiguous beach sidewalk (the Promenade)

Of the four municipalities within Jackson County, Ocean Springs and Pascagoula have the most comprehensive municipal parks and recreation systems. In addition to the indoor spaces and the variety of outdoor spaces, Pascagoula is the only community with a public outdoor pool that provides open swims and lessons. As Jackson County staff considers adding indoor facilities or aquatic facilities, they should look to locate them in areas besides Pascagoula and Ocean Springs.

## Recreation Programming Gaps

The recreational programming offered in all four of the municipalities is summarized in the table below.

Table 5.1 Municipality Recreational Programming

	Adult General	Adult Sports	After School	Swim	Camps	Early Childhood	Fitness	Open Gym	Seniors	Teens	Youth General
Gautier									X		
Moss Point					X		X				X
Ocean Springs	X	X	X		X						
Pascagoula			X	X	X		X	X	X		X

A wide variety of youth sports and special events are offered in all four municipalities and are not included in the chart. Whether provided by a municipality or by affiliate youth sports groups, traditional outdoor athletic programs such as baseball, softball, soccer, football, and cheer are plentiful throughout the County. Although the County has a large number of ball diamonds, the growth of travel baseball and softball is creating more year-round demand.

The biggest indoor space need includes places for teens and early childhood programming, followed by adult general interest, adult sports, aquatic programming, and open gym. Indoor spaces are also needed for after-school programming, seniors, and youth general interest. It appears, and is reported on in the partnership section of this report, that fitness opportunities are adequately provided in the Country by private-sector businesses.

There is no evidence that there are any programs at any of the four municipalities for people with disabilities. This might be a program area that the County could consider with the addition of new program spaces and additional staff. This might also be an opportunity to grow program participation through inclusion services (if not already provided at the desired level).

## Recreation Programming Needs Based on Public Engagement

Based on the response to the Social Pinpoint survey, more than half of the respondents (64%) indicated that they leave Jackson County and go to Biloxi to meet their recreation needs. Specifically, residents enjoy the large splash pad in Hillar Park, the Pickleball courts at Popp’s Ferry Park, and the Snyder Center.

Another popular activity that people leave Jackson County for is biking along safe Rails to Trails with sound infrastructure—the De Soto National Forest and the Longleaf Trace in Hattiesburg are mentioned specifically. Since the COVID-19 pandemic, people are seeking additional avenues to enjoy outdoor activities—from the survey results, more biking and kayaking opportunities are desired in Jackson County. Bicycle sales increased 63% from 2019 to 2020, and paddle sport equipment increased 56%. These outdoor and self-directed activity trends are here to stay as the pandemic continues to be an issue across the country, particularly in the south.

When asked about indoor facilities, survey respondents expressed interest in spaces for youth programming, art classes, theater, music, and swimming.

In regard to the desire for a farmers market, since the United States Department of Agriculture began tracking farmers markets in 1994, the number of markets in the United States has grown from 2,200 to over 8,600. Although this sounds like a good statistic, there are too few farmers to populate the market stalls and too few customers filling their canvas bags with fresh produce at each market, and many markets fail each year. Based on an internet search of farmers markets in Jackson County, there appear to be several along the Gulf Coast. Growing partnerships with existing farmers markets is a consideration.

Boat ramps and fishing opportunities appear to be easy to locate within the County. Additional study of these needs may be needed to determine if there are really too few or if increased marketing is needed.

The desire for more ball diamonds is a bit of a surprise. Between the County facilities and the municipalities, there are nearly 70 fields. A further study, including field use and permitting practices, should be considered along with future expansion of fields to learn specific areas of needs and accessibility for user groups.

During the pop-up engagement events held throughout the County, the following 10 recreational **facilities** rated the highest:

1. Recreational swim facilities
2. Farmers market
3. Boat ramps
4. Fishing
5. Baseball/softball diamonds
6. Paved walking and hiking paths or trails
7. Canoe/kayak blueway
8. Indoor gym/game courts
9. Unpaved walking and hiking paths or trails
10. Pickleball courts

Additional fields may be needed in areas away from the Gulf Coast—this might be an opportunity to partner with the local schools.

With the location of Jackson County along the Gulf Coast and the Pascagoula River running through the County, it's not surprising that additional opportunities for canoeing and kayaking are desired. The Mississippi Gulf Coast National Heritage Area Blueways organization has seven water trails mapped out for canoers and kayakers. It may be that more marketing of these opportunities is needed and not necessarily more opportunities.

The desire for additional pickleball courts is also not a surprise as pickleball participation is increasing exponentially with nearly 3 million people in the country playing regularly. Pickleball continues to be the fastest growing sport in America with the aging demographic, as 75% of core players are over the age of 55 years. Pickleball can be played as singles or doubles, indoors or out, and it is easy for beginners to learn but can be very competitive for advanced players. The game has developed a passionate following due to its friendly, social nature and its generational appeal. Across the country, many pickleball facilities with multiple courts at the same location are being constructed, often with lights (especially in hot climates) and sometimes with shade. These facilities, with multiple courts, are becoming quality wellness and social facilities primarily for older adults, but also for families and young adults. Also, many recreation providers

across the country are converting underused tennis courts to pickleball courts, and some tennis courts are being renovated for use by both sports.

In the same pop-up survey, the following 10 recreational **activities** rated the highest:

1. Movies in the park
2. Camps
3. Youth swim team
4. Concerts
5. Kayak or boat races
6. Nature programs
7. Teen programs
8. Gardening classes
9. Youth learn to swim
10. Adult fitness/wellness

Adding movie nights in the County's existing athletic field complexes would be a great way to reach a large number of families with small children. These events are not expensive to run as the equipment and the movies can be rented. Placing these events into athletic field complexes allows everyone (not just athletes) to take advantage of these facilities. This is quite common throughout the country. Other amenities can be added to these events such as food options (food trucks, ice cream vendors) and additional entertainment (such as a disc jockey, strolling magician, juggler, and a balloon artist) can be added before the movie begins. With good marketing, high attendance can be expected, and event sponsors are often easy to secure.

Youth summer camps are offered in three of the four municipalities, but it appears that more programs are desired. Working parents often seek summer camp activities (with before and after care to extend the camp day) to provide child care for their kids. More research regarding existing camps offered by the public schools, local child care providers, religious institutions, nonprofits, and for-profit businesses should be conducted before the County decides to enter this business. It might be that the County could assist with advertising current opportunities instead of offering its own camps.

With youth swim team and youth learn-to-swim classes both on the list of top activities, and a desire for recreational swim facilities at the very top of the facilities list, it might be time for the County to conduct a feasibility study regarding the construction and operation of a new aquatic center. A new facility could be designed to provide for instruction, recreation, exercise, relaxation, and socialization that would enhance the quality of life for County residents. As noted in the partnership section of this report, this might be an opportunity for a public/private partnership with the County providing the land and building the facility and a partner handling the operations. Further, existing aquatic facilities should be reviewed to help ensure the operating seasons are maximized to accommodate more demand.

Listening to live music is an activity that people of all ages enjoy. If not currently being used for this type of an event, the fairgrounds should be considered. With ample parking, this would be a great venue for adding some summer concerts. Again, the fairgrounds are located in the very southern part of Jackson County, but it would be a good place to start to see if they are successful.

Paddle sports (including kayaks, paddleboards, rafts, and canoes) have increased in popularity as the sale of equipment rose 56% in 2020 over the prior year. Inflatable versions of kayaks and paddleboards have gained in popularity due to their cost and the ability of the consumer to store these bulky pieces of equipment. Adding instructional paddleboarding or kayaking may be advantageous. Often times, people are interested in a brief lesson before going out on their own. Watercraft rentals for paddle sports can serve as a profit center, which can fund associated operations while producing revenue for other services.



Additional nature programming should be considered. Access to nature is abundant, but it appears people are looking for nature programming. Innovative nature programming, perhaps led by the newly created position, can reintroduce patrons to nature while attracting new users. With the growth in nature-based programming across Jackson County, which was elevated due to COVID-19 impacts, innovative and highly engaging services are occurring at a rapid pace in the park and recreation industry. Some of these efforts are showcased through Great Outdoors Colorado (GOCO), which features many types of grassroots efforts taking place across the state of Colorado (<https://goco.org/>) in nature-based programming.

The desire for more teen programming is also very common and often difficult to achieve. The agencies that have the most success offering teen programs include teens in the planning. New spaces (both outdoors in parks and at new indoor facilities) should be created for this important age group. Blending some of the highly desired programs with teen programming can be a successful method to achieve program growth. For example, teen-specific paddle sport activities and nature programs (e.g., Junior Ranger programs, nature-based scavenger hunts, and outdoor volunteer cleanup or tree-planting programs) are very successful in this age group across the country).

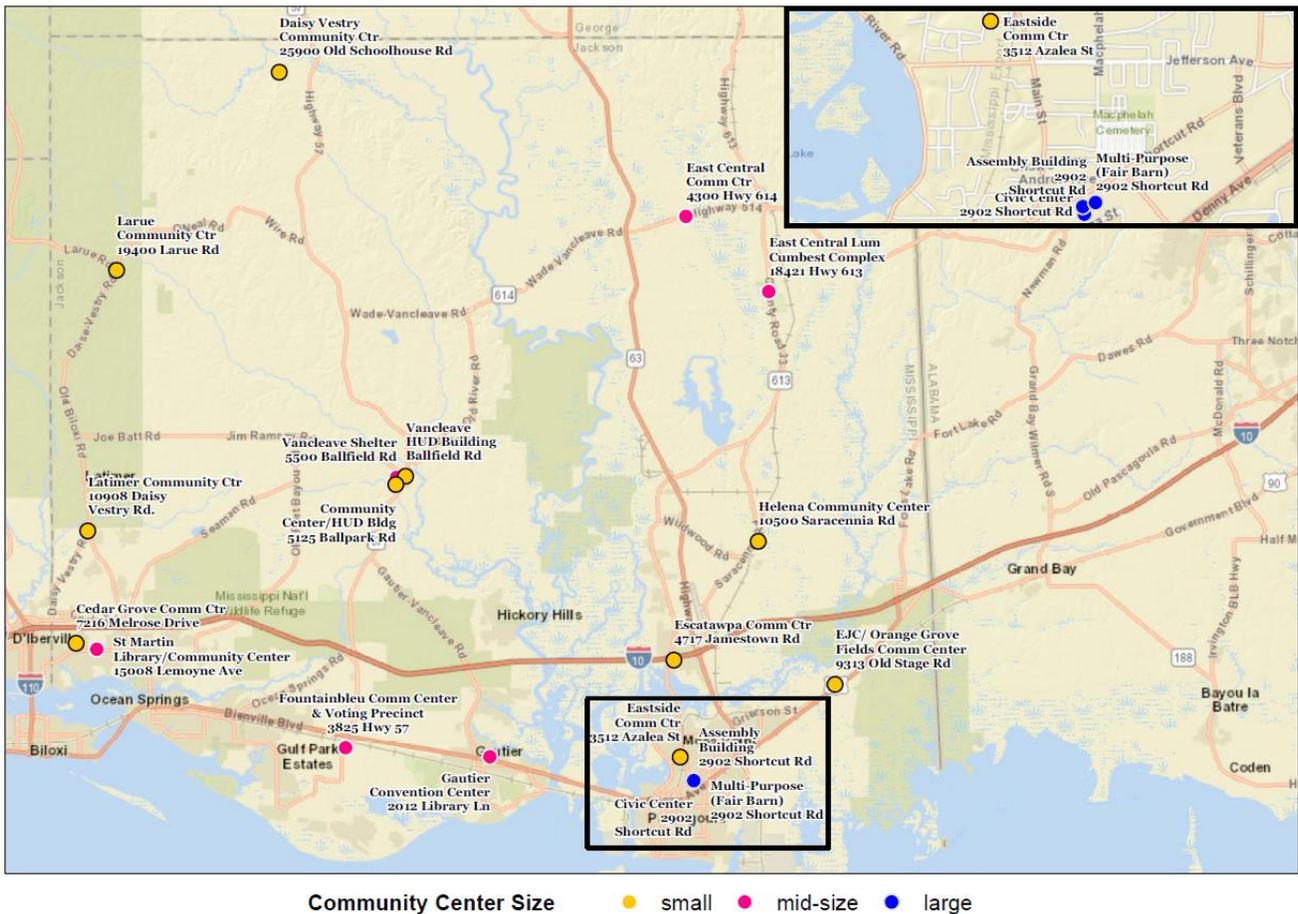
Adult fitness and wellness classes are common programs that come up during public engagement across the County. Although there are a number of opportunities offered by the private sector, more research should be conducted to see what people need, what they are willing to pay, and how far they are willing to drive. Typically, people will travel only four miles (on average) to get to a fitness center according to an article in the Wall Street Journal (Rachel Bachman, March 21, 2017).

## Jackson County Community Centers

When the population of the four municipalities (71,453) is subtracted from Jackson County's population (143,617), a total of 72,164 people are without any indoor public recreation spaces. With Pascagoula providing the most comprehensive park and recreation offerings, the County should consider adding indoor facilities in other parts of Jackson County. Another option would be to explore the possibility of utilizing the County's community centers or partnering with the local school district to utilize these public facilities.

The County owns and operates 15 community centers spread throughout Jackson County in addition to the County Fairgrounds, which includes several large facilities on the site. The County community centers are strictly rental venues and are now managed by the Recreation Department. They range in size from a few hundred square feet (sf) up to over 37,000 sf. These facilities are rented for a variety of events, from small meetings to large weddings and everything in between. Below is a map of the Jackson County Community Centers:

Figure 5.2 Jackson County Community Centers



The smaller centers, fewer than 5,000 sf, are labeled in yellow. The pink dots represent the mid-size centers that range in size from 5,000 to 10,000 sf. The largest centers are labeled in blue and are over 10,000 sf.

The County might consider utilizing some of the mid-size or large community centers for some indoor programming including:

- East Central Community Center (5,000 sf)
- East Central County Safe Room (6,200 sf)
- Gautier Convention Center in Gautier (5,000 sf)
- Fountainbleu Community Center in Ocean Springs (5,400 sf)
- West Jackson County Safe Room (6,200 sf)
- St. Martin Community Center (9,000 sf)
- Central Jackson County Safe Room (6,200 sf)

These facilities should be evaluated for their suitability for recreation programming including early childhood, after-school care, camps, teens, arts, and seniors. The fairground facilities might also be suitable for some programming as several structures range from 6,720 sf (Arts Building) to 37,500 sf (the Multipurpose Building).

Moving the supervision of the community centers into the Recreation Department should be considered in order to create efficiencies and synergies within recreation programming and to get the most out of the community center spaces.

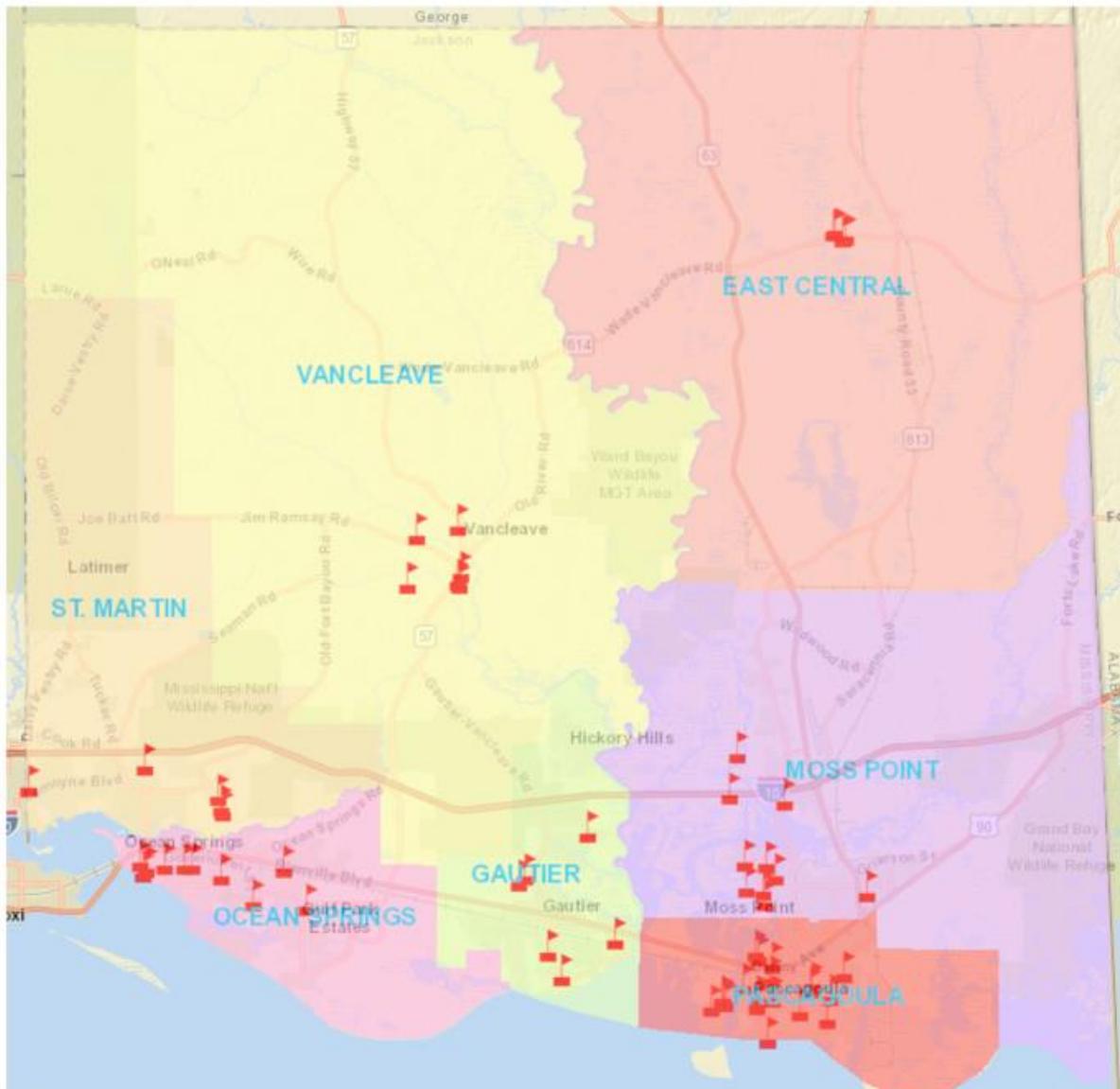
## **Partnering With Local School Districts**

There are several school districts within Jackson County, including:

- Jackson County School District: serving Vancleave, Latimer, St. Martin, Hurley, Wade, and Big Point
- Ocean Springs School District: serving Ocean Springs and Gulf Park Estates
- Pascagoula Gautier School District: serving Pascagoula and Gautier
- Moss Point School District: serving Moss Point, Escatawpa, and Helena

Prior to constructing new facilities, the County might pursue partnerships with one or more of these school districts in order to obtain access to indoor programming space. A map of all of the public schools in Jackson County is below.

Figure 5.3 Jackson County Public Schools



It is common practice for public park and recreation agencies to enter into intergovernmental agreements with school districts for the shared use of multipurpose spaces, gymnasiums, indoor lap pools, playgrounds, and outdoor athletic fields.

## Future Program Opportunities

Using the results of the public engagement, future programming at either new or existing facilities could include a wide variety of offerings. According to the results, indoor facilities needs include: spaces for youth programming, art classes, theater, music, and swimming.

The tables that follow include menus of programming options that could be offered in the County for early childhood and youth, teens, and adults.

## Future Program Planning Ideas

Age Group	Program Category	Activity Ideas
<b>Early Childhood and Youth</b>	Cooking/Baking	<ul style="list-style-type: none"> <li>• Cookie making and decorating</li> <li>• Ice cream making</li> </ul>
	Environmental Education/Nature	<ul style="list-style-type: none"> <li>• Animal tracks</li> <li>• Identify common raptors: hawks, eagles, and owls</li> <li>• Stars and planets</li> <li>• Nature scavenger hunts</li> </ul>
	Drop-In Play	<ul style="list-style-type: none"> <li>• Arts and crafts</li> <li>• Dinosaur days</li> <li>• Open gym/open swim</li> <li>• Open tumbling and gymnastics</li> </ul>
	Language	<ul style="list-style-type: none"> <li>• Learning letters</li> <li>• Spanish instruction</li> <li>• Story time</li> </ul>
	Miscellaneous	<ul style="list-style-type: none"> <li>• After-school care</li> <li>• Karate</li> <li>• Lego Mania</li> <li>• Ninja Warriors</li> <li>• Sensory play</li> <li>• Yoga</li> </ul>
	Performing Arts	<ul style="list-style-type: none"> <li>• Choir</li> <li>• Dance</li> <li>• Movement</li> <li>• Music</li> </ul>
	Sports Instruction	<ul style="list-style-type: none"> <li>• Basketball</li> <li>• Preschool gymnastics/tumbling</li> <li>• Soccer</li> <li>• T-ball/baseball</li> <li>• Tennis</li> <li>• Track and field</li> </ul>
	Swimming	<ul style="list-style-type: none"> <li>• Mom and Me swim class</li> <li>• Swim instruction</li> </ul>
	Visual Arts	<ul style="list-style-type: none"> <li>• Drawing</li> <li>• Clay play</li> <li>• Finger painting</li> </ul>

Table 5.2 Future Program Planning Ideas (continued)

Future Program Planning Ideas		
Age Group	Program Category	Activity Ideas
<b>Teens</b>	Environmental Education/Nature	<ul style="list-style-type: none"> <li>• Camping</li> <li>• Geocaching</li> <li>• Hiking/orienteering</li> <li>• Junior Ranger program</li> <li>• Outdoor volunteer programs</li> <li>• Scavenger hunts</li> </ul>
	Drop-In Play	<ul style="list-style-type: none"> <li>• Chess</li> <li>• Open gym/open swim</li> </ul>
	Language	<ul style="list-style-type: none"> <li>• Creative writing</li> <li>• Poetry slams</li> <li>• Spanish instruction</li> </ul>
	Miscellaneous	<ul style="list-style-type: none"> <li>• Babysitting clinic</li> <li>• Camp counselor training program</li> <li>• CPR and first aid training</li> <li>• Standup paddleboarding</li> <li>• Partner with local businesses to offer job training</li> <li>• Yoga</li> </ul>
	Performing Arts	<ul style="list-style-type: none"> <li>• Improv classes</li> <li>• Music lessons (guitar, drums)</li> <li>• Open mic night</li> <li>• Theater performances</li> </ul>
	Sports Instruction	<ul style="list-style-type: none"> <li>• Archery</li> <li>• Badminton</li> <li>• Dodgeball</li> <li>• Lacrosse</li> <li>• Pickleball</li> </ul>
	STEAM	<ul style="list-style-type: none"> <li>• Coding</li> <li>• Robotics</li> <li>• Scratch coding</li> <li>• 3D Printing</li> </ul>
	Swimming	<ul style="list-style-type: none"> <li>• High school swim clinic</li> <li>• Lifeguard training</li> <li>• Water Safety Instructor training</li> </ul>
	Visual Arts	<ul style="list-style-type: none"> <li>• Animation</li> <li>• Movie making</li> <li>• Photography</li> </ul>

Table 5.2 Future Program Planning Ideas (continued)

Future Program Planning Ideas		
Age Group	Program Category	Activity Ideas
Early Childhood & Youth	Cooking/Baking	<ul style="list-style-type: none"> <li>• Healthy eating and grocery shopping</li> <li>• Pasta making</li> <li>• Pizza workshop</li> <li>• Tamale making</li> </ul>
	Environmental Education/Nature	<ul style="list-style-type: none"> <li>• Climate change certification course</li> <li>• Climate stories ambassador training</li> <li>• Environmental education for sustainability</li> <li>• Family camping and hiking</li> <li>• Outdoor volunteer programs</li> </ul>
	Drop-In Activities	<ul style="list-style-type: none"> <li>• Lap swim</li> <li>• Open gym (basketball/volleyball)</li> </ul>
	Miscellaneous	<ul style="list-style-type: none"> <li>• Do It Yourself (DIY) classes</li> <li>• English as a second language</li> <li>• Gardening workshops</li> <li>• Kayaking instruction</li> <li>• Parenting skills</li> <li>• Spanish instruction</li> </ul>
	Performing Arts	<ul style="list-style-type: none"> <li>• Choir</li> <li>• Dance</li> <li>• Theater/performances</li> <li>• Music (guitar and piano lessons)</li> </ul>
	Sports Leagues	<ul style="list-style-type: none"> <li>• Basketball</li> <li>• Flag football</li> <li>• Pickleball</li> <li>• Soccer</li> <li>• Softball</li> <li>• Tennis</li> <li>• Volleyball</li> </ul>
	Swimming	<ul style="list-style-type: none"> <li>• Aquatic aerobics classes</li> <li>• Parent and child swim class</li> <li>• Swim instruction</li> </ul>
	Visual Arts	<ul style="list-style-type: none"> <li>• Drawing/Painting</li> <li>• Ceramics</li> <li>• Photography</li> </ul>

## Recreation Programming Recommendations

The County has an incredible opportunity following the completion of the master planning process to increase the number and variety of recreation facilities that would allow for expanded programming for residents of all ages. The following list of recommendations is based on the information included in this section of the report.

- Add indoor spaces (either through partnerships or the construction of a new facility) to provide a variety of recreational opportunities for teens, early childhood, adults, and seniors. The spaces should be suitable for a wide range of activities.
- Create a new programming position that will focus on general recreation for all ages as well as recreation programs for children with disabilities. As programming increases, additional staffing will need to be hired to oversee new program areas. The position(s) could start as part-time and evolve into full-time positions.
- Construct a new aquatic facility that can provide recreational opportunities for swim instruction, recreation, exercise, relaxation, and socialization for people of all ages. Also, review existing aquatic facility operating seasons and hours to make sure these existing resources are maximized to meet demand.
- Connect existing trails and add new trails to create a safe system enabling residents to stay in the County for this type of activity.
- Research the possibility of creating or growing nature-based specific volunteer groups, which are assisted by Recreation staff. These groups are growing across the country, along with the desire to connect with nature, be healthy in the outdoors (especially due to pandemic impacts) and to give back to communities. Nature-based volunteer groups are often the largest volunteer groups in any community and generate a sense of pride and support for their communities.
- Move the supervision and management of the existing County community centers into the Recreation Division to create efficiencies and synergies within recreation programming and to get the most out of these valuable spaces.
- Investigate the feasibility of entering into an intergovernmental agreement with the local school districts to provide additional indoor and outdoor amenities to residents.
- Pursue more partnerships to expand services, such as with schools, nonprofits, businesses, churches, and other groups to expand recreation programming, especially with limited staffing and facilities resources.
- New programming opportunities will require solid marketing so staffing in this area will be needed as well. Print material, social media and general public relations will be needed to establish new programming.

# 06 Staffing Assessment

## Staffing Evaluation

The Parks and Recreation Master Plan process included an analysis of staffing and organizational structure. The Staffing Evaluation process encompassed a review of Department documents such as job descriptions, staffing levels, organization chart, analysis of an employee survey assessment, and a series of meetings with employees. The following report includes a high-level summary of the process. The full report is contained within a separate document.

The Evaluation included:

- Major themes from employee meetings
- Results of Are We Making Progress Assessment
- Review of organization structure
- Staffing level assessment
- Recommendations for the future

## Major Themes from Employee Meetings

A series of meetings were held to gain perspectives from employees in the Department about staffing, structure, and operational areas such as support, resources, communication, organizational strengths, and opportunities for improvement. Individual meetings were held with the Director, Office Manager, and the three Division Managers: Grounds Crew Supervisor, Recreation Superintendent, and Golf Course Manager. In addition, approximately 25 employees participated in group meetings to discuss staffing and structure.

### Key Themes from Meetings

Ten employee meetings were facilitated via Zoom or by telephone. Employees received information in advance about key topic areas, such as staffing, structure, resource availability, collaboration and cooperation. The highlights of employee comments include the following:

### Overall Themes

- On a very positive note, the employees feel they get good support from their supervisors, there is a high degree of cooperation among the staff, and employees have good working relationships among the various Department Divisions. Employees feel great pride in their work.
- The results of the Are We Making Progress survey instrument were very positive. The survey was distributed to all employees, and

## 6 - Staffing Assessment

- Staff members also discussed process improvement ideas such as purchasing and recruitment and retention of part-time employees.

### Staffing

- Employees feel the organization structure works well. They did not have suggestions or recommendations for changing the structure.
- The most frequently mentioned area of concern for employees relates to staffing levels. There have been additional areas to maintain without a correlating increase in staff.
- A new area of responsibility includes the addition of an Outdoor Recreation Specialist, which brings an entirely new area of responsibility for the Department.

### Communication and Relationships

- Overall, communication throughout the Department is effective, though according to employees, there is always room for improvement. Employees mentioned that supervisors listen to employees.
- Relationships with other County departments were also mentioned as being effective and supportive.
- The use of technology is in need of improvement. Some employees only have flip phones. Many do not have computer access, but some prefer it that way and consider themselves to be “old school.”

### Maintenance, Equipment, and Facilities

- The Golf Course staff mentioned the need for a permanent building to store vehicles and equipment.
- The improvements made to Whispering Pines over the last several years have helped with the brand and image of the course.
- Grounds Maintenance and Recreation staff frequently get pulled from scheduled work as a result of bad weather or other events. This results in preventative maintenance activities not being completed.

## Are We Making Progress?

As part of the evaluation process a survey titled Are We Making Progress was distributed to all of the employees. The survey instrument was customized for Jackson County Recreation. Forty-two employees responded. The survey, distributed in December 2020 was administered through SurveyMonkey. The survey assessed various organizational components including:

1. Leadership
2. Strategy

3. Measurement, Analysis, and Knowledge Management
4. Workforce
5. Operations
6. Results

The overall results were extremely positive. The only area of concern from the employees was staffing levels of the Department.

## Staffing Review

The next section of the report included information about the organization structure and staffing. A series of organizational principals were utilized to evaluate the current structure including the following:

Organizing principles:

The Department of Recreation is functionally organized, with an Office Manager and three Division Managers, an Outdoor Recreation Specialist, and a Mechanic reporting to the Director.

Figure 6.1 Organization Structure



## 6 - Staffing Assessment

The Grounds Maintenance Division includes maintenance responsibilities for parks, boat ramps/piers and other miscellaneous areas. The Division also provides ground maintenance support at the Helena Complex. Two full-time janitors are also included in this Division. Other responsibilities include areas such as playground mulching, limb trimming, and election set up/break down.

The Recreation Superintendent position manages six complexes, which are structured in four areas:

- Vancleave
- Lum Cumbest
- St. Martin/West Jackson County Soccer
- Helena/Jackson County Soccer

The Complex's responsibilities include oversight of leagues, tournaments, and grounds maintenance. Turf field maintenance responsibilities are contracted to a private company and include mowing, weed/pest control, and fertilization. In addition, this Division manages and maintains Arena and RV Park Maintenance, user groups, and rentals.

Facilities Maintenance, which used to be a separate division, now reports to the Recreation Superintendent position. This area comprises many of the construction trades including: carpentry, electrical, plumbing, inventory and equipment control, new construction and estimating, and pier repairs and inspections. Playgrounds and splash pads are also included in this area.

The Golf Course Division is involved in the management and maintenance of Whispering Pines Golf Course, which is an 18-hole course. Whispering Pines is operated by the Jackson County Board of Supervisors and is managed by the Recreation Department. Staffing responsibilities include: course maintenance and landscaping, clubhouse operations, food services, tournaments, and events.

The Director directly supervises four Divisions, an Outdoor Recreation Specialist, Mechanic, and Office Manager. The Recreation Superintendent directly supervises four Recreation III positions, four Recreation II positions, the Facilities Maintenance Supervisor, and oversees the caretakers and the turf contractor. This Manager position has a narrower span of control than what is typically recommended, but the expanse of responsibilities warrants a smaller span of control. In addition, the Manager provides support to the Director.

The Grounds Maintenance Supervisor supervises two Recreation II staff, two Recreation I, a Sanitation Driver, two Janitors, and two part-time laborers. The Facilities Maintenance Supervisor directly supervises four Recreation III positions, a Painter, and an Electrician. Both Supervisor positions have an adequate span of control.

The Golf Course Facility Manager oversees a Golf Course Superintendent (currently vacant), Clubhouse Manager, Clerks, and Cart Attendants. This is a typical structure for a golf course operation.

The Outdoor Recreation Specialist primarily works on her own, and is the only position dedicated to recreation program and services. Outdoor recreation programs and activities can be an area of future growth as well as other program areas.

Observations about the organization structure include the following:

- The organization structure consists of a functional approach to services, which is the most prevalent type within parks and recreation agencies. There are clear and distinct roles and responsibilities among the Divisions, aside for some overlap of responsibilities between Complex/Arena and Facilities Maintenance Divisions.
- According to observations and conversations with staff, there are similar responsibilities between Complex/Arena and Grounds Maintenance, specifically ground maintenance responsibilities. Consideration could be given to aligning responsibilities differently. Could Grounds Maintenance and Complex/Arena be merged into one division? This may be a good alternative based on the similarity of responsibilities.
- Another option is to realign the two divisions into three or four geographical areas, with responsibility for both complexes/arenas and grounds maintenance. This would be effective for managing continued growth of the Department and the correlating growth of parks, facilities, and amenities. Another option would be to continue with the current structure, but include grounds maintenance responsibilities as part of Complex/Arena responsibilities and shift the resources and responsibilities from Grounds Maintenance.
- The Complex/Arena Manager desires to elevate three of the four Rec III positions into Complex Manager positions. Given the level of responsibility for the complexes, this seems to be a reasonable recommendation. This change will help to elevate the level of sophistication of the operation.
- The Facilities Maintenance Division includes a Rec III that is responsible for splash pads and playgrounds. Typically these responsibilities would be included as part of park maintenance.
- The level of sophistication of grounds maintenance operations is less than what typically is found in park and recreation agencies, particularly in the use of technology. Many agencies have a management analyst or an administrative assistant position that oversees the data related to park maintenance activities and recommends ways of improving efficiency and effectiveness.
- There is a need to develop succession planning for each of the division heads. This includes the development of a leadership development curriculum to ensure leadership competencies.
- Many park and recreation agencies contract sanitation responsibilities, given the cost of a trash truck and the amount of windshield time for a Sanitation Driver to cover an entire county.
- The same is true for custodial responsibilities, as this is an area of responsibility that is typically managed by a private contractor. However, the Department did research this previously, but found it to be too expensive, as compared to doing this in-house. Having two full-time staff members is insufficient for the number of sites involved. Furthermore, the custodial staff spend a significant amount of drive time that could be reduced with staff members located around the County. The Department recently hired two full time janitors to address this concern.

**6 - Staffing Assessment**

- The Department has responsibility for many of the construction trades and mechanical expertise. This is another area that is typically a contracted service. However, this does not take into account the individual skill sets of the incumbent employees who hold these positions. If the Department feels as though they can perform these tasks competently and efficiently, then this may just be a recommendation for the future.
- Most parks and recreation agencies have marketing staff included as part of their organization. However, Jackson County Recreation Department does not have a dedicated marketing staff person. The number of marketing staff in the parks and recreation industry has significantly grown in the last decade, correlating with the growth in social media. This may be a consideration for the future, particularly with the anticipated future growth of recreation programming. Marketing staff can also oversee responsibilities related to public communication and partnership relationships.
- The County has a separate Harbor Departments. Harbors are often a part of a park and recreation department as they have similar functions. Combining the Harbor and Recreation departments would result in streamlining services to residents as there would be one point of contact for services offered by these three departments.
- An additional recreation program division will be needed at some point, with the future expansion of recreation programs.
- Develop an organization chart for the future based on continued County growth.

If the Harbor Department becomes part of the Recreation Department, along with Community Centers, these areas could be included as part of the Recreation Division.

## Staffing Levels

During the employee focus groups, a frequent comment focused on staffing levels, and the feeling that there is a need for additional staff. One source of comparative information comes from the National Recreation and Park Association’s (NRPA) Park Metrics database. NRPA produced a 2019 Agency Performance Report with 1,075 agencies reporting. The sample of agencies include county organizations that have individual city agencies that are not included in the county numbers. Agencies serving a population of 100,000 to 250,000 (the population range determined by NRPA) shows the following results:

	Low quartile	Median	Upper Quartile
Full-time equivalent staff	53.3	114	197.4

The low quartile represents the 25% of the lowest reporting agencies, the upper quartile represents the top 75% of agencies reporting, and the median represents the midpoint of all the data reported. Jackson County Department of Recreation has 43.3 full-time equivalent staff (FTE), which is below the lowest quartile of reporting agencies, by about 10 full-time equivalent positions. This is partly a result

of the Department not having a wide array of recreation programming and also having a contract for athletic turf management. Aside from this metric, there is no national standard guiding agencies with the establishment of staffing levels.

In previous years, the (NRPA) PRORAGIS program included staffing levels for maintenance, according to total acreage. This metric is no longer included in the NRPA Park Metrics program (formerly called PRORAGIS). However, using this information from the PRORAGIS database of reporting agencies, the following information shows maintenance staffing levels for agencies having responsibility for maintaining 251-1,000 acres:

Number of Acres/Number of Full-Time Equivalent Staff:

	Low Quartile	Median	Upper Quartile
251 to 1,000	5.4	12	16.6

In this case, the low quartile represents agencies that dedicate the most staff, and the upper quartile dedicate the least number of staff toward park maintenance. This shows that the agencies with the most park maintenance staff maintain 5.4 acres/FTE.

The limitations of this comparison includes the lack of differentiation of the types of maintenance duties performed. For example, an agency with significant athletic field maintenance acres requires more labor hours than general park maintenance. In addition, agencies located in warm weather climates, such as Jackson County, will generally have greater park maintenance expense as a result of a much longer growing season. It also does not take into account other responsibilities grounds maintenance staff have, including tasks related to piers and boat ramps.

The Department has responsibility for maintaining 432.23 acres, which excludes golf course acreage. Of the 432.23 acres, 56 acres of athletic field maintenance is contracted. Therefore, staff have responsibility for 376.23 acres of maintenance. Currently, there are eight full-time employees working in the Complex Division, excluding the Manager position. This is supplemented by 640 hours of seasonal support. This equates to 8.31 FTEs.

The Grounds Division includes seven full-time staff, four full-time Recreation Workers, two Janitors, and a Sanitation Driver, supplemented with a seasonal sanitation driver. Excluding the Janitors and Sanitation Driver, there are four full-time staff associated with grounds maintenance, aside from the Grounds Crew Supervisor. This is supplemented by two seasonal employees working 2,600 hours a year. This equates to FTE of 5.25 staff dedicated to grounds maintenance.

- 8.31 FTEs dedicated toward park maintenance within the Complex Division
- 5.25 FTEs dedicated toward maintenance within the Grounds Division
- Total of 13.51 FTEs dedicated toward park maintenance

**6 - Staffing Assessment**

As a result, Department staff have responsibility for 27.8 acres/FTE. This is calculated by dividing 376.23 acres by the total of 13.51 FTEs. This result is significantly beyond the upper quartile of 16.6, meaning the Department staff members responsible for park maintenance have much greater acreage to cover.

In order to get the number closer to the median, an additional 18 FTEs are needed. This is calculated by taking the 376.63 acres, divided by the median number of 12, which is 31.5. Subtracting the existing 13.51 FTEs from 31.5 equals 18. However, due to the fact the employees do not complete highly intensive maintenance activities such as chemical applications for athletic turf, a number of 12-15 FTEs may be more realistic. On the other hand, the higher number may be justified given that Jackson County's warmer weather requires year round maintenance. In colder climates, the growing season is generally seven months shorter.

If the upper quartile number of 16.6 acres/FTE is used as a metric, the additional staffing level would require approximately eight additional FTEs, which may be a better goal to achieve, based on budget constraints.

As for a comparison of golf course staffing, the National Golf Foundation has developed metrics associated with staffing levels. The municipal golf course average number of staff includes the following metric for an 18 hole course:

Table 6.1 National Golf Foundation Staff Metrics - National Average for 18-Hole Course

Staff Type	Full-Time Average	Part-Time Average
Operations (clubhouse and food and beverage)	5.4	20
Maintenance	4.2	6.8
Total Staff	9.6	26.8

Table 6.2 Whispering Pines Staff

Staff Type	Full-Time	Part-Time
Operations (clubhouse and food and beverage)	5	6
Maintenance	6	2
Total Staff	11	8

For Whispering Pines, the staffing complement includes the following full-time positions:

- 1 Facilities Manager
- 1 Club House Supervisor
- 1 Lead Clerk
- 2 Clerks
- 5 Operators
- 1 Turf Technician
- 6 Part-time Clubhouse Clerks
- 2 Part-time Cart Attendants
- 2 Part-time seasonal laborers working 1,440 hours or .70 FTE

There is a Course Superintendent position, but that position is currently vacant.

Compared to national averages, Whispering Pines has a similar number of staff to the national average, 11 as compared to 9.6 nationally. On the other hand, the part-time staffing complement is significantly below the national average of 26.8. Using 720 hours as a typical part-time or seasonal employee, courses nationally have approximately 19,300 available hours of support; whereas, Whispering Pines utilizes 1,440 hours of support, or 17,860 hours less than the national average.-

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# 07 Partnership Analysis

## Partnership Analysis Overview

A common method to deliver recreation services is to collaborate with other private, public, and nonprofit entities, often using the umbrella term “partnership.” This section outlines 10 core partnership components. Subsequent report sections review existing recreation providers, Jackson County’s (the County’s) user agreements and interlocal agreements, service delivery, and revenue generation. The final section offers recommendations to provide direction for future partnership opportunities.

## Partnership Components

A partnership is “a collaborative relationship between entities to work toward shared objectives through a mutually agreed division of labor.” For a partnership to be successful, 10 key components should be in place, and leaders from the collaborating organizations should prioritize these components.

### Leadership

Partnerships imply a shared leadership among respected individuals who are recognized and empowered by their own organizations and trusted by partners to build consensus and resolve conflicts. The leads (CEO, president, executive director, or principal) of the partnering organizations must be overtly supportive of the partnership.

### Mutual Benefit

Both partners must feel that the benefits of the relationship are reciprocal.

### Purpose

A shared common vision and purpose that builds trust and openness and recognizes the value and contribution of all members needs to exist for a partnership to flourish. Shared goals and objectives, understood and accepted as being important by each partner, lead to improved coordination. Good coordination of policies, programs, and service delivery will ultimately create better outcomes.

### Flexibility

Successful partnerships are founded on mutual respect and a commitment to agreed-upon principals which evolve overtime as circumstances warrant.

### **Common Understanding**

A common understanding of the framework, culture, values, and approach of partner organizations needs to exist. Also important is a clear understanding of individual members' roles and responsibilities regarding the division of labor. Goals must be clearly defined and shared.

### **Structural Approach**

Both partners must participate in coordinating efforts and a written agreement formalizing roles and responsibilities is ideal.

### **Communication**

If a partnership is going to succeed, strong feedback loops are required. Effective communication at all levels within the partnership and with partner organizations, sharing and accessing all knowledge and information, needs to exist. A designated liaison from each organization also helps to streamline problem solving and conflict resolution. It is inevitable that issues will arise between partners and these should be viewed as opportunities to build a stronger relationship.

These components are the foundation of a successful partnership. The premise of these components serves as cornerstone to this report's observations and recommendations.

### **Performance Management**

Integrated processes which allow both sides to evaluate the relationship openly and develop new directions which maximizes returns should be planned from the outset. Partners must demonstrate accountability for the actions they take and ownership of the delivery of the objectives and targets for which they are responsible.

### **Learning and Development**

A healthy partnership promotes an atmosphere of learning. Goals, successes, failures, and constraints should all be shared openly between the partners on a regular basis—at a minimum annually, but preferably semi-annually. Investing in partner skills, knowledge, and competence needs to be highly valued within the partnership. This open mindset and spirit of facilitation creates opportunities to shape each other's work and learn together. In this environment, people can more effectively reflect on successes and failures.

## Providers

Jackson County residents' recreational opportunities are provided by more than just county-led services. In addition to the public recreation services of the County and four cities, residents are served by nonprofit groups and clubs, private businesses, and neighboring communities. This section will outline the opportunities these various groups provide and will then give specific attention to the sports provided by the entities. Establishing and/or continuing relationships based on collaboration and mutual support with the entities will optimize the residents' leisure options.

### Public

The Cities of Gautier, Moss Point, Ocean Springs, and Pascagoula all have parks and recreation departments that provide leisure services to their residents. The breadth and depth of the services vary between the cities, with Pascagoula offering the largest quantity of recreation programs, facilities, and services. The recreation programming report (Section 5) outlines specific details regarding the cities' services. Generally, the cities' programs are heavily focused on sports. The important factor to remember is that those services are designed to provide for the respective city's residents. In unincorporated communities, residents rely on the County for public recreation programs, facilities, and services.

In addition to the municipal opportunities, governmental agencies such as the National Park Service and the State of Mississippi offer leisure opportunities within Jackson County's boundaries. The following table depicts publicly managed facilities, organized alphabetically by activity type.

## 7 - Partnership Analysis

Table 7.1 Publicly Managed Facilities by Activity Type

Public Entity Name	Address	City	State	ZIP Code	Activity Type
Davis Bayou Campground, Gulf Islands National Seashore	3500 Park Rd	Ocean Springs	Mississippi	39564	Campground
Shepard State Park	1034 Graveline Rd	Gautier	Mississippi	39553	Campground
Ocean Springs Community Center	512 Washington Ave	Ocean Springs	Mississippi	39564	Community Center
Ocean Springs Civic Center	3730 Bienville Blvd	Ocean Springs	Mississippi	39564	Community Center
Riverfront Community Center	4400 Denny St	Moss Point	Mississippi	39563	Community Center
Gulf Islands National Seashore, William M Colmer Visitor Center	3500 Park Rd	Ocean Springs	Mississippi	39564	Museum
Mississippi Sandhill Crane National Wildlife Refuge	7200 Crane Ln	Gautier	Mississippi	39553	Nature
Pascagoula Wildlife Management Headquarters	816 Wade Vancleave Rd	Moss Point	Mississippi	39562	Nature
Andrew Johnson Recreation Center	1402 Tucker Ave	Pascagoula	Mississippi	39567	Pool
Andrew Johnson Recreation Center	1402 Tucker Ave	Pascagoula	Mississippi	39567	Recreation Center
Pascagoula Recreation Center	2935 Pascagoula St	Pascagoula	Mississippi	39567	Recreation Center
Sue Ellen Recreation Center	4313 Sue Ellen St	Moss Point	Mississippi	39563	Recreation Center
Gautier Senior Center	914 De La Pointe Dr	Gautier	Mississippi	39553	Senior Center
Ocean Springs Senior Center	514 Washington Ave	Ocean Springs	Mississippi	39564	Senior Center
Pascagoula Senior Center	1912 Live Oak Ave	Pascagoula	Mississippi	39567	Senior Center

## Neighboring Communities

Though small, the neighboring community to the east, Grand Bay, Alabama (AL), offers a few leisure opportunities right over the border, such as a public community center and festival park, and privately owned equestrian center, wedding venue, and racing venues. Further east, in Irvington, AL, are two more racing venues. The City of Mobile's Parks and Recreation Department offers an array of indoor and outdoor recreation facilities and an equally comprehensive recreation program menu. Featuring more than 50 pages of recreation opportunities for all ages and abilities, Mobile's leisure opportunities are plentiful. Programs are priced with one rate, without resident/nonresident designation. The program guide advertises an opportunity for Programmatic Partnerships, which invites people with skill sets in leading various recreation programs and activities at the city's facilities to apply to become a Programmatic Partner. Facility use agreements and mandatory technical assistance workshops provide structure to, and set expectations for, the partnership.

To the west, Biloxi, Mississippi's Parks and Recreation Department offers a variety of programs beyond sports, including summer playground, special population, and senior program options. In addition to the traditional sports of football, cheerleading, soccer, baseball, softball, and basketball, two indoor pools provide space for swim lessons, swim teams, and other aquatic programming. Most of the programming is available for nonresident use, except for exclusive resident-only participation at the aquatic center, in senior programs, and in adult softball. Participants in this master plan's public engagement process shared that they often travel to Biloxi for their leisure needs.

It appears that, based on pricing structure, Biloxi is not interested in partnering to offer services not currently available to County residents, such as the elite swim team. Conversely, it appears Mobile is not as strict and would welcome residents who are willing to drive 30 miles to its facilities.

## Privately Owned

Private business owners can help round out the community's available leisure options, and provide varying levels and approaches to service delivery. The Department can foster intentional connections with those businesses that serve a leisure need otherwise not being met by the municipal providers. Table 7.2 shows a sampling of private providers within the County and is designed for exploratory and informational purposes.

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Table 7.2 Privately Managed Facilities by Activity Type

<b>Business Name</b>	<b>Address</b>	<b>City</b>	<b>State</b>	<b>ZIP Code</b>	<b>Activity Type</b>
Ivey Framing & Gallery	1012 Government St	Ocean Springs	Mississippi	39564	Art
Moran's Art Studio	1201 Bienville Blvd	Ocean Springs	Mississippi	39564	Art
Pink Rooster	622 Washington Ave	Ocean Springs	Mississippi	39564	Art
Singing River Art Association	618 Delmas Ave	Pascagoula	Mississippi	39567	Art
Martin Lake Resort Inc.	14605 Parker Rd	Biloxi	Mississippi	39532	Campground
Indian Point RV Resort & Café	1600 Indian Point Pkwy	Gautier	Mississippi	39553	Campground
Santa Maria RV Resort Marina	5800 Martin Bluff Rd	Gautier	Mississippi	39553	Campground
Sioux Bayou RV Park	1221 John Dailey Dr	Gautier	Mississippi	39553	Campground
Riverbend Park Resort Assn	10707 Highway 613	Moss Point	Mississippi	39562	Campground
Riverside RV Park	10128 Pollock Ferry Rd	Moss Point	Mississippi	39562	Campground
Presley's Outing	10501 Presleys Outing Rd	Moss Point	Mississippi	39562	Campground
Camp Journey's End	7501 Highway 57	Ocean Springs	Mississippi	39565	Campground
In the Zone	3614 Bienville Blvd	Ocean Springs	Mississippi	39564	Childcare
Creative Dance & Gymnastics	3928 Jamestown Rd	Moss Point	Mississippi	39563	Dance
Spotlight Elite Dance Center	1907 Eden St	Pascagoula	Mississippi	39581	Dance

Table 7.2 Privately Managed Facilities by Activity Type (continued)

Business Name	Address	City	State	ZIP Code	Activity Type
Duo Dance & Fitness Center	2430 Ingalls Ave	Pascagoula	Mississippi	39567	Dance
Studio of Dance & Gymnastics	2206 Chicot St	Pascagoula	Mississippi	39581	Dance
Melange Dance Company of Jackson County	2206 Chicot St	Pascagoula	Mississippi	39581	Dance
Roberts' Ranch	9820 Highway 57	Vancleave	Mississippi	39565	Equestrian Center
Bodyquest Aerobic Club	2707 Highway 90	Gautier	Mississippi	39553	Fitness
Gulf Coast Fitness	2525 Highway 90	Gautier	Mississippi	39553	Fitness
Hurley Athletic Club	7635 Highway 614	Hurley	Mississippi	39555	Fitness
Full Circle Fitness	19724 Highway 63	Moss Point	Mississippi	39562	Fitness
Legendary Athletic	21175 Highway 613	Moss Point	Mississippi	39562	Fitness
Field House	3401 Bienville Blvd	Ocean Springs	Mississippi	39564	Fitness
Planet Fitness	2200A Bienville Blvd	Ocean Springs	Mississippi	39564	Fitness
Seaside Fitness	703 Bellande Ave	Ocean Springs	Mississippi	39564	Fitness
Cycology	1060 Thorn St	Ocean Springs	Mississippi	39564	Fitness
Keith Hughes Boxing Club and Fitness	3509 Bienville Blvd	Ocean Springs	Mississippi	39564	Fitness
Crossfit Royal Coast	903 Ingalls Ave	Pascagoula	Mississippi	39567	Fitness
Planet Fitness	3253 Denny Ave	Pascagoula	Mississippi	39581	Fitness

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Table 7.2 Privately Managed Facilities by Activity Type (continued)

<b>Business Name</b>	<b>Address</b>	<b>City</b>	<b>State</b>	<b>ZIP Code</b>	<b>Activity Type</b>
Pro Health & Fitness Gym	619 Krebs Ave	Pascagoula	Mississippi	39567	Fitness
Singing River Healthplex	3101 Denny Ave	Pascagoula	Mississippi	39581	Fitness
Total Fitness	1809 Denny Ave	Pascagoula	Mississippi	39567	Fitness
Singing River Cross Fit	1902 Market St	Pascagoula	Mississippi	39567	Fitness
Southern Fitness	12305 Highway 57	Vancleave	Mississippi	39565	Fitness
Hickory Hill Country Club	Hickory Hill Dr	Gautier	Mississippi	39553	Golf
Shell Landing Golf Club	3499 Shell Landing Blvd	Gautier	Mississippi	39553	Golf
Gulf Hills Golf Club	13700 Paso Rd	Ocean Springs	Mississippi	39564	Golf
Pascagoula Country Club	2703 Washington Ave	Pascagoula	Mississippi	39567	Golf
Preserve Golf Club	8901 Highway 57	Vancleave	Mississippi	39565	Golf
McCranie ATA Martial Arts	7301 Highway 614	Hurley	Mississippi	39555	Martial Arts
Ocean Springs Taekwondo	5703 Bienville Blvd	Ocean Springs	Mississippi	39564	Martial Arts
Koast Karate Klub	1711 Market St	Pascagoula	Mississippi	39567	Martial Arts
Ocean Springs Museum	1600 Government St	Ocean Springs	Mississippi	39564	Museum
Singing River Healthplex	3101 Denny Ave	Pascagoula	Mississippi	39581	Pool
Pascagoula Country Club	2703 Washington Ave	Pascagoula	Mississippi	39567	Pool
H2O and Beyond Aquatic Center	3002 Belair St	Pascagoula	Mississippi	39567	Pool
i9 Sports	Various	Biloxi	Mississippi		Sports Instruction

Table 7.2 Privately Managed Facilities by Activity Type (continued)

Business Name	Address	City	State	ZIP Code	Activity Type
Wolf River Canoe & Kayak	21640 Tucker Road	Long Beach	Mississippi	39560	Water Adventure / Tours
Everything Kayak Rentals	15240 Creosote Road	Gulfport	Mississippi	39503	Water Adventure / Tours
Adventure Locators, LLC	10470 D'Iberville Boulevard, Ste E & F	D'Iberville	Mississippi	39540	Water Adventure / Tours
McCoy's River & Marsh Tours	7001 Frank Griffen Road	Moss Point	Mississippi	39563	Water Adventure / Tours
Biloxi Bay Kayak Rentals	9485 Fournier Avenue	D'Iberville	Mississippi	39540	Water Adventure / Tours
South Mississippi Kayak Rentals	southmskayakrentals@yahoo.com	D'Iberville, Ocean Springs, Biloxi	Mississippi		Water Adventure / Tours
Mississippi Charter and Guide Services	798 Beach Boulevard	Pascagoula	Mississippi	39567	Water Adventure / Tours
Eco-Tours of South Mississippi	City Park Road	Gautier	Mississippi	39553	Water Adventure / Tours
Gulf Islands Waterpark	13100 16th Street	Gulfport	Mississippi	39503	Waterpark

Public-private relationships frequently exist where there is a specialty service that the private sector can sometimes administer more effectively and efficiently than the public entity. For example, waterpark management is a niche industry; it might be mutually beneficial for the Department to consider an agreement with existing regional waterpark owners (e.g., Gulf Islands Waterpark) to privately manage a waterpark on county-owned land.

## Nonprofit Groups and Clubs

The United Way for Jackson County and George County provide funds for numerous health and human service agencies that have programs in the local community. The Department could be a perfect partner in supporting the United Way's local education, income, and health initiatives. The community centers could serve as host to United Way-facilitated programs, providing space for classes like parenting and healthy eating. If facility space use is not an option, the Department could join the Community Care Council, a group that meets throughout the year to coordinate services being offered in the County.

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There is one YMCA facility located in Jackson County—the Mississippi Gulf Coast YMCA in Ocean Springs. There is also a YMCA in Biloxi, MS, and Mobile, AL. Boys and Girls Clubs are located in Moss Point, Pascagoula, Ocean Springs, and Gautier. The YMCAs and Boys and Girls Clubs are providing recreation services throughout the highest-populated areas of the County. It would behoove the Department not to duplicate services already provided at these locations. Maintaining solid working relationships with agencies by meeting on a regular basis to discuss service provision, community need, and collaborative endeavors would be mutually beneficial.

The Jackson County Economic Development Foundation’s website hosts an entire Culture and Recreation page that provides names and links to performing arts, visual arts, points of interest, sports/recreation, County recreation facilities, and major annual events. Though it is a solid resource, the community should look to the Department’s webpages as the comprehensive resource. Similarly, throughout the consultant’s internet searches, one of the websites most frequently returned was Coastal Mississippi’s [gulfcoast.org](http://gulfcoast.org) web address. Coastal Mississippi is the shortened business name for the Mississippi Gulf Coast Regional Convention and Visitors Bureau. The strong web presence, April 2021 CEO Report to its Board of Commissioners, and solid representation of County leisure opportunities on its website suggest that it would be in the Department’s best interest to maintain an active partner relationship with Coastal Mississippi.

The Department’s web pages should serve as a conduit, connecting residents to various recreation-based nonprofit clubs and groups. Examples of these groups include:

- The Friends of Arts, Culture and Education (FACE): Art classes, summer camp, cooking classes
- Melange Dance Company of Jackson County: Dance
- The Walter Anderson Theater Project: Theater

The Department could supply a description of the group’s services or mission, the type(s) of activities, location, and the group’s contact information on the web pages. The Department could also establish a vetting process, whereby clubs and groups would formally demonstrate the adherence to specific criteria (e.g., insurance, 501c3 status) before the County would support their group.

Table 7.3 Nonprofit Facilities by Activity Type

Nonprofit Name	Address	City	State	ZIP Code	Activity Type
Art with Heart	4400 Denny St	Moss Point	Mississippi	39563	Art
Boys & Girls Club of Jackson County – Moss Point Outreach	4208 Jamestown Rd	Moss Point	Mississippi	39563	Boys and Girls Club
Boys & Girls Club of Jackson County – Andrew Johnson Unit	1402 Tucker St.	Pascagoula	Mississippi	39567	Boys and Girls Club
Boys & Girls Club of Jackson County – Mary B Ruddiman Unit	2221 Government St.	Ocean Springs	Mississippi	39564	Boys and Girls Club
Boys & Girls Club of Jackson County – Jolly McCarty Unit	2302 Ladnier St	Gautier	Mississippi	39553	Boys and Girls Club
Ohr-O'Keefe Museum of Art	386 Beach Blvd	Biloxi	Mississippi	39530	Museum
GI Museum	5796 Ritcher Rd	Ocean Springs	Mississippi	39564	Museum
La Pointe Krebs Museum	4602 Fort St	Pascagoula	Mississippi	39567	Museum
Mississippi Maritime Museum	115 E 1st St	Biloxi	Mississippi	39568	Museum
Walter Anderson Museum of Art	Washington Ave	Ocean Springs	Mississippi	39564	Museum
The Kroc Center Mississippi Gulf Coast	575 Division St	Biloxi	Mississippi	39530	Pool
The Walter Anderson Theater Project	1600 Government St	Ocean Springs	Mississippi	39564	Theatre
Community Resources Center, United Way	3501 Magnolia St	Pascagoula	Mississippi	39567	United Way
Mississippi Gulf Coast YMCA	1810 Government St	Ocean Springs	Mississippi	39564	YMCA

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### Sports

This section provides a closer look at local sports opportunities. In internet searches, the consultants identified at least 13 youth sport organizations as offering team sport opportunities in the County. The sports were traditional in nature: football (2), soccer (2), baseball (3), and softball (3). Lacrosse, which is a slightly less traditional sport, had three organizations. The local cities' sport offerings were also very traditional in nature, with all four offering football, for example. The high schools also provide sport opportunities. Between the youth sport organizations, city, and high school offerings, the youth sport administration for traditional sports appears stronger than any other youth leisure opportunity in the region. The Department's current role as provider of outdoor field space for practice and competition appears to be necessary for these sports to be able to continue.

Continued partnering with the organizations, cities, and schools as an outdoor sport facility provider is recommended. Additionally, partnerships with these organizations in the construction and/or operation of potential new indoor sport facilities should be explored. For example, it is not uncommon for youth sports organizations to pay for indoor training time, or for a swim team to manage the operations of a pool as an independent contractor.

Second to word of mouth, the internet is typically how parents will learn about sport opportunities. As the conduit, the Department can establish a vetting process for youth sport organizations that would like their contact information featured on the Department's webpages. A similar youth sport "one-stop shopping" concept is being developed in Prince George's County, Maryland, and will be unveiled by the end of 2021. The new site will provide County residents local sport information, sortable by features such as sport type, level of competition, and location.



## Overall Provider Observations

When the sampling of recreation providers is projected on a map, their geographic locations generally align with the County's larger population centers. Figure 1 depicts leisure opportunities provided by private, nonprofit, and public providers by type of program. Figure 2 depicts only the public and nonprofit buildings, including county-owned community centers, city-owned recreation and senior centers, Boys and Girls Clubs, and the United Way.

Jackson County's community centers are nicely spread throughout its geographic boundaries, which bodes well for location-based equitable service provision. The community centers are a tremendous asset to County residents that could be used to reach more needs than that of a rentable gathering space. With interdepartmental collaboration or combination, the spaces could become hubs of recreational activities. The County's greatest opportunity for collaboration lies within its existing facilities and their corresponding staff oversight structure.

## Duplication and Gaps

This study did not identify any major areas of duplication. As the Department continues to explore the development and expansion of its services, it is important to avoid duplication of services. For example, the County has a solid number of private fitness providers throughout its boundaries; as the Department considers programmatic expansion, it will be important not to compete with those private fitness providers. Ways to avoid competition include entering the fitness market with niche services not offered by the private sector; becoming partners with the existing providers; and/or intentionally not entering the marketplace as a new provider. In addition to fitness, there appear to be a solid array of golf courses, campgrounds, and water adventure/tour providers.

The opposite of service duplication occurs when there are no providers offering specific services, otherwise referenced as service gaps. Partners can help fill service gaps in areas where services are not currently available to County residents. The following subsections identify and describe four key service gaps that the County could fill through partnerships.

### Aquatics

Pascagoula has three pools (two private and one public), and the YMCA in Ocean Springs has a pool. This leaves a void in the south central, central, and north sections of the County. There is one waterpark in Hancock County, one in Harrison County, and none in Jackson County. Recreational swim facilities ranked high in the community needs feedback; therefore, partnerships could be explored to help fill the service gap. In addition to private waterpark operators, nonprofit agencies such as the YMCA and swim team organizations can help build and/or manage new aquatic facilities. Consider using USA Swimming, the national governing body for swimming in the United States, as a resource.

### Blueway Routes

As new/proposed blueway routes are developed, consider formal partnership agreements with private operators. This report identified at least nine potential private businesses to consider. A formal bid process can award a single business the rights to operate from specific entry points. The resulting agreement should include an annual fee and/or percentage of sales, to be used toward the maintenance and management of the blueway.

Figure 7.1 Jackson County Leisure Opportunities

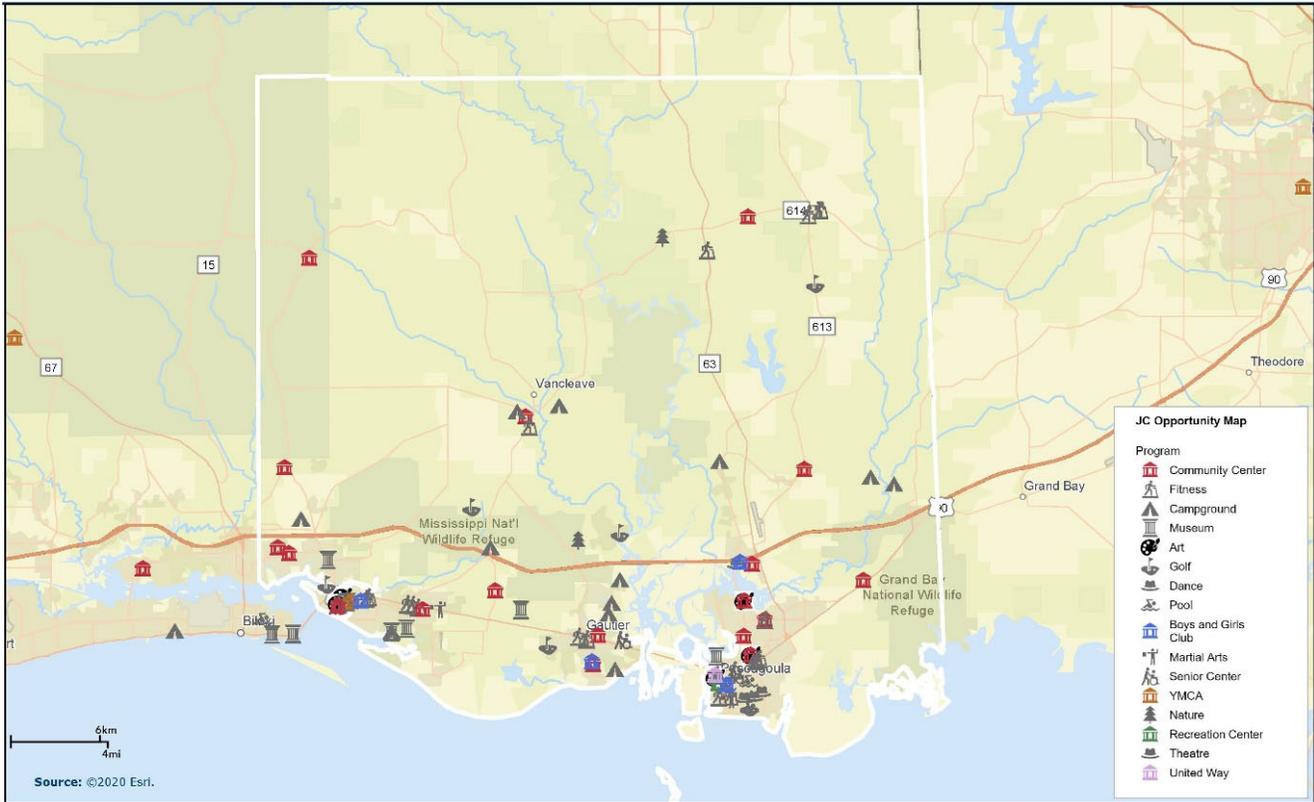


Figure 2: Nonprofit and Public Facilities

Figure 7.2 Jackson County Public and Non-Profit Centers



## Nontraditional Sports

A strengthening opportunity in sport partnerships would be to explore potential partnerships in providing nontraditional sports, such as e-sports, skateboarding, pickleball, disc golf, parkour, and/or bicycle motocross (BMX). Whatever the sport, look to its national association for guidance and local connections for potential partnering possibilities.

## Therapeutic Recreation

Therapeutic recreation (TR) provides leisure opportunities for people with disabilities. TR programs and activities are designed by specially trained professionals, and create opportunities for groups of participants with special needs to recreate together. Additionally, inclusion services are designed to assign an inclusion aide to a specific participant, which therefore enables the person with a disability to participate in a mainstream recreational activity.

Sometimes municipalities collaborate to form special districts, joining forces to provide the specialized TR programs and inclusion services in a more efficient manner across the geographic boundaries of combined group. Other times, a county provides this level of service. The Department could consider collaboration with entities such as the American Therapeutic Recreation Association, Mississippi Recreation and Park Association, Special Olympics of Mississippi, and the ADA National Network (Region 4 serves Mississippi) to provide guidance, support, and resources.

## User Agreements

### Facility Use Agreement Review

The partnership analysis provided an opportunity to review all agreements for consistency in language, expectations, information collected, format, branding, and processes. By nature, an agency's documents can tend to prioritize its internal needs ahead of the customers. The suggestions provided within this review are intended to not only strengthen the documents to support the County's needs, but also simultaneously support the customers' needs.

#### Pavilion Use Agreement

The Pavilion Use Agreement is a straightforward document that gathers the user's information and provides key rules and regulations for pavilion use. Customer-friendly features such as a fillable form and a list of all available pavilions with corresponding information would be helpful. Knowing features such as number of tables, electricity and/or water availability, and distance to parking would support the customer's decision-making process. The new online reservation feature is a terrific self-service option; including additional information such as the items listed above as well as photos would provide an enhanced level of service.



#### Golf Tournament Agreement

The Golf Tournament Agreement appears to function well as both an information-gathering document and an information source for the customer. Event-day roles and responsibilities could be provided in a bulleted format to help ensure the event planner is aware of exactly what the course staff will and will not do. The cleaning fee seems low, considering the extent of acreage the participants will be covering. Perhaps consider a cleaning fee structure according to the various areas, such as clubhouse, number of holes, whole course, etc. Sponsorship parameters could also be added. For example, outline the extent to which sponsors are allowed to post signs on their sponsored holes, conduct special on-course activities, and/or conduct raffles.

## Horse Arena and RV Park Agreements

The East Central Horse Arena, Conrad Mallette Multi-Purpose Arena and Jackson County R.V. Park Agreements are very similar in nature, but contain language specific to features and amenities within the two locations. Their agreements are a bit more complex, in that livestock, motorized vehicles, recreational vehicles, and other event components add safety, security, medical, and liability considerations. Because of the complexity of the events held at the arenas, language surrounding event pre-meeting preparation could be added as a means to support the event's success and the facility's upkeep. A checklist could support the pre-event preparation process as well as the post-event checkout process.



## Non-Exclusive League Agreement

The Non-Exclusive League Agreement outlines a series of guidelines for sports groups who wish to use athletic facilities for an extended amount of time. The current agreement provides a strong starting point for establishing mutual expectations between the County and user; additional strengthening opportunities are as follows:

- Define the reporting process and corresponding timing expectations for needed repairs.
- Create a concession stand cleanliness standards document. Include the state's health department food storage and licensing standards—especially if the league is allowed to store food long-term.
- Create a list of acceptable field maintenance practices and safety standards. Establish a required field user training, and document that the trainings occur.
- Add detailed expectations regarding base lining responsibilities and field drying agent expectations.

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- Provide an explanation of the “zero tolerance” expectation and subsequent ramifications.
- Provide direction on where current field schedules are available for public viewing, to avoid game and practice field conflicts.
- Consider expanding soccer goal anchoring expectations to include exact quantity and placement of sand bags.
- Ensure the sequential numbering of the document requirements is not duplicated.
- Add language regarding the owner’s right to audit and spot-check the facilities at any time.
- Provide consequences for not abiding by the use agreement.

## Rental Agreement for Recreational Facilities

Three strengthening opportunities were identified in the agreement:

- Consider reordering the packet to provide an introductory statement regarding the purpose of the agreement and information regarding the approval process, rules and regulations, the form for the user to fill out, and the internal tracking form.
- Create a “day-of” renter checklist, possibly tailored to each site’s unique features. Include reminders regarding rules and regulations, emergency procedures, and County contact information.
- Establish a shortened approval process for groups that wish to rent multiple times per year.

## Public Events and Land Use Agreement

The current Public Events and Land Use Agreement provides a strong base for establishing expectations and user requirements. The majority of strengthening opportunities lie in additional language that will provide even more clarity for the County and user. Prescribed parameters can help ensure more equitable administration of otherwise vaguely supported approval criteria. The following subsections suggest operation-based and clarification opportunities.

### Operation

- Consider inclusive language; for example, use “their” in lieu of “his.”
- Add at least one mandated planning meeting, required to occur prior to authorizing the event and signing the agreement.
- Create a form that acts as both an event information sheet and a checklist for all required information.

### Clarification

- Establish prescribed scenarios whereby traffic control measures will be required.
- Clearly outline the ratio of restroom-to-guest requirement.

- Instead of “reasonable attempts,” define exactly when the County will provide restroom and electrical outlet/power sources.
- Define what “good cause” means when determining whether use beyond 48 hours will be approved.
- Establish a cleanup deposit that varies according to size and scope of event.
- Define and provide examples of what “non-household garbage” entails.
- Outline damage charges based on facility type, hourly labor, and supply/material costs. Consider a damage deposit when specific facility types are rented.

## Overall Agreement Observations

From form to form, it is a bit unclear which sections the renter fills out and which sections are for internal use. Additionally, some consistencies between policies made sense, and some did not. For example, the process of picking up keys one day prior to the event was consistent, and although the cleaning fees were similar in rate, they did not seem to align with the potential mess that could occur at the facilities that varied by size and function. There were also inconsistencies, such as forms that identified ramifications for misuse and those that did not. It appears that the County has put effort into standardizing the forms; continued efforts to align form approach and content would provide uniformity and clarity.

## Rental Groups as Partners

Rental groups organize tournaments, leagues, and events that provide services the County does not generally offer. Especially in the case of field, court, course, and arena rentals, if rental groups are viewed as partners in that regional service provision, then making the processes as easy and clear as possible will aid in maintaining long-term relationships with them. Creating a sense of ownership and shared responsibility in the upkeep of the spaces while they are using them will foster better care and attention to those spaces. Regularly celebrating the success of their events and programs, supporting their needs and requests in a timely fashion, and having a team mindset can foster less of a transactional relationship and more of a developmental one.



## Interlocal Agreements

As a part of the master planning process, the Department asked the consulting team to review the Department's interlocal agreements. An interlocal agreement is a contract that establishes a relationship between two government entities, often to clarify roles and responsibilities required to execute an activity that results in mutual public benefit. Examples include the joint management of a park, cooperative acquisition and/or development of a recreation center, shared operational responsibilities for a public facility, joint purchasing endeavors, equipment sharing, the maintenance of a multi-jurisdiction trail system, and/or the exchange of funds to be used to provide recreation services. The product of interlocal agreements is a relationship management tool that often increases effectiveness and efficiency in providing local government services.

### Interlocal Agreement Best Practices

Because interlocal agreements are legal documents, content is generally formal in both structure and writing style. The following subsections will review the core components, administrative tactics, and development of the agreements as well as the review of a few benchmark agreements.

#### Core Components

Though legal requirements vary by state, the basic components of an interlocal agreement are as follows:

- Agencies involved
- Purpose/catalyst for the agreement
- Responsibilities of both parties
- Financing and budgeting
- Accountability
- Indemnification
- Insurance
- Liability
- Duration and renewal parameters
- Severability
- Communication channels
- Signatures

Simple agreements do not necessarily require each of these components. That said, detailed agreements arguably better-facilitate greater understanding between the agencies. If there is little room for interpretation, there is a higher likelihood both parties will be satisfied with the execution of said agreements. Therefore, interlocal agreements should provide clarity through as much detail as possible, clearly identifying roles, responsibilities, and expectations of both agencies.

## Administration

Satisfaction with the agreements can largely hinge on the effectiveness with which they are executed and the extent to which accountability measures are in place. Interlocal agreements are only effective if they are managed consistently by both parties. Specific administrators of the agreements can formally be assigned through the agreement itself, or agencies can informally assign the responsibility. Accountability for the successful execution of the agreements' tenets should be built into each agency's internal staff expectations and formally reported to the partner agency. Reporting expectations can be outlined formally in the agreement as well. Some agreements specifically outline the agencies' ability to audit the others' work. Specificity can also be outlined through mutually agreed-upon maintenance expectations that establish standards such as turf length, aeration frequency, and/or weed control, for example.

Annual meetings are often prescribed within the agreements; semi-annual or quarterly meetings between administrators might be more effective in maintaining more communicative and positive working relationship between the partner agencies.

In a research study conducted by Kurt Thurmaier in Iowa, 28% of the state's interlocal agreements were for parks and recreation services. Additionally, the results suggested that, "healthy underlying social networks, maintained with regular communications, is important in maintaining successful interlocal agreements."

## Interlocal Agreement Development

The State of Indiana's "Manual of Practice For Drafting Interlocal Agreements" (manual) describes best practices in interlocal agreement development. The manual suggests establishing a clear goal for the agreement, with full explanation of the intended service outcomes. The manual provides guidance on conducting a feasibility study, negotiation points, and an outline and sample agreements to support the agreement's composition. An important point expressed at the beginning of the manual is to make sure the public is included in the development of any new, proposed interlocal agreement.

## Benchmark Interlocal Agreements

Reviewing examples of other interlocal agreements throughout the nation can help provide ideas for strengthening and improving existing agreements. Summaries of two such examples are provided below:

1. Asotin County/Clarkston (WA); Transfers funds from the city to county for the maintenance and operational cost of an aquatic center:
  - The county implemented a local option sales tax of .3% specifically for the aquatic center
  - The city implemented a .3% local option sales tax for its General Fund
  - The city agrees to contribute \$160,000 in equal monthly installments
  - The agreement establishes an annual renewal term

<https://mrsc.org/getmedia/18af67b7-68c3-47ff-9bcd-f332c6f089bf/c5-a81aquaticop.aspx>

This agreement is fairly straightforward, yet specifically defines the fiscal responsibilities of each party.

2. Snohomish County/City of Arlington (WA); Defines joint operation and maintenance responsibilities for a park:
  - Comprehensive master plan determined public interest of county residents to participate in joint municipal undertakings to increase recreational opportunities and facility capacity
  - County-owned property
  - Designates an Administrator for each party
  - County is responsible for restroom maintenance, utilities, signage, trail maintenance, and enforcement
  - City is responsible for operations of the public park, park usage administration, general maintenance, and repair following minor weather events
  - Joint responsibilities include annual meetings and media outreach
  - Establishes accountability for the park's condition, and guidelines for alterations and improvements
  - Establishes the city as an independent contractor
  - Formally outlines indemnification, liability, and insurance requirements

<https://mrsc.org/getmedia/49f32890-6f36-4474-ac0e-b5c39a53e829/s61-a7parkjointop.aspx>

This agreement is testament to a well-defined relationship. Administrators are designated, specific responsibilities are assigned, communication channels are established, and accountability methodology is well defined.

Additional examples from Washington can be found here: <https://mrsc.org/Home/Explore-Topics/Parks-and-Recreation/Partnerships-and-Agreements/Intergovernmental-Cooperation-in-Parks-and-Recreat.aspx>.

## Jackson County's Interlocal Agreements

Jackson County has interlocal agreements with four cities: Gautier, Moss Point, Ocean Springs, and Pascagoula. Established in 1997, each agreement auto-renews October 1 of every year. The agreements are identical in intent and content, and the catalyst for the agreements is to formally document the desire to work together "in an efficient and cost-effective manner," which is achieved through the "provision of recreation services and facilities." The primary way the partnership is executed is to transfer all funds collected for recreation purposes by the County to the respective city. More specifically, the transferred funds are "all funds received from taxes collected from within the corporate limits of the City limits..." for recreation purposes. The City subsequently maintains all County and city-owned recreation facilities (excluding public beaches). The city is expected to submit an annual report to County, accounting for the expenditures and funds received under the agreement.

The agreements are fairly simplistic in approach, using general language rather than specific. For example, phrases such as "all funds" and "all facilities" are used, rather than defining specific percentages of funds or referencing the specific parks to be maintained. The agreements do not outline maintenance expectations, establish operational responsibilities, or specify accountability practices.

The consulting team recommends the County review and update its interlocal agreement with each city, to provide specificity through better-defined expectations. Meeting frequency, maintenance expectations, and accountability are the three areas to be reviewed within the agreements' current context. Potential additional service provision components could include a definition of which types of facilities and programs each agency will provide. This clarification will help establish each agency's roles within the context of park and recreation services, and avoid duplication and gaps in service provision.

### Pascagoula

The County established a second interlocal agreement with the City of Pascagoula (City) in 2011. The agreement's purpose is to establish the use of a County-owned parcel as a parking lot for the adjacent City-owned recreation center. The City's responsibilities are to maintain the property as a parking area, and not to construct any structures without County approval. The agreement automatically renews annually on October 1.

Benefits to the County include prescribed use of its land to support recreation service provision, without any connection to (or liability for) the operation, maintenance, or financing of the facility itself. Adding more key administration points, such as each agency's responsible party, maintenance expectations, or audit/review parameters would strengthen the agreement.

## Service Delivery

### Delivery Models

Currently, the Department's services operate in a self-serve model. Passive recreators can use parks and amenities by initiating their own visits; organized groups can use the parks and facilities through formal reservation channels. In addition to the self-serve model, many park and recreation agencies organize and deliver part of their services using a guided recreation model. Whether led by instructors or staff, programs and events in the guided recreation model are designed to encourage recreation participation at specific times and places for specific purposes. Provided in tandem, self-serve and guided recreation can reach more residents' leisure needs and interests. The consulting team recommends that the Department consider growing its efforts to provide comprehensive leisure opportunities through guided recreation.

### Partners' Role in Service Delivery

The current recreation service delivery system is largely focused on facility provision for external partners: primarily via sports fields and arenas. The renters are responsible for the complete administration and execution of the planned activity, including organization, marketing, registration, and instruction. This method is beneficial to the Department because the staff only have to execute the rental agreement and maintain the facility.

In addition to viewing the renters as service provision partners, individual recreation instructors can become contractually based partners who deliver recreation services on behalf of the County. Individuals with specific skills can lead registration-based classes at prescheduled times and locations via the umbrella of the County system. Paid via the contractual agreement, this type of service provision is an alternative to hiring employees to provide the instruction. Some park and recreation agencies exclusively use contractual instructors to provide recreation programs. In the Department's case, introducing contracted instructors can increase service provision without exponentially expanding the staff size.

### Benchmark Agencies

To help explore best practices and alternative methodology, similar agencies across the country can be used as benchmarks.

Many county-based recreation systems are structured in such a way that they:

- a) Provide services outside the physical city boundaries
- b) Facilitate services that have a regional interest or draw
- c) Act as a conduit, as a resource that connects private, nonprofit, and public recreation services and/or
- d) Offer services that are not available through private, nonprofit, and public recreation providers



#### The County as the Regional Provider

In Johnson County, Kansas, the Park and Recreation District operates large sports complexes, regional parks, aquatic facilities, and specialized centers such as an Arts and Heritage Center and a nature center. The cities have strong park and recreation departments in their own right; therefore, Johnson County focuses on facilities and programs that have a regional reach and draw.

#### The County as the Conduit

Another role to explore is one where the county acts as the conduit that connects existing opportunities in a centralized location. An example of this is Maryland-National Capital Park and Planning Commission, where the Prince George's County Youth and Countywide Sports Division is currently developing a database of all possible sport opportunities available in Prince George's County—a "one-stop shop" for community members to find the type and level of sport that fits their needs.

Regardless of role, whether regional provider, conduit, primary provider, or provider in tandem, filling unmet needs should be Jackson County's primary goal. The best way to define how the County can assist in serving its residents' recreational needs is doing so collaboratively. Joining the existing providers in a strategic discussion regarding how the parties can work together and support each other is the first step. The discussion should define roles and methodology, and result in an actionable plan.

#### The County as the Primary Provider

Mecklenburg County in South Carolina serves as the region's primary recreation service provider. The municipalities rely on Mecklenburg County's comprehensive array of facilities and programs for public leisure provision.

#### The County as a Provider in Tandem

Through shared local responsibilities and regionally based, specialized facilities, the Parks and Recreation Division's facilities in Broward County, Florida, include water parks, campgrounds, a target range, a multipurpose stadium, an observatory, mountain bike trails, dog parks, a velodrome, an educational farm and stables, disc golf courses, environmental education center, and more.

## Revenue Generation

Recreation programs, facilities, and services require funding to administer, which is generally gained through tax dollars, user fees, and/or alternative revenue sources. Partnerships can help augment and enhance that funding. The subsections below provide four examples of such opportunities.

### Independent Contractors

The County's existing community centers' use can be maximized beyond the current rental-only philosophy. The facilities can be intentionally programmed, with specific activities scheduled on a regular, repeating basis. To demonstrate the revenue potential of this service expansion, a sample class will be explored from a fiscal perspective.

In this example, a music exploration class, geared toward toddlers ages three to five years old, will be held on four consecutive Mondays from 9 a.m. to 10 a.m. at the East Central Community Center in Moss Point. Led by an independent contract instructor, five participants pay \$20 for the four-week session. The resulting gross revenue of \$100 is shared, with 70% for the instructor and 30% for the County. When this example is expanded to five classes per week, repeated across eight sessions at 10 sites (assuming \$20 session fee and an average of five participants each), the estimated revenue for one year is \$40,000 gross and \$12,000 net for the County. Continuing with this example, the returns grow exponentially when a larger percent of the facilities' capacities are filled, and when the total participation average grows.

Efficiencies are achieved by using a standard independent contractor agreement for all classes, and a single Department staff person to administer and manage the agreements and activity scheduling. Often a single contractor will hold their class(es) at multiple locations throughout the week, serving the needs of different constituents in a larger geographic area. The centralized coordination is beneficial for all parties: the contractor's classes are advertised and administered for them, the County facilities' usage increases, and community members have expanded leisure opportunities.

### Affiliate Sport Groups

Affiliate sport group agreements vary nationally. Usage fees charged to the groups can be assigned based on the number of players, a flat team fee, or the number of hours reserved, or sometimes there is no fee at all. Choosing a fee structure and corresponding rates greatly depends on the agency's philosophy of service delivery, and what expense the fees would need to offset. For example, fees can be established based on a percentage of direct and/or indirect costs, such as maintenance expenses (e.g., grass cutting, field lining), staff administration, debt service, and/or site-based capital improvement. The consulting team recommends a review of the County's current pricing philosophy and possible update of the affiliate sports group fees and charges. An auditing system that corresponds to the established funds should also be implemented.

## Rental and User Fees

One way to generate revenue is to charge for the use of facilities and services. Rental and user fees and charges can help to recoup part or all of what it costs to maintain the facility. The philosophy that supports those fees and charges can differ greatly between communities and counties. Deciding what services will have fees associated with them is an important first step; the second step is determining price points based on direct costs, indirect costs, a cost recovery model, and/or willingness to pay. This approach to pricing can help strike a balance between the social service need to provide services for the good of the community with the business-conscience need for the additional revenue to maintain those services.

Many jurisdictions charge additional fees for non-residents to reserve or use park facilities. This common practice may increase revenue generation for the department and improve revenue recovery system-wide. One option to consider would be to charge a fee for non-county residents to reserve pavilions.

The 2019 – 2020 revenue and expense report showed that rental income/user fees generated \$14,834, which is a small amount for a county system. Parking, entrance fees, launch fees, boat slip rates, shelter rentals, special events, sports fields, recreation facilities, community centers, campgrounds, special facility access (e.g., dog park), membership, and/or programs are all services that can be fee-based if the County so chooses. Generating more revenue can equate to more funding for facility maintenance, building new facilities, and supporting enhanced programming (which will in turn generate more revenue). If the County desires to increase revenue opportunities, it should review its recreation pricing philosophy and its fees and charges. For an example of best practice fee structures, the Broward County, Florida, fees and charges listing is comprehensive, and is available here: <https://www.broward.org/Parks/Fees/Pages/default.aspx>

## Grants

Grant funding can be a means by which to increase revenues without burdening users and/or residents. Grant selection committees can, at times, award more points to joint grant applicants who demonstrate the efficiencies of the partner agencies coming together to achieve a common goal. Therefore, grants are often more liberally awarded to groups of two or more collaborating agencies. Examples of this include a city and county team collaborating to extend a trail system, or a county and youth sports team seeking to rebuild a field damaged by a natural disaster.

Grant sources include federal and state initiatives, foundations, and commercial giving programs. Before searching for grant opportunities, the County should identify the specific project, facility, and/or outcomes the grant funds would support. Without the intended outcomes defined, researchers can spend unnecessary time combing through the thousands of grant opportunities. Recent grant searches have identified that grant opportunities tied to specific themes are much more plentiful than those for capital improvement projects. For example, combating hunger, equity initiatives, pandemic resilience, natural disaster recovery, and mental health initiatives have been common outcomes sought with recent grant opportunities. Once specific outcomes are identified, the research process can begin

**7 - Partnership Analysis**

by vetting grant options for key requirements, such as agency incorporation, match funding, partner collaboration, project timing, and target demographics. Grant funding reporting requirements and stipulations/restrictions can be an administrative burden for staff; therefore, investigative research should be conducted prior to the application process.

## Recommendations

The following is a list of recommendations, divided into thematic categories. The recommendations provide guidance in the realms of the Department's role, and identify Departmental growth opportunities.

### Administration

- Continue the role of practice and competition outdoor sports field provider.
- Review existing interlocal agreements with each city, to provide specificity through better-defined expectations.
- Evaluate the Department's recreation pricing philosophy; analyze the fees and charges for desired outcomes.
- Examine the current sports affiliate pricing philosophy, and possibly update the corresponding fees and charges.

### Leadership

- Be the conduit—the comprehensive community resource for county-wide services.
- Maintain solid working relationships with Boys and Girls Clubs and YMCAs by meeting on a regular basis to discuss service provision, community need, and collaborative endeavors. Take care not to duplicate services in the areas they currently serve.
- Facilitate a strategic discussion with existing providers. Determine how the parties can work together and support each other; define roles, methodology, and an actionable plan.

### Community Center Use

- Foster interdepartmental collaboration and/or combination to prioritize the community centers as hubs of recreational activities.
- Host United Way-facilitated and/or United Way-supported programs in community centers.
- Maximize the community centers' available usage hours for rentals and programs.

### Partner Relationships

- Engage independent contractors as recreation program providers.
- Explore potential partnerships in the provision of nontraditional sports.
- Seek out Coastal Mississippi as a formal partner.
- Value rental groups as partners in service provision.
- Consider partnering with sport organizations, schools, and cities to develop additional indoor sport facilities.

- Explore the opportunity to partner with regional waterpark owners to perhaps privately manage a waterpark on county-owned land.

#### Service Development

- Provide more comprehensive leisure opportunities through a guided recreation model.
- Develop new services that fill unmet needs.
- Avoid duplication with existing public and nonprofit recreation service providers.
- Use partners to help fill service gaps; consider targeting aquatics, blueway routes, nontraditional sports, etc..

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# 08 Budget Assessment

The planning team was tasked with conducting a financial analysis and historical review of the Department of Parks and Recreation's (Department) operating and golf course budgets, pricing methodologies for programs and services, how facilities and programs are performing currently, and a historical review of alternative earned revenues such as grants, sponsorships, and private funding. An analysis of the current distribution of revenues and identify opportunities for revenue growth is included. The County has become increasingly aware that the cost of providing fee-related services has been outpacing the revenue generated by providing those services. For these reasons, the County is interested in understanding revenue enhancement options to supplement fee-related services and considering recommendations that might better align fee levels to reflect costs.

This section of the report outlines how the planning team approached the project; summarizes the major technical findings that were identified within this phase of the project, provides an overview of how the analysis was performed; and provides a high-level synopsis of the project findings. The planning team reviewed the Department of Parks and Recreation's operating and golf course budgets for fiscal years (FY) 2019 – 2021, and proposed FY 2022 budgets.

## Summary of Technical Findings

Recreation services total operating budget, exclusive of the Department's golf operations budget, for fiscal year (FY) 2020 was \$6,191,901, representing a 7.0% decrease from the prior FY. Actual expenditures for FY 2020 were \$5,124,857, representing a 19.4% decrease from the prior FY. It is important to note that the financial effects of COVID-19 related operational adjustments are most likely reflected in the significant drop in actual expenditures when compared to the previous FY's expenditures. To that end, FY 2021 projected departmental expenditures are \$5,564,527, representing an 8.6% increase in spending from FY 2020, but still remaining 8.3% under the adopted budget for FY 2021. Likely, the lingering effects of COVID-19 related operational adjustments are still contributing to the decreased spending levels.

The Department is primarily funded by tax subsidies with revenues generated from user fees and charges representing less than one percent of total funding. The low percentage of revenue recovered from user fees and charges is not surprising given the relatively small base of revenue producing facilities and programs.

Revenues from fees and charges for rentals and services have continued to decline from FY 2019 with FY 2020 actual revenue and FY 2021 projected revenue representing, roughly, a 37% decline from 2019 levels. Once again, it is important to note that FY 2020 and FY 2021 revenues were most likely impacted by the effects of the COVID-19 pandemic and the decreased demand for rentals and recreation services.

The chart below illustrates the year-over-year fluctuations in overall department revenue, expense, and cost recovery levels:

Table 8.1 Jackson County Recreation Operations Fiscal Year Summaries and Cost Recovery

Recreation Operations Fiscal Year Summaries and Cost Recovery						
Category	2019	2020		2021		2022
	Actual	Budget	Actual	Budget	Actual	Proposed
Revenues	\$35,864	\$22,488	\$22,488	\$25,000	\$22,917	\$25,000
Expenditures	\$6,354,823	\$6,191,901	\$5,124,857	\$6,070,392	\$5,564,527	\$6,818,254
<i>Fees and Charges Cost Recovery</i>	0.6%	0.4%	0.4%	0.4%	0.4%	0.4%

Departmental cost recovery, the percentage of costs covered by revenues, was examined by identifying and assigning all costs associated with, and applicable to, programs and service delivery. Specifically for all FYs analyzed, financial, personnel, and programmatic data were reviewed carefully using standard analytical techniques and best practices. These data were used to develop the foundation and cost recovery assessment through which the detailed cost recovery determination was arrived at. This analysis included a detailed review of all revenue and expenditure budgets provided by the Department for the FYs analyzed. Revenue and expense data provided by Department staff consisted of budgeted values and actual values and was assigned to all applicable FYs accordingly.

The County collects taxes to satisfy its general revenue requirements. The level of service funded from tax levies is defined by the local jurisdictions and generally benefits all Jackson County residents, which is different than fees collected by providing specific services to non-residents, services benefitting smaller groups, or services benefitting only individuals. Fees paid relieve citizens of the burden of paying for discretionary services they do not use; therefore, fee levels should reflect the reasonable, identified costs to operate facilities and of the work Jackson County staff perform to deliver programs and services. To that end, while there has been conscious review and discussion about which programs and services should be subsidized, and to what level, without a formal policy in place there is bound to be inequity for which programs and services benefits from tax dollar support.

For example, in many communities there may be a discrepancy in levels of general fund subsidy among youth, adult, and senior citizen programs and services, based for the most part on arbitrary pricing or historical community support, and sometimes without analyzing the full-cost of providing programs and services to assign a fee accordingly. In situations when general fund support is either reduced or increased, how these funds will be used to subsidize various programs and services is often a contentious issue. Therefore, it is important to have a policy or cost recovery model to illustrate how programs and services are subsidized by tax dollars. Having a formal cost recovery policy will provide a tool to assist staff and community leaders with difficult decisions related to prioritizing how tax dollars should be allocated. The Department goals should include incorporating a philosophy that balances mission and financial viability, while effectively responding to the needs of the community.

When a cost recovery model is incorporated into a financial plan for an agency, it allows for management to consider several options for strategies to strengthen the business operations and service delivery. When considered and implemented, this strategy allows for reallocation of resources to specific service areas to either strengthen existing programs or to create new ones that better fit the needs of the community.

In the meantime, the County has begun discussions surrounding the development and implementation of new fees. The Board of Supervisors has discussed, and is in favor of, charging a fee to non-county residents for the use of park pavilions. Furthermore, the County should develop and adopt community-appropriate cost recovery percentage level policies. These policies should outline the cost recovery percentage the County desires to recover through all fees and charges, for all department programs and services offered. The planning team recommends keeping fees at current levels, with the exception of adopting new fees for services currently being provided, where applicable, until the County has decided what the new, increased target cost recovery level for all division programs and services should be.

Once a cost-recovery policy has been established and the adoption of an updated fee schedule has been completed, the planning team recommends the County conduct a formal fee study every three to five years; when the County experiences a significant change in demand for services, organizational structure, or key business processes; or when it identifies budgetary issues

that might be addressed by way of an increase in user fees or the adoption of new fees.

The Recreation Department's golf operations total operating budget for fiscal year FY 2020 was \$1,345,657, representing a 28.1% increase from the prior FY though actual expenditures for FY 2020 were \$971,043, representing a 7.5% decrease from the prior FY. Like recreation programming and services, it is important to note that the financial effects of COVID-19 related golf specific operational adjustments are most likely reflected in the significant drop in actual expenditures when compared to the previous FY's expenditures. To that end, FY 2021 projected departmental expenditures are \$1,212,246, representing a 24.8% increase in spending from FY 2020, but still remaining 5.9% under the adopted budget for FY 2021. Likely, the lingering effects of COVID-19 related golf operational adjustments are still contributing to the decreased spending levels.

Revenues from greens fees and sale of merchandise have continued to increase from FY 2019 with FY 2020 actual revenue of \$703,706 and FY 2021 actual revenue of \$893,856.48 representing, roughly, an strong increase from 2019 levels. Once again, it is important to note that FY 2020 and FY 2021 revenues were most likely impacted by the effects of the COVID-19 pandemic and the operational adjustments which ensured, as revenue for both FY 2020 and FY 2021 are below adopted budget levels. The chart below illustrates the year-over-year fluctuations in overall department revenue, expense, and cost recovery levels:

Table 8.2 Jackson County Golf Operations Fiscal Year Summaries and Cost Recovery

Golf Operations Fiscal Year Summaries and Cost Recovery						
Category	2019	2020		2021		2022
	Actual	Budget	Actual	Budget	Actual	Proposed
Revenues - Greens Fees and Sales	\$680,946	\$650,000	\$703,706	\$650,000	\$893,856.48	\$711,440
Revenues - Transfers In and Other	\$458,413	\$635,000	\$643,842	\$637,000	\$0	\$564,874
Expenditures	\$1,050,094	\$1,345,657	\$971,043	\$1,288,564	\$1,212,246	\$1,442,348
<i>Fees and Charges Cost Recovery</i>	<i>64.8%</i>	<i>48.3%</i>	<i>72.5%</i>	<i>50.4%</i>	<i>74.2%</i>	<i>49.3%</i>
<i>Overall Cost Recovery</i>	<i>108.5%</i>	<i>95.5%</i>	<i>138.8%</i>	<i>99.9%</i>	<i>74.2%</i>	<i>88.5%</i>

The planning team recommends implementing systems to help accurately identify revenue, expense, and participation data. A process should be started in order to review individual golf activities and services currently provided and identify which ones may be suitable for fee adjustment to achieve the desired cost recovery goal and to maintain, or establish, a sufficient fund balance while remaining competitive within the market and mindful of customers' ability to pay. Activities and services that are performing well financially should be identified and actions should be taken to ensure that the financial integrity of the activity or service is preserved. Activities or services that are performing poorly financially should be identified and strategies developed to enhance the financial viability of the activity or service, or to divest resources from the activity or service and reallocate to other pursuits that align with golf operations cost recovery goals and community needs. Where fee increases are deemed appropriate, further recommendation would be to employ a three-year approach to some of the more impactful fee increases, emphasizing the revenue generating potential of the activity or service at an elevated fee level.

### **Golf Operations Fund Balance / Reserves**

The County needs a fund balance sufficient to help ensure business and service continuity if a downturn in the economy, or some other unforeseen event or circumstance, occurs. The use of the reserve balance funds for specific expenditures and the maximum allowable fund balance (fund balance ceiling) is commonly determined by State legislative statute and/or County policy. Specific to this study the actual fund balance level was not analyzed, for this reason, the planning team does not recommend any immediate fee adjustments based on current fund balance, but does recommend that the County monitor the fund balance periodically to ensure sufficient fund levels are being maintained. Furthermore, it is important to note that fund balances can fluctuate daily and actual balance amounts reflect the point in time when calculated. For this reason, the planning team does also recommend monitoring the fund balance to identify any large fluctuations should they be evident as dramatic changes may be indicative of longer term trends pertaining to revenue or expenditure increases or decreases. Finally, should current fund balance not exist, it is recommended that the Department establish a reserve fund for the golf operations and designate a special revenue fund; should the fund balance be at a level significantly under the State defined ceiling the Department should consider highlighting this as an additional justification to explore fee increases or new fee adoption.

## Golf Operations Pricing Strategies

Golf course operations built upon sound business principles requires the adoption of defensible financial management policy and justifying how tax dollars are spent and invested, if subsidies are necessary to support operations. Adopting a pricing methodology that encourages revenue growth can help strengthen facility operations for the long term. By creating fiscal policy that aligns with fiscal reality, organizations enhance their chances of being financially resilient in the long term.

Much like recreation programs and services, establishing a price for a golf program or service can be based upon a variety of strategies. Arbitrary pricing is not encouraged as it is difficult to justify, and does not articulate use of tax subsidy in a way that ties to the County's community mission. It is recommended that the Department follow a cost recovery pricing approach, similar to that which was proposed for recreation programs and services, which is based on cost recovery goals within a developed cost recovery policy. This ensures that cost recovery goals function as a primary pricing strategy, followed by either market pricing (for golf services with low alternative coverage – few if any alternative providers) or competitive pricing (for golf services with high alternative coverage – other alternative providers offer similar or like services).

Other strategies to consider after cost of service and fee analysis is undertaken include:

- **Market Pricing:** a fee based on demand for a service or facility or what the Department determines a participant is willing to pay for a service. Private sector businesses commonly use this strategy. One consideration for establishing a market rate fee is determined by identifying all similar providers (i.e. private sector providers, municipalities, non-profit sector etc.), and it has been determined that the service has excellent position in the market, establishing a fee that is higher than other similar providers.
- **Competitive Pricing:** a fee based on what similar service providers are charging. One consideration for establishing a competitive fee is determined by identifying all providers of an identical service (i.e. private sector providers, municipalities, non-profit sector providers, etc.), and establishing a fee that is at mid-point or lower.
- **Differential Pricing:** fees that are grounded in the idea that different prices are charged for the same service when there is no real difference in the cost of providing the service. The same service may be offered at a more desirable time, location, or have other factors that attract a following, which may drive a higher price point. Moreover, pricing may be grounded in knowledge of the community's customer base and an understanding of ability to pay. The Department may wish to expand use of this pricing strategy to stimulate demand for a service during a specified time, to reach underserved populations, or shift demand to another place, date, or time.

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# 09 Capital Improvement Plan

As with any parks and recreation department, the planning and implementation of capital improvements for Jackson County Recreation is critical to the execution of its service delivery to the community. The Jackson County Finance Department (Finance) is tasked with monitoring all County departments' expenditures to maintain budgetary compliance and funding availability associated with facility renovations, maintenance, and expansion to address aging facilities and the changing needs of the community. The Park Classifications and Service Criteria section (Section 4) findings revealed the County has multiple proposed facilities to address current and future community needs. Additional findings identified a potential need for two more neighborhood parks and a special use facility to expand service in certain areas in the community. One of these recommended neighborhood park locations is in the City of Moss Point and should be provided by that jurisdiction. The second recommended park location is in the Latimer community which is unincorporated and would rely on the County to provide this facility. The recommended special use facility is an indoor recreation center with aquatics and a pickleball facility. This facility is intended to serve all county residents and beyond. Future expansion will address deficiencies in the Department's established levels of service, as well as its service area coverage. At minimum, these new neighborhood parks should contain a mixture of both active and passive multigenerational recreation facilities, including, but not limited to: open greenspace walking trails, pavilions, restrooms, playgrounds, and fitness equipment. The connectivity analysis identified several opportunities to expand trails and greenways. Additional opportunities for enhanced connectivity are recommended in the Jackson County Bicycle, Pedestrian, and Trails Master Plan but will require additional study for implementation. Implementation of these findings will most likely require cross-department collaboration.

In response to these recommendations, a ten-year spending plan has been created, which defines costs for recommended improvements to existing and proposed parks and park facilities. As the needs of the County and its residents continue to evolve over the next ten years, the Department will have to expand to provide additional facilities to meet programming demands and enhance service delivery where not adequately provided. Additionally, the community has identified a need to protect water resources for recreational uses. It is important to the community to have public access to these spaces for passive recreation and educational assets. The needs for expansion correspond with an identified need to invest in existing park and recreation facilities to improve the quality of service, foster a sense of community, and enhance the overall health of residents.

The recommended funding distribution for these projects has been broken into three prioritization levels or "tiers". Tier 1 is generally intended to address immediate needs for existing park renovations, such as ADA access improvements, general safety renovations, and planning efforts for upcoming projects. Some funding in Tier 1 will also support immediate expansion projects of existing parks. Some park renovations will require larger, more costly, development. For a more fiscally feasible approach, the planning team recommends approaching each existing park's development in portions by improvement budgets (E.X. lighting, fields, restrooms, etc.). Several development projects in the first two years reflect that. Funding shown in Tier 2 is for the development of new facilities being planned in Tier 1 as well as initial development of the expanded trail and greenway network. Additional funding for continued renovations of existing parks is also included in this tier. Tier 3 projects have been identified

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as upcoming needs that need longer range funding strategies. As with Tier 2, the third tier also includes funding for continued renovation to existing facilities and sport field conversion. The capital improvement budgets shown are recommendations from the planning team based on experience with similar scale projects in the region.

## 10-year Spending Plan

Jackson County's capital improvement plan identifies approximately \$79 million in renovations and new facility development. Projects in Tiers 1 and 2 have an approximate value of \$49 million. Tier 3 projects have approximately \$30 million in anticipated costs. Some renovations and other projects have been placed beyond the 10-year time frame in a "future" category that can be used for important efforts that fall just outside higher priority needs. The approximate value of these future projects is \$11,525,000. The large Community Recreation Center and Aquatic Center discussed in the report are not shown in this 10-year spending plan, as the County may pursue private partnership opportunities for their development.

During the community engagement process, the planning team learned nearly 90% of survey respondents support additional spending to fund recreation and parks system improvements. Most of these respondents were willing to pay between an additional \$1 and \$15 per month. The planning team estimates this might generate between \$3 million and \$10 million in additional annual revenue for park improvement efforts. This and other funding options are detailed in the following pages.

The spending plan highlights the safety and ADA items that were identified during the facility site visits and discussed in the facility assessments. Those items are identified for potential spending in each year of the spending plan, as well as several maintenance issues. Other expenditures are distributed over the course of the remaining years as well. New park and facility development spending is identified for years three to five.

The following provides a summary of the total costs identified in the spending plan:

ADA and general park improvements: \$1,000,000

Existing park renovations and improvements: \$60,050,000

New park and facility development: \$8,000,000

Greenways and blueways capital costs: \$18,500,000

Other capital costs: \$3,285,000

Discussion of costs is shown for overall system budgeting purposes only. Development is not funded at this time.

Table 9.1: Jackson County, Mississippi – 10 -Year Spending Plan

	TIER 1 (Years 1-2)	TIER 2 (Years 3-5)	TIER 3 (Years 6-10)	Future	TOTAL
<b>ADA AND GENERAL PARK IMPROVEMENTS</b>					
ADA Improvments & General Improvements	\$200,000	\$300,000	\$500,000		\$1,000,000
<b>ADA AND GENERAL PARK IMPROVEMENTS TOTAL</b>	<b>\$200,000</b>	<b>\$300,000</b>	<b>\$500,000</b>	<b>\$0</b>	<b>\$1,000,000</b>
<b>EXISTING PARK RENOVATIONS</b>					
Edward A. Khayat Park	\$500,000	\$625,000	\$2,125,000		\$3,250,000
Helena Complex			\$2,500,000	\$4,850,000	\$7,350,000
Lum Cumbest Park & Roy Crane Adult Complex	\$5,200,000	\$4,100,000	\$4,525,000	\$3,675,000	\$17,500,000
St. Andrews Family Park	\$330,000	\$735,000	\$785,000		\$1,850,000
St. Martin Complex	\$2,525,000	\$9,825,000	\$6,100,000		\$18,450,000
Vancleave Complex	\$3,565,000	\$4,700,000	\$3,385,000		\$11,650,000
<b>EXISTING PARK RENOVATIONS TOTAL</b>	<b>\$12,120,000</b>	<b>\$19,985,000</b>	<b>\$19,420,000</b>	<b>\$8,525,000</b>	<b>\$60,050,000</b>
<b>NEW PARK AND FACILITY DEVELOPMENT</b>					
Pickleball Complex				\$3,000,000	\$3,000,000
Neighborhood Park (Latimer area)		\$5,000,000			\$5,000,000
<b>NEW PARK AND FACILITY TOTAL</b>	<b>\$0</b>	<b>\$5,000,000</b>	<b>\$0</b>	<b>\$3,000,000</b>	<b>\$8,000,000</b>
<b>GREENWAYS AND BLUEWAYS CAPITAL COSTS</b>					
Greenways (18 miles)	\$3,600,000	\$5,400,000	\$9,000,000		\$18,000,000
Blueways (signage, launch upgrades, etc)	\$500,000				\$500,000
<b>NEW TRAILS AND GREENWAYS TOTAL</b>	<b>\$4,100,000</b>	<b>\$5,400,000</b>	<b>\$9,000,000</b>	<b>\$0</b>	<b>\$18,500,000</b>
<b>OTHER CAPITAL COSTS</b>					
Small Park Structures (Pavilions, Restrooms, Etc.)	\$600,000	\$900,000	\$1,500,000		\$3,000,000
Golf Course Maintenance Building	\$250,000				\$250,000
Facility Design Standards Manual	\$35,000				\$35,000
<b>OTHER TOTAL</b>	<b>\$885,000</b>	<b>\$900,000</b>	<b>\$1,500,000</b>	<b>\$0</b>	<b>\$3,285,000</b>
<b>Tier Totals</b>	<b>\$17,305,000</b>	<b>\$31,585,000</b>	<b>\$30,420,000</b>	<b>\$11,525,000</b>	<b>\$90,835,000</b>
Tier 1 and Tier 2 TOTAL	\$48,890,000				
Tier 3 TOTAL	\$30,420,000				
TOTAL	\$79,310,000				
FUTURE**	\$11,525,000				
				<b>GRAND TOTAL</b>	<b>\$90,835,000</b>
				<b>TEN YEAR TOTAL</b>	<b>\$79,310,000</b>
				<b>Ten Year Average Spending</b>	<b>\$7,931,000</b>

Notes:  
 Land acquisition costs not included.  
 Opinion of cost estimates as of July 2022.  
 \*Based on current market trends, anticipate construction cost escalation of approximately 5-7% annually for budgeting  
 \*\*The Community Recreation Center and the Aquatic Center discussed in the report are not shown in the 10-Year Spending Plan as the County may pursue private partnership opportunities for their development.  
 Schedule is shown for overall system budgeting purposes only. Development is not funded at this time.

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## Capital Development Funding

In order to meet the capital improvement goals identified in this report, a combination of funding resources is necessary, which includes increasing revenues, securing grants, and private funding. The combination of these funding sources would increase the ability to make identified improvements.

A number of funding sources are available that the County should consider for increasing funding to support capital improvements of parks and recreation facilities. The following revenue sources are included for the consideration of County elected officials and are not specific recommendations. The County should study these options for effectiveness. Historically, the main sources of capital funding for parks and recreation agencies in the state of Mississippi are:

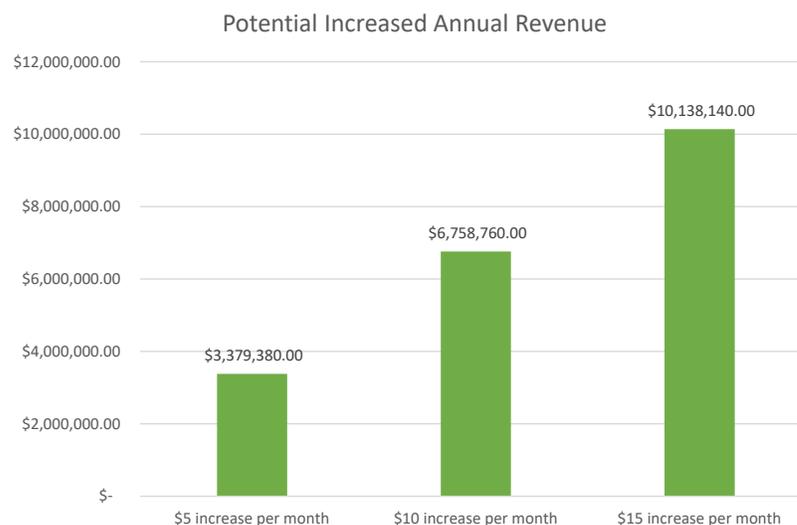
- General Fund Tax Dollars
- General Obligation Bonds
- Program User Fees
- Tax Dollars from Special Excise taxes (such as hotel, liquor, food and rental taxes)
- State and Federal Grants

### General Fund Tax Dollars

These options offer relatively stable funding for parks and recreation departments to cover operational costs and some capital improvements associated with routine maintenance projects or minor renovation projects. In general, these funding sources may not support larger unless leveraged with significant bond programs.

Almost 90% of survey respondents (89.7%) were in favor of some sort of increased revenue (up to \$15 per household) that would benefit the parks and recreation system. The chart below illustrates the potential annual revenue that could be generated from Jackson County households. These numbers are based on 56,323 households. Three hypothetical scenarios are shown for illustrative purposes in Figure 9.2.

Figure 9.2 Potential Increased Annual Revenue



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The planning team also understands there may be opportunities to increase the amount budgeted for capital improvements within the current millage cap. It is our understanding that approximately \$8 million per year could be realized within the current millage system.

### General Obligation Bonds

Counties across the country fund capital projects using general obligation bonds to build public facilities while spreading the facility cost over an extended period of time.

The use of a bond program would be a viable option to initiate a major capital program for parks and recreation facilities. The County could initiate a bond to fund a portion of the capital projects outlined in this master plan. The bond would be paid back over a 20 or 25-year period and would allow the County to begin to meet the facility needs of the community.

### Program User Fees

User fees assessed by parks and recreation agencies vary across the state. Fees can be charged to support facility maintenance, added to program registrations or required for park access on a daily or annual basis. Other user fees include memberships to special facilities and centers and program fees charged for instructional programs. The combination of these fees can generate major revenue for the County.

Program user fees are a collection of entry fees and program registrations. The funds collected are primarily used to offset the operating costs required to provide services to Jackson County residents. As new and redeveloped facilities are completed, self-generated revenue should be a high priority for the Department.

### Tax Dollars from Special Excise Taxes

Many communities across the country are incorporating lodging taxes to pay for tourism-related programs, including parks and recreation improvements. This method is typically popular because it typically places the cost on visitors and not residents. Counties have implemented, or are considering instituting, a lodging tax to fund future capital improvements that may lead to increased tourism. Silverthorne, Colorado, for example, passed a 2% lodging tax in 1999. Total collections have been divided: 85% going towards capital projects relating to parks, trails, open space, and recreation and 15% to help market the Town of Silverthorne and its amenities. Other communities from Washington to Texas have adopted similar funding measures that have helped develop large-scale recreation facilities that have attracted more visitors. Jackson County's 2% hotel/motel tax provides support for operations of Coastal Mississippi that encourages additional tourism. The County also collects a seawall tax for three cents per gallon. The tax is inside the cities of Ocean Springs and Pascagoula, which protects public highways and benefits local beaches. The County should review excise taxes on liquor, rentals, and hotels that support tourism as well as recreation and economic development. Review and comparison of local fees with other coastal communities (i.e., City of Moss Point, City of Ocean Springs, and City of Pascagoula) should be conducted to determine if rates are too low. If the rates are low, the County should explore establishing higher rates and dedicating the new income to capital projects and ongoing operations in the parks.

Jackson County also has a seawall gasoline tax which has been in place since 1924 with the passage of Mississippi Senate Bill No. 190. The purpose of the tax is "to authorize any county of the state where any part of the land of such county touches or joins any body of tidewater, to erect sea walls or other structures or devices for the protection of public highways extending along the beach or shore of any such body of tidewater and to issue the bonds of the county therefor and to apply a portion of the gasoline tax collected in such county towards the payment of the interest and principal of such bonds."

The seawall gasoline tax funds may also be used for the creation of sloping beaches or any other device to protect and preserve roads, streets and highways, affected by tidewater. Jackson County has used this fund for seawall improvements in Pascagoula and Ocean Springs.

A common element among all of these taxes is that they are paid by residents and non-residents, alike. The beach and other water-based activities are major attractions that draw many visitors who purchase alcoholic beverages at restaurants and stay in hotels - especially in southern Jackson County. In addition, many business travelers also stay in area hotels. Rental taxes could be generated on everything from rental cars to heavy equipment used by residents of Jackson County and beyond. These non-residents would be aiding in the development of park facilities if these taxes were increased.

## State and Federal Grants

Grant programs for parks and recreation improvements are available through various state and federal agencies. Many state agency grants allocate federal dollars for projects such as transportation enhancement grants, trails and greenways, and parks improvements. Grants are also available through non-profit and not-for-profit agencies. Because grants are typically highly competitive, any pursuit to acquire grant funding should begin with an understanding of the grant requirements, including matching fund requirements, understanding what the grant will and will not cover, the time frame for completion and what obligations may be required in the future, such as deed restrictions, maintenance and reporting.

A few examples of alternative funding sources include the following:

- Transportation Grants
- Transportation Enhancements
- Recreational Trails Program
- Community Development Block Grants (CDBG)
- Coastal Impact Assistance Program
- Rehabilitation Service Programs

### Transportation Grants/SAFETEA-LU

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) provides funds for various transportation projects, including greenways. Built upon the foundations of the Transportation Equity Act for the 21st Century (TEA-21), SAFETEA-LU was signed into law in August 2005.

### Transportation Enhancements (TE)

The Transportation Enhancements (TE) program funds a wide variety of transportation-related community projects. This program is the largest source of funding for trails and related facilities. Transportation Enhancement projects must relate to surface transportation and compete against numerous other projects. Greenways and other recreational trails are eligible for TE funding, as long as the project has a transportation element being funded.

There are 12 eligible Transportation Enhancement categories. The three that most relate to greenways and recreational trails are: pedestrian and bicycle facilities; pedestrian and bicycle safety and educational activities; and conversion of abandoned railway corridors to trails. The Mississippi Department of Transportation (MDOT) is the agency responsible for administering Transportation Enhancement funds in Mississippi. Jackson County could possibly fund all or portions of the recommended greenway system through annual applications to MDOT. These grants are 80% federal and 20% local funding. Therefore, for every \$1.00 invested by the County, the County receives \$4.00 in grant funds.

## Recreational Trails Program (RTP)

This program was initiated through the TEA-21 legislation. Funds are awarded for the construction of trails and support facilities. Emphasis is on the construction of multi-use trails such as biking, hiking, equestrian, motorized, etc. In Mississippi, administration of this program is handled by staff of the Mississippi Department of Wildlife, Fisheries and Parks.

## Community Development Block Grants

Although this program specifically funds housing, public facilities, economic development and community projects, recreation could be a minor component of the project seeking grant funding. The County may explore how to use these funds for riverfront development and parking projects – all projects that could support recreation activities.

## Coastal Impact Assistance Program (CIAP)

CIAP Funding is the Coastal Impact Assistance Program for coastal environmental protection. The County could use this assistance program to natural disaster relief of blueways and property acquisition for waterway development projects. Coastal projects that can be shown to have environmental benefits, like improving water quality or other qualifying activities, are eligible to receive these funds. This program is overseen by the Department of the Interior and is funded by revenue generated by off-shore oil drilling.

## Tidelands Trust Fund

This program was designed to conserve, reclaim and preserve tidelands in the state of Mississippi. Additionally, the Tidelands Trust Fund seeks to enhance existing public access areas in the best interest of the state's marine resources. Jackson County may use this grant program to fund preserve county beaches. These funds are administered by the Department of Marine Resources and the Secretary of State's Office.

## Environmental Education Grants

This program is sponsored by the EPA's Environmental Education Division (EED), Office of Children's Health Protection and Environmental Education. It supports environmental education projects that enhance the public's awareness, knowledge and skills to help people make informed decisions that positively affect environmental quality. The EPA awards grants each year based on funding appropriated by Congress. Annual funding for the program ranges between \$2 and \$3 million. Most grants awarded will be in the \$15,000 to \$25,000 range.

## Land and Water Conservation Fund

Since the mid 1960s, the Land and Water Conservation Fund (LWCF) program has provided funds for outdoor recreation acquisition and development. In the state, the Mississippi Department of Wildlife, Fisheries and Parks oversees this fund. Congress is responsible for setting the funding level each year. Should the State receive funds from the federal government, this would be another good source of funding for the county.

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### Hurricane Relief Funds

The Federal Emergency Management Agency (FEMA) and the Mississippi Emergency Management Agency (MEMA) both provide funds to local communities for hurricane relief. These funds are in the form of grants to repair public infrastructure damaged by the storms. When FEMA funds do not cover the full cost of repairs, MEMA provides funding to make up the difference. While not an annual program, these organizations provide a major source of funds following damaging storms.

### Private Grants

Local governments throughout the country are seeking funding for outdoor recreation projects from private philanthropic organizations, foundations and corporations. One private grant example is the American Greenways Kodak Awards Program. This program, administered by The Conservation Fund, provides grants of \$500 to \$2,500 to local greenways projects. The purpose of the grants is to stimulate the planning, design and development of greenways. Information can be found at [www.conservationfund.org](http://www.conservationfund.org).

### Rehabilitation Service Programs

This program is available through the US Department of Education, Office of Special Education and Rehabilitative Services. The intent of the program is to provide recreational activities and related experiences for people with disabilities that can aid in their employment, mobility, socialization, independence and community integration. Specific project activities may include swimming, wheelchair basketball, camping, hiking, water skiing, horseback riding, arts and sports. Historically, applications are due in September of each year.

## Summary

The identified capital improvements needed to address current deficiencies and achieve a unified vision for Jackson County is \$142,285,000 for the efforts shown in the Capital Improvement Plan. Accomplishing this goal will require a balanced approach to acquiring additional funding sources for land acquisition, planning and design, and development. Alternative funding sources will likely be required to execute this program. Without additional funding, the improvements identified in this plan will likely require deferral to be addressed at a future time.

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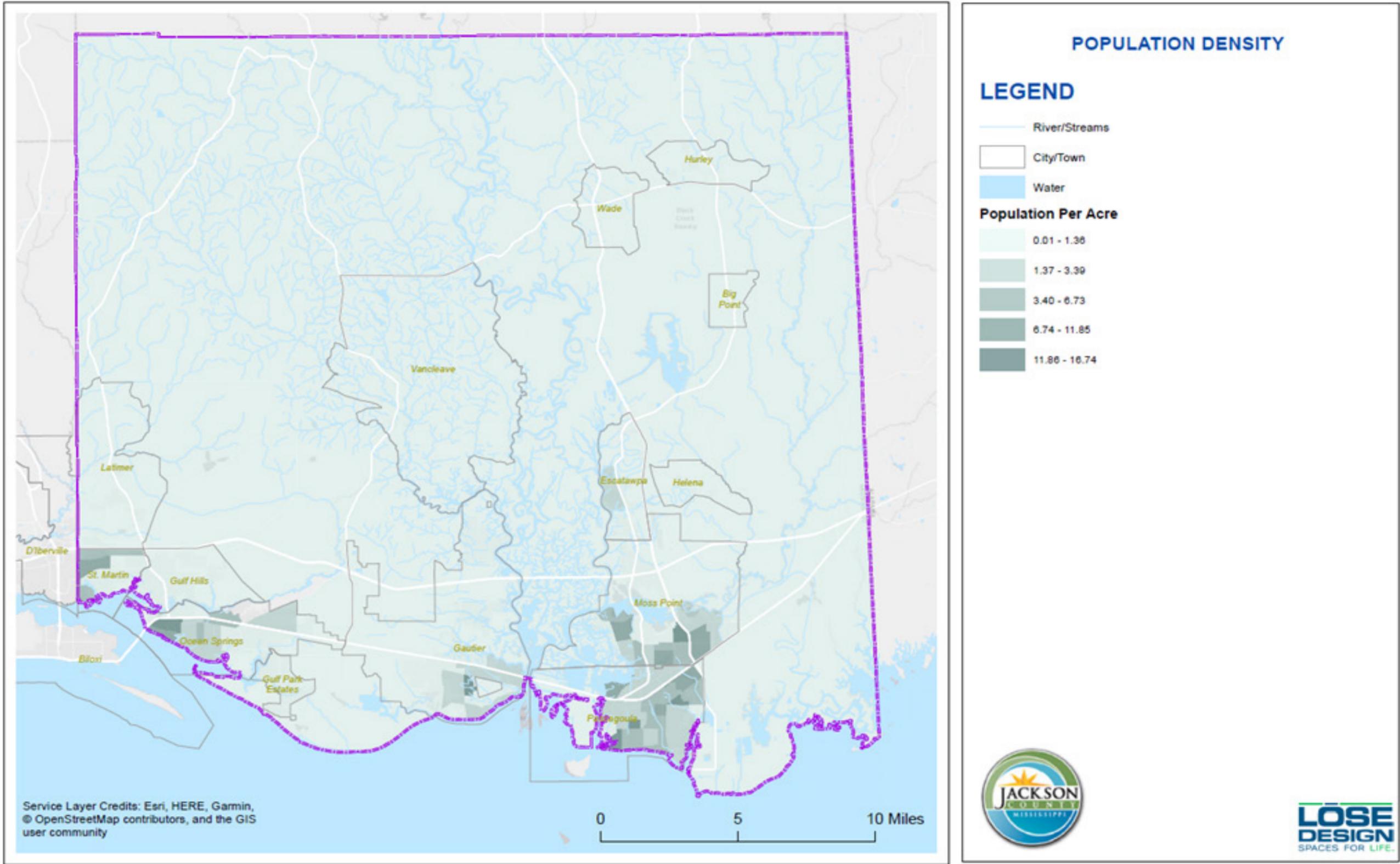
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Jackson County Population Density Per Acre



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

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## Jackson County Parks & Recreation Master Plan - Facilities Needs

Please place a dot under those facilities that you believe are important, but not being provided adequately in Jackson County.

1. Small neighborhood parks	2. Large community parks	3. Baseball / softball diamonds	4. Soccer fields	5. PAVED walking & hiking paths or trails	6. UNPAVED walking & hiking paths or trails	7. Passive open park space
1 dot	12 dots	12 dots	8 dots	8 dots	8 dots	0 dots
8. Outdoor exercise stations	9. Picnic shelters / pavilions	10. Skateboard area	11. Disc golf course	12. fishing	13. Place to read a book or visit with friends	14. Indoor gym / game courts
5 dots	5 dots	0 dots	2 dots	10 dots	0 dots	10 dots
15. Place for indoor classrooms or meetings	16. Outdoor stage / amphitheater	17. Community garden	18. Farmers market	19. Football / lacrosse fields	20. Synthetic turf fields	21. Outdoor basketball courts
1 dot	4 dots	1 dot	12 dots	6 dots	8 dots	4 dots
22. Improved Beach Access	23. Boat Ramps	24. Cultural/ Historic Sites	25. Boardwalks	26. Piers	27. Nature Centers	28. Canoe/ Kayak Blueways
1 dot	10 dots	0 dots	2 dots	0 dots	10 dots	6 dots





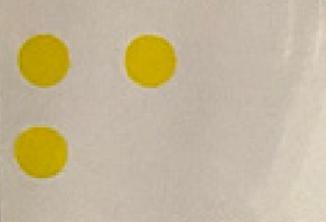
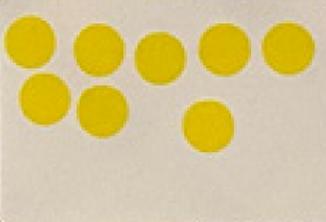
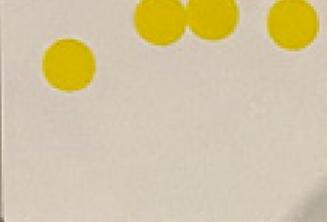
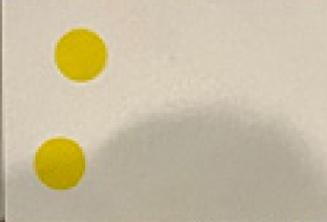
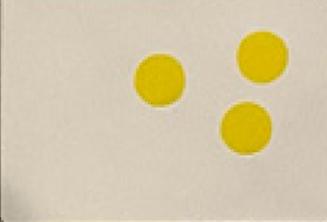
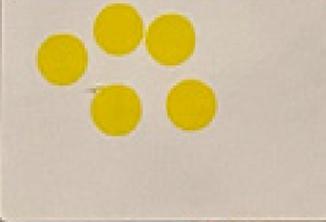
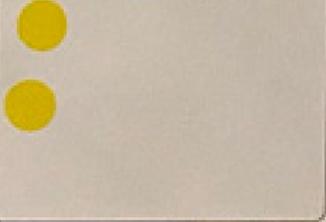
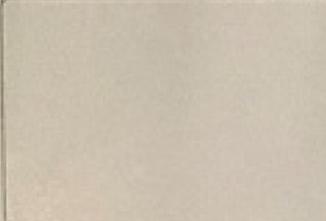
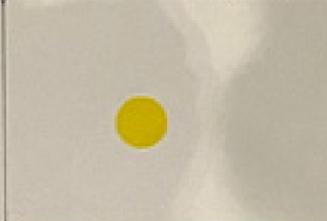
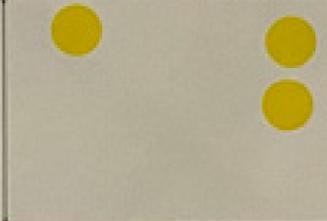
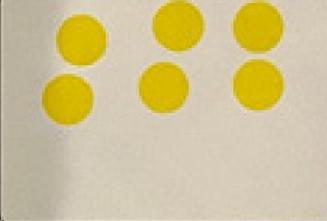
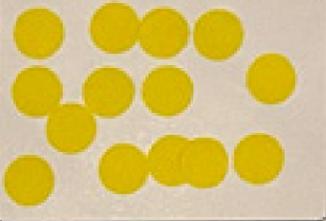
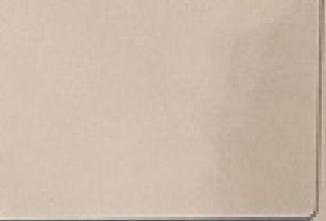
# Jackson County Parks & Recreation Master Plan - Programs Needs

Please place a dot under those programs that you believe are important, but not being provided adequately in Jackson County.

1. Adult fitness/wellness	2. Adult learn to swim	3. Nature programs	4. Teen programs	5. Cooking classes	6. Computer classes	7. Senior leisure programs
3 dots		3 dots	7 dots	3 dots	1 dot	
8. Youth fitness/wellness	9. Youth learn to swim	10. Adult performing arts/dance/acting	11. Youth performing arts/dance/acting	12. Adult visual arts/painting/crafts	13. Youth visual arts/painting/crafts	14. Preschool programs
1 dot	3 dots		3 dots		1 dot	3 dots
15. Adult music classes	16. Youth music classes	17. Movies in the park	18. Concerts	19. Community special events	20. Outdoor dining event	21. Water fitness (Zumba/water aerobics)
1 dot	3 dots	10 dots	3 dots	3 dots	1 dot	5 dots
22. Athletic special events (marathons, etc.)	23. Kayak or boat races	24. GED continuing education	25. Camps (summer/school break)	26. Temporary art exhibits	27. English classes	28. Foreign language classes (non-english)
5 dots	1 dot		15 dots			2 dots

### Jackson County Parks & Recreation Master Plan - Programs Needs

Please place a dot under those **programs** that you believe are important, but not being provided adequately in Jackson County.

<p>57. Leadership programs</p> 	<p>58. Senior trips</p> 	<p>59. Coding classes</p> 	<p>60. Debate team or class</p> 	<p>61. Robotics team</p> 	<p>62. Martial arts</p> 	<p>63. Gardening classes</p> 
						
<p>64. Events to meet neighbors</p> 	<p>65. Community service or clean up events</p> 	<p>66. Pickleball league</p> 	<p>67. Parent / child events (dances, dinners)</p> 	<p>68. Youth golf league</p> 	<p>69. Youth swim team</p> 	<p>70. Bike riding classes</p> 
						
71. Other	72. Other	73. Other	74. Other	75. Other	76. Other	77. Other
78. Other	79. Other	80. Other	81. Other	82. Other	83. Other	84. Other



# Jackson County Parks & Recreation Master Plan - Programs Needs

Please place a dot under those programs that you believe are important, but not being provided adequately in Jackson County.

1. Adult fitness/wellness	2. Adult learn to swim	3. Nature programs	4. Teen programs	5. Cooking classes	6. Computer classes	7. Senior leisure programs
8. Youth fitness/wellness	9. Youth learn to swim	10. Adult performing arts/dance/acting	11. Youth performing arts/dance/acting	12. Adult visual arts/painting/crafts	13. Youth visual arts/painting/crafts	14. Preschool programs
15. Adult music classes	16. Youth music classes	17. Movies in the park	18. Concerts	19. Community special events	20. Outdoor dining event	21. Water fitness (aqua/aerobics)
22. Athletic special events (marathons, etc.)	23. Kayak or boat races	24. Adult continuing education	25. Camps (summer/school break)	26. Temporary exhibits	27. English classes	28. Foreign language classes (non-english)

## Jackson County Parks & Recreation Master Plan - Programs Needs

Please place a dot under those programs that you believe are important, but not being provided adequately in Jackson County.

	30. Youth football league (recreation)		31. Youth basketball league (recreation)		32. Youth soccer league (recreation)		33. Youth lacrosse league (recreation)		34. Youth softball league (recreation)		35. Youth tennis league (recreation)
●		●	● ●	●	●	●		● ●	●	● ●	●
	37. Youth football league (competitive)		38. Youth basketball league (competitive)		39. Youth soccer league (competitive)		40. Youth lacrosse league (competitive)		41. Youth softball league (competitive)		42. Youth tennis league (competitive)
● ●		● ●	● ●					● ●	●	● ●	● ●
	44. Disc Golf Lessons or League		45. Golf Lessons		46. Tennis Lessons		47. Adult Athletic Leagues (recreation)		48. Adult Athletic Leagues (competitive)		49. Running or walking groups
● ●				●		● ●	● ●	●		● ●	● ●
	51. Cornhole league (bean bag toss)		52. Kickball league		53. Dodgeball League		54. Tree climbing lessons		55. Kayak or canoe lessons		56. Fishing lessons
	● ● ● ●			●		● ●		● ● ● ●		● ● ● ●	● ● ● ●



# Jackson County Parks & Recreation Master Plan - Programs Needed

Please place a dot under those programs that you believe are important, but not being provided adequately in Jackson County.

57. Leadership programs



58. Senior trips



59. Coding classes



60. Debate team or class



61. Robotics team



62. Martial arts



63. Gardening classes



64. Events to meet neighbors



65. Community service or clean up events



66. Pickleball league



67. Parent / child events (dances, dinners)



68. Youth golf league



69. Youth swim team



70. Biking classes



71. Other

72. Other

73. Other

74. Other

75. Other

76. Other

77. Other

78. Other

79. Other

80. Other

81. Other

82. Other

83. Other

84. Other

### Jackson County Parks & Recreation Master Plan - Facilities Needs

Please place a dot under those **facilities** that you believe are important but not being provided adequately in Jackson County.

1. Small neighborhood parks	2. Large community parks	3. Baseball / softball diamonds	4. Soccer fields	5. PAVED walking & hiking paths or trails	6. UNPAVED walking & hiking paths or trails	7. Passive open park space
8. Outdoor exercise station	9. Picnic shelters / pavilions	10. Skateboard area	11. Disc golf course	12. Fishing	13. Place to read a book or visit with friends	14. Indoor gym / game courts
15. Space for classroom meetings	16. Outdoor stage / amphitheater	17. Community garden	18. Farmers market	19. Football / lacrosse fields	20. Synthetic turf fields	21. Outdoor basketball courts
22. Improved Access	23. Boat Ramps	24. Cultural/ Historic Sites	25. Boardwalks	26. Piers	27. Nature Centers	28. Canoe/ kayak Blueways



# Jackson County Parks & Recreation Master Plan - Facilities Needs

Please place a dot under those facilities that you believe are important, but not being provided adequately in Jackson County.

29. Shuffleboard / bocce ball 	30. Gymnastics or Tumbling facility 	31. Senior / active adult center 	32. Tennis courts 	33. INDOOR tennis courts 	34. Pickleball courts 	35. Adventure play - climbing wall 
[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]
36. Sand volleyball 	37. Place to picnic or sunbathe 	38. Area for open play 	39. Miracle field / accessible baseball 	40. Kayak and canoe launches 	41. Playgrounds 	42. Inclusive or accessible playgrounds 
[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]
43. COMPETITION swim facilities 	44. RECREATION swim facilities 	45. Splash pad / spray park 	46. Track and field facility 	47. PAVED place to ride a bike 	48. Paved area for a bike 	49. BMX track 
[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]
50. Off-leash dog park 	51. Picnic camp (tent) 	52. Community Center 	53. Other <i>Shooting Range</i>	54. Other <i>Indoor Pickleball</i>	55. Other	56. Other
[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]	[Yellow dot]

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## Focus Group 3

### Conservation Groups and Trails (Virtual Mtg)

#### INTRODUCTIONS

Patric Harper - USFWS in AL and MS Coastal Grant and Gulf restoration team

Julia Oneal

Johnny Marquez - Dir. of Coastal Policy and land trust board

Genieva with Heritage Trails Partnership - focused on trail maintenance and interested in maintenance plans and trail placement.

Rhonda Price - Dir. Mississippi Gulf Coast Recreation Area

#### STRENGTHS

- Grant opportunities (habitat mgmt., trail work)
- Federal lands and refuges
- WMAs
- Amount of managed acres
- Land trust presence
- Diversity of habitats
- One of few counties with a staffed recreation team
- Land trust properties
  - o See website for list of properties/facilities
  - o Accessible whenever possible
- Heritage area grant funding
  - o Trails funded in part by land trust
- Great staff in Jackson County Rec
  - o Addition of Barb is a huge strength
- Jackson County residents' interests
  - o Art
  - o Ecology
  - o Engaged
  - o Master naturalist
  - o Strongest eniro stewardship of the 3 coastal counties
- Research facilities
- Shoreline is more natural in Jackson County than others
- Waterways
- Potential trail connectivity, blueways and eco tourism
- Collaboration

## WEAKNESSES

- More shoreline development
  - Bulkheads – see specific locations
- Decrease in walkability from neighborhoods to destinations
  - Sidewalk repairs
  - Safety concerns
- Litter
  - Clean up events pull 10 to 50 per event
  - Prevention needed
  - Shift in mindset needed

## OPPORTUNITIES

- Potential protected trail development (utility esm't, rail with trail, etc.)
- Plastic Free Gulf Coast and additional litter prevention messaging
- Active partnerships with waste collectors (Waste Pro, etc.)
- Additional volunteer opportunities for school aged kids
  - Discreet efforts are more effective
- Blueway Development
  - Paddle the Gulf awareness campaign in the 5 Gulf states
    - Website
    - Signage
    - ID app
  - Identifying potential routes
  - Story maps available on website
  - Heritage area funding available for signage
  - Events calendar
- Pascagoula River Blueway Connection
  - Parking
  - Trailheads
  - Signage
- Nature Centers are provided by others
  - Need marketing assistance (ex. Twelve Oaks)
  - Some funding currently provided
- Shoreline Conservation Cost share Program
- Connectivity of conservation lands
  - Habitat preservation
  - Wildlife corridors
- Beneficial use of dredge material
  - Offset erosion impacts and habitat loss
  - Periodic meeting at DMR (Department of Marine Resources)

## THREATS

- Invasive species – giant Salvinia, etc.
- Lakes George on trib of Pascagoula
  - o Creates a State water park by damming a tributary of the Pascagoula River
  - o Listed species above and below dam
  - o George County
  - o Impacts water flows
- Shoreline erosion
  - o Boat wakes

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Vanceleave

Jeff

South MS SC  
(Jackson County)

Chad

Vanceleave Softball  
9-14

Christina

NBHA

Barrel Racing

Hattiesburg down for MS

Roger + Lori

Barrel Racing Competitive

# Strengths

- Arenas are open to public
- Good response rate; good communication
- Easy to host events; meet organization standards → Regional Draw for Barrel Racing
- Best soccer facilities in County
  - 800 SC
  - 300 east central
  - ? Misty Plains
  - ? GCU

---

est. 2500
- West Jackson Reno skated
- Staff response
- Dog shows = \$\$\$
- Stalls & camp sites allow for multi-day events

# Weaknesses

Fighting travel ball participation (softball)

- Softball is still growing (1 team/yr.) @ Vancleave
- Rec ball declining
- Soccer has 1/2 in travel ball (Jackson + Harrison)

JC targeted by travel tourney producers

Revenue KPIs not tracked (teams visiting per tourney)

Field prep personnel (volunteers)

- supplies provided by JC

-

Parking configuration → safety issue

Baseball/softball facilities

- concessions
- bathroom upgrades

# Opportunities

- Lamoyne Soccer
- Interleague Tournaments
  - Vanleave
  - St. Martin
- Covered batting cages
- Multi-day barrel racing

---

# Threats

- losing staff w/ knowledge of arena needs
  - threatens events
- Soccer turf quality - bermuda competition

Vanleave Focus Group

# Intros

Jesse St. Martin SB  
+  
Travel

Kevin - BMA Engineers  
T-ball Coach

Mike - GCU Soccer  
Grantiz Soccer Camp  
Multi-Sites

# Strengths

- Selective Coaching → Experienced
- Facilities in Gautier
- Soccer draws across County
- Softball parents are supportive
  - legacy
- Solid Complex - resilient
- Community involvement
- Well maintained
  - Great staff
- Park is always open

St. Martin Focus Group

# Weaknesses

- # of field (not scaling w/ growth)
- Inefficient complex layout
- Travel times degrading fields
- Dated facilities - in need of replacement
  - bathrooms
- More staff
- Soccer building - old/outdated
- St. Martin drainage issues
- Lack of hotel/restaurants near Granton complex → deters tournaments
- Granton lighting needs

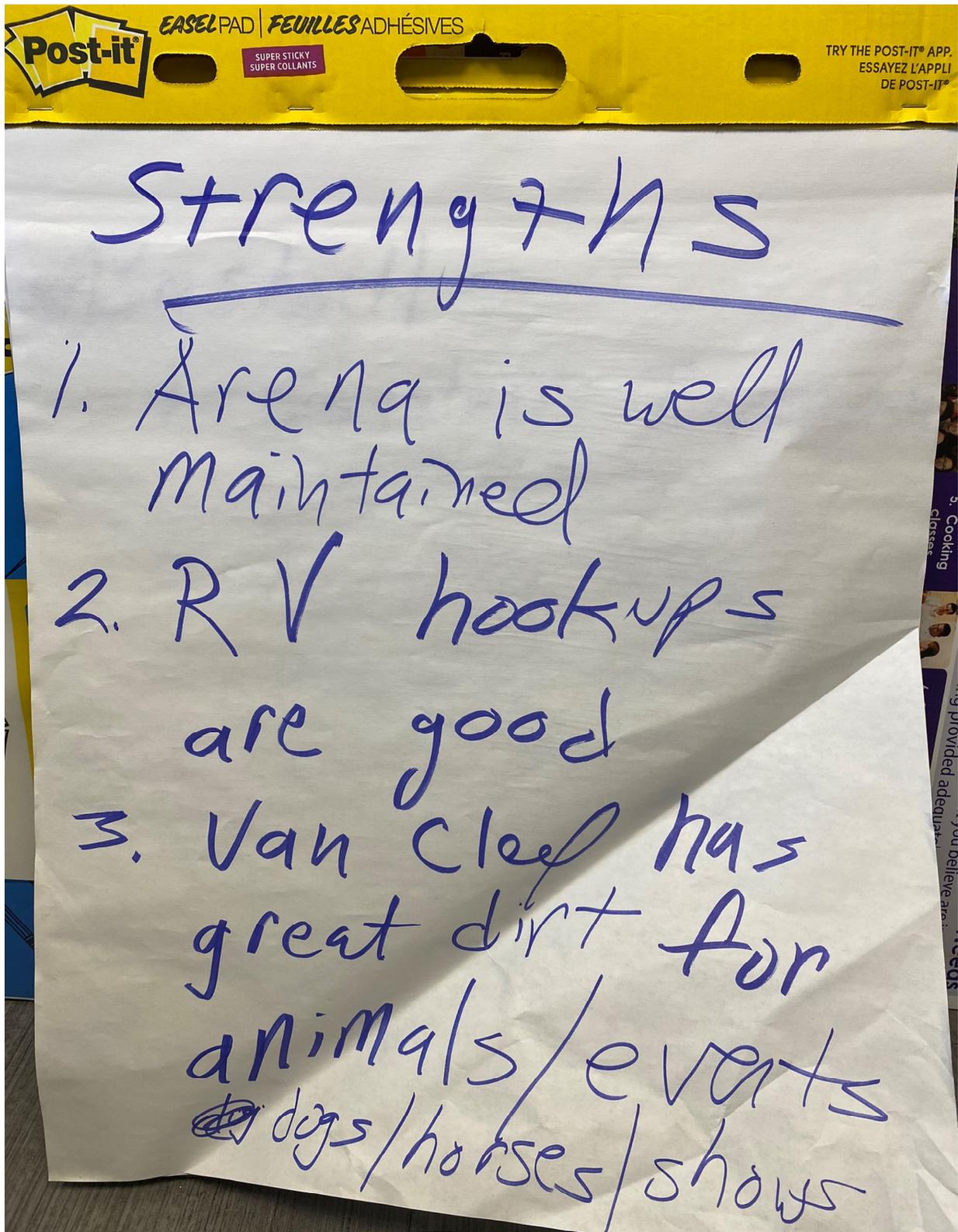
# Opportunities

- encourage development of hotels/restaurants near tournament facilities
- Tournament = Revenue
  - staff needs for field prep/operations
- Room for growth - additional fields
- Wifi: boosters (Gautier, others?)
- Batting cage innovations
- Field sponsorships

St. Martin Focus Group

# Threats

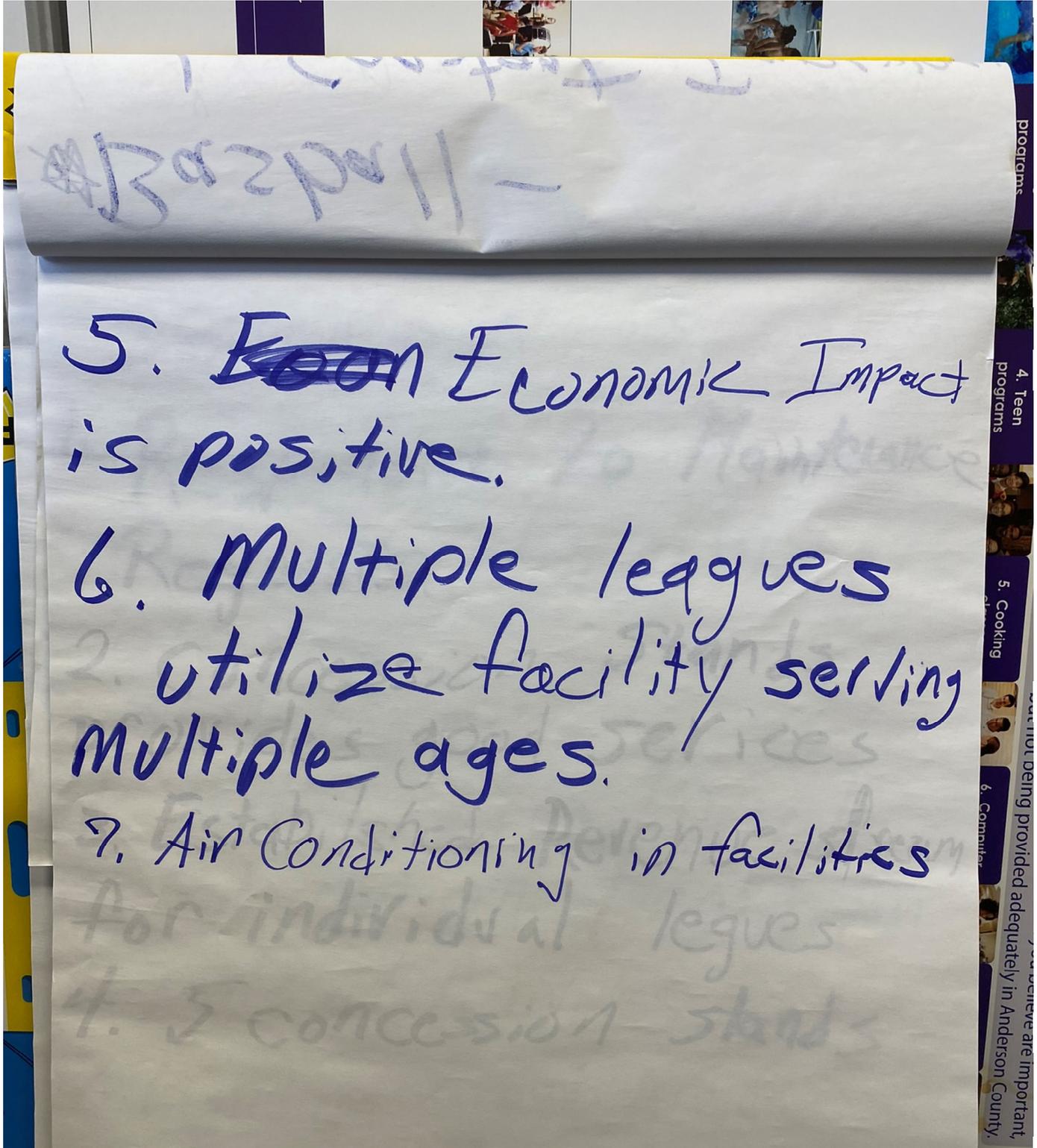
- Crime in park  
or  
Suspicious activity



Lum Cumbest Focus Group

# Basball -

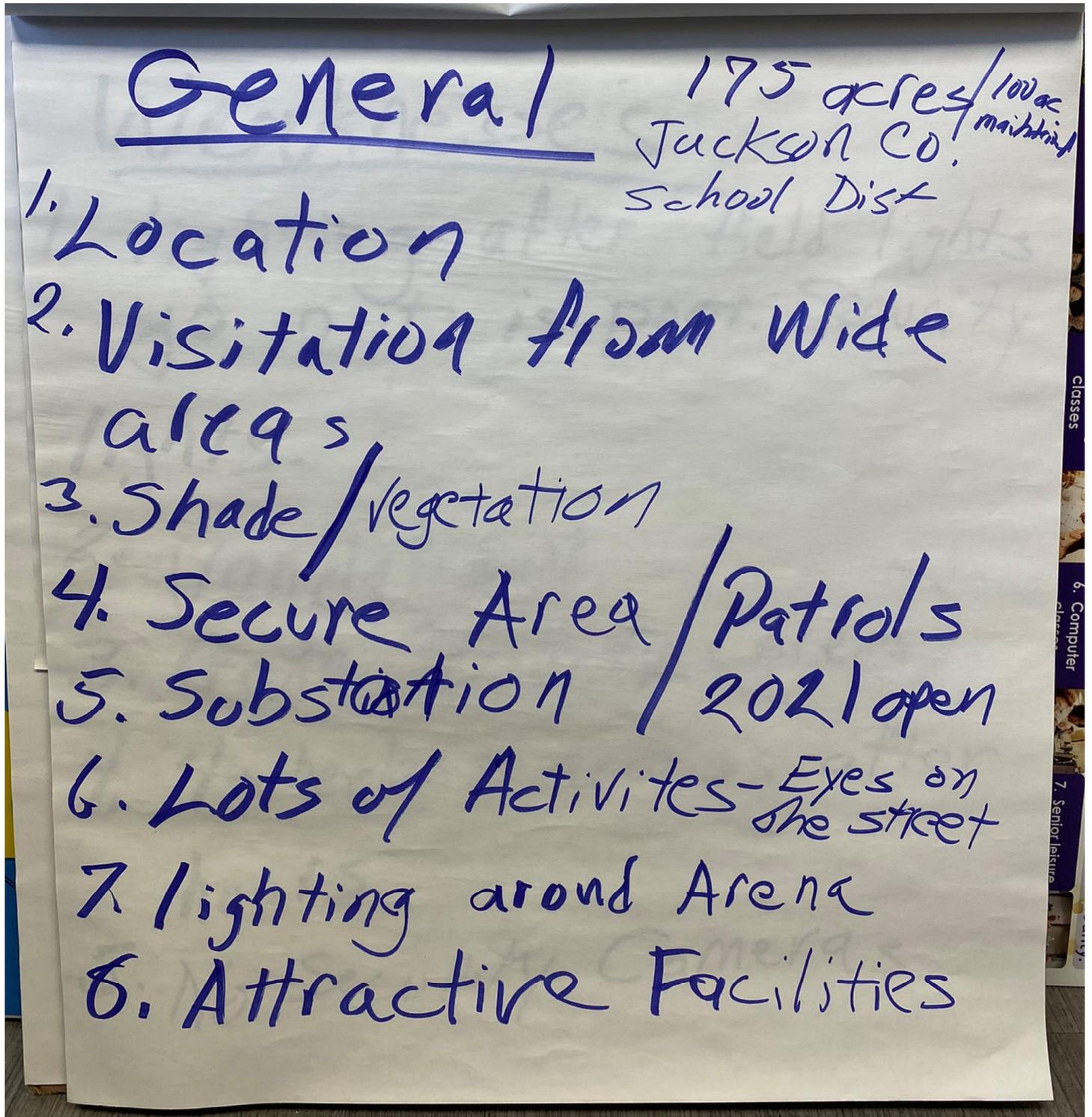
1. Constant Improvement  
↳ maintenance
2. Location and  
coordination of events  
and family friendly &  
multiple Kids.
3. Concession Stand
4. Older Kids 11-14  
may travel



Lum Cumbest Focus Group

# Soccer

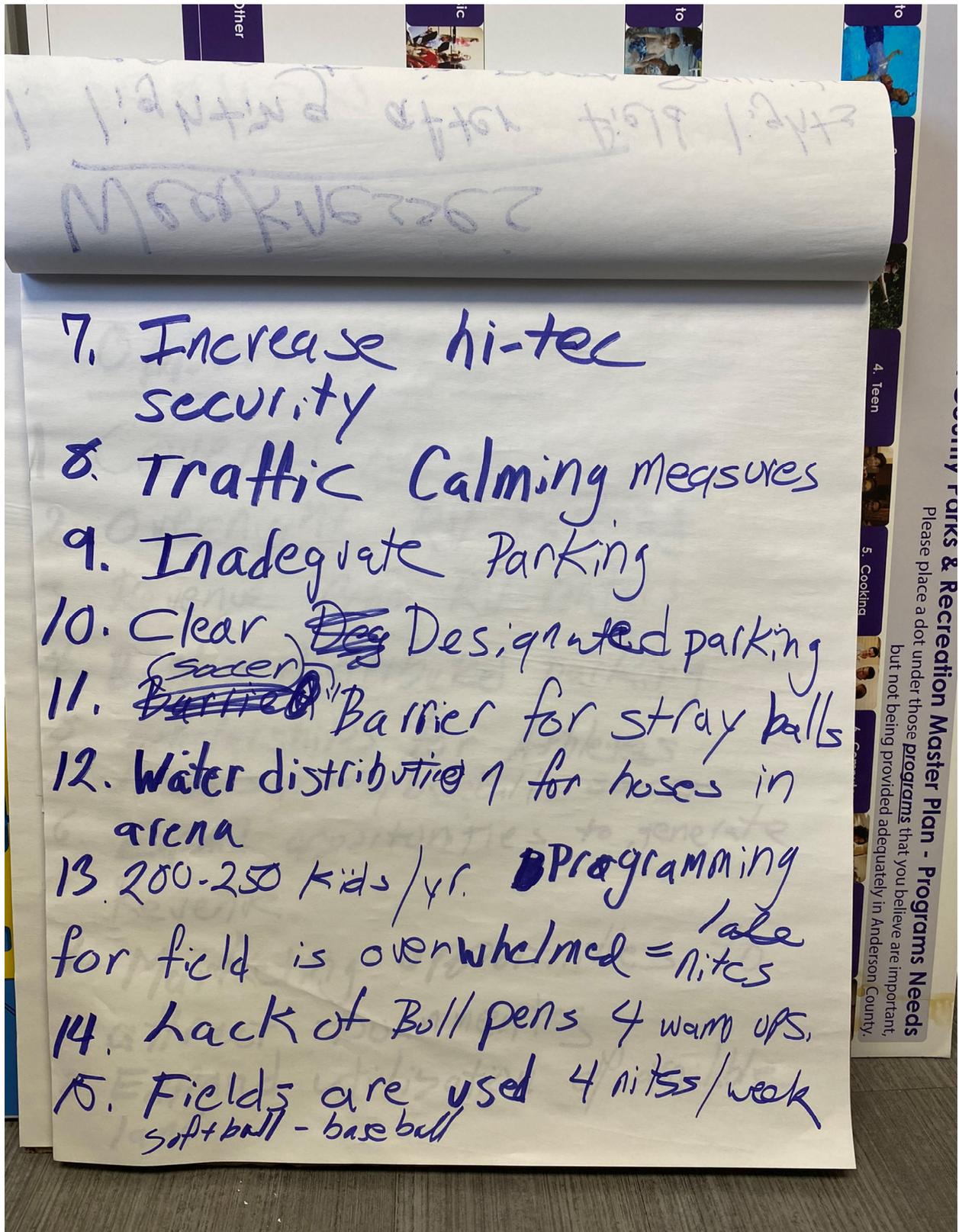
1. Responsive to Maintenance Requests.
2. Concession stands provides good services
3. Established Revenue stream for individual leagues
4. 3 concession stands
5. Lighting around Arena
6. Attractive Facilities



Lum Cumbest Focus Group

# Weaknesses

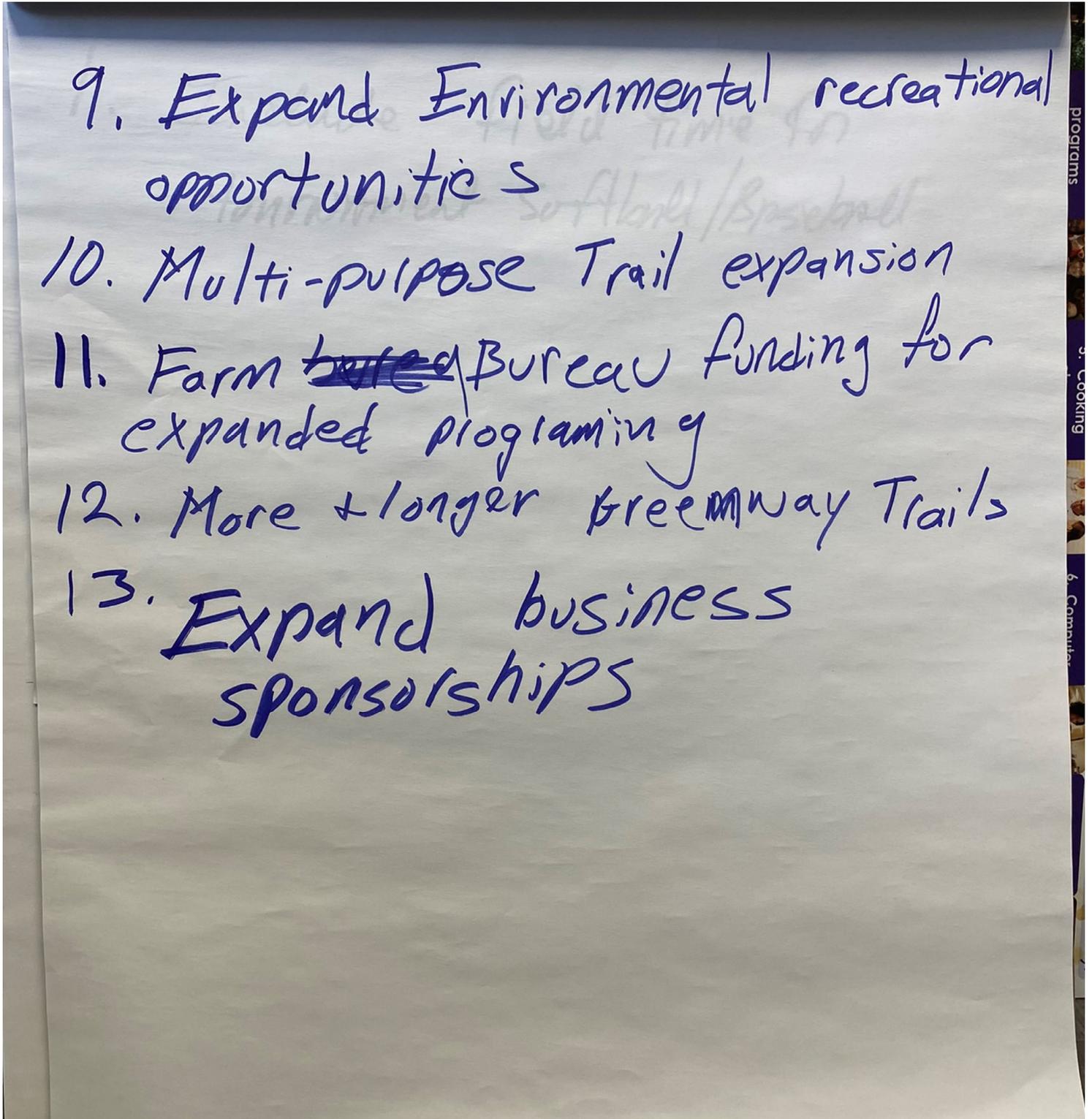
1. lighting after field lights go out is poor. Security lights.
2. Vandalism
3. Gate Security (Arena)
4. 4-wheelers access after hours
5. No Security Cameras



Lum Cumbest Focus Group

## Opportunities

1. Covered Arena
2. Overnight RV parking
3. Revenue from RV rentals
4. Better distributed parking
5. Scholarships for Athletes  
horses, softball/baseball soccer
6. Expand opportunities to generate  
Revenue
7. Marketing opportunities to  
attract tournaments
8. Expand utilization of available  
land



9. Expand Environmental recreational opportunities

10. Multi-purpose Trail expansion

11. Farm ~~land~~ Bureau funding for expanded programming

12. More + longer Greenway Trails

13. Expand business sponsorships

Lum Cumbest Focus Group

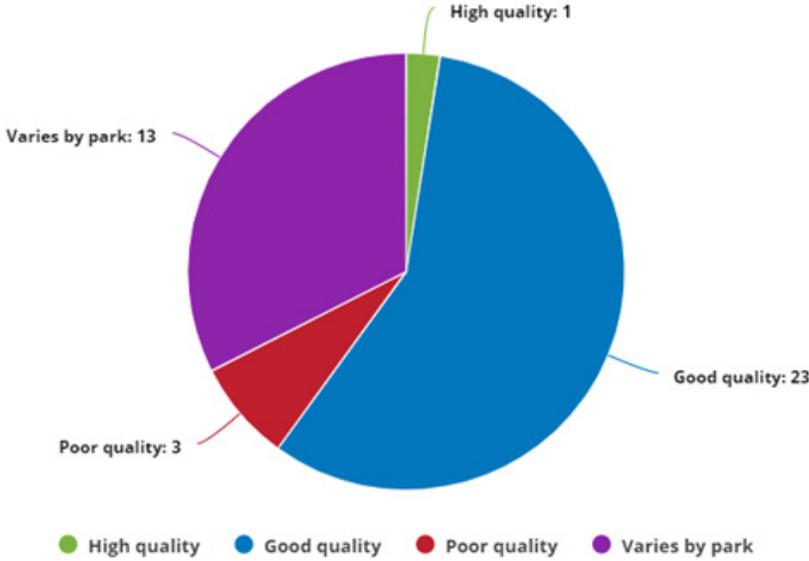
1. Include field time for  
tournament softball/Baseball

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Q1. How would you rate the condition of Jackson County's park facilities?

40 answers

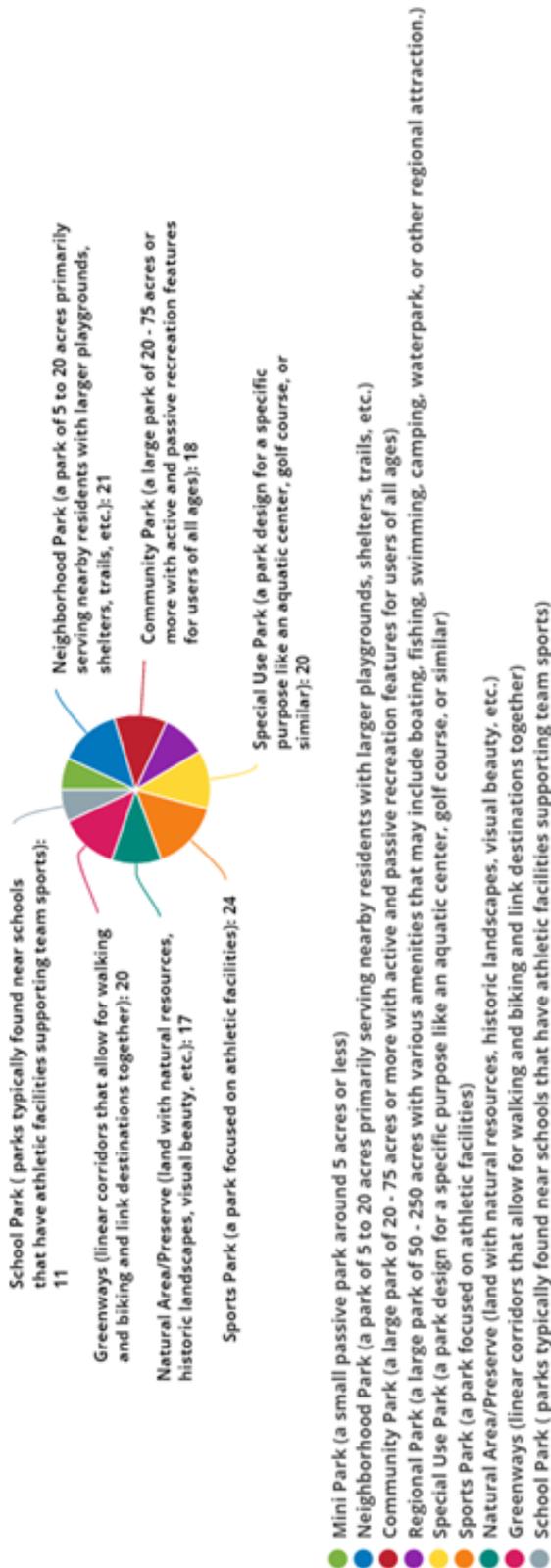
Pie Bar



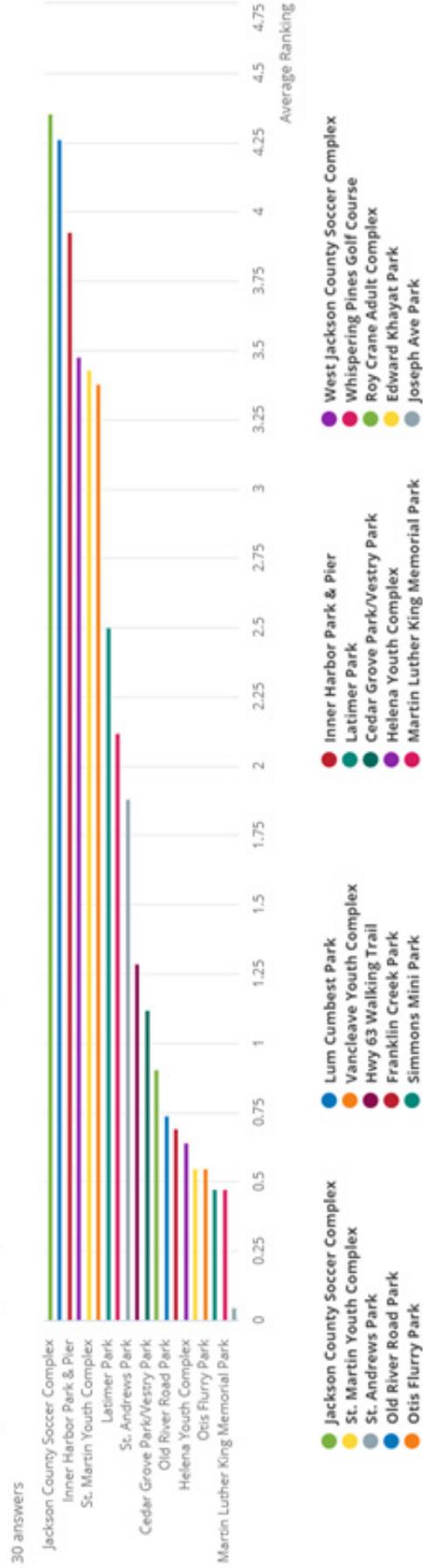
Q2. Which types of parks are you or members of your household likely to visit? Please check all that apply.

41 answers

Pie Bar



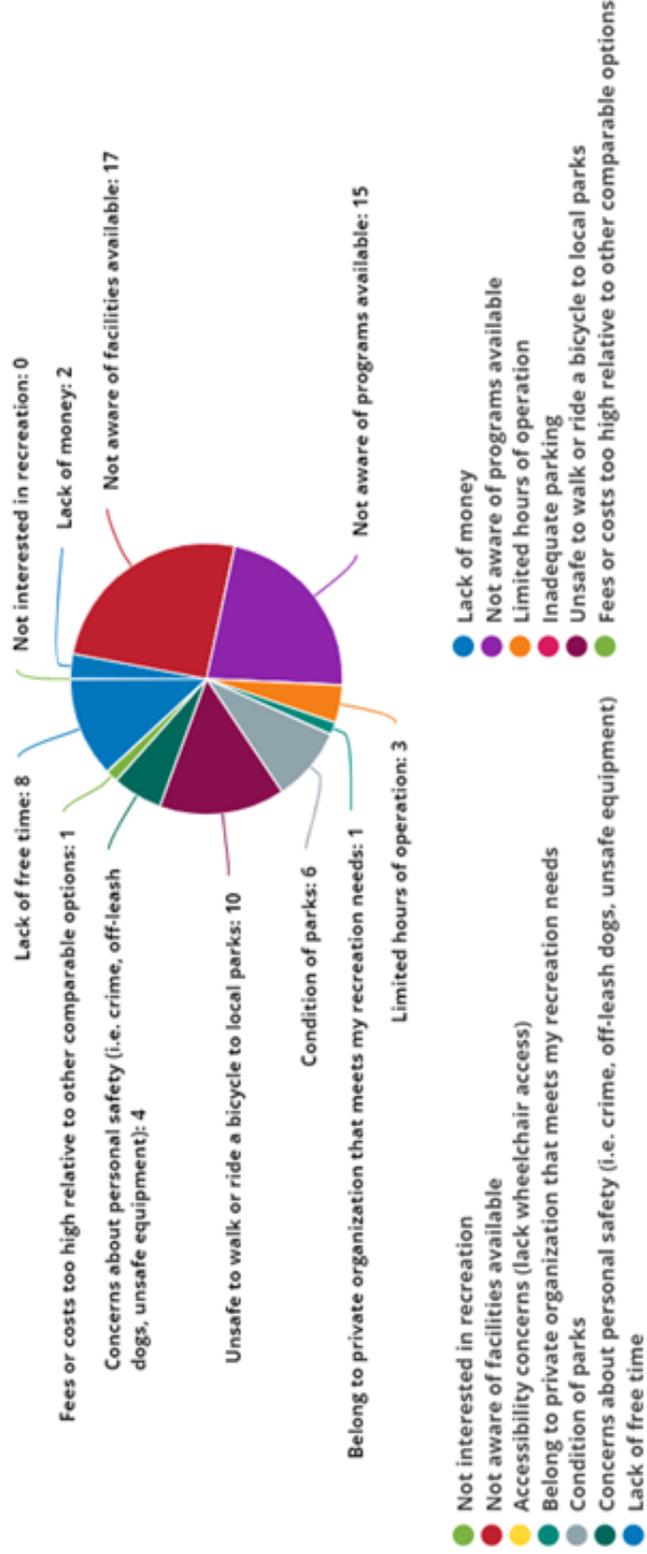
Q3. Please select and rank the following Jackson County parks you or your family use from most visited to least visited in the last 12 months. Only rank the parks you have visited in the past 12 months.



Q4. Please tell me if any of the following prevents you from using Jackson County's parks, facilities or trails.

35 answers

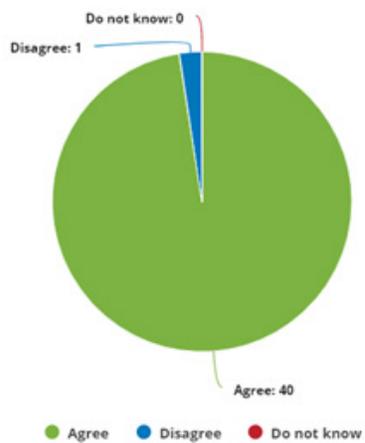
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Q5. Tell me if you agree with the following... "Parks and recreation are important to a community when compared to other priorities (public safety, streets, utilities, schools).

41 answers

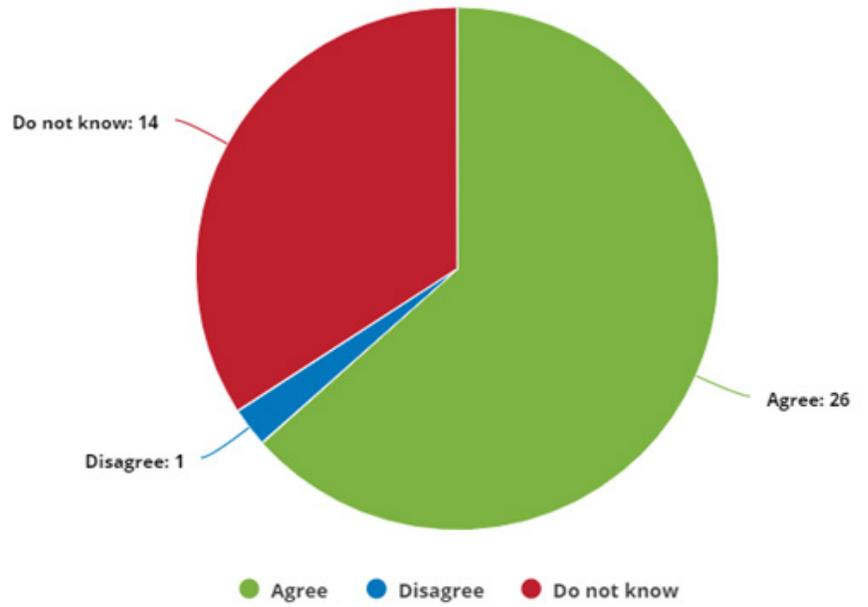
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Q6. I am able to contact Jackson County Recreation staff for information easily.

41 answers

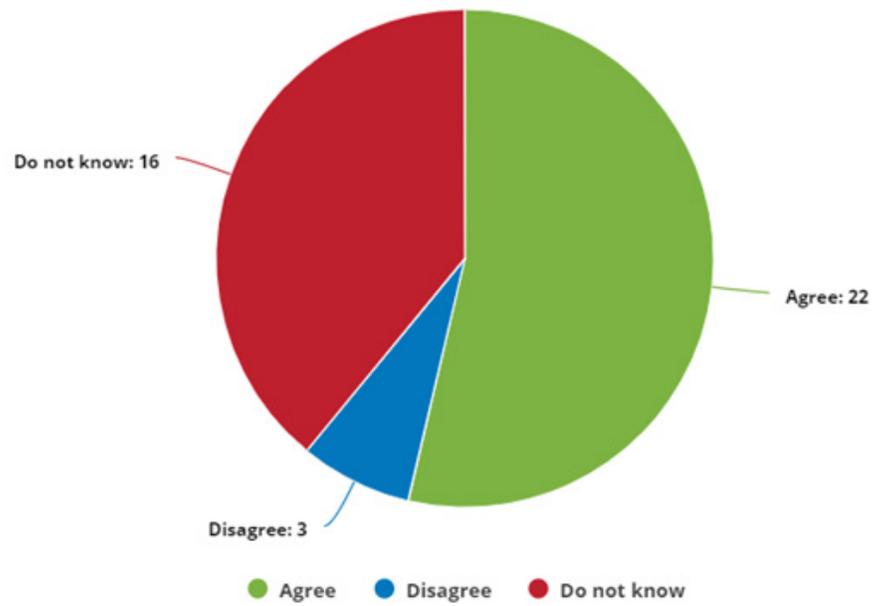
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Q7. I am willing to be a volunteer to improve our parks.

41 answers

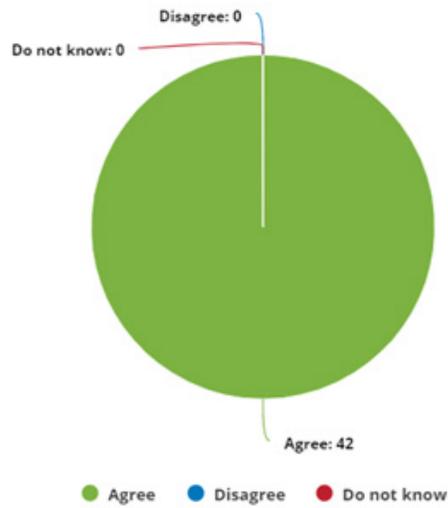
Pie Bar



Q8. I support efforts to improve Jackson County's park facilities and programs over time as funding options become available.

42 answers

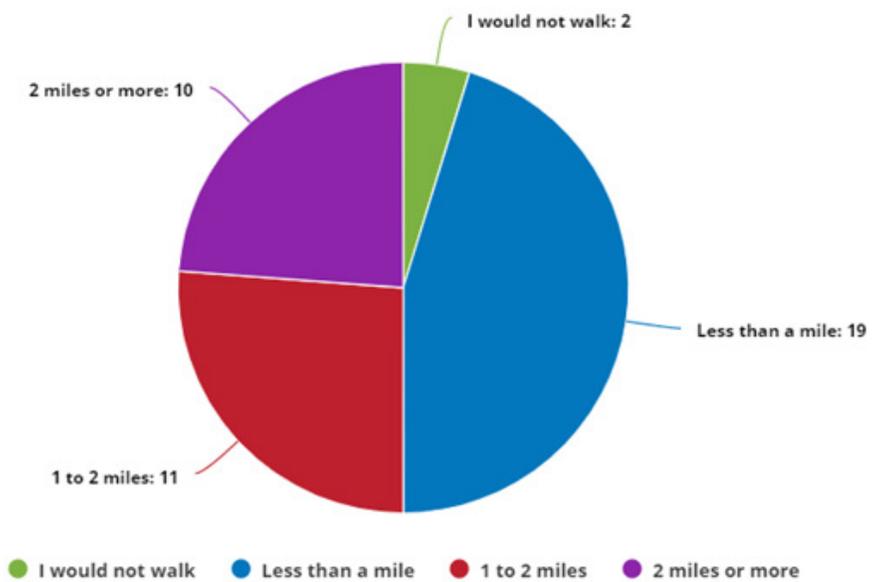
Pie Bar



### Q9. How far would you be willing to walk to a park if it were safe to do so?

42 answers

Pie Bar



### Q10. Why not?

1 answers

Word Cloud Response List

#### RESPONSES

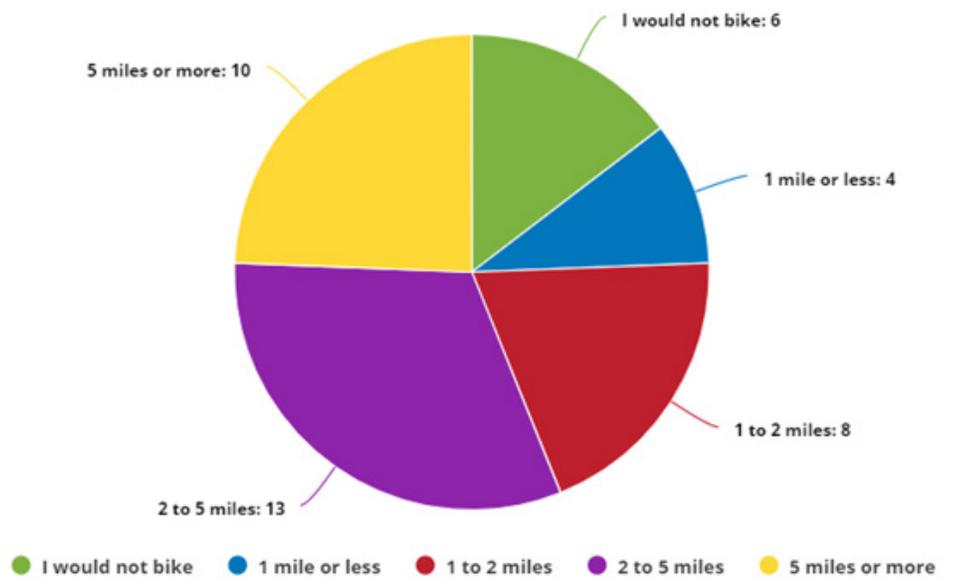
Busy roads

11 - Appendices

Q11. How far would you be willing to ride a bike to a park if it were safe to do so?

41 answers

Pie Bar



Q12. Why not?

5 answers

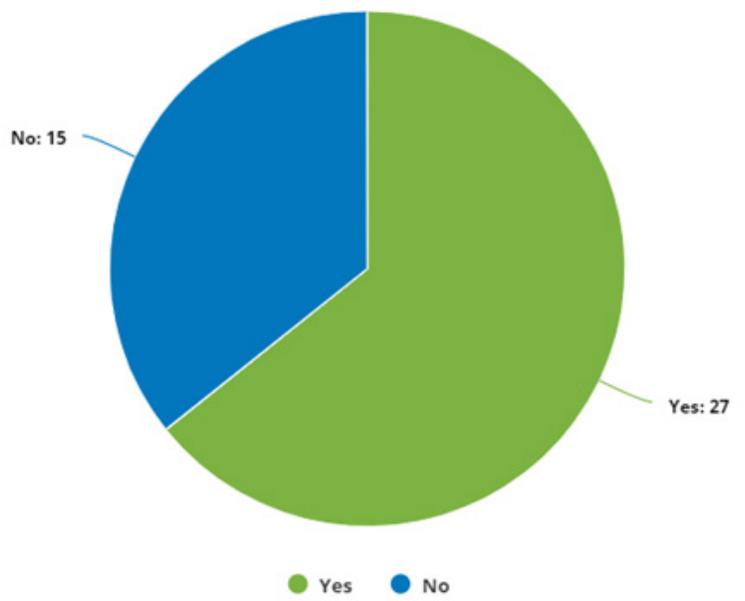
Word Cloud Response List

- RESPONSES
- ABILITY
  - busy roads
  - I'm too fat
  - not interested
  - Safety and health

Q13. Do you travel outside Jackson County to use parks and/or recreation facilities?

42 answers

Pie Bar



Q14. If so, where and why?

26 answers

Word Cloud

Response List

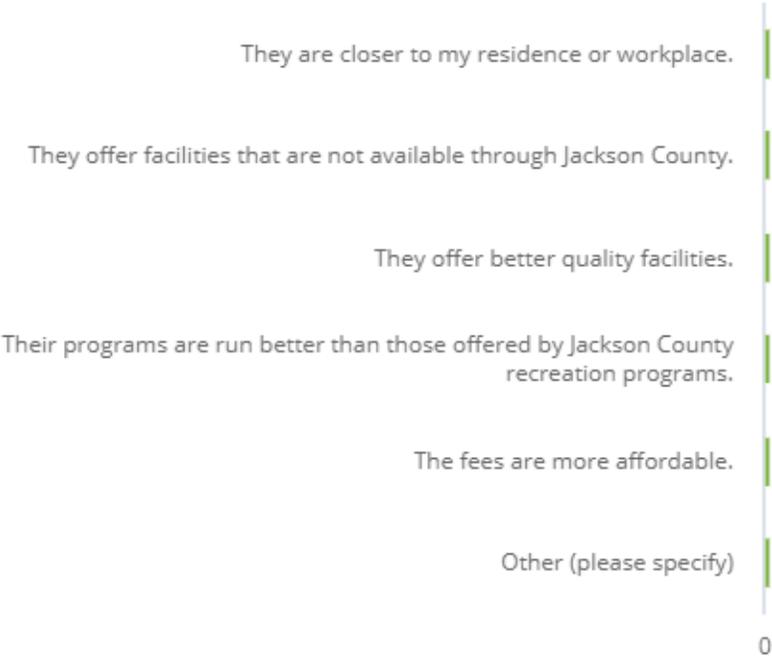
Q14. If so, where and why?



Q15. Which of the following factors cause you to use these other facilities?

0 answers

Pie Bar

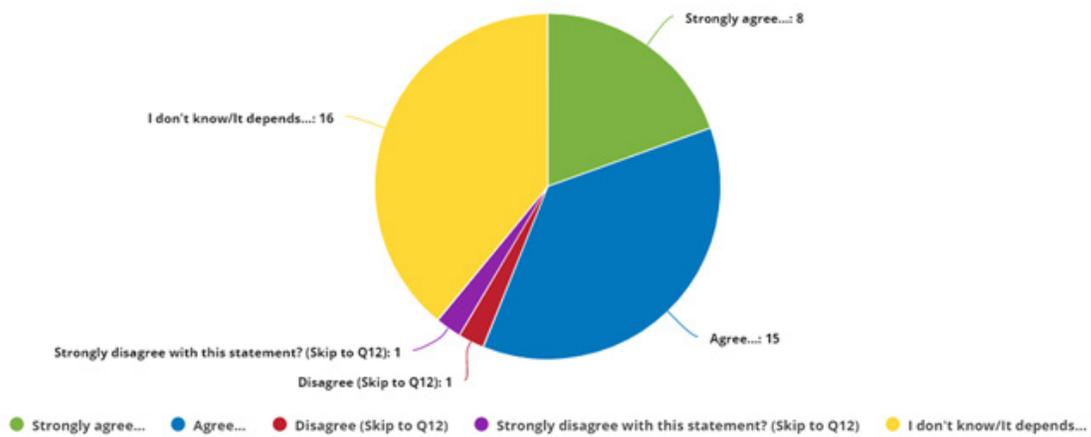


Total

Q16. Please use the choices below to express you you feel about the following statement... "I would be willing to pay more to improve the quality of facilities and programs provided by the Jackson County Recreation Department." Do you...

41 answers

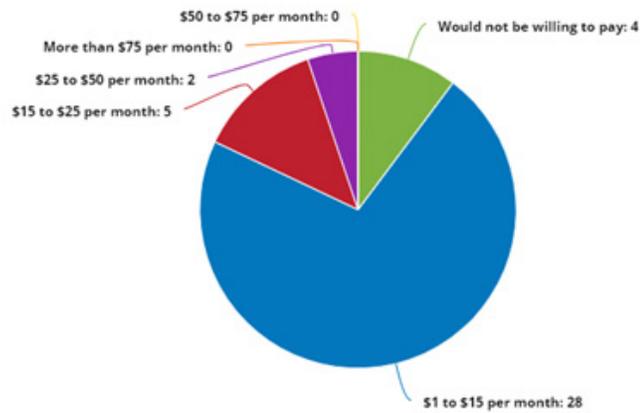
Pie Bar



Q17. Which of the following best describes how much you would be willing to pay on a monthly basis to support improvements to park and recreational facilities and services in Jackson County?

39 answers

Pie Bar

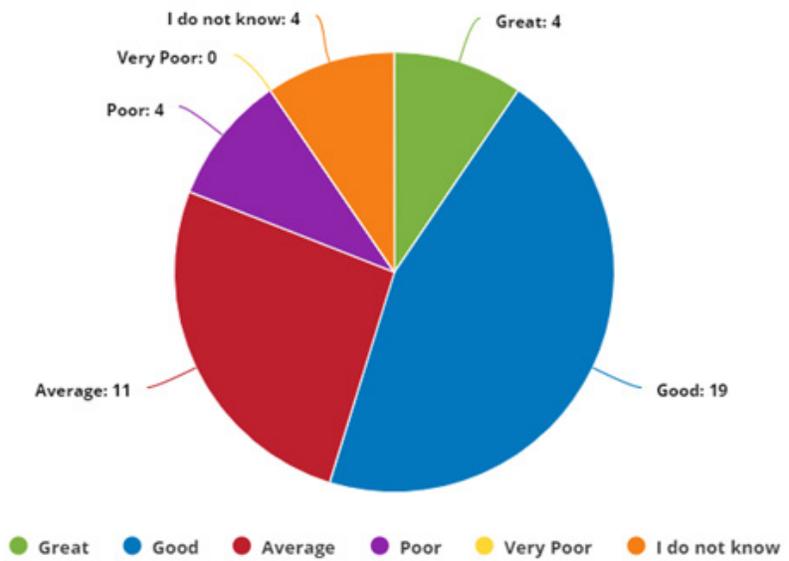


● Would not be willing to pay ● \$1 to \$15 per month ● \$15 to \$25 per month ● \$25 to \$50 per month ● \$50 to \$75 per month ● More than \$75 per month

Q18. How would you describe the Jackson County Recreation's reputation? Would you say its reputation is....

42 answers

Pie Bar



Q19. Briefly tell us why you feel that way.

25 answers

Word Cloud

Response List

Q19. Briefly tell us why you feel that way.



11 - Appendices

Q20. We'd like to ask you a few questions about yourself. This information will be used for statistical purposes only, such as comparing the responses among various subgroups of respondents. This information will not be used to identify you in any way. What is your 5 digit postal zip code?

12 answers

Word Cloud

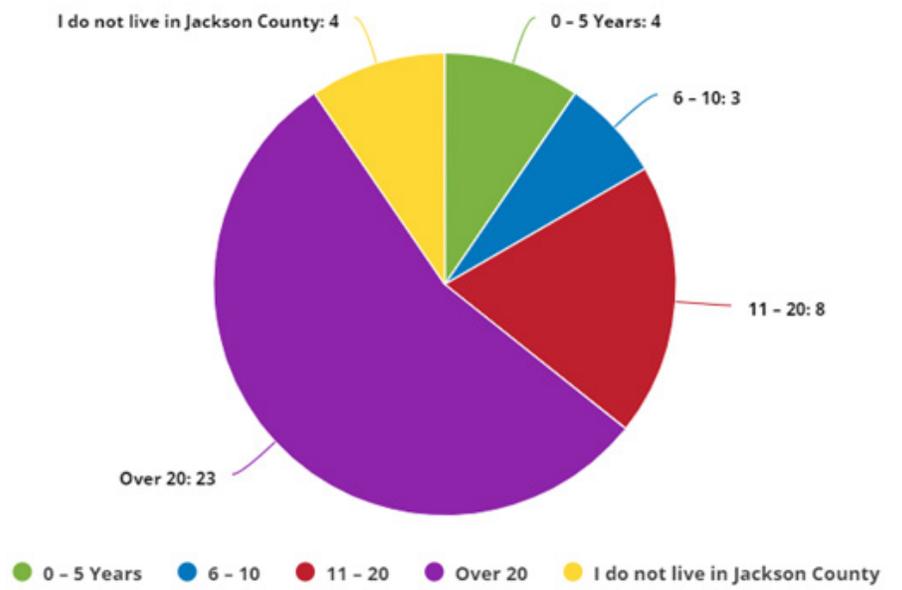
Response List

RESPONSES	<a href="#">Download CSV</a>
36541	
36544	
39452	
39503	
39532	
39553	
39555	
39562	
39564	
39565	
39567	
39573	

### Q21. How long have you lived in Jackson County?

42 answers

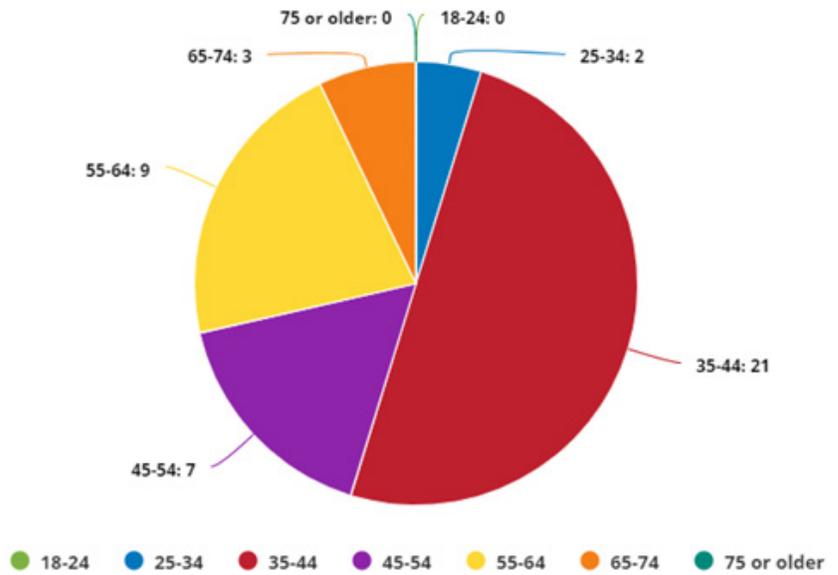
Pie Bar



Q22. Which of the following categories describes your age? Are you...

42 answers

Pie Bar



Q23. Are you a...

42 answers

Pie Bar

Renter (or rents from someone who owns home): 3



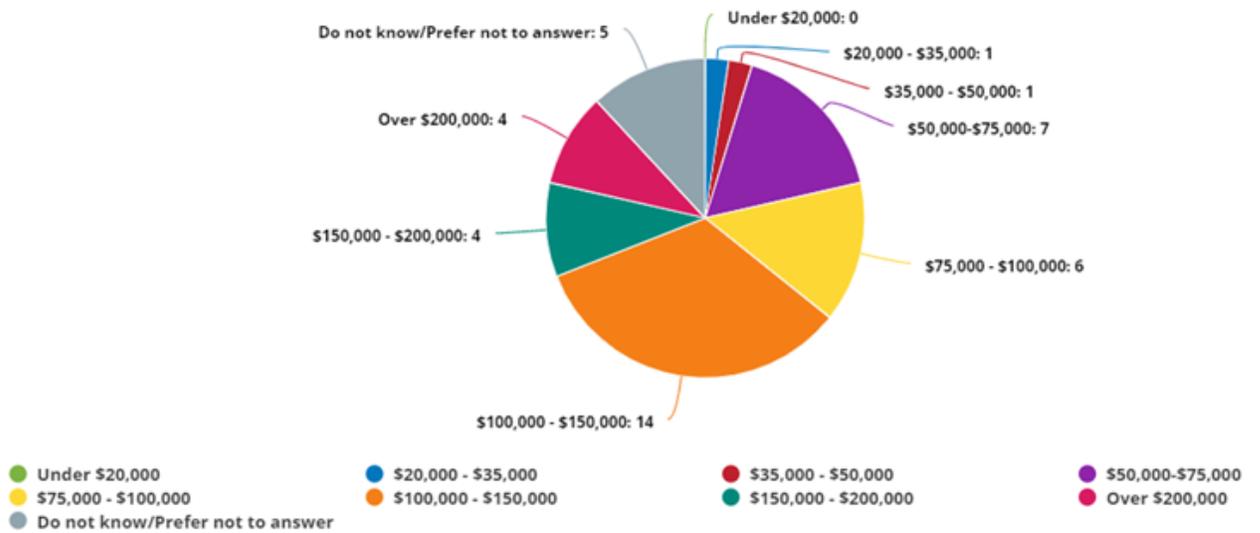
Home Owner (or lives with a homeowner): 39

● Home Owner (or lives with a homeowner) ● Renter (or rents from someone who owns home)

Q24. Which of the following best describes your household's total income?

42 answers

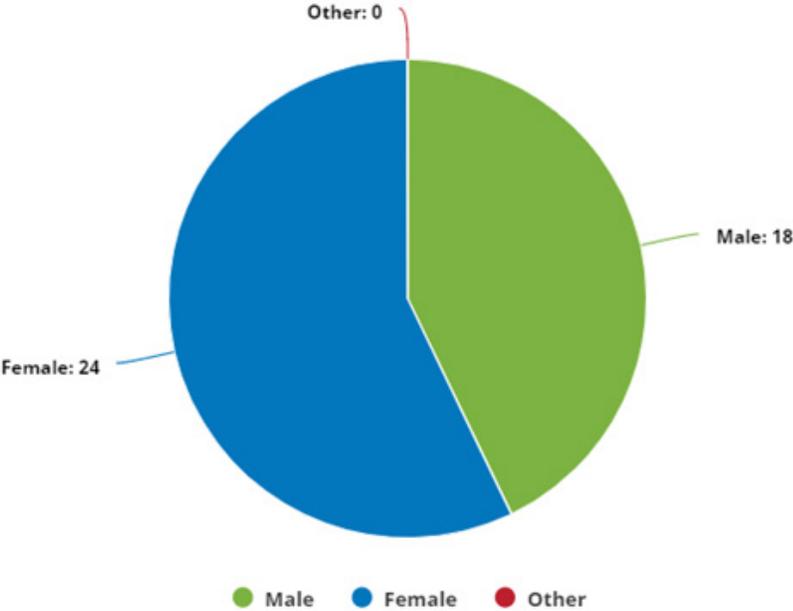
Pie Bar



Q25. How would you describe your gender?

42 answers

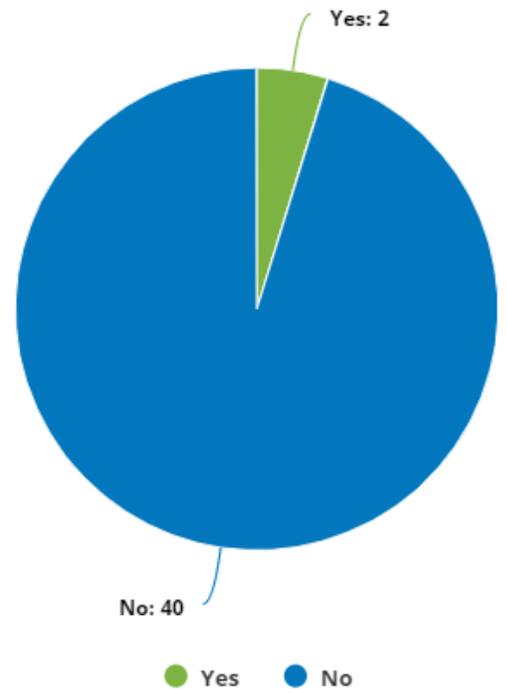
Pie Bar



### Q26. Are you of Hispanic, Latino, or of Spanish origin?

42 answers

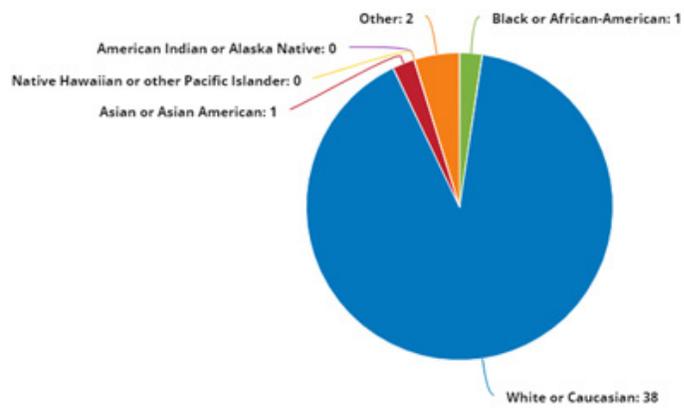
Pie Bar



Q27. Which of the following best describes your race? Are you ...

42 answers

Pie Bar



● Black or African-American ● White or Caucasian ● Asian or Asian American ● American Indian or Alaska Native ● Native Hawaiian or other Pacific Islander ● Other

Q28. Please provide any additional comments you have about Jackson County's parks, facilities, programs or funding.

17 answers

Word Cloud

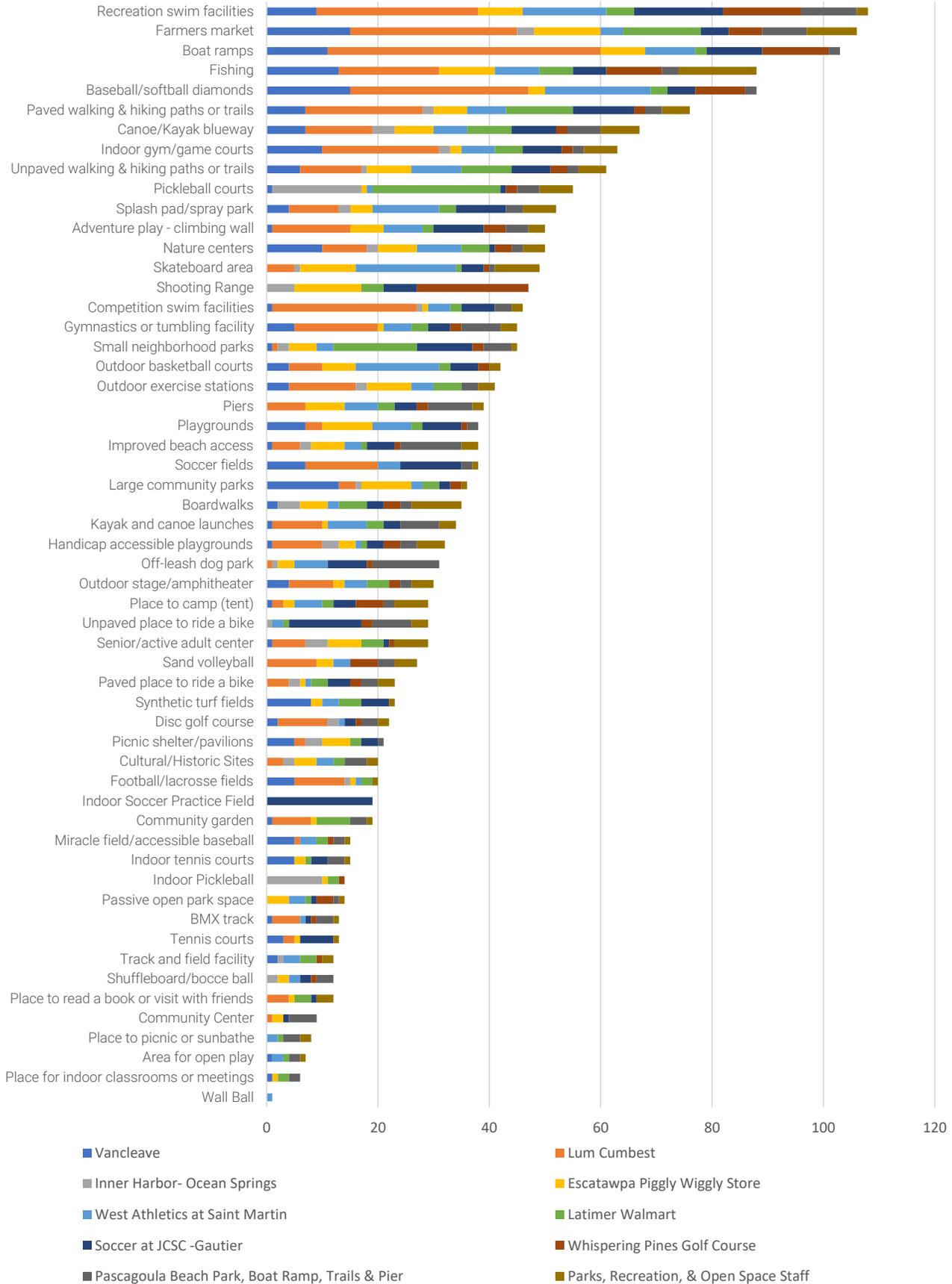
Response List

Q28. Please provide any additional comments you have about Jackson County's parks, facilities, programs or funding.

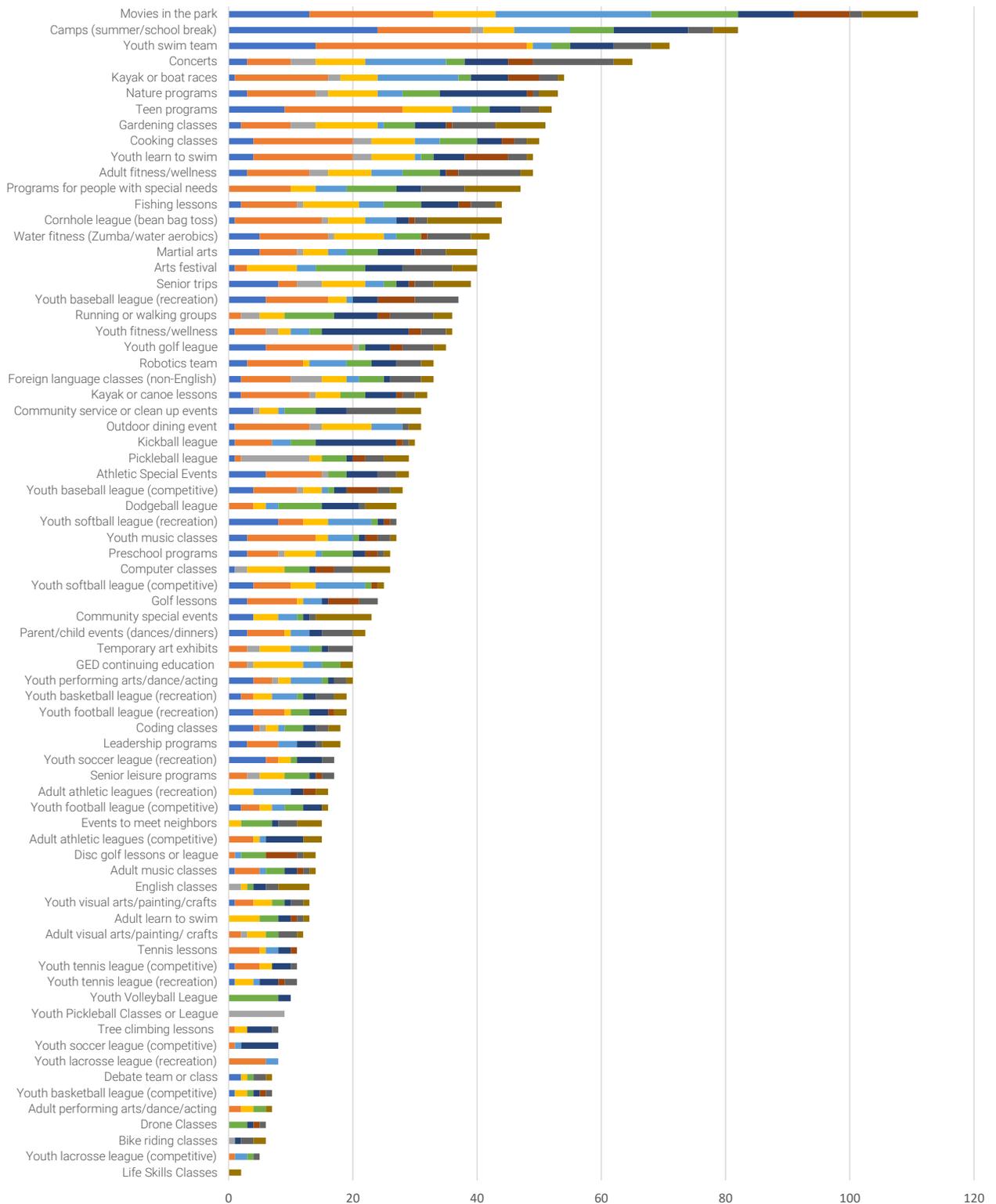


## Appendix F: Pop-Up Events - Facility and Program Priorities

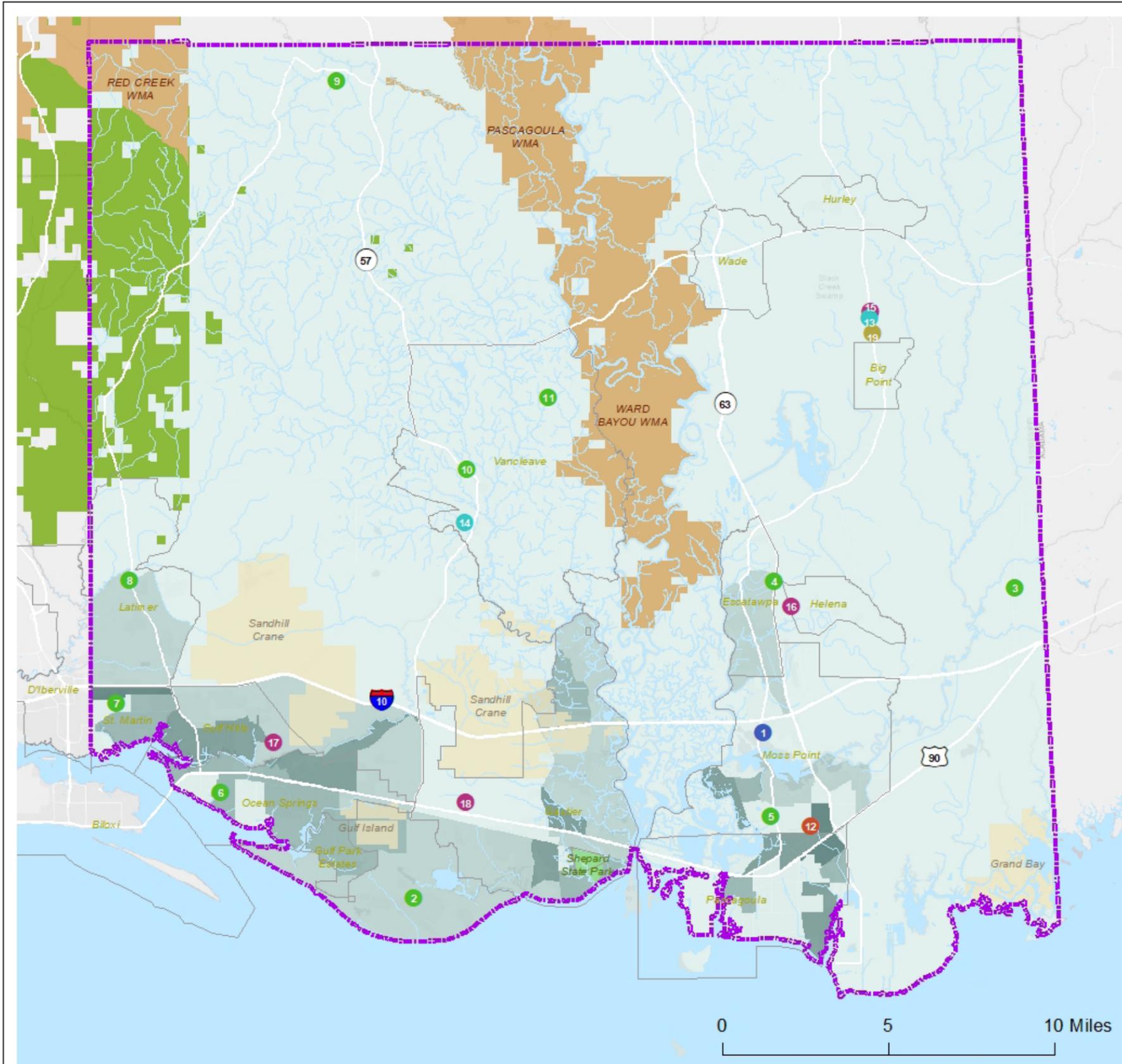
### Pop Up Facility Priorities



Pop Up Program Priorities



Jackson County Current Park Inventory



### CURRENT PARK INVENTORY

#### LEGEND

	County Limits		Population Per Acre
	City/Town		0.01 - 1.36
	River/Streams		1.37 - 3.39
	State Park		3.40 - 6.73
	Wildlife Mgmt. Area		6.74 - 11.85
	National Wildlife Refuge		11.86 - 16.74
	National Forest		

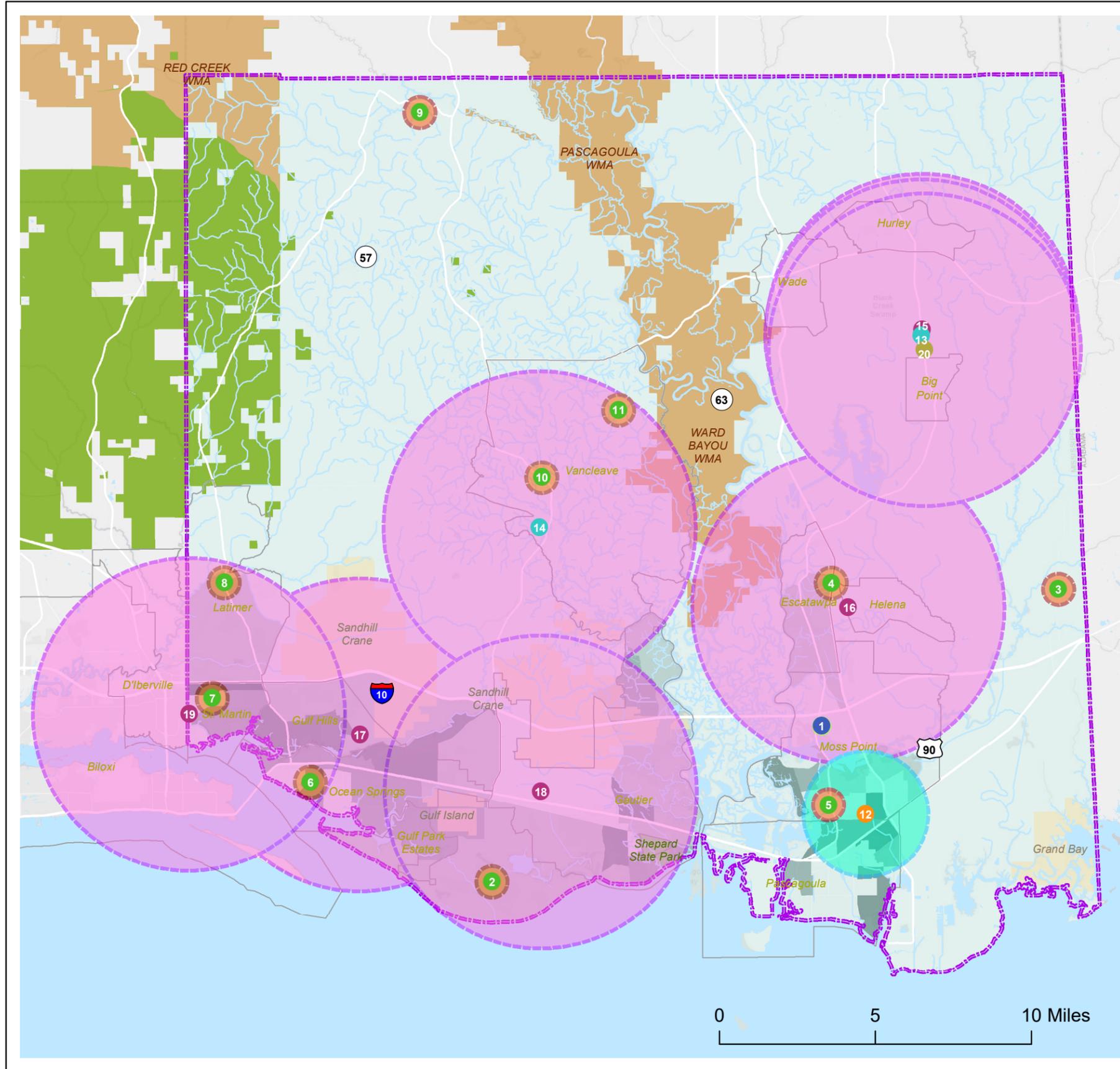
#### Park Inventory

- |                                      |                           |                                   |             |
|--------------------------------------|---------------------------|-----------------------------------|-------------|
|                                      | Mini Park                 |                                   | Sports Park |
| 1. Simmons Park                      |                           | 15. Roy Crane Adult Complex       |             |
|                                      | Neighborhood Park         | 16. Helena Youth Complex          |             |
| 2. St. Andrews Park                  |                           | 17. St. Martin Youth Complex      |             |
| 3. Franklin Creek Park               |                           | 18. Jackson County Soccer Complex |             |
| 4. Hwy 63 Walking Trail              |                           |                                   | Special Use |
| 5. Joseph Street Park                |                           | 19. Whispering Pines Golf Course  |             |
| 6. Inner Harbor Park and Pier        |                           |                                   |             |
| 7. Cedar Grove Park                  |                           |                                   |             |
| 8. Latimer Park                      |                           |                                   |             |
| 9. Vestry Park                       |                           |                                   |             |
| 10. Martin Luther King Memorial Park |                           |                                   |             |
| 11. Old River Road Park              |                           |                                   |             |
|                                      | Community Park            |                                   |             |
| 12. Edward Khayat Park               |                           |                                   |             |
|                                      | Regional Park/Sports Park |                                   |             |
| 13. Lum Cumbest Park                 |                           |                                   |             |
| 14. Vancleave Youth Complex          |                           |                                   |             |



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

Jackson County Park Service Area Gap Analysis



### CURRENT GAP ANALYSIS

#### LEGEND

- River/Streams
  - County Limits
  - City/Town
  - State Park
  - Wildlife Mgmt. Area
  - National Wildlife Refuge
  - National Forest
- | Population Per Acre |               |
|---------------------|---------------|
|                     | 0.01 - 1.36   |
|                     | 1.37 - 3.39   |
|                     | 3.40 - 6.73   |
|                     | 6.74 - 11.85  |
|                     | 11.86 - 16.74 |

#### Existing Park Inventory

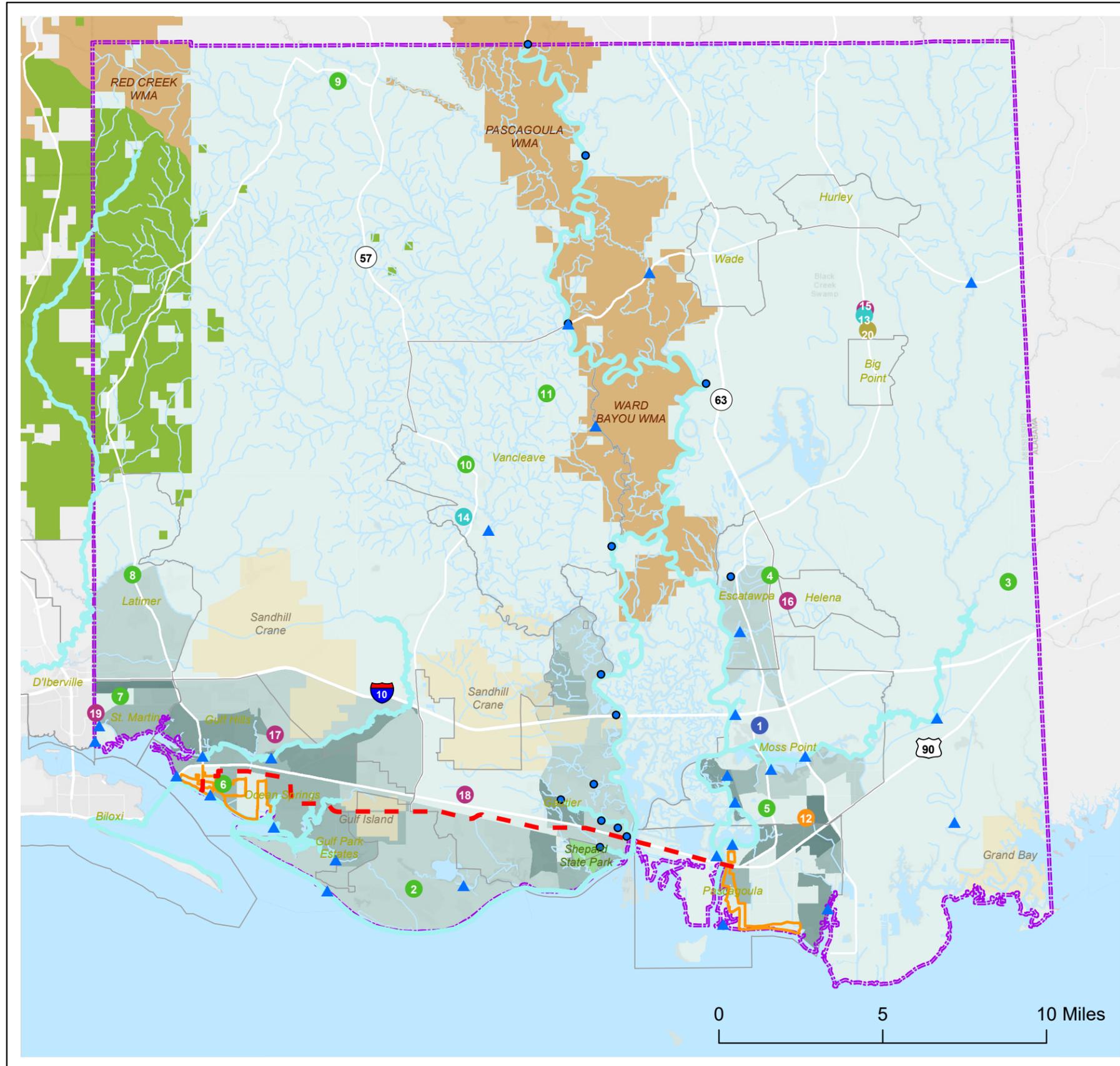
- Mini Park
  - 1. Simmons Park
- Neighborhood Park
  - 2. St. Andrews Park
  - 3. Franklin Creek Park
  - 4. Hwy 63 Walking Trail
  - 5. Joseph Street Park
  - 6. Inner Harbor Park and Pier
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  - 10. Martin Luther King Memorial Park
  - 11. Old River Road Park
- Community Park
  - 12. Edward Khayat Park
- Regional Park/Sports Park
  - 13. Lum Cumbest Park
  - 14. Vanleave Youth Complex
- Sports Park
  - 15. Roy Crane Adult Complex
  - 16. Helena Youth Complex
  - 17. St. Martin Youth Complex
  - 18. Jackson County Soccer Complex
  - 19. West Jackson County Soccer Complex
- Special Use
  - 20. Whispering Pines Golf Course

#### Park Service Areas

- 0.25 Mile Mini Park Service Area
- 0.50 Mile Neighborhood Park Service Area
- 2 Miles Community Park Service Area
- 5 Miles Sports Park Service Area



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

## CONNECTIVITY

### LEGEND

- County Limits
- City/Town

### Connections

- Biking
- Hiking
- Blueway
- Fitness Trails
- Wildlife Observation
- Proposed Greenway

### Points of Interest

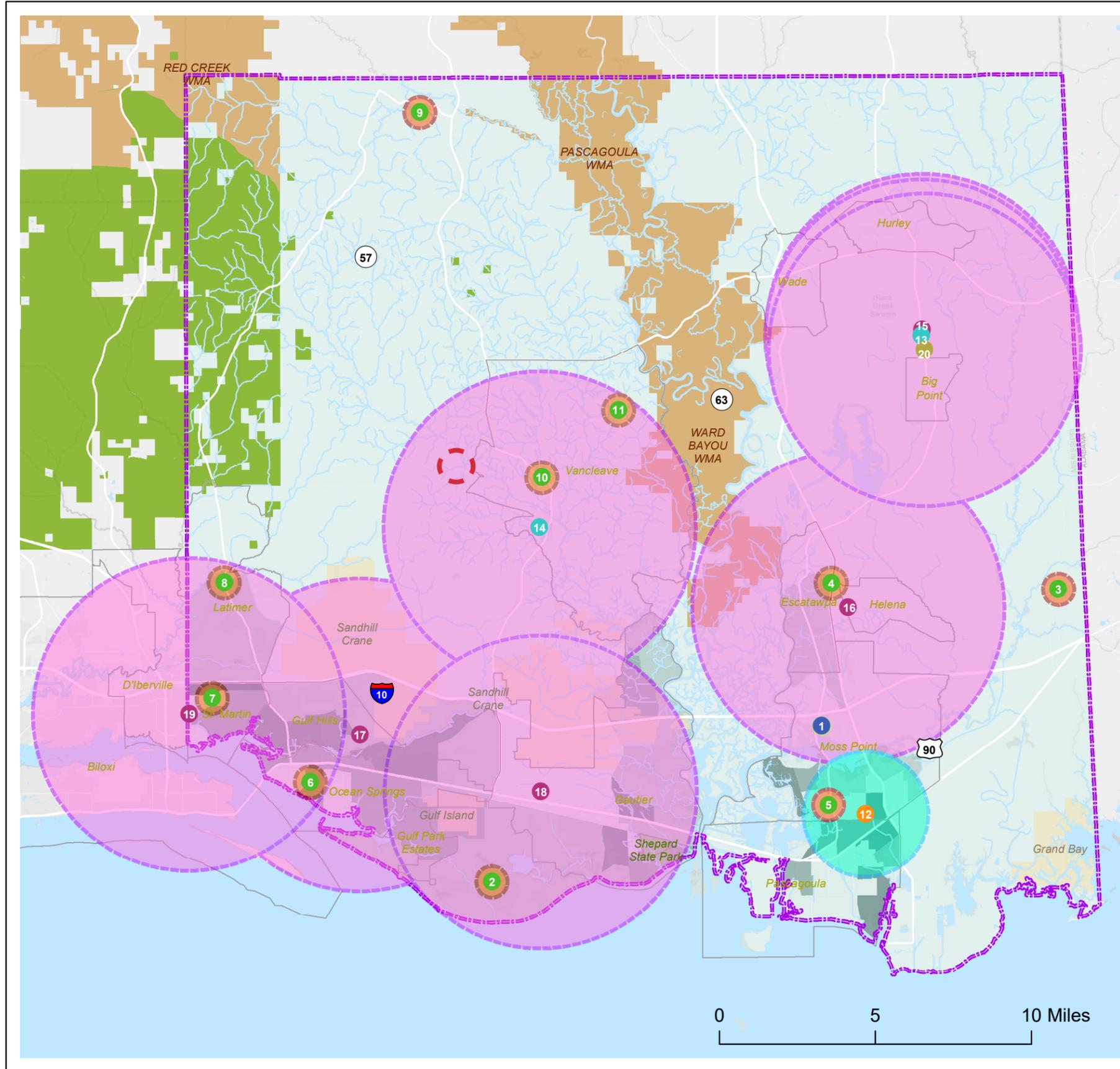
- Blueway Points of Interest
- Boat Ramps

### Park Inventory

- Mini Park
  - 1. Simmons Park
  - 2. St. Andrews Park
  - 3. Franklin Creek Park
  - 4. Hwy 63 Walking Trail
  - 5. Joseph Street Park
  - 6. Inner Harbor Park and Pier
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- Special Use
  - 20. Whispering Pines Golf Course



Jackson County Park Service Area Gap Analysis



### CURRENT GAP ANALYSIS

#### LEGEND

- River/Streams
  - County Limits
  - City/Town
  - State Park
  - Wildlife Mgmt. Area
  - National Wildlife Refuge
  - National Forest
- | Population Per Acre |               |
|---------------------|---------------|
|                     | 0.01 - 1.36   |
|                     | 1.37 - 3.39   |
|                     | 3.40 - 6.73   |
|                     | 6.74 - 11.85  |
|                     | 11.86 - 16.74 |

#### Existing Park Inventory

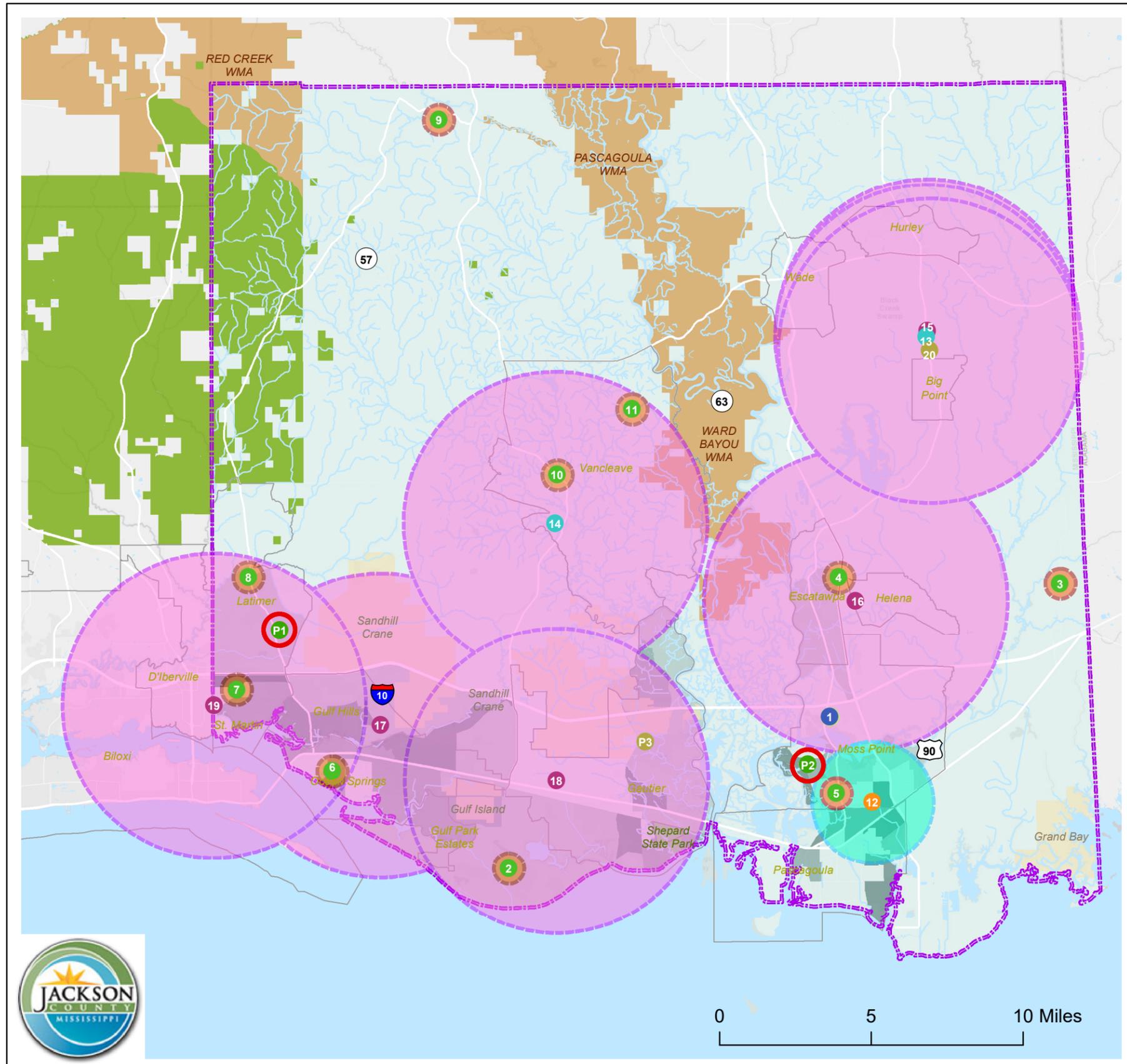
- Mini Park
  - 1. Simmons Park
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  - 2. St. Andrews Park
  - 3. Franklin Creek Park
  - 4. Hwy 63 Walking Trail
  - 5. Joseph Street Park
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  - 7. Cedar Grove Park
  - 8. Latimer Park
  - 9. Vestry Park
  - 10. Martin Luther King Memorial Park
  - 11. Old River Road Park
- Community Park
  - 12. Edward Khayat Park
- Regional Park/Sports Park
  - 13. Lum Cumbest Park
  - 14. Vanleave Youth Complex
- Sports Park
  - 15. Roy Crane Adult Complex
  - 16. Helena Youth Complex
  - 17. St. Martin Youth Complex
  - 18. Jackson County Soccer Complex
  - 19. West Jackson County Soccer Complex
- Special Use
  - 20. Whispering Pines Golf Course

#### Park Service Areas

- 0.25 Mile Mini Park Service Area
- 0.50 Mile Neighborhood Park Service Area
- 2 Miles Community Park Service Area
- 5 Miles Sports Park Service Area
- Proposed park service area



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates



Source : U.S. Census Bureau, 2019 American Community Survey 5-Year Estimates

### PROPOSED FACILITIES

#### LEGEND

	River/Streams		<b>Population Per Acre</b>
	County Limits		0.01 - 1.36
	City/Town		1.37 - 3.39
	State Park		3.40 - 6.73
	Wildlife Mgmt. Area		6.74 - 11.85
	National Wildlife Refuge		11.86 - 16.74
	National Forest		

**Existing Park Inventory**

	Mini Park		Sports Park
	Neighborhood Park		Special Use

1. Simmons Park
2. St. Andrews Park
3. Franklin Creek Park
4. Hwy 63 Walking Trail
5. Joseph StreetPark
6. Inner Harbor Park and Pier
7. Cedar Grove Park
8. Latimer Park
9. Vestry Park
10. Martin Luther King Memorial Park
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12. Edward Khayat Park
13. Lum Cumbest Park
14. Vanleave Youth Complex
15. Roy Crane Adult Complex
16. Helena Youth Complex
17. St. Martin Youth Complex
18. Jackson County Soccer Complex
19. West Jackson County Soccer Complex
20. Whispering Pines Golf Course

**Park Service Areas**

	0.25 Mile Mini Park Service Area
	0.50 Mile Neighborhood Park Service Area
	2 Miles Community Park Service Area
	5 Miles Sports Park Service Area
	0.50 Mile Proposed Neighborhood Park Service Area

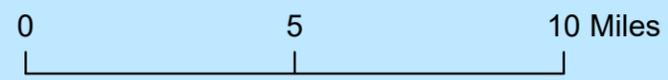
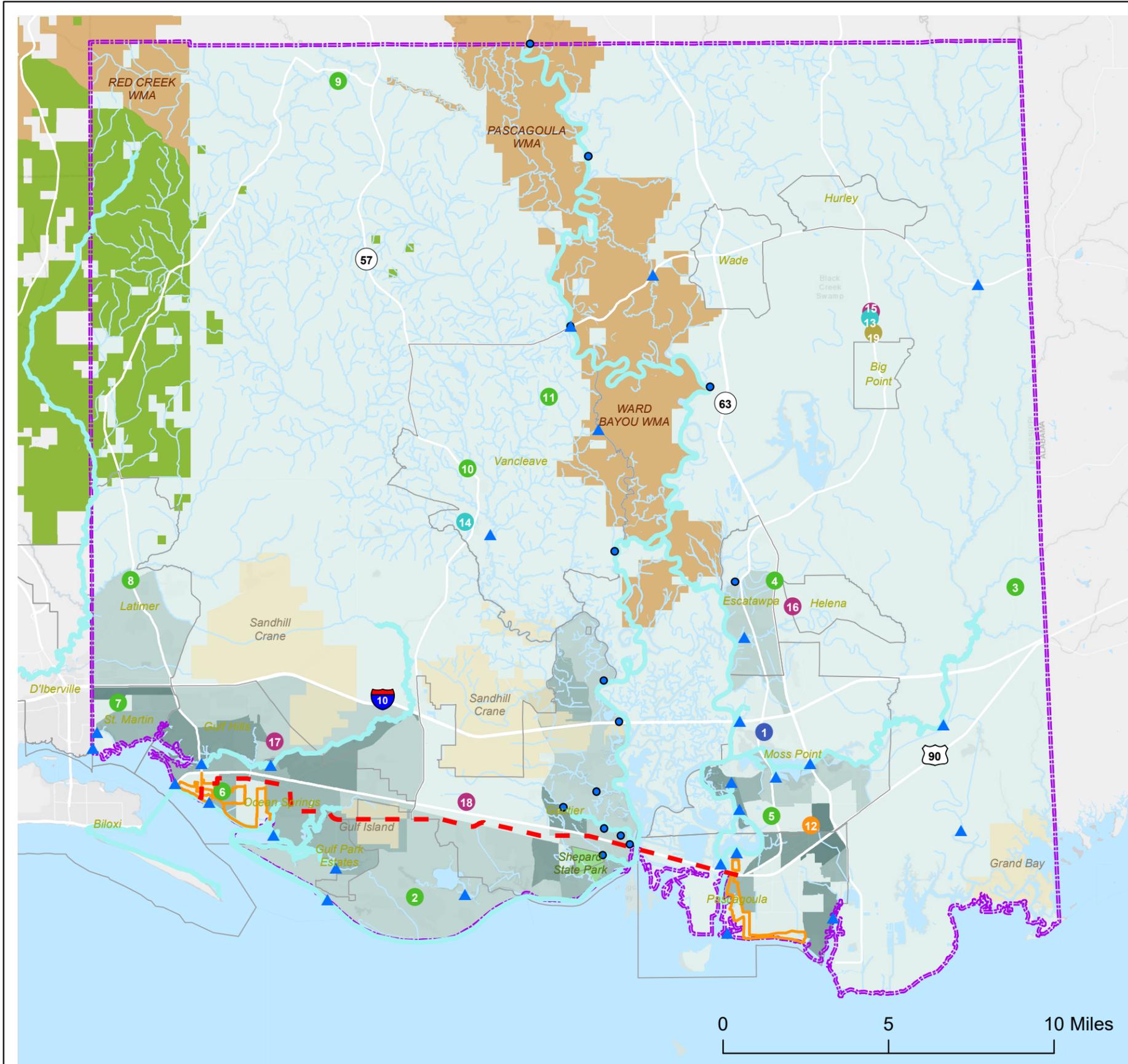
  

**Proposed Facilities**

- Neighborhood Park
- P1. Neighborhood Park (Latimer Area)
- P2. Neighborhood Park (Moss Point Area)
- Special Use
- P3. Recreation Center (County-wide Service Area)



Jackson County Connectivity



## CONNECTIVITY

### LEGEND

- County Limits
- City/Town

### Connections

- Biking
- Hiking
- Blueway
- Fitness Trails
- Wildlife Observation
- Proposed Greenway

### Points of Interest

- Blueway Points of Interest
- Boat Ramps

### Park Inventory

- Mini Park
  - 1. Simmons Park
  - 2. St. Andrews Park
  - 3. Franklin Creek Park
  - 4. Hwy 63 Walking Trail
  - 5. Joseph Street Park
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  - 16. Helena Youth Complex
  - 17. St. Martin Youth Complex
  - 18. Jackson County Soccer Complex
- Special Use
  - 19. Whispering Pines Golf Course



# Appendix H

## Blueway Connections

### Sample Renderings

North Deep Slough  
Roy Cumbest Drive  
Hickory Hills Country Club

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# North Deep Slough

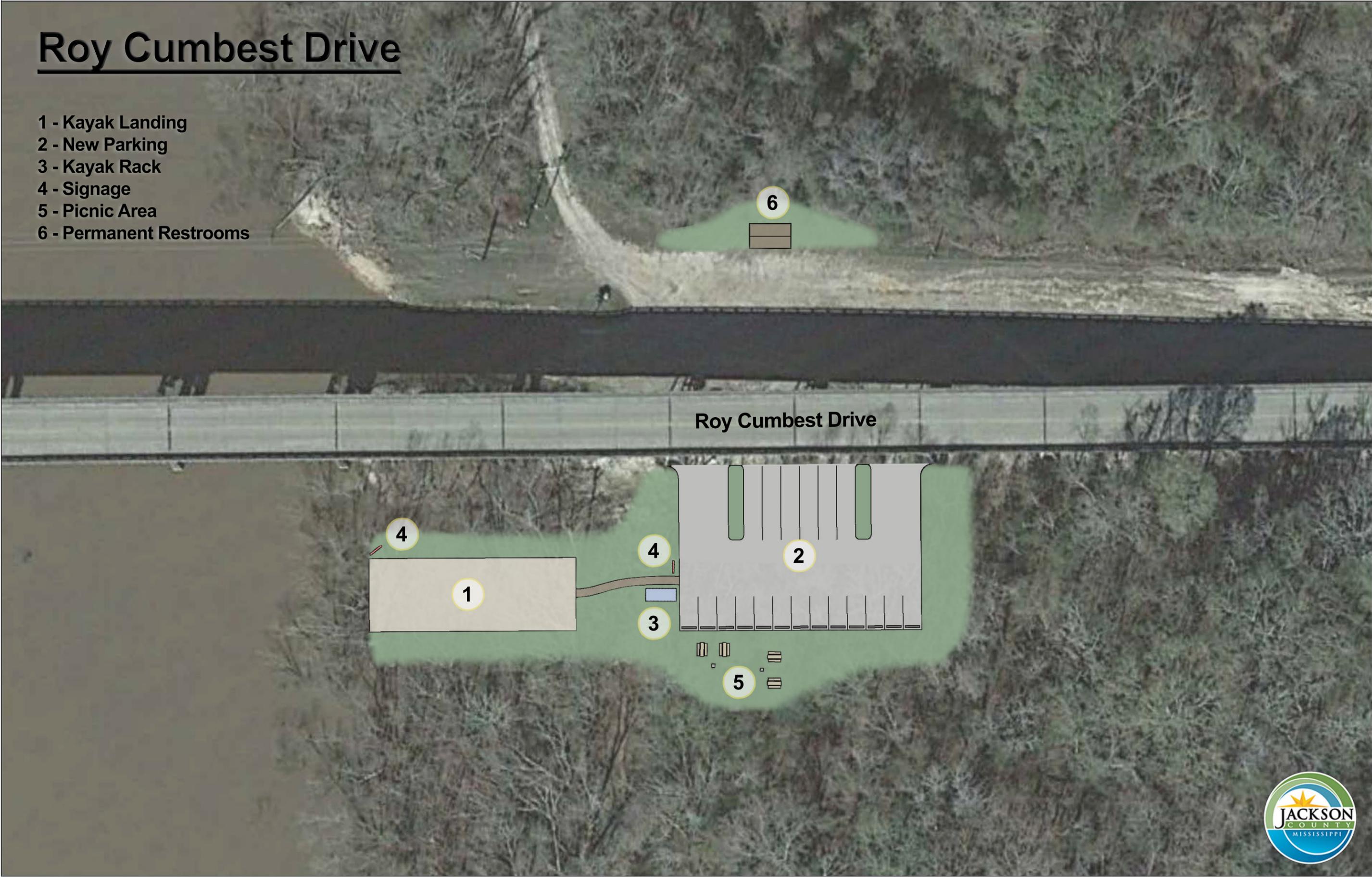
- 1 - Kayak Landing
- 2 - Parking Improvements
- 3 - Kayak Rack
- 4 - Signage
- 5 - Picnic Area
- 6 - Comfort Station Restrooms



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# Roy Cumbest Drive

- 1 - Kayak Landing
- 2 - New Parking
- 3 - Kayak Rack
- 4 - Signage
- 5 - Picnic Area
- 6 - Permanent Restrooms



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# Hickory Hill Country Club

- 1 - Kayak Landing
- 2 - Parking Improvement (Resurface/Stripe)
- 3 - Kayak Rack
- 4 - Signage
- 5 - Picnic Area



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# Appendix I

## Pascagoula River - Jackson County Blueway Connection Concept Development Report

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# PASCAGOULA RIVER - JACKSON COUNTY BLUEWAY CONNECTION

## CONCEPT DEVELOPMENT REPORT

### **SUBMITTED TO:**

JACKSON COUNTY BOARD OF SUPERVISORS

### **PREPARED BY:**

ALLEN ENGINEERING & SCIENCE, INC.

JULY 2022



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19W	- MGCCC ESTUARINE CENTER – MILE 45.5 W + 3.0 .....	20
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**APPENDIX D: PASCAGOULA RIVER JACKSON COUNTY BLUEWAY MAP**



## 1.0 BACKGROUND

---

Jackson County, Mississippi is proposing to complete the connection between two existing blueways including the George County Blueway and the Pascagoula River Jackson County Blueway. The Pascagoula River extends approximately 46 miles through Jackson County, and when combined with other branches, creates approximately 80 miles of navigable waterway. The proposed Pascagoula River – Jackson County Blueway Connection project would establish 65-miles of mapped and signed navigable waters by connecting the established Pascagoula River George County Blueway and Pascagoula River Jackson County Blueway and connecting paddlers to businesses and other recreational opportunities throughout the County.

The proposed Pascagoula River - Jackson County Blueway Connection Project includes:

- 65 miles of fully mapped and signed Blueway
- 22 Points of Interest
- Kayak Launches/Landings
- Interpretive signage
- Restrooms
- Parking
- Picnic areas
- Camping grounds
- Mile Markers

Allen Engineering and Science, Inc. (AllenES) was retained to assist the County in developing a conceptual design for the project and an opinion of probable cost that can be utilized to assist the county in applying for project funding.



Photo 1 – Pascagoula River



## 2.0 PHYSICAL INVENTORY AND ASSESSMENT

AllenES met with Jackson County Recreation Department representatives to discuss the County's vision for the Blueway and visited all the accessible Points of Interest as depicted in **Figures 1-5** below.

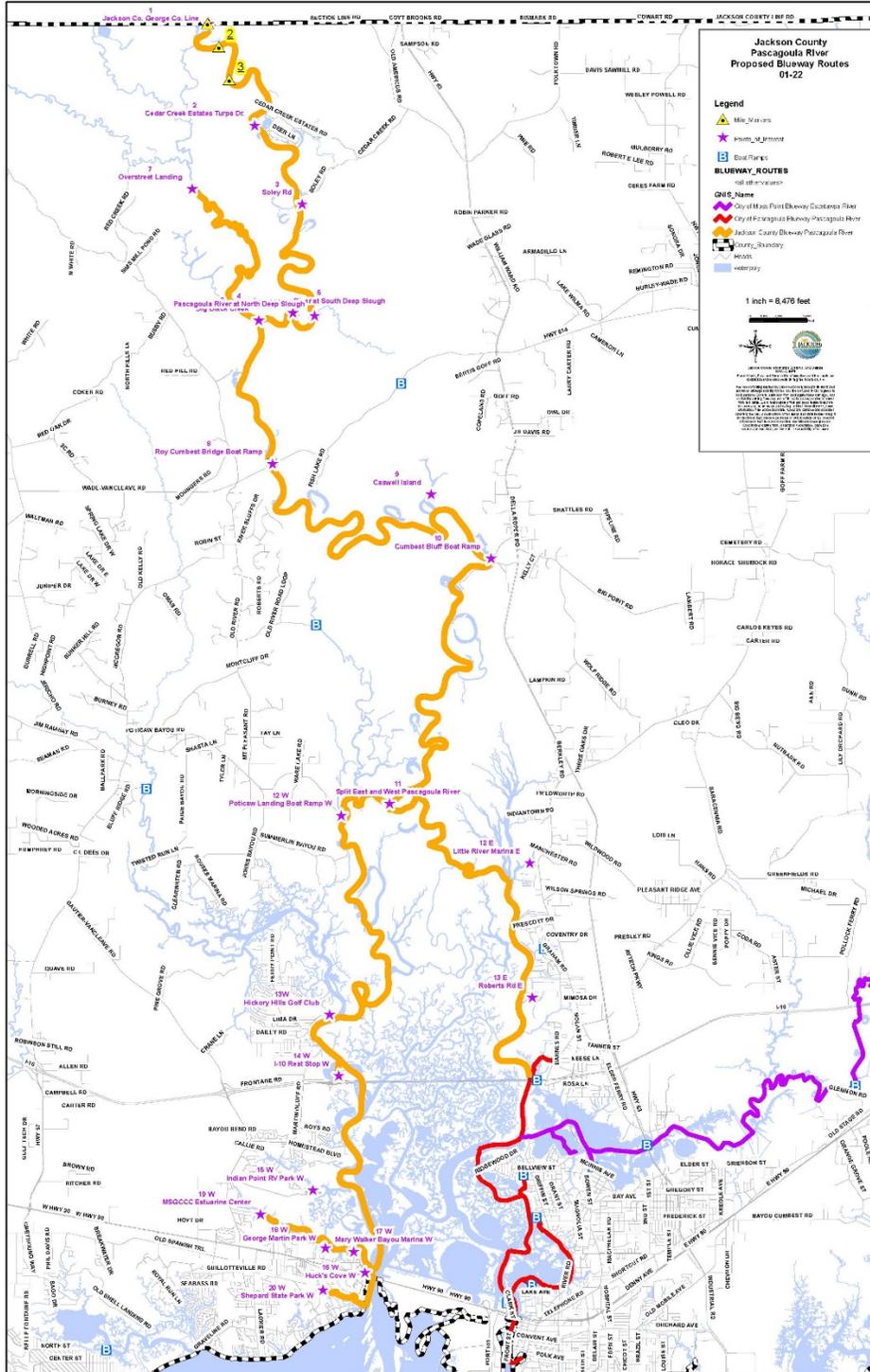
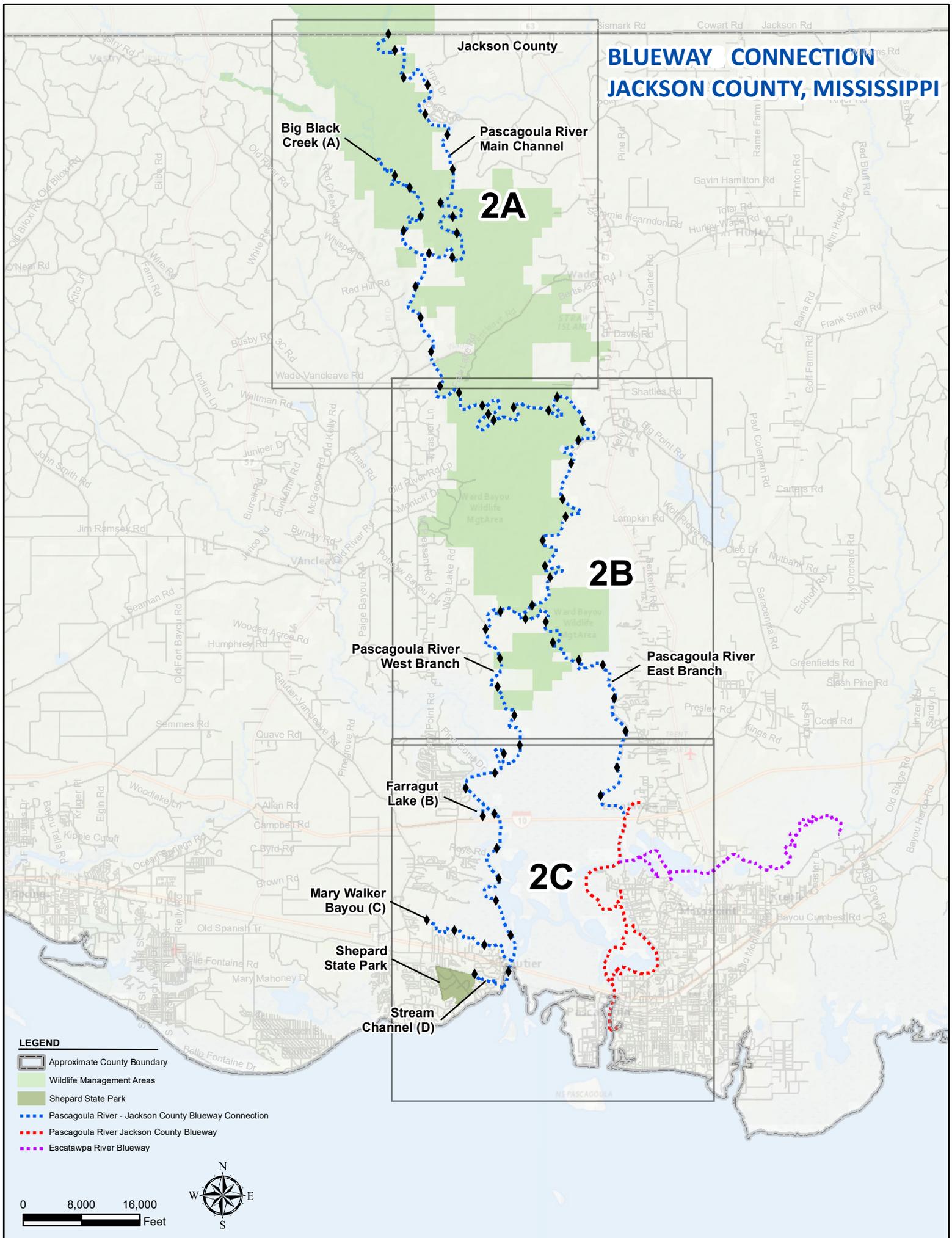


Figure 1. Proposed Blueway Map

# BLUEWAY CONNECTION JACKSON COUNTY, MISSISSIPPI



**Big Black Creek (A)**  
**Pascagoula River Main Channel**

**2A**

**Pascagoula River West Branch**  
**Pascagoula River East Branch**

**2B**

**Farragut Lake (B)**

**Mary Walker Bayou (C)**

**Shepard State Park**

**Stream Channel (D)**

**2C**

- LEGEND**
- Approximate County Boundary
  - Wildlife Management Areas
  - Shepard State Park
  - Pascagoula River - Jackson County Blueway Connection
  - Pascagoula River Jackson County Blueway
  - Escalawpa River Blueway

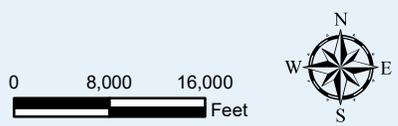
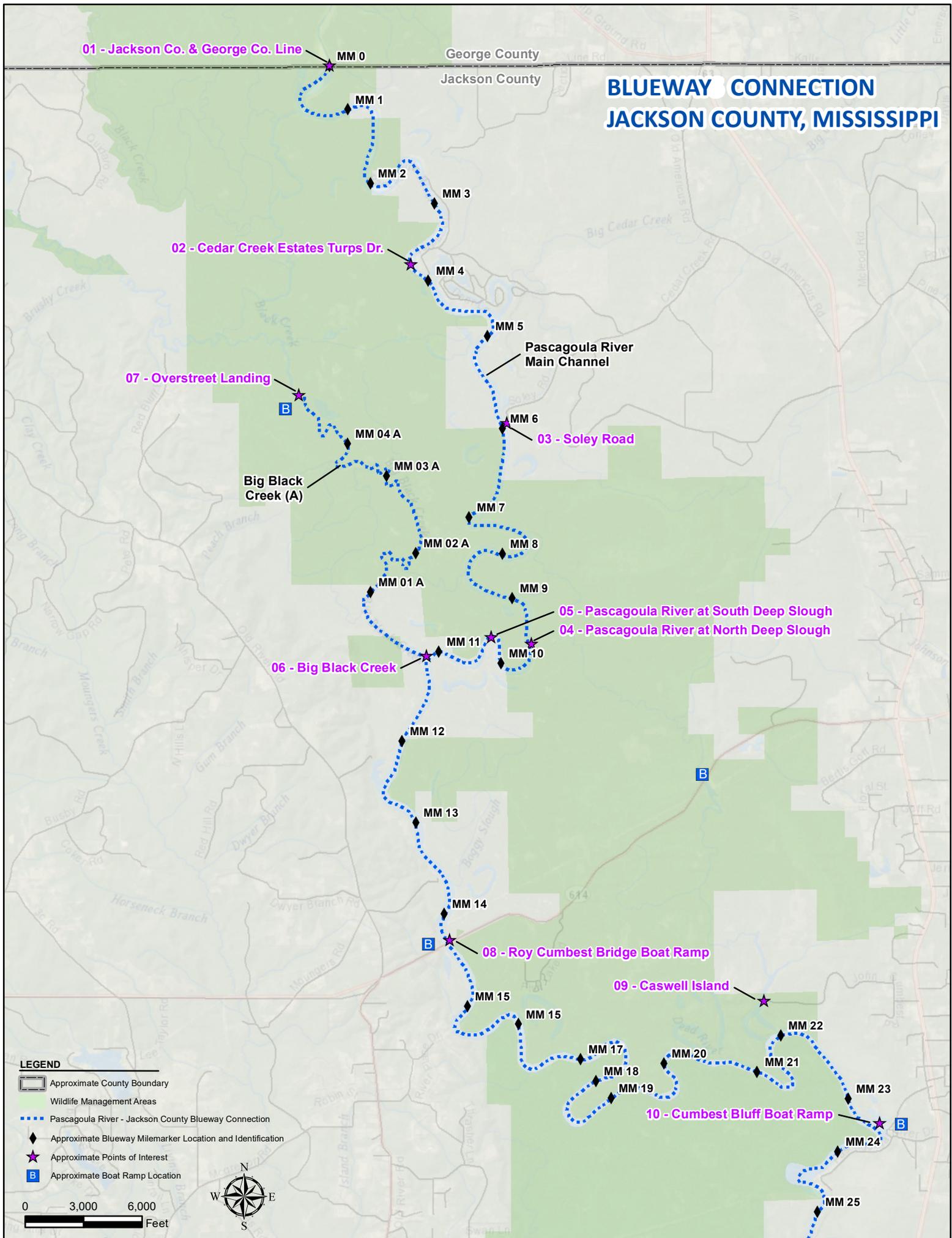
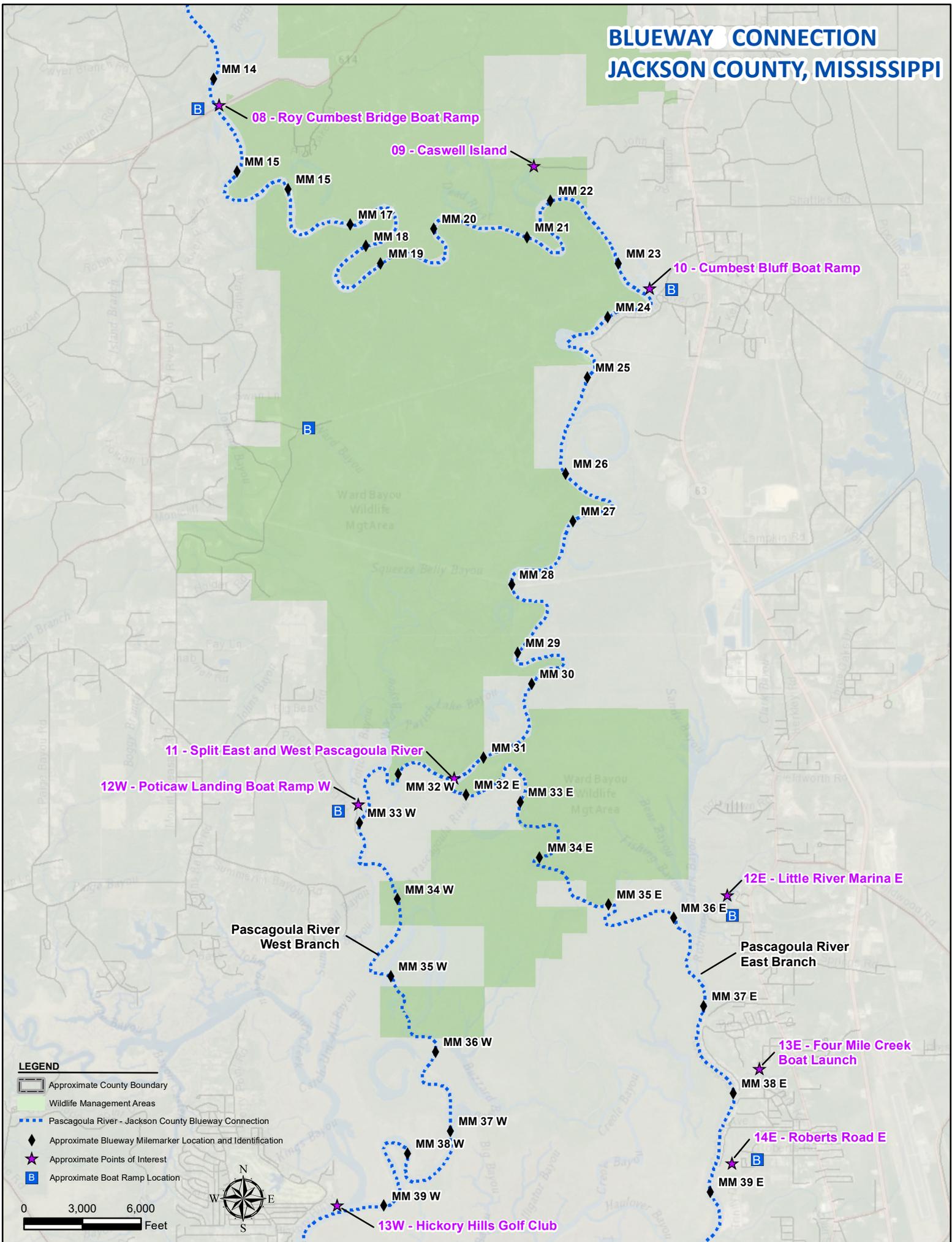


Figure 2. Blueway Connection Map



# BLUEWAY CONNECTION JACKSON COUNTY, MISSISSIPPI



**LEGEND**

- Approximate County Boundary
- Wildlife Management Areas
- Pascagoula River - Jackson County Blueway Connection
- Approximate Blueway Milemarker Location and Identification
- Approximate Points of Interest
- Approximate Boat Ramp Location

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Figure 2B. Blueway Connection Map - Segment B

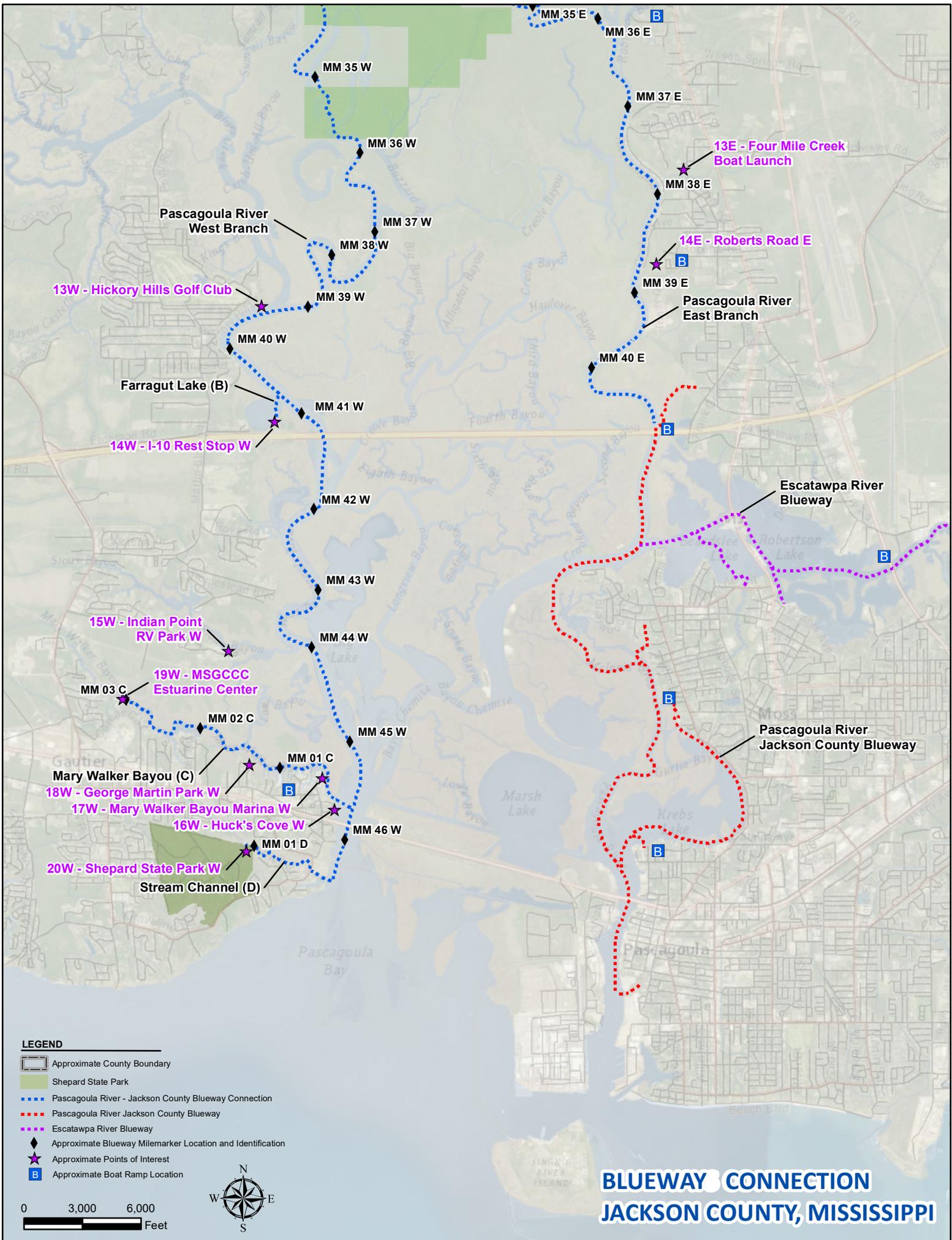


Figure 2C. Blueway Connection Map - Segment C



The goal of the Pascagoula River – Jackson County Blueway Connection project is to make the Pascagoula River a paddler friendly environment. This includes wayfinding signage, mile markers, educational signage, and signage identifying each point of interest and associated amenities. AllenES recommended improvements based on the existing conditions of the points of interest and their location along the Blueway, but recommended improvements were not dependent on land ownership. Each point of interest, their existing facilities and potential improvements are described below.

### **1 - JACKSON COUNTY GEORGE COUNTY LINE – MILE 0.0**

The Jackson/George County Line is the potential starting point of the Pascagoula River – Jackson County Blueway Connection. There are currently no known improvements or vehicle access points to this site. Although, the County Line may not serve as a stop along the Blueway, signage should be placed at this point to alert travelers that they have entered the Pascagoula River Jackson County Blueway. This may also be an appropriate location for educational signage and a stand containing maps of the Blueway. For the purposes of the Opinion of Probable Cost, these are all the improvements that were included for this site.

The County Line would serve as a good beginning point for the trail in the future. It would be possible to provide access to this point through the Pascagoula Wildlife Management Area (WMA) via Section Line Road through coordination with the Mississippi Department of Wildlife Fisheries and Parks (MDWFP). If future access were provided, this would be an excellent place for a kayak landing, campground, parking, and other amenities that would be utilized at the trailhead.



Photo 2 – Pascagoula River at County Line



## **2 - CEDAR CREEK ESTATES – TURPS DRIVE LANDING – MILE 3.6**

The Cedar Creek Estates – Turps Drive Landing is a privately owned boat launch and the northern-most vehicle accessible stop along the Pascagoula River – Jackson County Blueway Connection. This site includes a large sandbar and is accessible from an approximate 500 ft dirt road of Pascagoula River Drive. This landing is likely only available to be used as an emergency take-out point. No improvements are recommended to this Point of Interest other than signage to identify the stop and alert travelers of the “Emergency Use Only” status of the area. Any improvements will be minimal to avoid disruption to the private boat launch.



Photo 3 - Sandbar at Cedar Creek Estates – Turps Drive Landing



### **3 - SOLEY ROAD – MILE 6.0**

Much like the Cedar Creek Estates, the Soley Road Landing is a privately owned boat launch along the Pascagoula River – Jackson County Blueway Connection. The site includes a paved boat ramp and is frequently used by local fishermen. This landing is likely only available to be used as an emergency take-out point. No improvements are recommended to this Point of Interest other than signage to identify the stop and alert travelers of the “Emergency Use Only” status of the area. As previously mentioned, due to the private land ownership, there is the opportunity for Jackson County to enter a Public/Private Partnership to accomplish the improvements.



Photo 4 - Soley Road Landing



#### **4 - PASCAGOULA RIVER AT NORTH DEEP SLOUGH – MILE 9.7**

The North Deep Slough Point of Interest is located inside the Pascagoula WMA. The MDWFP website lists the area as a camp site. Historic imagery shows a sandbar at this site which makes it an ideal launch when water levels make it accessible. The area floods frequently, so any improvements would need to be resilient. The area is accessible by a vehicle road when the Pascagoula River is below 12' on the Graham Ferry gauge.

The North Deep Slough area is at mile marker 9.7 on the trail which makes it the first stop as a camp site for novice paddlers or a good spot for a picnic for those who would like to continue down river. The site has vehicle access and a campground, so it is an ideal place to develop as the “Trailhead” of the Blueway. This would include a kayak landing, campground improvements, parking improvements, potential restrooms, and picnic area.



Photo 5 – North Deep Slough

#### **5 - PASCAGOULA RIVER AT SOUTH DEEP SLOUGH – MILE 10.5**

Just downstream from the North Deep Slough stop is the South Deep Slough POI. The site includes a sandbar which makes it an ideal launch or stop when water levels make it accessible. This area is also located in the Pascagoula WMA and has vehicle access and a campground according to the MDWFP website.

Due to its proximity to North Deep Slough, developing both sites may not be necessary, but any amenities that are possible at the North Deep Slough site are also possible here. This site may best be used as a more primitive campground for those paddlers looking for a different experience and an additional picnic stop for those heading further down-river.



Photo 6 – South Deep Slough



## 6 - BIG BLACK CREEK – MILE 11.2



The area at the confluence of the Pascagoula River and Big Black Creek is another point of interest. This site has no vehicle access, but historic imagery does show a large sandbar at this curve in the river.

No improvements were included in the opinion of cost at this site; however, the sandbar is a great stopping point, and there is the potential to make improvements including restrooms, picnic areas, or campgrounds.

Photo 7 – Pascagoula River and Big Black Creek confluence

## 7 - OVERSTREET LANDING – MILE 11.2 + 5.0

Overstreet Landing is an existing boat launch on Big Black Creek that has been developed by the MDWFP. The Landing is approximately 5 miles upstream of the confluence with the main channel of the Pascagoula River. The site includes a paved boat ramp and primitive campground area.



Overstreet Landing also has great potential to be turned into a “Trailhead” since it provides vehicle access further north than any other site on the Blueway. The existing campground, parking, and boat ramp could be improved as needed. We would also recommend educational signage and maps be located at this location. Improvements recommended include a kayak landing and the addition of restrooms. A partnership could be made between Jackson County and MDWFP to accomplish these improvements.

Photo 8 – Overstreet Landing



### **8 - ROY CUMBEST BRIDGE BOAT RAMP – MILE 14.4**

The boat ramp at Roy Cumbest Bridge currently provides access to the Pascagoula River from Wade-Vancleave Road. This site is approximately 10-miles downstream of Overstreet Landing and 5-miles from North Deep Slough making it an ideal take-out or rest area. The site currently has a boat ramp and parking, but no amenities specific to paddlers.

The recommended site improvements include a dedicated kayak landing, parking improvements, restrooms, and a picnic area.



Photo 9 – Roy Cumbest Boat Ramp

### **9 - CASWELL ISLAND – MILE 22.0 + 0.3**

Caswell Island is a Point of Interest in Caswell Lake. The lake is part of the Pascagoula WMA but has private land bordering much of its eastern side. There is a potential for vehicle access via John Cumbest Road, but at the time of the site visit the area was inaccessible due to the river level.

Due to the private land along the eastern side, improvements at Caswell Island may be limited. The area is a potential emergency access point and may also provide a picnic area on the publicly owned western side of the lake. As previously mentioned, due to the private land ownership, there is the potential for Jackson County to enter a Public/Private Partnership to accomplish the improvements. The area has ecological significance with the Cypress Swamp in the area. It may also be possible to develop a campground within the adjacent WMA to provide an overnight spot near the 20-mile point along the trail. The next potential campground is approximately 14 miles south of Caswell Island at the Little River Marina, so it is recommended that camping amenities be provided near the Caswell Island area.



### **10 - CUMBEST BLUFF BOAT RAMP – MILE 23.4**

The Cumbest Bluff Boat Ramp is located adjacent to a bait shop and several private residences. The land near the ramp is privately owned. A Public/Private Partnership would be necessary to make significant improvements to the Boat Ramp area. The property across the River from the Cumbest Bluff Boat Ramp is part of the Ward Bayou WMA, so it may be possible to develop a campground in this area.

The bait shop is the northernmost point along the Blueway that provides an opportunity to



purchase food or drinks. Due to the public nature of the site, this area is not recommended for camping but would make an ideal take-out for a single day paddle or launch point for a trip through the southern section of the Blueway. The recommended improvements at the Cumbest Bluff Boat Ramp include a kayak landing, parking improvements, public restroom facilities, and a picnic area. These improvements may be accomplished through a Public-Private partnership. The property across the River from the Cumbest Bluff Boat Ramp is part of the Ward Bayou WMA, so it may be a possibility to develop a campground in this area.

Photo 10 – Cumbest Bluff Ramp in High Water

### **11 - EAST- WEST PASCAGOULA RIVER SPLIT – MILE 31.7**

The area at the East-West Pascagoula River Split is a Point of Interest and decision point for paddlers. This site has no vehicle access, but historic imagery shows a small sandbar on the northern shore of the eastern channel just beyond the split. The area was inaccessible due to high water levels and lack of vehicle access at the time of our site visit.

Signage at this area will be important to inform paddlers of the split in the River and provide directions regarding the Points of Interest downstream. No other improvements were included in the Opinion of Probable Cost at this site; however, the sandbar is a great stopping point. The potential exists to make improvements at the sandbar including restrooms, picnic areas, or campgrounds.



## PASCAGOULA RIVER – WEST BRANCH

### 12W -POTICAW LANDING BOAT RAMP – MILE 32.8 W + 0.1

The Poticaw Landing Boat Ramp is a fish camp on Poticaw Bayou located approximately 1.5 miles west from the East-West Split in the River. The area has multiple private residences and house boats. Much of the land near the ramp is privately owned. The site has good vehicle access via Poticaw Landing Road and there is adequate space for parking near the boat ramp. At the time of the site visit there were no stores open at the site, but it appeared a small store was there in the past.

The Poticaw Landing Boat Ramp is well positioned to be a highly trafficked launch for trips down the Western Split and a take-out point for trips along the northern or middle sections of the Blueway. The site would provide a good opportunity for a Public/Private Partnership with private entities to provide guide services, equipment rental and sales, and food and beverage sales. The recommended improvements at the site include a dedicated kayak landing, parking improvements, restroom facilities, and a picnic area.



Photo 11 - Poticaw Landing



### 13W - HICKORY HILLS COUNTRY CLUB – MILE 39.3 W



The Hickory Hills Country Club is located within a neighborhood in northern Gautier and has an existing restaurant and a boat ramp with associated parking behind the clubhouse. The area is well situated for day paddlers to stop for lunch or for leisure paddlers to launch for a daytrip through Gautier's Points of Interest. The existing facilities could provide opportunities for partnerships for equipment sales and rentals as well.

Hickory Hills existing parking area and boat ramp are deteriorated and need rehabilitation. There is also ample space to provide a picnic area, campground and dedicated kayak landing area. The site also needs appropriate signage to indicate the location of both parking and landing facilities. A Public/Private Partnership between the Club and Jackson County would be required to make improvements at this site.

Photo 12 - Hickory Hills Boat Ramp



Photo 13 - Hickory Hills Boat Ramp Parking Area



### 14W - I-10W REST STOP – MILE 40.7 W + .3



The I-10W Rest Stop is located adjacent to Farragut Lake which provides direct access to the Western Split of the Pascagoula River. The Rest Stop has existing restroom and picnic facilities along with ample parking and limited concession options. With improvements, this site could be utilized as a launching point for short trips down the Western Split or a take-out point for longer trips from upstream.

Photo 14 – I-10W Trail to Farragut Lake

The I-10 Rest Stop has most of the amenities desired already in place, but it will require a kayak landing, to allow easy access to the water. Additional wayfinding signage should also be placed at the mouth to Farragut Lake directing paddlers to the site. As this is a rest stop, coordination and consultation with the Mississippi Department of Transportation (MDOT) will be required prior to any improvements.



Photo 15 – I-10W Rest Stop Picnic Area near Farragut Lake



**15W - INDIAN POINT RV PARK – MILE 43.7 W + 0.8**

The Indian Point RV Park is located on Sioux Bayou approximately 0.8 miles from the main channel of the Western Split of the Pascagoula River. The park has an existing boat launch, restaurant, parking, restrooms, campground, picnic area, and other amenities. The site is a good place for visitors to the Blueway to set up camp and to explore several segments of the trail during their stay.

Indian Point RV Park would need a dedicated kayak landing to help separate the paddlers from the boat traffic. Depending on the location of the kayak landing additional parking may be required to accommodate the Blueway traffic. Indian Point RV Park is actively looking at enhancing nature-based tourism opportunities by adding or enhancing nature-based amenities including bird and wildlife watching hides, hiking and biking trails, and adding a dedicated kayak landing. These additions would make Indian Point RV Park a great Point of Interest with a focus on nature. A Public/Private Partnership between the Park and Jackson County would be required to make improvements at this site.



Photo 16 – Indian Point Boat Ramp



### 16W - HUCK'S COVE – MILE 45.5 W

Huck's Cove is a marina, bar, and grill located in Gautier just off the Western Split of the Pascagoula River. Huck's Cove would provide a great rest stop and entertainment destination for leisure paddlers. Huck's currently has a back deck with a small sand beach/river access point. Huck's serves food and beverages, has plenty of space for dining and leisure, and has restroom facilities. Huck's is a great destination along the Blueway but is not ideal for launching or take out.



The river access needs to be upgraded to accommodate canoe and kayak traffic and provide a safe landing separate from boat traffic. This could be accomplished with a floating launch from the existing pier or the addition of a natural landing near the existing water access. A Public/Private Partnership between Huck's Cove and Jackson County would be required to make improvements at this site.

Photo 17 – Huck's Cove Parking Area



Photo 18 – Huck's Cove Pier



**17W - MARY WALKER BAYOU MARINA – MILE 45.5 W +0.7**

The Mary Walker Bayou Marina is located approximately 0.7 miles up Mary Walker Bayou from the Western Split of the Pascagoula River. The marina currently houses many boats and is in the process of expanding and rehabilitating several more slips. The marina currently has a store selling fishing supplies and snacks, so the addition of kayak equipment and rentals would be an easy addition. The Marina also has restrooms and parking available.

The Marina would require a dedicated kayak landing and paddling area to promote separation between paddlers and boaters. The addition of a picnic area and parking improvements would also add to the amenities at the Marina. A Public/Private Partnership between the Marina and Jackson County would be required to make improvements at this site.



Photo 19 – Mary Walker Bayou Marina Store



Photo 20 – Mary Walker Bayou Marina Boat Ramp



Photo 21 – Horn Island Grill (*Facebook*)

Horn Island Grill is located approximately 500 feet south of Mary Walker Bayou Marina and has quickly become a local favorite. Horn Island Grill is on the water, has great food, offers live music 2 or 3 times a week and is easily accessible from the Marina. Horn Island Grill would make a great added amenity to the Mary Walker Bayou Marina Point of Interest experience.



**18W - GEORGE MARTIN PARK – MILE 45.5 W + 1.2**

The George Martin Park is a Gautier City Park located approximately 0.5 miles upstream of the Mary Walker Bayou Marina and 1.2 miles from the main channel of the Western Split of the Pascagoula River. The park has many improvements including a boat ramp, fishing pier, restrooms, picnic areas, trails, a playground, and a dedicated kayak launch with a handicap accessible launch. The only improvement that the park would need is signage identifying the Blueway.



Photo 22 – George Martin Park Kayak Launch

**19W - MGCCC ESTUARINE CENTER – MILE 45.5 W + 3.0**

The Mississippi Gulf Coast Community College (MGCCC) Estuarine Center is an ideal Point of Interest along the Blueway. It is an educational center situated on Mary Walker Bayou approximately 3 miles upstream of the confluence with the Western Split of the Pascagoula River. The MGCCC Estuarine Center has an existing boat ramp, parking, restrooms, and a large deck that can be used to picnic or relax. The site is a great launching point for a leisurely paddle around Gautier.



Photo 23 – MGCCC Estuarine Center

The MGCCC Estuarine Center includes an existing floating launch for kayaks with access from the existing deck. The addition of tables and chairs or benches on the existing deck could also provide additional space for paddlers to gather.



Photo 24 - MGCCC Estuarine Center Deck



**20W - SHEPARD STATE PARK – MILE 46.2 W+1**

The 400-acre Shepard State Park in Gautier is a location for RV, camper, or tent camping with modern amenities and activities including hiking, birding, disc golf, a dog park, boat launch, and competition-level archery range. The boat launch is located approximately 1 mile up a small bayou off the Western Split of the Pascagoula River. The area adjacent to the boat launch has a picnic area and a dedicated tent campground. The Park's many amenities make it a great base camp and landing spot for Blueway expeditions.

The area near the boat launch would benefit from a dedicated kayak landing to improve safety. The addition of a graveled parking area near the ramp would also add to the amenities the park offers paddlers. The area near the boat launch could also benefit from the addition of restrooms, but restrooms are available in other areas of the park.



Photo 25 – Shepard State Park Boat Ramp



Photo 26 – Shepard State Park Boat Ramp



## PASCAGOULA RIVER – EAST BRANCH

### 12E - LITTLE RIVER MARINA – MILE 36.5 E + 0.6

The Little River Marina is located approximately 0.6 miles up Robinson Bayou from the Eastern Split of the Pascagoula River. The Marina has a restaurant and bar, and it also has an RV park and campground. This site is a great launching point for a trip down the Eastern Split or a take-out point after a long paddle through the upper segment of the River.

The area has frequent boat traffic so the addition of a dedicated kayak landing and additional signage would improve safety. The area near the boat launch would also benefit from parking improvements and some outdoor seating. A Public/Private Partnership between the Marina and Jackson County would be required to make improvements at this site.



Photo 27 – Little River Marina Boat Ramp and Pier



Photo 28 – Little River Marina Restaurant



### 13E – FOUR MILE CREEK BOAT LAUNCH – MILE 37.5 E

The Four Mile Creek Boat Launch is located approximately 0.4 miles east of the main East Pascagoula River. The boat launch is located on Four Mile Creek, a small tributary of the Pascagoula River, and includes a paved boat ramp and camping areas. The site is a great launching point for a leisurely paddle down the Eastern Split of the Pascagoula River.

The site includes appropriate signage and has good access. Recommended improvements would include outdoor seating or a picnic area and a dedicated kayak landing.



Photo 29 – Four Mile Creek Boat Ramp



Photo 30 – Four Mile Creek Boat Ramp



## 14E - ROBERTS ROAD – MILE 39.2 E + 0.3



Photo 31 – Roberts Road Landing Boat Ramp

The Roberts Road Landing is located approximately 0.3 miles up Smear Bayou from the Eastern Split of the Pascagoula River. The landing is a private boat ramp with a small shop and boat slips adjacent to the parking area. There are no public amenities at the site. This area could be an ideal take-out spot for the paddlers coming down the Eastern Split but requires improvements to promote paddler safety. The recommended improvements include parking improvements, a picnic/seating area, and a dedicated kayak landing. Additional signage is also recommended to warn boaters of the presence of paddlers in the area. As previously mentioned, due to the private land ownership, there is the potential for Jackson County to enter a Public/Private Partnership to accomplish the improvements.



### 3.0 CONCEPT DEVELOPMENT

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At approximately 80 miles long, the Pascagoula River is the largest free flowing (unaltered by dams, channelization, levees, or similar human impact.) river in the contiguous US. The Pascagoula Watershed drains approximately 8,800 square miles (5,632,000-acres) and includes a diverse range of habitats including cypress-tupelo swamps, marshes, wetlands, oxbow lakes and pine ridges. The Pascagoula River itself is wide and slow and in high water spreads out over its banks into the woods, creating a network of species diverse lakes and bayous. Periods of low water exposes countless sandbars and bayous. The Pascagoula Watershed is home to a diverse range of animal species including minks, muskrats, snakes, beavers, raccoons, possums, armadillos, mice, wild hogs, squirrels, coyotes, deer, herons, nutrias, bobcats, and alligators. According to the Nature Conservancy, the Pascagoula Watershed is also home to over 320 species of birds including a variety of wading birds and several rare species such as the Mississippi sandhill crane and swallow-tailed kites.

The Pascagoula River – Jackson County Blueway Connection project provides paddlers with an amazing natural experience through bottomland hardwood forests, cypress swamps, and coastal marshes. The planned route has many Points of Interest and access points in place that create a solid foundation for the establishment of the Blueway Connection. The project will drive economic growth in Jackson County through nature-based tourism and create recreational opportunities for the residents of the Gulf Coast. The Pascagoula River – Jackson County Blueway Connection will be the longest Blueway on the Mississippi Gulf Coast and its addition to the existing Pascagoula River George County Blueway and the existing Pascagoula River Jackson County Blueway will create over 100-miles of recreational opportunities for paddlers of varying levels of experience.

The existing infrastructure (including boat launches, parks, restaurants, and campgrounds) is the foundation on which the Blueway Connection can be built. With minimal improvements the Pascagoula River – Jackson County Blueway Connection can become a reality. The majority of the route is surrounded by publicly owned lands including the Pascagoula River WMA, the Ward Bayou WMA, and other state-owned lands. This will limit the need for property acquisition. The use of public-private partnerships can further reduce the need for required acquisitions. Business owners in the community have shown great support for the project and willingness to work with the County to create a special experience for paddlers.

The Pascagoula River – Jackson County Blueway Connection would create an corridor through various ecosystems that make up the Mississippi Gulf Coast. The Blueway would begin in the hardwood forests and oxbow lakes of northern Jackson County, then continue south into the cypress swamps, and finally through coastal marsh near the mouth of the Pascagoula River; thus, creating a diverse ecological experience for visitors.

With over 65 miles of River planned to be included in the Blueway, the scope of the project does present some challenges. Due to the length of the route passing through the natural areas of the Pascagoula River floodplain there are three segments along the trail that do not have emergency access within the recommended five-mile interval. These segments exist between Roy Cumbest Bridge and Caswell Island, between Cumbest Bluff Boat Ramp and Poticaw Landing Boat Ramp, and between Poticaw Landing Boat Ramp and Hickory Hills Country Club. With coordination with the MDWFP, access could be developed through the WMAs to create emergency take-out points in these areas. It would also be beneficial to develop additional camping areas between the Cumbest Bluff Boat Ramp and the East-West Pascagoula River Split.



The project will also help drive economic growth in the region. Connecting the existing Pascagoula River George County Blueway and the existing Pascagoula River Jackson County Blueway would create a destination for paddlers and an opportunity to spend multiple days on the River and in the region. The overall Blueway created would provide over 100 miles of marked waterway, providing numerous opportunities for paddlers ranging from an afternoon of bar/restaurant hopping in Gautier to a week-long overnight nature adventure beginning in Merrill, George County, and ending at Shepard State Park, Gautier or connecting to the existing Pascagoula River Jackson County Blueway. The Blueway Connection will create opportunities for lodging, equipment rental and sales, guide services, license sales, restaurant and store sales, and events such as races, triathlons, fishing rodeos, etc.

Nature-based tourism is continuing to grow in Coastal Mississippi, and the Pascagoula River – Jackson County Blueway Connection will be a valuable addition to the offerings of Jackson County. Recent studies suggest that water-based trails provide economic benefits and help diversify local economies by supporting a greater mix of businesses in local communities. These economic benefits can be significantly increased by expanding camping and lodging opportunities, developing guide training and promotion incentives, holding organized events such as kayak races, and participating in collaborative marketing efforts. While the economic impact of blueways on local economies is fairly modest, it is recommended that blueway developers and operators work with existing businesses to provide additional food, lodging, and outfitting services designed to encourage longer and more frequent stays. The availability of data related to the economic impacts of nature-based tourism has increased as these types of tourism amenities have become more common. Coastal Mississippi accounts for one-third of the state’s tourism employees, expenditures, and taxes. This fact alone places Coastal Mississippi as one of the highest-performing tourism destinations in the nation. The following provides some interesting information about people participating in nature-based tourism activities.

<b>Who is an Ecotourist?</b>	
Age	Ranges from 35-54 years old, although age varied with activity and other factors such as cost.
Gender	Generally, 50% are female and 50% are male, although differences by activity exist.
Education	82% are college graduates. However, a shift in interest was found in those with less education, indicating the expansion of ecotourism into mainstream markets.
Party Composition	60% of experienced ecotourists prefer to travel as a couple, 15% travel with families, and 13% travel alone.
Trip Duration	The majority of experienced ecotourists preferred trips lasting 8-14 days.
Expenditure	Experienced ecotourists are generally willing to spend more than general tourists, the largest group was willing to spend over \$1,500 per trip on average.
Important Elements of the Trip	Experienced ecotourists indicate that they seek experiences that include: 1) a wilderness setting, 2) wildlife viewing, and 3) hiking and trekking.

EBSCO Sustainability Watch: Ecotourism



The State of Mississippi's 2021 Economic Contribution Report indicates that 23 million visitors spent \$6.727 billion on all tourism categories, resulting in \$407.4 million for the State's general fund. Other statistics relative to nature-based tourism in Mississippi include:

- Direct payroll for outdoor recreation is \$7.8 million (2021)
- Coastal Mississippi is the largest tourism market in the State and in 2021 accounted for \$2.2 billion in total tourism expenditures, 17% of total tourism employment, and generated over \$240 million in taxes and fees for state and local public entities.

A report from the Outdoor Industry Association provides the following insight into outdoor recreation in Mississippi.

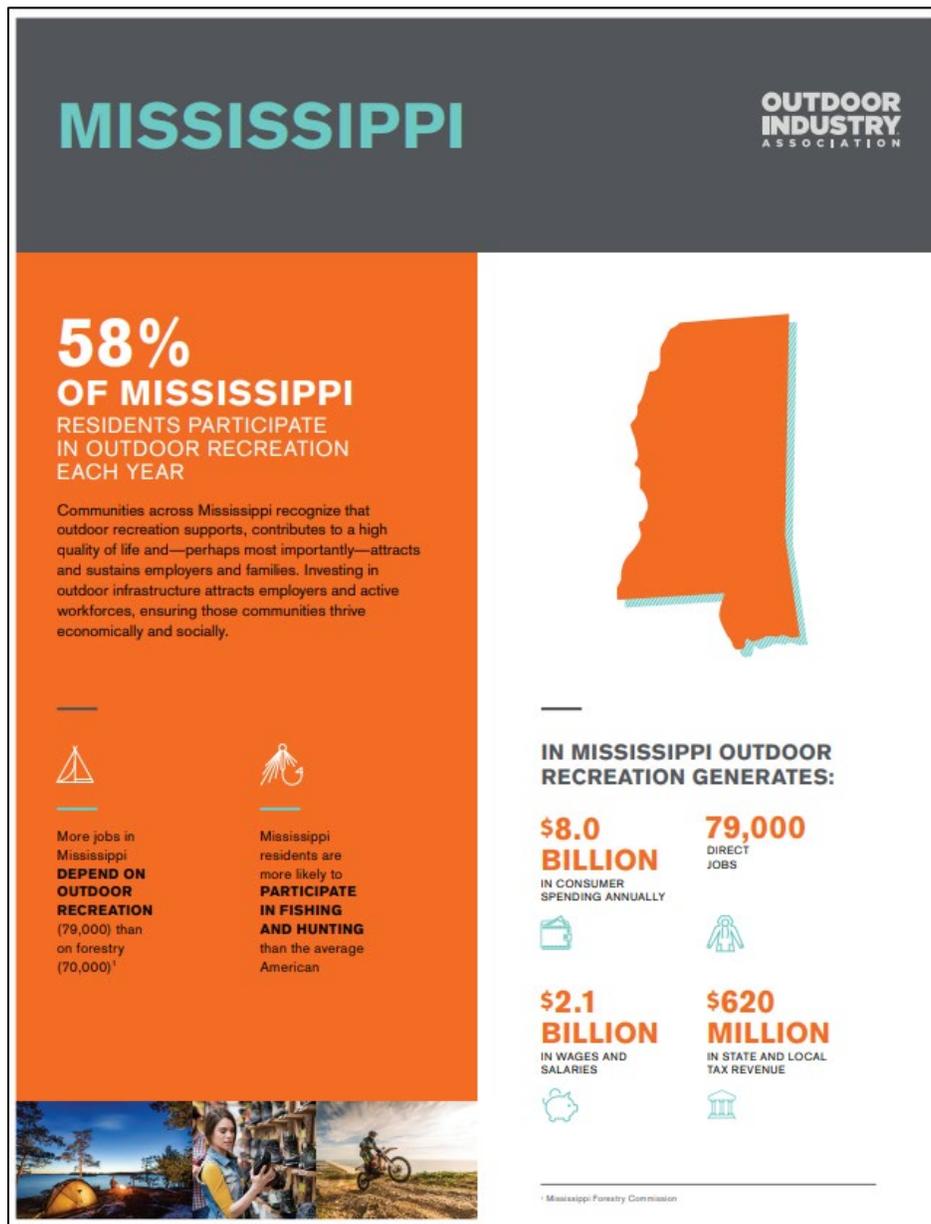


Figure 3. Outdoor Industry Association Graphic



Additionally, a 2020 report from Coastal Mississippi provides the following insight into coastal residents' sentiments toward tourism:

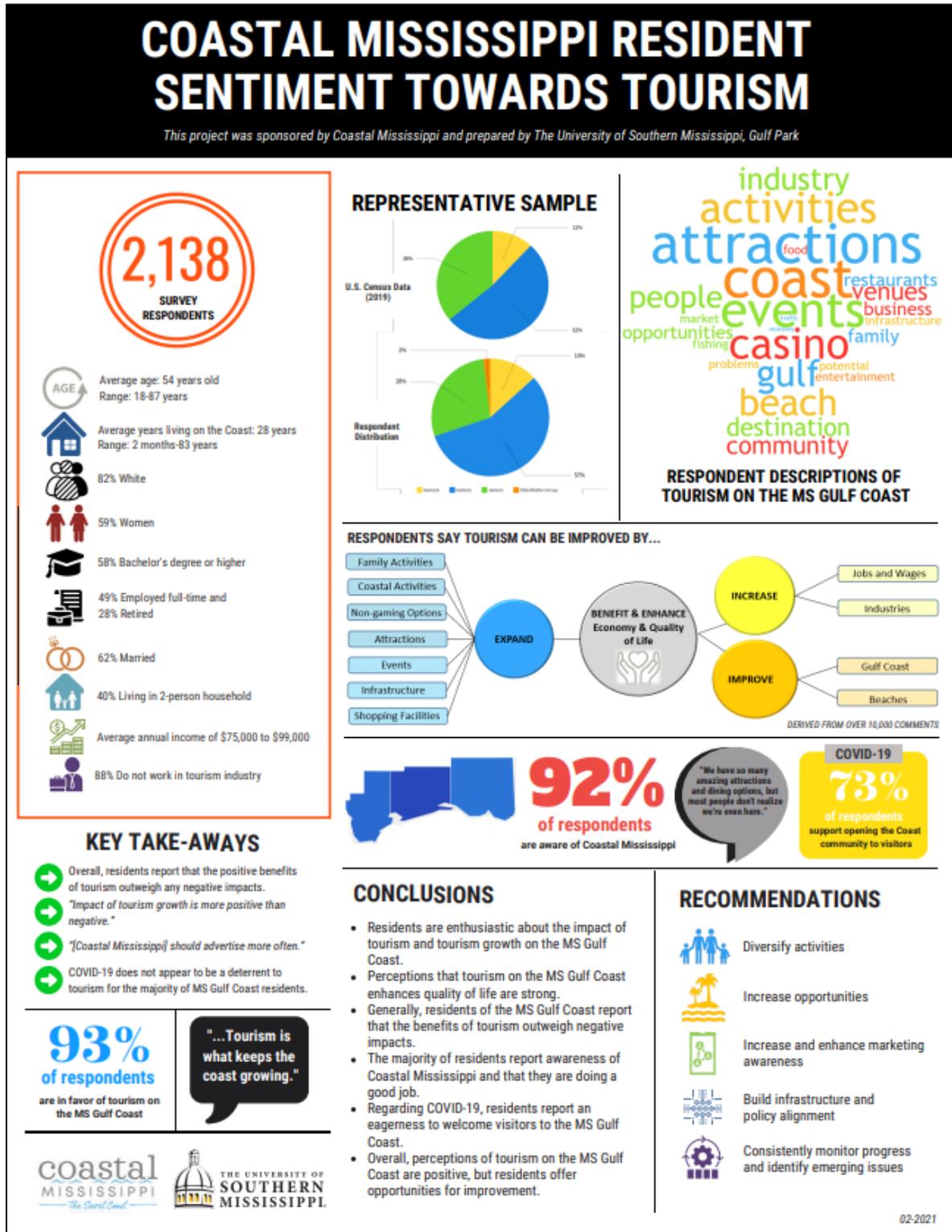


Figure 4. Coastal Mississippi Report Results



Implementation of the Pascagoula River – Jackson County Blueway Connection will enhance Coastal Mississippi’s nature-based tourism industry by expanding trip options, creating new job opportunities, and contributing to the local tax base. Current data indicates a growing demand for nature-based tourism options, likely driven in part by the emphasis on “social distancing” during the COVID pandemic from 2020-2022. It is expected that this growth trend will continue and the Blueway Connection project will contribute to the infrastructure necessary to meet the growing demand.

One of the most important components of a successful Blueway is clear communication to paddlers for planning and wayfinding. This is most effectively done through clear wayfinding signage and maps. The Pascagoula River - Jackson County Blueway Connection will require extensive wayfinding signage along the River to keep paddlers in the main channel. Development and distribution of high-quality trail maps will be vital to the success of the Blueway and safety of the paddlers. Maps will assist paddlers in planning trips and navigating the River. Access to the Blueway information will also be very important. It is recommended that a website and mobile app be developed to assist in publicizing the Blueway, its points of interest, and its partners. The mobile app could also include real-time digital mapping and wayfinding to assist paddlers while navigating the Blueway. Several of the location and points of interest identified in this report have the potential to become inaccessible during high water. River levels can be viewed on the National Oceanic and Atmospheric Administration's (NOAAs) National Weather Service Website. The proposed mobile app could incorporate river level data and weather conditions to inform paddlers of the current paddling conditions.

It is recommended that Jackson County gather additional support from local groups such as the Mississippi Gulf Coast National Heritage Area, Mississippi Department of Wildlife, Fisheries, and Parks, Pascagoula River Basin Alliance, The Nature Conservancy, The Land Trust for the Mississippi Coastal Plain, the Pascagoula River Audubon Center, Wildlife MS, and others. The Pascagoula River – Jackson County Blueway Connection is referenced in the *Jackson County Bicycle, Pedestrian, and Trails Master Plan*. It is also recommended that the County requests inclusion of the project in the Mississippi Gulf Coast National Heritage Area’s *Blueways Design Guide* as a potential project and promoted through the Nature-based Tourism Plan for Coastal Mississippi.



## 4.0 OPINION OF PROBABLE COST

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Based on the recommendations described in **Section 2**, AllenES developed a concept level Opinion of Probable Cost (OPC). These recommendations are summarized in the table shown in **Appendix A**. The OPC was based on Q1 2022 pricing. Costs assumed no price escalation. The OPC may also be found in **Appendix A**.

Each of the proposed improvements and the items used to build costs for each are provided below.

### **KAYAK LANDING/LAUNCH**

A kayak landing refers to a structure/feature used to assist in navigation of a kayaker from the shore into or out of a waterbody. These features will be utilized at the sites that lack natural parking and shoring for kayakers. The landing is conceptually understood to be a sandy sloped shorefront that can accommodate multiple kayaks and allow pedestrians to park, store kayaks, and enter the water safely and separate from boat traffic. A general kayak landing is assumed to be approximately 20-foot-wide sandy shorefront. Costs assume that heavy equipment will excavate the shorefront and install sand sloping into the water. The total cost for a kayak landing includes the following components:

- Mobilization,
- Equipment Rentals,
- Excavation, and
- Sand Installation.

In some areas a floating kayak launch may be attached to existing docks but all sites were assumed to have the kayak landing described above. A launch may be substituted during final design if it is determined to be more economical or site appropriate.

### **PARKING AREA**

As many of the sites are accessible by roadway, parking areas are essential for incoming boaters, kayakers, campers, and visitors. Some sites do not have any parking, while others need improvements to their existing parking areas. Generally, the parking area design (13,000 square feet) will accommodate ten (10) passenger vehicles with 1 ADA compliant space, two-way traffic in/out, and additionally provides parking space for a truck and 20-foot-long trailer. Parking areas also assume they will require connection to other features within the site utilizing an outdoor recreation access route. Costs assume that heavy equipment will mobilize, clear, and grub the designated area. A woven geotextile fabric will be installed over the area, and gravel may then be installed. The total cost for a parking area includes the following components:

- Mobilization,
- Clearing and Grubbing,
- Woven Geotextile Separation Fabric (US 200),
- 8" Gravel,
- Parking Blocks, and
- 300' of Outdoor Recreation Access Route



### **PRIMITIVE CAMPGROUND AREA**

Primitive campground areas are recommended at some of the larger sites. A primitive campground area would allow these sites to accommodate a small family and make the sites more attractive to visitors. Generally, the campground area would consist of a graveled tent area and picnic area, connected by a small walkway. The graveled area would be contained by treated perimeter timbers. Costing assumes the campground area to have a picnic table and a stationary firepit with grill. The estimated total cost for a primitive campground area includes the following components:

- Perimeter Timbers,
- Geotextile Separation Fabric,
- Light Gravel,
- Picnic Table, and
- Fire Pit with Grill.

Conceptually, the primitive campground area may look like the following photograph.



Photo 32 – Example Campground



### **PICNIC AREA**

One of the more prevalent and desired features of the Points of Interest will be a picnic area. Conceptually, the picnic area would accommodate four small families and would include four (4) picnic tables and two (2) stationary grills. The picnic area would be located in a rectangular graveled area with treated perimeter timbers. The estimated total cost for a picnic area includes the following components:

- Perimeter Timbers,
- Geotextile Separation Fabric,
- Gravel,
- Picnic Tables, and
- Stationary Grills.

### **PERMANENT RESTROOMS**

Permanent restrooms are possible at sites that are publicly owned and are positioned in areas that are less susceptible to frequent flooding. Due to the proximity to the river these facilities would need to be resilient to flood waters. The facilities utilized in the conceptual opinion of probable cost consist of masonry block buildings with two separate restroom facilities in each. The building is assumed to be a 16-foot by 9-foot with 2 single stall restroom facilities attached to a septic system. In some areas the building may require a raised foundation to rise above the FEMA flood plain. The opinion of cost for each facility includes the following components:

- Mobilization
- Concrete Slab
- Elevated Masonry Block Building
- Septic System Installation
- Fixtures and Plumbing



Photo 33 – Permanent Restroom Building



## COMFORT STATIONS

Comfort Stations are desired at many of the Points of Interest that are susceptible to seasonal flooding. AllenES assumed that these sites have one unisex portable restroom. As there are many options for portable restroom facilities, AllenES assumed cost for a 6-foot by 6-foot by 8-foot-high portable wooden restroom structure. The comfort station is designed to have a dry composting toilet with subsurface disposal bed for liquids; a solar panel on the roof with battery and controller for positive draft of air through composteer to control odors and provide power for lights; and a solar LED light with motion sensor. These facilities are portable and can be moved in and out of the area based on river levels. The estimated total cost for a restroom includes the following components:

- Construction of Structure,
- Composting Toilet,
- Solar Power Setup, and
- Mobilization to Site.

The following photos illustrate one of the restroom units.



Photo 34 – Comfort Station



Photo 35 – Comfort Station Fill Line



## SIGNAGE

The Blueway Connection will require mile markers, Point of Interest identifiers, and educational signage to assist kayakers along the travel route and to also identify campground and launch areas.



Photo 36 – Example of Mississippi Gulf Coast Blueways Signage (*MS Gulf Coast, Blueways Design Guide, 2018*)

AllenES assumed the installation of one barge-driven marine pile for each mile of the selected route (approximately 65 miles) that will include mile marker signs. The estimated total cost for a signage includes the following components:

- Mobilization
- Barge-Driven Marine Pile Sign Base, and
- Sign

## KAYAK RACK WITH WASH STATION

A recommended amenity at the more popular takeout spots is a kayak rack with a built-in wash station. A rack and wash allows paddlers to clean their equipment prior to loading it and prevents the potential spread of invasive species. The wash stations are likely only feasible at locations that have water service already. The estimated total cost for a kayak rack with a wash station includes the following components:

- Mobilization,
- Concrete Foundation
- Water Service Line
- Kayak Rack with Wash Station



Photo 37 – Kayak Rack



## **5.0 APPENDICES**

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**APPENDIX A**

**POINT OF INTEREST EVALUATION  
AND  
CONCEPTUAL OPINION OF PROBABLE COST**



**Point of Interest Evaluation  
Jackson County - Pascagoula River Blueway Connection**

No.	Landing	Existing Boat Ramp	Kayak Landing	New Parking	Parking Improvements	Permanent Restrooms	Comfort Stations	Food	Picnic Area	Kayak Rack	Signage	Campground
1	Jackson Co. George Co. Line										N	
2	Cedar Creek Estates Turps Dr.	X	P								N	
3	Soley Rd.		P								N	
4	Pascagoula River at North Deep Slough		N		N		N		N	N	N	X
5	Pascagoula River at South Deep Slough								N		N	X
6	Big Black Creek										N	
7	Overstreet Landing	X	N		N	N			N	N	N	
8	Roy Cumbest Bridge Boat Ramp	X	N	N		N			N	N	N	P
9	Caswell Island								N		N	N
10	Cumbest Bluff Boat Ramp	X	N		N	N		X	P		N	
11	Split E & W Pascagoula River										N	
12 W	Poticaw Landing Boat Ramp W	X	P		N	P		P	P	N	N	
13 W	Hickory Hills Country Club	X	N		N	X		X	N	N	N	
14 W	I-10 Rest Stop W		N		X	X		X	X	N	N	
15 W	Indian Point RV Park W	X	N	P	N	X		X	X	N	N	
16 W	Huck's Cove W		N		X	X		X	X		N	
17 W	Mary Walker Bayou Marina W	X	N		P	X		X	P	N	N	
18 W	George Martin Park W	X	X		X	X			X	N	N	
19 W	MGCCC Estuarine Center	X	X		X	X			N	N	N	
20 W	Shepard State Park W	X	N	N	X		P		X	N	N	X
12 E	Little River Marina E	X	N		N	X		X	P	N	N	RV Parking
13 E	Four Mile Boat Creek Boat Launch	X	P		X	P			N	N	X	X
14 E	Roberts Road E	X	N		P				P	N	N	RV Parking

Note: X=Existing N=Need P=Possible  
Blank options were not accessible, not possible, or not recommended

**APPENDIX A.1 – POINT OF INTEREST EVALUATION**



**Conceptual Opinion Of Probable Cost  
Jackson County - Pascagoula River Blueway Connection**

No.	Landing	Kayak Landing	New Parking	Parking Improvements	Permanent Restrooms	Comfort Stations	Picnic Area	Kayak Rack	Signage	Campground	Total
1	Jackson Co. George Co. Line	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 8,200	\$ -	\$ 8,200
2	Cedar Creek Estates Turps Dr.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 4,100
3	Soley Rd.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 4,100
4	Pascagoula River at North Deep Slough	\$ 17,300	\$ -	\$ 35,000	\$ -	\$ 12,800	\$ 14,300	\$ 11,300	\$ 4,100	\$ -	\$ 94,800
5	Pascagoula River at South Deep Slough	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,300	\$ -	\$ 4,100	\$ -	\$ 18,400
6	Big Black Creek	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 4,100
7	Overstreet Landing	\$ 17,300	\$ -	\$ 35,000	\$ 75,600	\$ -	\$ 14,300	\$ 11,300	\$ 8,200	\$ -	\$ 161,700
8	Roy Cumbest Bridge Boat Ramp	\$ 17,300	\$ 68,000	\$ -	\$ 75,600	\$ -	\$ 14,300	\$ -	\$ 4,100	\$ 29,000	\$ 194,700
9	Caswell Island	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 4,100
10	Cumbest Bluff Boat Ramp	\$ 17,300	\$ -	\$ 35,000	\$ 75,600	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 132,000
11	Split E & W Pascagoula River	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 4,100
12 W	Poticaw Landing Boat Ramp W	\$ -	\$ -	\$ 35,000	\$ -	\$ -	\$ -	\$ 11,300	\$ 8,200	\$ -	\$ 54,500
13 W	Hickory Hills Country Club	\$ 17,300	\$ -	\$ 35,000	\$ -	\$ -	\$ 14,300	\$ 11,300	\$ 4,100	\$ -	\$ 82,000
14 W	I-10 Rest Stop W	\$ 17,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 21,400
15 W	Indian Point RV Park W	\$ 17,300	\$ -	\$ 35,000	\$ -	\$ -	\$ -	\$ 11,300	\$ 4,100	\$ -	\$ 67,700
16 W	Huck's Cove W	\$ 17,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,300	\$ 4,100	\$ -	\$ 32,700
17 W	Mary Walker Bayou Marina W	\$ 17,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 4,100	\$ -	\$ 21,400
18 W	George Martin Park W	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,300	\$ 4,100	\$ -	\$ 15,400
19 W	MGCCC Estuarine Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,300	\$ 11,300	\$ 4,100	\$ -	\$ 29,700
20 W	Shepard State Park W	\$ 17,300	\$ 68,000	\$ -	\$ -	\$ -	\$ -	\$ 11,300	\$ 8,200	\$ -	\$ 104,800
12 E	Little River Marina E	\$ 17,300	\$ -	\$ 35,000	\$ -	\$ -	\$ -	\$ 11,300	\$ 4,100	\$ -	\$ 67,700
13 E	Four Mile Boat Creek Boat Launch	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,300	\$ 11,300	\$ -	\$ -	\$ 25,600
14 E	Roberts Road E	\$ 17,300	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 11,300	\$ 4,100	\$ -	\$ 32,700
--	New Campgrounds	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 29,000	\$ 29,000
--	Wayfinding Signs - 50 Each	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 205,000	\$ -	\$ 205,000
--	Mile Marker Signs - 65 Each	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 266,500	\$ -	\$ 266,500
<b>Project Subtotal Total \$ 1,729,700</b>											
<b>Maps, Website, and App Development \$ 100,000</b>											
<b>Professional Services (15%) \$ 274,500</b>											
<b>Contingency (20%) \$ 420,900</b>											
<b>Project Total \$ 2,150,600</b>											

Note: X=Existing N=Need P=Possible  
Blank options were not accessible, not possible, or not recommended

**APPENDIX A.2 – CONCEPTUAL OPINION OF PROBABLE COST**



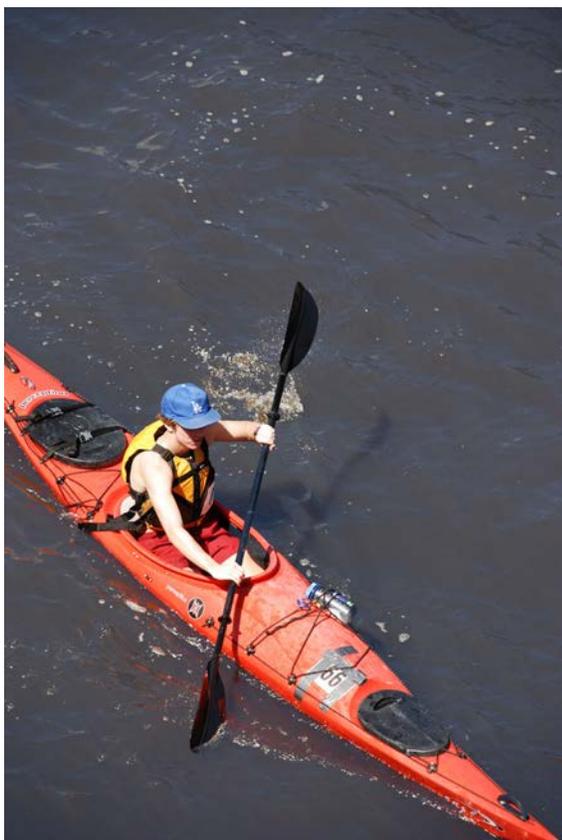
## **APPENDIX B**

### **MISSISSIPPI GULF COAST BLUEWAY DESIGN GUIDE**



# BLUEWAYS DESIGN GUIDE

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The Mississippi Gulf Coast National Heritage Area (MGCNHA) seeks to celebrate the individuality of each designated Blueway, while providing tools to further promote and enhance usage by locals and visitors. Mississippi Gulf Coast National Heritage Area Blueways is a program to provide a unified marketing effort along with financial and design assistance to existing and future Blueways. This overarching theme provides cohesiveness that will encourage the adventurer to explore designated trails in South Mississippi with pertinent, consistent information that is readily accessible.

#### **WHAT IS A BLUEWAY?**

The National Park Service defines blueway, or water trail, as “a stretch of river, a shoreline, or an ocean that has been mapped out with intent to create an educational, scenic, and challenging experience for recreational canoers and kayakers. The trails are organized by local volunteers with the help of public officials and private landowners, all of whom promote its proper use and maintenance.” (Source: Water Trail Planning 101, National Park Service)

#### **WHAT IS THE DIFFERENCE BETWEEN A BLUEWAY AND A WATER TRAIL?**

American Rivers describes blue trails, water trails, and blueways, one and the same, as “...the water equivalent to hiking trails. They are created to facilitate recreation in and along rivers, coastal areas and other water bodies. They are found in urban settings and remote environments. Blue trails come in all shapes and sizes and are used by paddlers, anglers, hikers, picnickers, and those just seeking a bit of solitude.” (Source: americanrivers.org)

#### **WHY IS A BLUEWAY OR WATER TRAIL IMPORTANT TO THE LOCAL ECONOMY?**

Water trail programs contribute to the health of the outdoor recreation industry, which includes 140 million Americans who spent \$646 billion on outdoor recreation, and created \$80 billion per year in national, state, and local tax revenues. They have the potential to diversify and improve the economy of connecting communities. (Source: The Outdoor Recreation Economy, 2012)

#### **WHY ARE BLUEWAYS IMPORTANT TO A NATIONAL HERITAGE AREA?**

National Heritage Areas are places where historic, cultural, and natural resources combine to form cohesive, nationally important landscapes. Unlike national parks, National Heritage Areas are large, lived-in landscapes. Therefore, the celebration and promotion of blueways are a component to the management plan for the Mississippi Gulf Coast National Heritage Area.

#### **WHY SHOULD ESTABLISHED BLUEWAYS CONSIDER INCORPORATING MGCNHA BLUEWAYS BRAND IN THE EXISTING MATERIALS?**

There are ten (10) established blueways, with others currently in planning stages, and many additional opportunities. By adopting an overarching theme for marketing purposes, each blueway or water trail keeps its own identity, but is part of a larger network of trails that can be promoted locally, state-wide, and nation-wide in a unified way. Most importantly, this program provides for the replacement of missing signage along blueway trails and at trail-heads.

Contact the MGCNHA to incorporate planned blueways into the network.

# Creating a Blueway in 5 Steps

1

## The why, the where, and the who

Is there a special waterway in your area?

- Identify the intended blueway.

What are your reasons for creating a blueway? (Examples: tourism, preservation of natural areas, etc.)

Who will be involved as potential partners?

- Establish a presentation outlining the vision that can be used to present in person and draw support and commitment from the necessary public agencies, private land owners, and public interest groups.
- You will need both public and private support on state and county levels. Government agencies that tend to be involved are: EPA, Mississippi Department of Wildlife, Fisheries and Parks, Mississippi Department of Environmental Quality, the Secretary of State, and the Mississippi Department of Marine Resources. Other partners might include: local Chambers of Commerce, Police Department, Watershed Planning Committee, First Responders, and hospitals with health initiatives. For private land owners with properties surrounding the intended blueway, a land ownership and use agreement will need to be established to make the blueway possible. Interest groups such as: kayak/canoe clubs, local enthusiasts, kayak rental companies, local recreation-based businesses and restaurants along the waterway. Interested citizens should also be engaged.

Hold a preliminary committee meeting involving all necessary groups. Plan to meet at least monthly until implementation is successful.

- Create a vision statement that clearly articulates what the group is intending to accomplish.
- Identify and establish the projected blueway including name, length, existing boat ramps and launches
- Identify existing features of the projected blueway including signage needed, security necessary, who will maintain the blueway, types of habitat, etc.
- Outline step-by-step process and assign deadlines for completion
- Assign specific roles and responsibilities to delegated representatives
- Determine costs and budget: Cost of proposed waterway and continued maintenance, primary sources of funding, and whether there is a need to have outside consultant assistance?

Plan next public meeting with key stakeholders to further discuss the blueway and instill a public buy-in for stewardship.

# Creating a Blueway in 5 Steps

2

## Preliminary Physical Inventory and Assessment

Collect mapping and background reports on the waterway area.

- Utilize a software program (i.e. Google Earth) to create a virtual tour of the blueway and establish GPS coordinates, and create a general design of the map.
- Identify public access points to the water that may be suitable as launch sites.

Take a field trip with involved representatives of the proposed blueway.

- Verify software maps with physical location, including mileage.
- Verify launch sites and handicap accessibility.
- Establish correct and proper names of areas (ask local population to verify).
- Utilize local knowledge to identify and take note of points of interest such as: wildlife areas, birding spots, fishing areas, land trail access.
- Establish water conditions using scale of Easy, Intermediate, and Difficult.
- Identify potential hazards.

Record the location of the Blueways component including making connections to points of interest: land-based trails and other recreation, natural, and cultural resources.

---

3

## Feasibility and Blueway Design

Devise goals and objectives to define the character of the proposed Blueway including provisions for protecting the resource that is also responsive to the needs of the landowners, the community, and the users. Draft land use permissions and agreements if necessary.

Prepare a Design Plan for all the Blueway components including signage and interpretive strategies.

- Establish stewardship and maintenance programs:
  - Blueways Management Action Plan
  - Volunteer programs
  - Outreach programs
- Promote strategies that have minimum-impact practices such as “Leave No Trace”.
- Promote species awareness to prevent transferring of invasive species.
- Follow and sign best practices for public safety.
- As part of the goals and objectives, prepare an Implementation Plan outlining timeline, costs, roles and responsibilities.

Review risk management issues for both development and operations, including provision of insurance.

# Creating a Blueway in 5 Steps

4

## Marketing and Public Engagement

Develop a Blueway Brochure:

- Implement consistent text with the Blueway design such as “Leave No Trace”.
- List requirements and rules for Blueway such as permits needed for Wildlife Management Areas or camping.
- List important information such as numbers to contact in the event of an emergency or violation.
- Implement Blueways map with all points of interest: List all names of focus points, for example: Mississippi Gulf Coast National Heritage Area.
- List all government agency sponsorships and partnerships .

Design a website:

- Website needs to have consistent information with design and brochure.
- Create a PDF to download trail map and information.
- Verify safety information is up to date, and provide information regarding trail maintenance, issues or hazards, volunteer opportunities and community events.

Conduct public engagement sessions throughout the process:

- Initially collect information about the resources and gauge level of interest in Blueway.
- Present the development scheme for feedback and for public buy-in.

Host special promotional events.

Conduct clean-up campaigns.

Recruit volunteers to undertake the day-to-day stewardship tasks.

Establish outreach programs to recruit new Blueway users and volunteers such as high schools, colleges, universities, and military.

5

## Implementation

Finalize the design with documents of infrastructure elements like access roads, parking, trails, launches, and amenities such as benches and trash cans.

- Record the design conditions with GPS coordinates.
- Begin permitting process; a completed design will be necessary.
- Monitor to ensure the resource is being protected and that user regulations are being followed.
- Ensure safety information is effectively warning users of the risks, and that seasonal variations in the water conditions are accurately presented.



## Elements of a Successful Blueway Trail

- Trail Name
- Trailhead Location(s)
- Latitude/Longitude
- Length of Trail
- Level of Difficulty
- Description
- Trail Amenities:
  - parking
  - restrooms
  - drinking water
  - trash disposal
  - signage
  - launch/pull-out
  - camping area
  - available cell phone signal
- Points of Interest:
  - scenic vistas
  - bayous/creeks/springs
  - wetlands
  - forests
  - cultural landmarks
  - historic landmarks
- Level of Accessibility
- Security:
  - lighted area
  - law enforcement patrols
- Natural Resources:
  - ecological classification
  - vegetation types
  - water resources
  - fisheries
  - wildlife
  - threatened or endangered species
  - habitat stewardship
- Cultural Resources:
  - archaeological or historical features
  - socioeconomic features

# Trail Types

The Mississippi Gulf Coast offers two types of blueway trails: those in streams, rivers, and bayous; and tidal estuaries, bays, and coastal trails. In most cases, streams and bayous are characterized as having slower travel speeds, and many resting points. Large rivers, along with tidal estuaries, bays, and coastal areas, may have faster traveling speeds and motorized vessels.

## Streams, Rivers, and Bayous

These are primarily used by non-motorized vehicles such as canoes and kayaks. Paddling routes should be designed to offer safe and reliable passage of a canoe or kayak, with trips of varying length to accommodate people with different levels of endurance. The primary consideration in the designation of paddling routes includes adequate signage, amenities, and support facilities.

- Access points should be located at maximum intervals of 5 miles.
- Camping and sanitary facilities should be located at maximum intervals of 20 miles.
- Portages should be kept to a minimum, but if required, should consist of established landings and a well-maintained natural surface trail without steep slopes.
- Accurate information about the route should be available at the trailhead and online, including a map of the river, mileage, points of interest, level of difficulty, etc.
- Uniform signage should include directional signage, wayfinding, points of interest, support facilities, and mileage.
- Hazards along the trail should be clearly marked.

## Tidal Estuaries and Coastal Trails

Boating trails at bays, estuaries, and the barrier islands are another way to explore the coastal area waterways. Most of these areas permit motorized vessels, so paddlers should be aware of the potential for conflicts, and learn the standard navigation rules. Boaters should strive to know all the expected requirements, including what to do in an encounter with commercial vessels, vessels engaged in fishing and diving and law enforcement personnel. At an absolute minimum, paddlers should know when to yield or give-way to another vessel.

Unlike roads and highways, waterways do not have road signs and many handheld maps do not accurately represent waterway information. Instead, the waterways have Aids To Navigation, all of those man-made objects used by mariners to determine position or a safe course. Aids To Navigation include buoys, day beacons, lights, lightships, lighthouses, radio beacons, fog signals, marks and other devices used to provide “street” signs on the water. Aids To Navigation include all the visible, audible and electronic symbols that are established by government and private authorities for piloting purposes. A clear, illustrated guide to navigation rules and Aids To Navigation may be found at: <https://www.boatus.org/navigation-rules/>

# Launch Points

Paddlers of all abilities want to launch and land smoothly without capsizing or damaging their boats. They need firm surfaces that support movement, and sufficient space to accommodate the length of their boat during put-in and take-out. Climbing in and out of boats can be especially challenging when there is significant height difference between seat levels and the shoreline. Additionally, federal law requires that all boating facilities provide access to paddlers with disabilities whenever possible. (Source: National Park Service, The ABCs of Logical, Lasting Launches)

## Beaches + Natural Slopes:

The simplest and most cost-effective launches require little or no construction. Paddlers may use natural features (e.g., riverbanks, rock outcrops, banks adjacent to bridges) or existing shorelines with decks, bulkheads or boardwalks. Any of these can suffice as long as currents in the area are not too strong, water depth allows for stable launching without damage to boats, and the vertical space between the shore and surface of the water is not excessive. Paddlers must also have enough space to place their boats in the water and easily step in or out of them. Native soil, sand, gravel, or vegetation may be added to improve drainage and control erosion; fist-sized rip-rap can be added to trap sediment and fill in over time.

- Natural materials unique to a particular area may blend with the natural landscape and be most easily accessible, such as crushed oyster shells.
- Flat rocks can provide excellent firm surfaces. Pointed or jagged rocks are not recommended, as they create unstable surfaces that can damage boats or injure paddlers.
- Matting can be used to temporarily stabilize a sandy beach with a firm substrate.
- Gravel can be used to form simple ramps, preferably in areas with minimal wave action or water level fluctuation.
- Braided rope, tied to a tree or other shoreline anchor, can serve as a makeshift handrail.
- Existing shoreline configurations (e.g., bulkheads, boardwalks, uneven rocks) can be converted into beach areas by adding firm sand substrates and/or gravel; these are called “implanted” beaches.



Source: River Management Society, National Park Service, Prepare to Launch  
Images: Allison Anderson

# Launch Points

## Boat Ramps, Docks + Piers:

Concrete ramps may be used as launches by themselves or in combination with floating launches, piers, bridges, dock abutments, bulkheads, and rock cribs. If the ramp connects to a floating launch using a bridge, a hinged metal transfer plate will allow an easier transition. Concrete must be installed in dry conditions. The area must be totally clear of water when any portion of the ramp extends beneath the surface of the water. The underwater area may need to be dried out with a cofferdam, a watertight enclosure that is temporarily used to pump water out of an area during construction. If lime is used in this process, it must be managed carefully so it does not enter the water where it can pose a danger to riparian species. Pre-cast concrete planks and panels should only be used in bodies of water with little to no current. Reinforced concrete is used for underwater sections of the ramp, and is typically 6-8" thick with reinforcing steel, and must be designed for its specific location by a professional engineer. Surface finish, including corrugated concrete, rock salt, or exposed aggregate may be applied to concrete to increase traction or improve its appearance. One popular finish uses 1" by 1" V-grooves formed at a 60-degree angle to the centerline. V-grooves should not be used on launches that serve wheelchair use as they are difficult to travel over/on when operating a wheelchair.

Pier structures can span marshes or shallow areas to enable launching in water of sufficient depth. In some cases, "approach pads" or walkway structures are designed to enable access to the launch itself. Structures are composed of a deck and frame, which stand above water level at all times, and are supported by piers. Decking is frequently made of wood, concrete, or composite wood materials. Piles are usually made of treated timber, steel pipes, or concrete.

Floating launches are structures that are not built into the bottom of the water body. Typically composed of a deck, frame, and floats, they are anchored to the shore. Paddlers launch from the deck, which is supported by the frame, while the floats beneath the frame provide buoyancy. Anchoring devices help to stabilize the launch and protect it from the elements. Pile guides are often used, allowing launches to adjust to changing water levels while keeping their decks horizontal and steady. When floating launches attach to connecting structures with varying heights (e.g., gangways), pile guides can help to maintain a relatively small cross slope, making launches more likely to be accessible to paddlers with disabilities. Floating launches are most effective when used on water with little debris and minimal exposure to strong currents or waves. In general, they can withstand flow rates up to 0.25 feet per second. Floating launches should be removed and secured during flooding or high flow events, and unless they are specifically designed to endure ice formation, they should be removed before freezing occurs.

A variety of materials can be used for the decks, frames, and floats that make up a floating launch:



- Plastics are regularly used for this launch design and have various levels of durability.
- Treated wood is another material that is commonly used for this type of design. Treated wood must be used with caution in regard to the environment and to the health of those involved in construction. While treated wood can last up to five times as long as untreated wood, there are risks involved with their preservatives and chemical treatments.
- Metal decking, such as aluminum, is used mainly for heavy-use launches that also serve motorized boats. Metal grating provides effective drainage and traction.

Source: River Management Society, National Park Service, Prepare to Launch  
Image: Bayou Bogue Homa, Allison Anderson

# Launch Points

## Stairs, Bulkheads + Seawalls:

Staircases composed of timber steps may be cost effective alternatives to concrete when working with a launch site along a steep shoreline. Timber may be built into a steep shoreline in a variety of manners, depending on a site's needs. For example, timber should be installed from the bottom of a slope upwards, stacked one upon another, in order to reinforce an eroding slope. Materials are pressure-treated timber, anchored with 1/2" rebar stakes, typically 24" long (4 at each step, minimum).

Bulkheads and the coastal seawall may present challenges for launching kayaks and canoes, but commercial ladders and lifts can be mounted on private bulkheads to make launching easier. Nothing may be mounted on public seawalls, levees, or other coastal infrastructure. The concrete seawall may offer some risk for launching, as adjacent water depths are unknown, steps may be slippery and footing compromised, and currents may threaten paddlers with overturning.



Source: River Management Society, National Park Service, Prepare to Launch

# Accessibility

The Americans with Disabilities Act and Architectural Barriers Act Accessibility Guidelines, dated July 23, 2004 and enforced since March 2012, states:

Advisory 1001.1 Scope: Unless otherwise modified or specially addressed in Chapter 10, all other ADAAG provisions apply to the design and construction of recreational facilities and elements.

This section addresses recreational boating facilities, boarding piers, fishing piers and platforms, water play components, and sloped entries to water areas.

Accessible routes: Floors and ground surfaces shall be stable, firm, and slip resistant. The clear width shall be 36" minimum. The running slope shall be not steeper than 1:20. Cross slopes shall not be steeper than 1:48. Ramps provided with compliant handrails may be 1:12 maximum rise, with landings every 30" of vertical rise.

See specific requirements defined in the code: <https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/background/adaag>



*St Clair, MI: ADA canoe/kayak launch*

# Signage

Creating a trail network requires consistent, recognizable signage that guides visitors to recreational areas, explains trail conditions, highlights, and safety information, and provides information that will make their experience more enjoyable. Blueway trails are no different from land-based trails in this respect, even though they may present different challenges to visitors.

Trail users must have access to information, and it can be shared through a wide variety of formats including trailhead kiosks, brochures, websites, guidebooks, and trail signs. If trail users are uncertain about trail locations or directions, they may become disoriented, or follow waterways that leave them stranded or damage the environment. Signs handled in a consistent manner allow visitors to trust the information they are presented with, and better predict where the next piece of information is located.

The objectives of trail signage are to:

- Improve the trail user experience
- Enhance the safety of people, vehicles, and property
- Improve travel within and between trail systems
- Increase comfort and confidence in navigating the trail network
- Promote recreational trail use
- Protect the environment by directing visitors onto designated trails

A standardized signage system enhances the overall appearance of a trail network. These simple guidelines and templates are an attempt to create a personality or image that visitors are consistently drawn to explore. The signage elements included in this document use consistency in all signage elements. We encourage trail operators to be consistent with nomenclature; blueways should be named for the commonly known name of the waterway. Blueways should always be labelled with a consistent name, font, and colors.

This signage program provides a template for written directions, information, graphic maps, and precautionary messages in a clear and concise graphic manner. The MGCNHA is cognizant of the potential for sign pollution and wishes to eliminate extraneous or redundant signage, allowing visitors to self-navigate to their preferred destinations. Trail operators should ensure the signs are easy to read while moving, either from an automobile (guide signs) or a boat (directional signs and mile markers). In-depth information signage should be reserved for trailheads and other waiting/gathering areas.

There are several sign types included in the catalog:

- Guide Signs provide wayfinding to trailheads, parking areas, and pull-out points
- Directional Signs, Mile Markers, and Cautionary Signs follow the trail to identify launch locations, points of interest, hazards, and identify progress along the trail, which is useful in an emergency
- Trailhead Signage include the trail map, legend, and rules of the trail
- Interpretive Signage provide information to enhance the experience, on ecological, historic, scenic, and cultural amenities along the trail
- Points of Interest Signage identify places to rest, get supplies, have a meal, or explore a publicly accessible feature

Signs should be placed where they are clearly visible to trail users. Eye level will be different depending on the type of trail user; this means that automobile signs are oriented to passengers seated in moving vehicles, and on-trail signs are oriented to paddlers. They should be well out of the path of travel, and a safe distance from the edge of the roadway, waterway, or parking area. If multiple signs are mounted on the same post, the primary message should be in the top position on the post.

# Signage



**Sign Maintenance:** Providing trail signage comes with a responsibility for long-term management. Trail operators, including volunteer organizations, should ensure that trail signs are maintained in good order, and that the signs continue to reflect the nature of the trail. It should also be noted that signage to be installed within a highway right-of-way must be approved by the Mississippi Department of Transportation; on city or county roads, the responsibility for placement and mounting details is typically determined by the local authority. Be sure to keep vegetation pruned from in front of signs at all times, especially in periods of high summer growth.

Viewing Distance (feet)	Capital Letter Height (inches)
0-20'	0.75"
21-27'	1"
28-41'	1.5"
42-55'	2"
56-83'	3"
84-111'	4"

**Sign Materials:** The preferred material for all signs is 5mm di-bond aluminum signage with vinyl graphics and a laminate layer for exterior use. Reflective material may be desirable for sign surfaces for high visibility in the dark.

**Mounting and Installation:** Signs should be installed with locking fasteners to make removal difficult. Aluminum nails should be used to attach signs. While vandalism is a possibility, MGCNHA recommends enlisting neighbors, users, and/or outfitters to monitor the trail and report any incidents.

**Accessories:** MGCNHA recommends trail operators do not incorporate space for printed map distribution at trailside locations, as most paddlers will use a website or photograph of the trailhead map. Brochure holders are fragile, subject to vandalism, and the maps need constant replenishing. Instead, use QR codes or web addresses to direct paddlers to online maps and information, which can be more easily updated. QR codes for each of the existing blueways are included in the blueway templates.

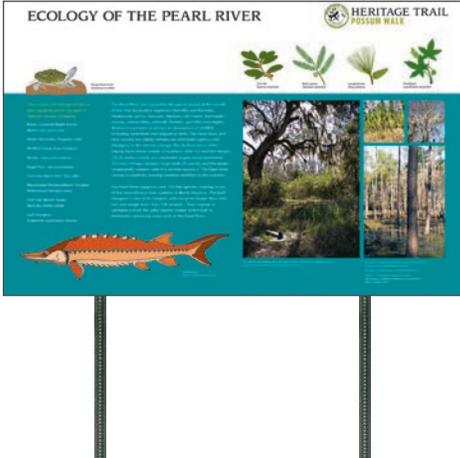
*(Source: New York State Parks Trails Technical Signage Guidelines)*

# Catalog of Signage

## Directional Signs: Federal and State Highways + Local Roads



## Trailheads, Maps + Interpretive Signs



## On the Water: Mile Markers, Directions + Points of Interest



## Directional Signs: Federal + State Highways

18"



Canoeing - RS 079

18"



Kayaking - RS 118

On federal highways, a standard set of icons provide directional information to blueway destinations. They are square format in the standard color used for guidance to sites of public recreation or cultural interest. The Federal Highway Administration Manual on Uniform Traffic Control Devices has established a guide for appropriate ink colors, and recreational signs use Pantone 469.

## Directional Signs: Local Roads



Local roads allow greater personalization of signage. The blueways community has agreed that consistency is desirable, so the attached directional signs should be used to point visitors to trailheads and launch points. The signs may be 4-color or monochrome using the standard Pantone 469 Brown. Fonts include Mosk and Aquatico.



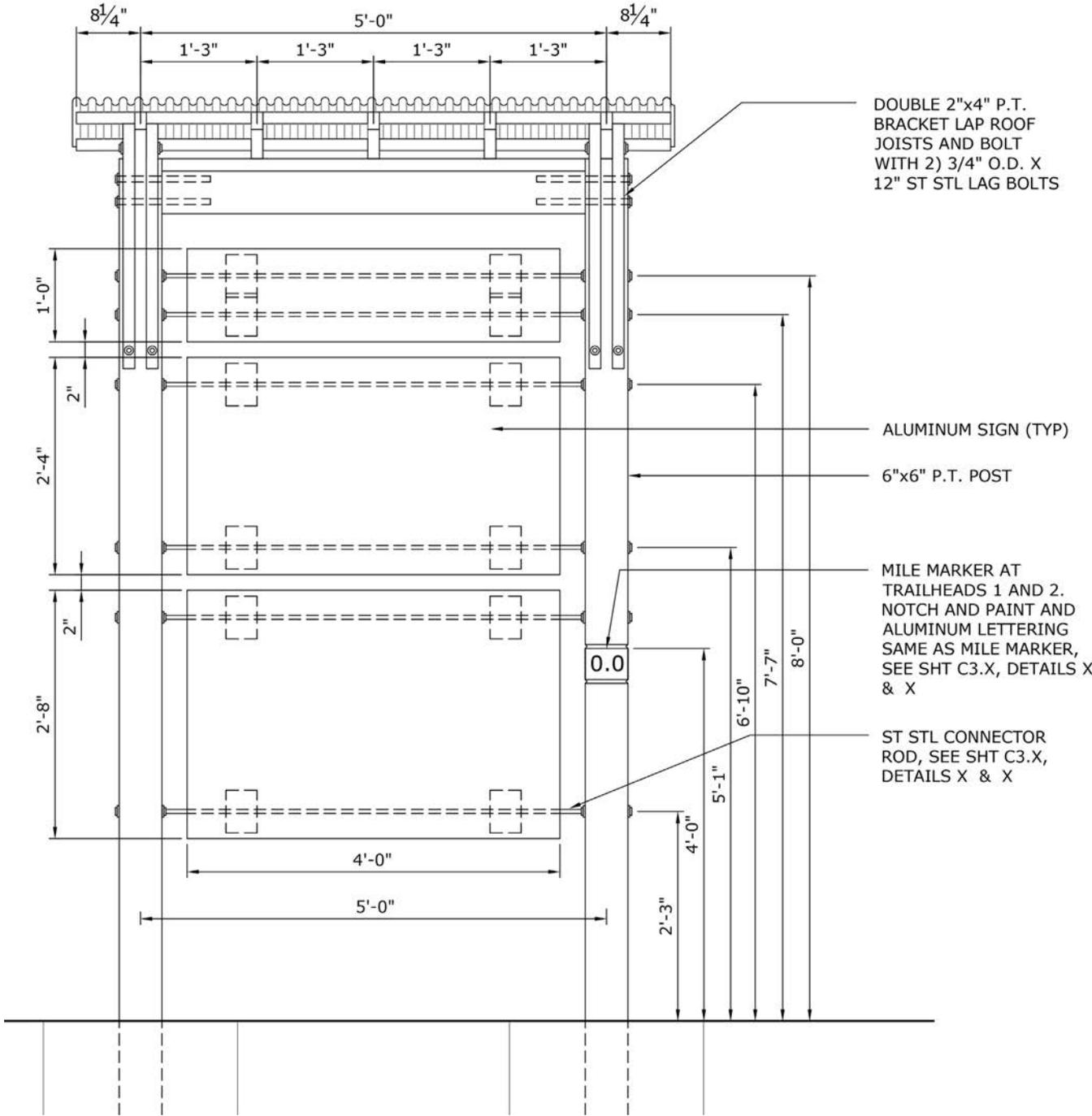
## Trailhead Signs

Upon arrival at the trailhead, signs should show additional information, such as a blueway map, known hazards, trail rules and access, and points of interest along the way. Signage may be mounted on standard posts or on a kiosk for greater visibility and durability.



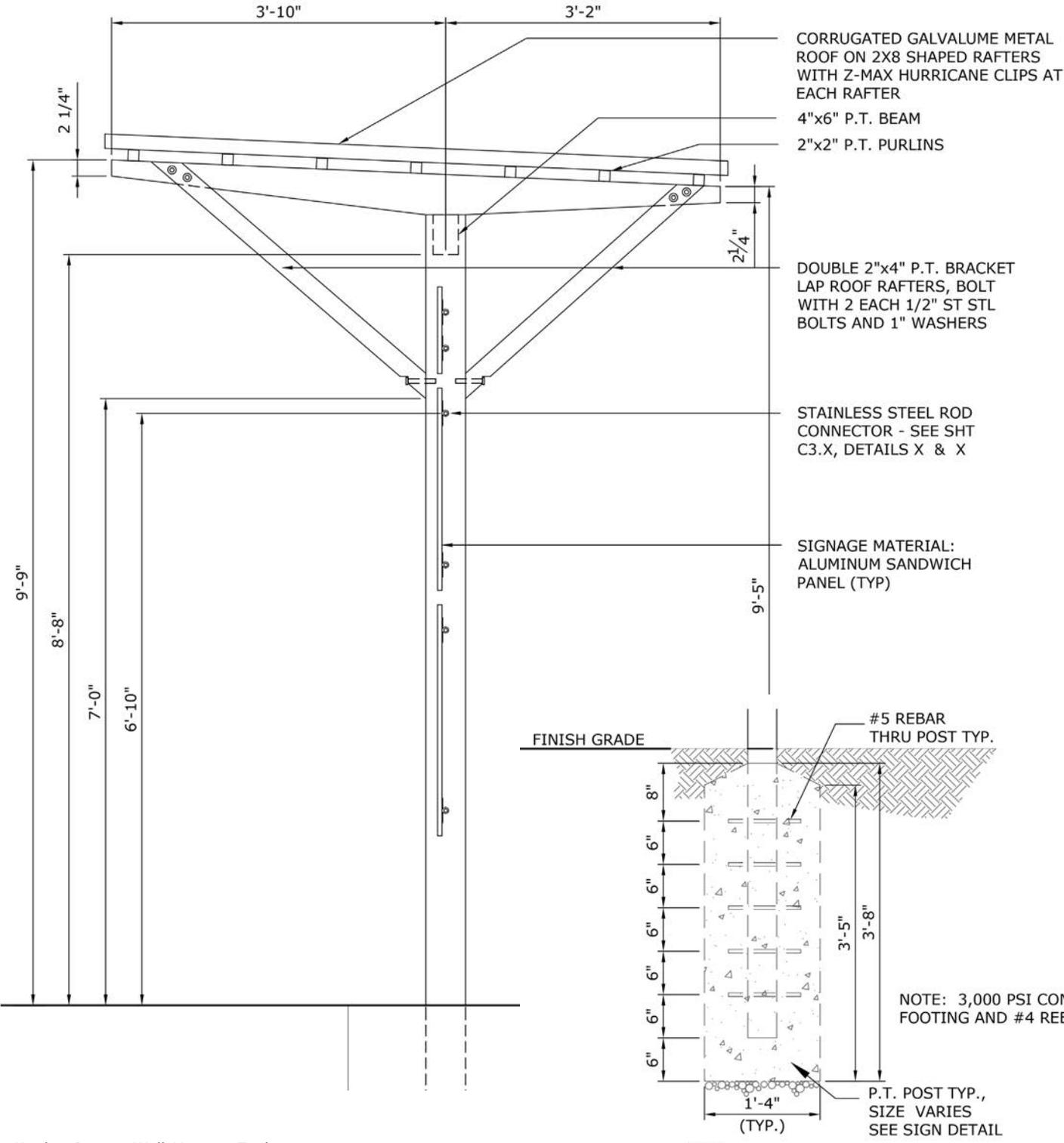
*Kiosk at Possum Walk Heritage Trail  
Image: Allison Anderson*

# Trailhead Signs



Kiosk at Possum Walk Heritage Trail  
 Courtesy of Compton Engineering and unabridged Architecture

# Trailhead Signs



Kiosk at Possum Walk Heritage Trail  
 Courtesy of Compton Engineering and unabridged Architecture

# Trailhead Signs

48"

**JOURDAN RIVER BLUEWAY**

Lat: 30°23'1.01"N  
Long: 89°27'53.60"W

The Jourdan River Blueway Trail invites canoers and kayakers to explore a 8.5 mile trail through coastal floodplains and a riverine ecological system. The river trail links the McLeod Park canoe launch to the Bayou Talla boat launch.

The tranquil waters of the upper Jourdan River offer a haven for birds, wildlife... and paddlers! From Bayou Bacon to Bayou Talla, the blueway trail guides kayakers and canoe enthusiasts past artesian springs, hardwood forests, and through the natural beauty of Hancock County. From the boat launch at McLeod Park, paddlers may go upriver past oxbow lakes and bluffs to Bayou Bacon. The trail continues downriver past sandbars, the Highway 603 bridge, and houses and restaurants of Jourdan River Shores to the Bayou Talla boat launch. The Jourdan River below McLeod Park is a popular area for high-speed water sports, so remain aware!

Cutting the ribbon on the blueway trail in June 2012, with the Hancock County Board of Supervisors, the Land Trust for the Mississippi Coastal Plain, and local paddlers.

**Bayou Bacon**  
The Jourdan River is one of the major coastal streams that flow north to the Gulf of Mexico. It is a coldwater influenced freshwater river, with oysters being found upstream along the river. All year, Bayou Bacon will find largemouth bass, freshwater catfish, striped bass... and whatever the size of your kayak.

**Sandbars**  
These appear as ever changing formations that drift with winds and tides, but often form the center of the river. Sandbars are popular spots to picnic, and play. The occasional oxbow lake allows paddlers to enjoy a quiet resting spot. Please respect the privacy of adjacent landowners.

**Birds**  
This area has excellent feeding, nesting, and wintering habitat for migrating birds such as brown pelicans, white pelicans, and cormorants. Throughout the year hawks, osprey eagles and other species make their homes in the tall trees.

**Oxbow Lakes**  
Formed when river meanders, and the outer side of a meander cut off to form a lake. In low coastal plains, the river meanders widely, creating oxbow lakes and floodplains. Oxbow lakes were once a part of the river, but over time water in the channels connecting them where they once flowed to the sea.

**Scenic Point One: McLeod Nature Trail**  
The nature trail provides a beautiful 1.25 mile walk, winding through a pine and hardwood forest parallel to the Jourdan River. Many trees are identified with historical names, and birds and animals will probably cross your path.

**McLeod Park**  
The park includes 236 acres with a park store, 15 carpools, primitive campsites, bathrooms, restrooms, play area, two boat launches, and fishing pier. Scenic Point Two McLeod Boat Launch provides ramps and trailers a safe spot to put in, with a rest water zone.

**Bayou Talla Boat Launch**  
The river is lined with smooth cypress and wild rice along the Upper Jourdan River, with floating lashed oyster along the shoreline. The fish is named for the charcoal fish which provided fuel for cooking and heating in this area, made from the forests of pine trees.

**Native Tribes**  
Ochonee and Creek Indians were once residents of this area. Creek Indians are members of the Iroquois and Shawnee of the Southeast. A chief Indian is a type of archaeological site made up of ancient mounds of shells. Over time, oysters and other trees cover some of the shells, eventually forming an island of oyster land.

**Artesian Springs**  
When the groundwater beneath the earth's crust is forced to a surface, it bubbles up to form an artesian spring. Near this side marker is an artesian spring that bubbles up through the river. Look for it on the south side of the river - it is especially easy to spot at low tide. The location is a spring to river.

**Scenic Point Four: Bayou Talla**  
The Bayou Talla Boat Launch is located at the end of Comstock Street in NOLA, Mississippi. There is no charge to launch, and parking is available. A collecting table is conveniently located on the river. Monitors such as "Threatened River Dams" and the operation for high altitude content. Reads when found copper pills, and it's more difficult to catch the mussels... they might have used this launch to open their shells, fighting to New Orleans and across the country!

32"

In this example from Hancock County Scenic Byways, the blueway map includes photos of the people and scenery along the water trail, and information on points of interest. This map is located at the Gatehouse to McLeod Park. It also includes latitude/longitude coordinates, mile markers showing distances, launch and takeout points, major roadways, and other features of the paddle - all critical information to have before setting out on the trail.

Images courtesy of Compton Engineering and unabridged Architecture

# Interpretive Signs

Interpretive signs guide people to immerse themselves in rich cultural history and natural scenery. Before researching, drafting the text, or designing a sign, the need for the interpretive sign must be determined. Answer the following questions:

- Is there something that needs explaining?
- Will something be missed without interpretation?
- Is a sign the appropriate form of interpretation?
- Will the sign help prevent damage to the site?
- Will enough visitors see the sign to make it cost effective?
- Who is the target audience of the sign?
- Will the signs damage the site?

There are different types of interpretive signs. Ask yourself if you want your sign to inform, educate, or entertain the audience. What are your objectives?

- What do you want the audience to know and learn?
- What do you want the audience to do?
- How do you want the audience to feel?

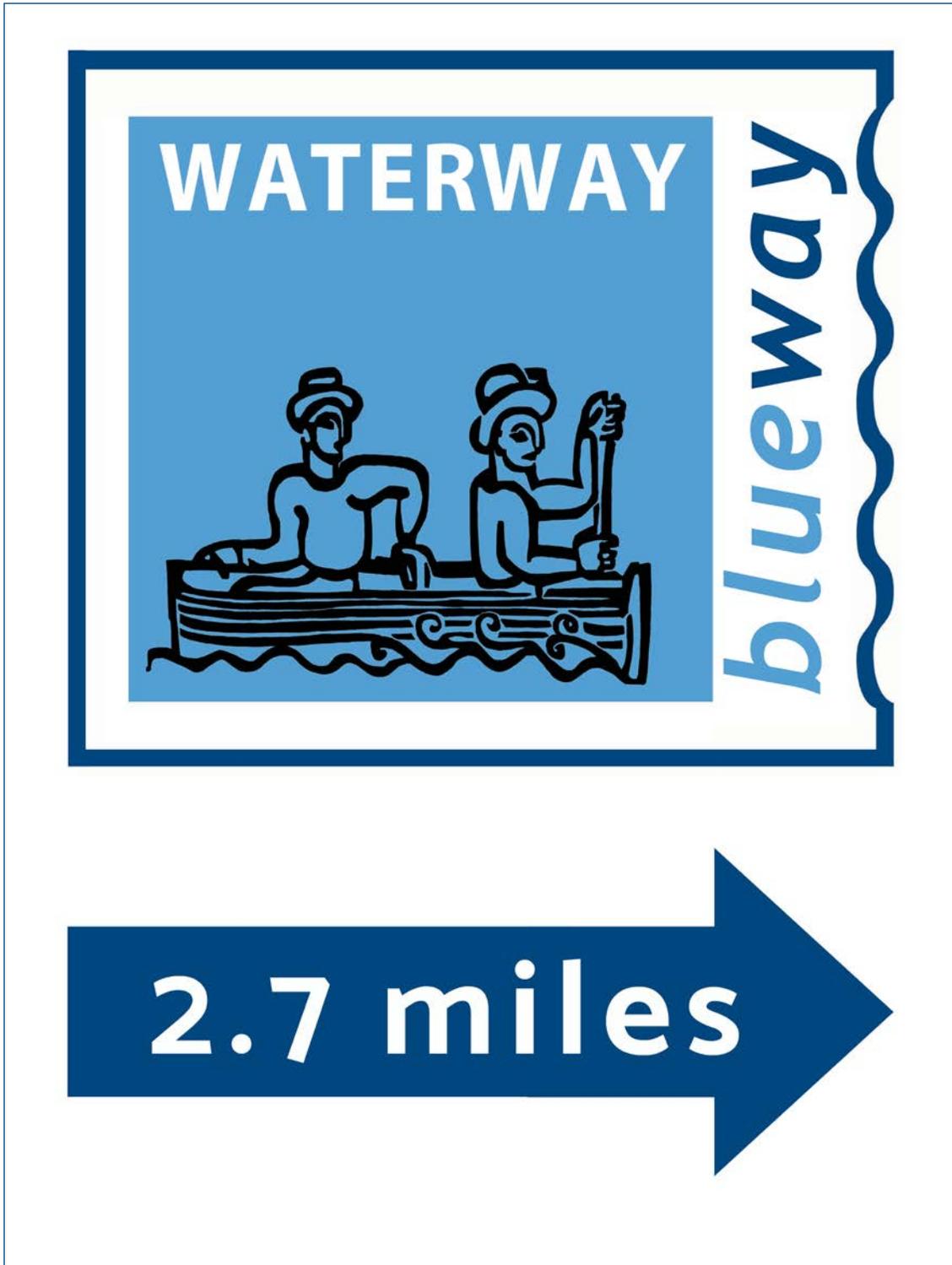
1. Interpretive signs illuminate the power of place. Clear educational messages and content inform the public of each site's historic significance.
2. Interpretive panels do more than provide just dates and facts. They also inspire a feeling of stewardship in site visitors, strengthening awareness of cultural and natural resources.
3. Thoughtful and well designed signage programs demonstrate community pride in local heritage.
4. Interpretive signage is self-sufficient: it provides a high-quality interpretive experience without the requirements of staff or facilities to maintain.
5. Interpretive signs provide a consistent message available to many visitors at one time, can be viewed at the visitors' convenience, and are available 24 hours a day.
6. Interpretive signage enhances visitor perceptions of a site, city, or region. By drawing attention to an area's unique history and identity, tourists better appreciate the story of a new place. Captivating interpretive signs and exhibits can become destinations in their own right.



# Guide Signs on the Water: Directions

*(Use where blueway has adopted the Walter Anderson logo)*

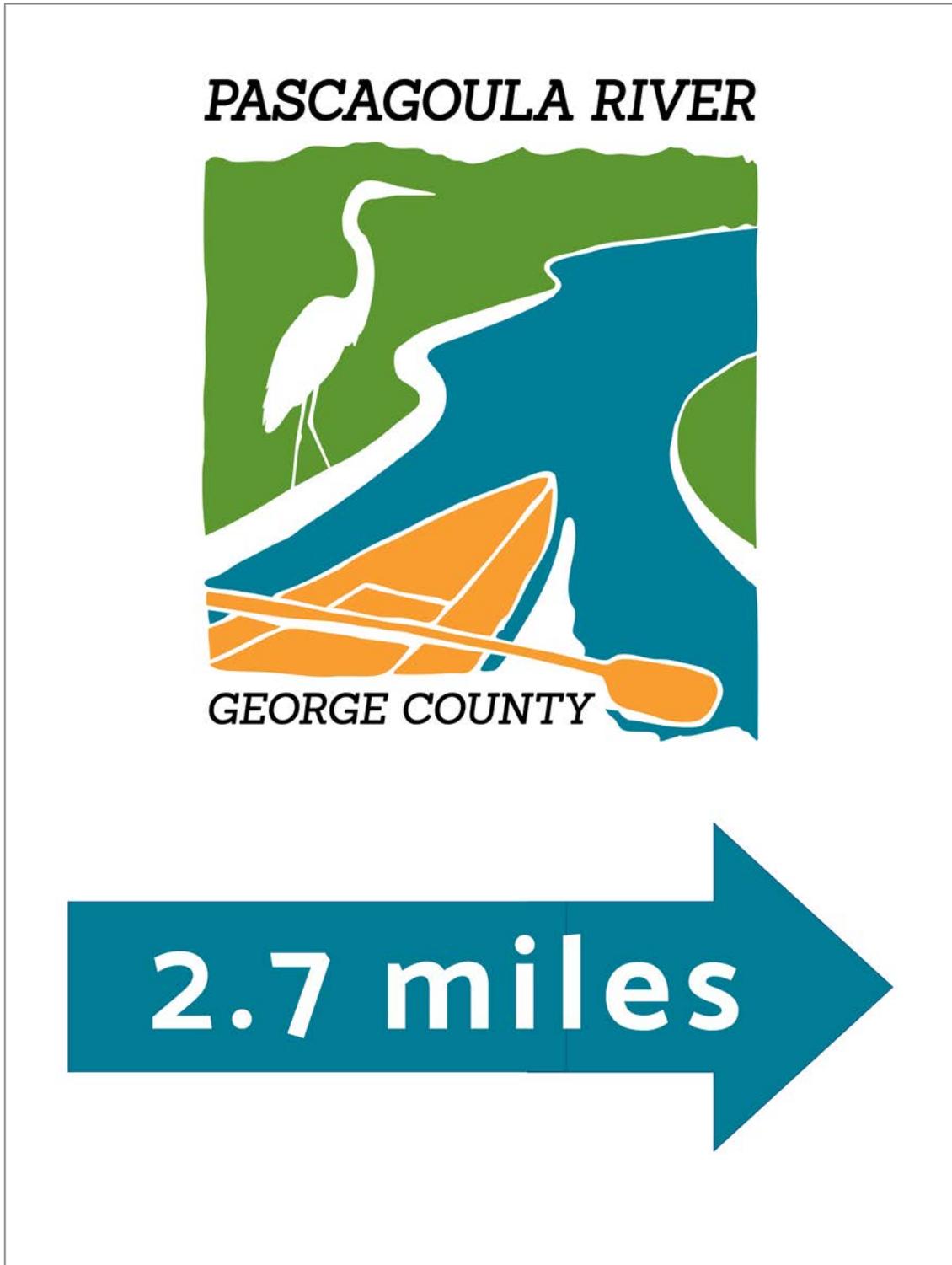
18"



24"

Guide Signs on the Water: Directions  
*(Use where blueway has adopted their own logo)*

18"



24"

# Guide Signs on the Water: Directions

*(Use where blueway has not adopted a logo)*

18"



24"

# Mile Marker Signs

*(Use where blueway has adopted the Walter Anderson logo)*

24" wide

30" high



# JOURDAN RIVER



# Mile Marker Signs

*(Use where blueway has adopted their own logo)*

24" wide

30" high



**PASCAGOULA RIVER**  
*George County*



# Mile Marker Signs

*(Use where blueway has not adopted a logo)*

24" wide

30" high



24"

30"



# Highway 26 Birding Spot



24"

30"



# Lighthouse Park



24"

30"

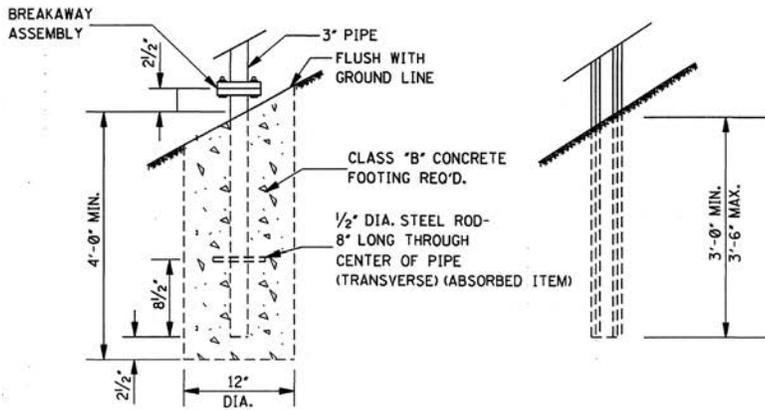


# Cemetery Landing



**RED CREEK**

# Sign Mounting

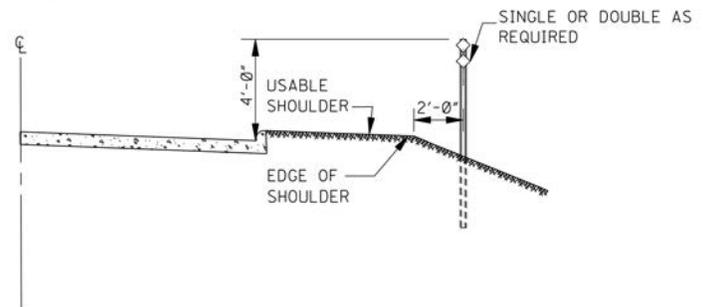


FOOTING DETAIL FOR 3" PIPE

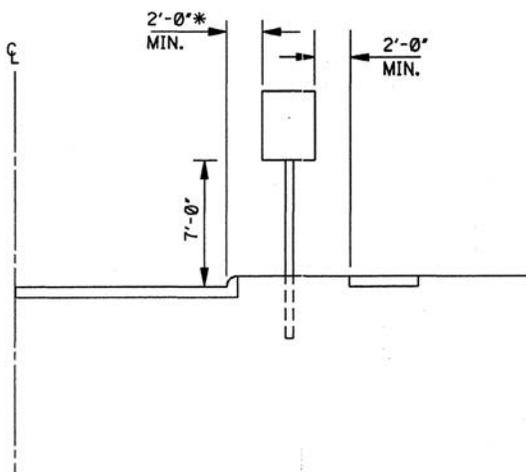
FOOTING DETAIL FOR U-SECTION POSTS

**GENERAL NOTES:**

1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE  $\frac{7}{16}$ " X  $\frac{1}{2}$ " X VARIABLE LENGTH FLAT STEEL BARS. BARS ARE WELDED TO PIPE AS SHOWN. WHEN FABRICATION IS COMPLETE, POST SHALL BE GALVANIZED AS PER SECTION 630 OF THE STANDARD SPECIFICATION.
2. HOLES IN FLAT BARS ARE  $\frac{3}{8}$ " DIAMETER.
3. SIGNS ARE FASTENED TO FLAT BARS AND U-SECTION POST WITH  $\frac{3}{16}$ " BOLTS, WITH FLAT WASHER AND LOCK-NUTS.
4. GROUND PLATE NOT REQUIRED ON U-SECTION POST.



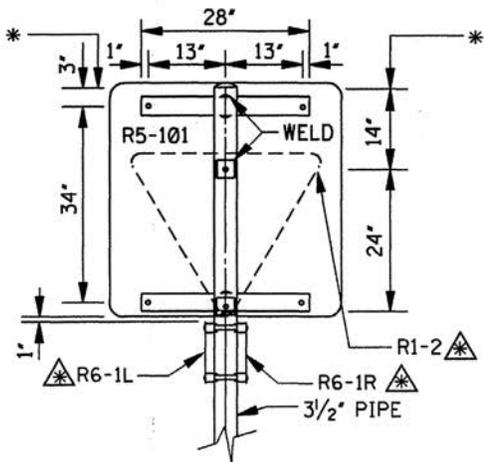
DELINEATOR MOUNTING ON OUTSIDE SHOULDER MOUNTABLE CURB ALONG MAIN FACILITY OR RAMP



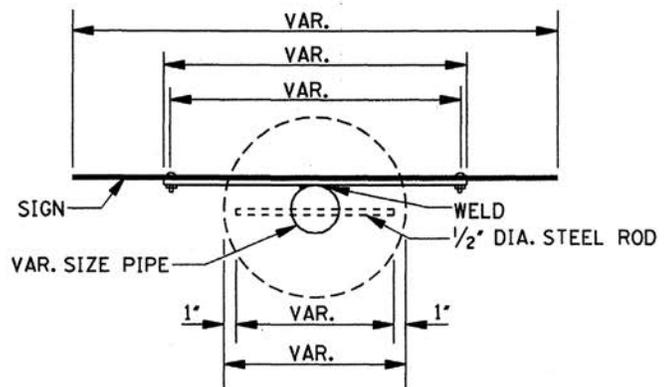
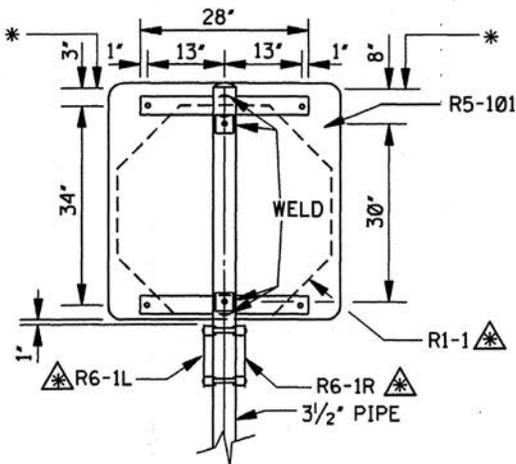
TYPICAL INSTALLATION ALONG FRONTAGE ROAD, RAMP OR STREET WHERE THERE IS NOT A USABLE SHOULDER

\* NOTE: THE 2'-0" MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-SECTION POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET A MINIMUM OF 4'-0". RAMP DESTINATION SIGNS WILL BE OFFSET 4'-0" FROM SHOULDERS.

# Sign Mounting



SEE PLAN VIEW BELOW  
 WHERE REQUIRED



TYPICAL PLAN VIEW

1. **FOOTING**  
 ALL FOOTINGS SHALL BE CLASS "B" CONCRETE. POST STUBS SHALL BE SET IN CONCRETE FOOTING AT REQUIRED GRADE AND ALIGNMENT WITH CARE SO THAT MINIMUM SHIMMING WILL BE REQUIRED.
2. **BASE CONNECTION PROCEDURE**  
 ASSEMBLE POST TO STUB WITH BOLTS AND WITH A FLAT WASHER ON EACH BOLT BETWEEN PLATES. SHIM AS REQUIRED TO PLUMB POST. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS AND SHIMS AND TO CLEAN BOLT THREADS. THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE AS SHOWN BY TABLE. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH. HIGH STRENGTH BOLTS IN BASE CONNECTIONS SHALL BE TIGHTENED TO TORQUE AS SHOWN BY TABLE ON SN-6A. DO NOT OVER TIGHTEN!
3. **POST LENGTH**  
 ALL POST LENGTHS SHALL BE VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION. WHERE FIELD CONDITIONS REQUIRE THE POST LENGTH TO VARY MORE THAN 12', IT MAY BE NECESSARY TO CHANGE THE SIZE OR NUMBER OF POSTS. SUCH DETERMINATION WILL BE MADE BY THE ROADWAY DESIGN ENGINEER. ANY CHANGE OF SIZE OR NUMBER OF POSTS SHALL NOT BE JUSTIFICATION FOR ANY CONTRACT PRICE ADJUSTMENTS.
4. **FABRICATOR NOTE**  
 IMPORTANT- ALL FRICTION FUSE BOLTS SHALL BE TIGHTENED IN SHOP BY A METHOD APPROVED BY THE BRIDGE DESIGN ENGINEER. TIGHTENING SHALL BE TO SUCH A DEGREE AS TO PROVIDE THE MINIMUM TENSION IN EACH BOLT WHEN ALL BOLTS ARE TIGHT, AS SHOWN BY TABLE SN-6A.
5. ALL HOLES IN FUSE PLATES AND HINGE PLATES SHALL BE DRILLED.
6. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE ACCEPTABLE.
7. **WELDING FOR STEEL SIGN SUPPORTS**  
 WELDING SHALL BE PERFORMED IN SHOP BY ELECTRIC ARC PROCESS.
8. **MATERIAL SPECIFICATIONS**  
 THE MATERIALS USED IN THE CONSTRUCTION OF THE GROUND MOUNTED SIGN SUPPORT STRUCTURES, AS LISTED BELOW, SHALL CONFORM WITH THE REQUIREMENTS OF THE DESIGNATED ASTM SPECIFICATION. ALL OTHER MATERIALS, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS, EXCEPT AS OTHERWISE NOTED ON THE PLANS.

# Amenities

Recreational Trail amenities provide comfort and convenience for visitors and trail users. These include:

- Parking
- Restrooms
- Camping
- Concessions
- Trash/Recycling
- Benches

Recommendations for each of these subjects are outlined in the following pages.



## Amenities: Parking

Parking areas for blueway launch sites include rural areas where improved roads are rare, and urban areas in the midst of commercial and residential uses. As the first and last impression for blueway users, parking areas should be environmentally-friendly and inspire a connection between people and nature. Pervious solutions are recommended at parking areas to allow stormwater to infiltrate the ground, filter out contaminants, and intercept potential marine debris.

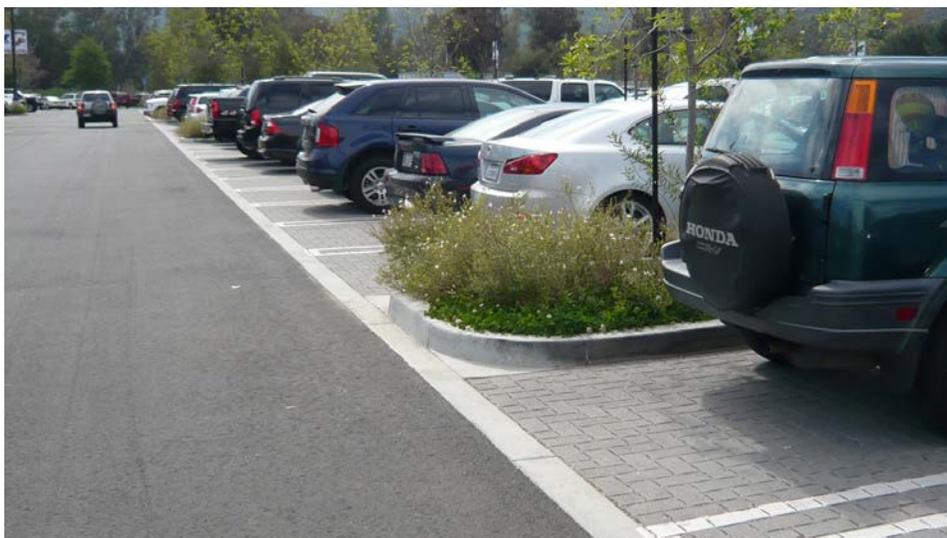
In undeveloped areas, the lowest-initial cost and lowest-maintenance solution will be a gravel or recycled concrete surface. Generally, the following materials provide firmer surfaces that are more stable than the alternative:

- Crushed rock (rather than uncrushed gravel)
- Rocks with broken faces (rather than rounded rocks)
- A rock mixture containing a full spectrum of sieve sizes, including fine material (rather than a single size)
- Hard rock (rather than soft rock that breaks down easily)
- Rock that passes through a 1/4-inch screen (rather than larger rocks)
- Rock material that is compacted in 3- to 4-inch layers (rather than thicker layers)

Pervious pavement effectively treats, detains, and infiltrates stormwater runoff where landscape-based strategies are insufficient. Pervious pavements must be designed to account for the native subsoil infiltration rate. The depth of the pervious layer, void space, and the infiltration rate of the underlying soils result in the desired storage volume and intended drain time of the facility. Acceptable materials in Mississippi should be based on engineering constraints and the surrounding street context, but typically include:

- Interlocking pavers
- Permeable concrete
- Permeable asphalt

ADA standards require a minimum number of accessible parking spaces [ADAAG §208.2]: a lot with with 1-25 spaces requires 1 van-accessible space. To maintain handicap access, aggregate must meet the ADA requirements: stable, firm, and slip resistant. Most loose materials, including gravel, will not meet these requirements unless properly treated to provide sufficient surface integrity and resilience. Binders, consolidants, compaction, and grid forms may enable some of these materials to perform satisfactorily but require repeated maintenance.



*interlocking pavers*



*compacted, crushed rock with fines*

## Amenities: Restrooms

The expansion of blueways along the Gulf Coast means providing comfort for novice paddlers, which often requires comfort stations. Although primitive facilities may be acceptable - even expected - by seasoned paddlers, children and others unfamiliar with day-long outdoor excursions may prefer portable or permanent restrooms. However, restrooms require maintenance, either daily or weekly, depending on use and standards; this should be the primary factor in determining whether or not to provide restrooms. Restrooms may be available at adjacent public parks and facilities. Working with the organization in charge of trail maintenance will determine the best option.

In many of the gulf area coastal plains, permanently plumbed restrooms are prohibited due to floodplain regulations. In these locations, restrooms must be elevated or on mobile chassis capable of being trailered away in advance of flooding or storms.



*mobile multi-stall unit*



*RR on mobile chassis*



*elevated above base flood elevation*

## Amenities: Camping

Many of the blueway trails flow through communities with overnight lodging, especially around the coastal towns, but several sections are currently available only as day use trails. Due to land ownership and wildlife management issues, there is limited potential for ground camping. Elevated camping platforms have been suggested as a solution that would allow uninterrupted, multi-day paddling trips, especially along the proposed Gulf Coast Saltwater Paddling Trail and the barrier islands of the National Seashore.

The factors that will determine the suitability of constructing a public camping platform include:

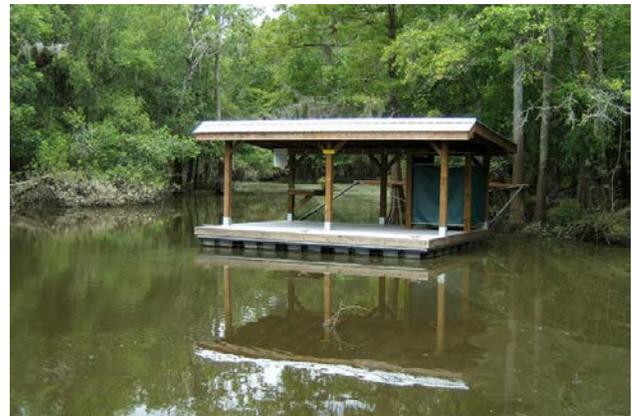
- ease of access by blueway trail users
- potential for use or abuse by non-blueway trail users
- environmental impact
- contribution to the blueway experience
- ability to work with partners (adjacent landowners, trail stewards, etc)

Recommendations include:

1. Create structures that are 20' x 20' or smaller.
2. Locate structures over non-vegetated land.
3. Floating platforms must have redundant, permanent anchors that are designed for anticipated flood levels.
4. Locate platforms in areas that do not conflict with existing or planned aquaculture areas, or prime fishing areas.
5. Restrooms are not encouraged unless they are portable units with a regular replacement schedule.
6. Waste management should be addressed.
7. Signage indicating rules, fees, hazards, and environmental impact should be posted at each structure.
8. Seasonal closure may be indicated where paddling users may encounter hunting preserves.
9. An agency or organization must be designated to maintain the structures in good condition, hold liability insurance, patrol the sites regularly and regulate conflicts.



*Hell's Bay Chickee, Florida*



*Dead Lake Bartram Canoe Trail, Alabama*

In situations where the trail and infrastructure crosses properties owned by multiple stakeholders, a non-profit trail management organization set up as a 501 c(3) entity is the predominant model. For example, the Maine Island Trail stretches 350 miles along the coast and includes 150 properties belonging to a variety of landowners. The non-profit maintains ownership of all trail infrastructure, and use of the platforms and land-based sites is regulated by the organization. Fees are charged to users of the facilities, and the organization is responsible for the upkeep and maintenance of the camping facilities. Liability insurance on camping platforms is maintained by the organization. Land sites are leased to the trail organization, which creates management contracts with property owners.



## Amenities: Concessions

To take full advantage of the opportunities the blueway creates for outdoor activity—for fun, fitness, and for the enjoyment of the natural environment—watershed residents will want access to equipment such as canoes and kayaks, life jackets, and provisions. They also will need access to information and programming that encourages trying out new activities, at little or no cost and in settings that feel comfortable and safe. People’s experience of the blueway will also be enhanced by amenities along and near by the water. There is potential for food and drink sales from convenience stores to sit-down restaurants. Consider the following opportunities for concessions along the blueways:

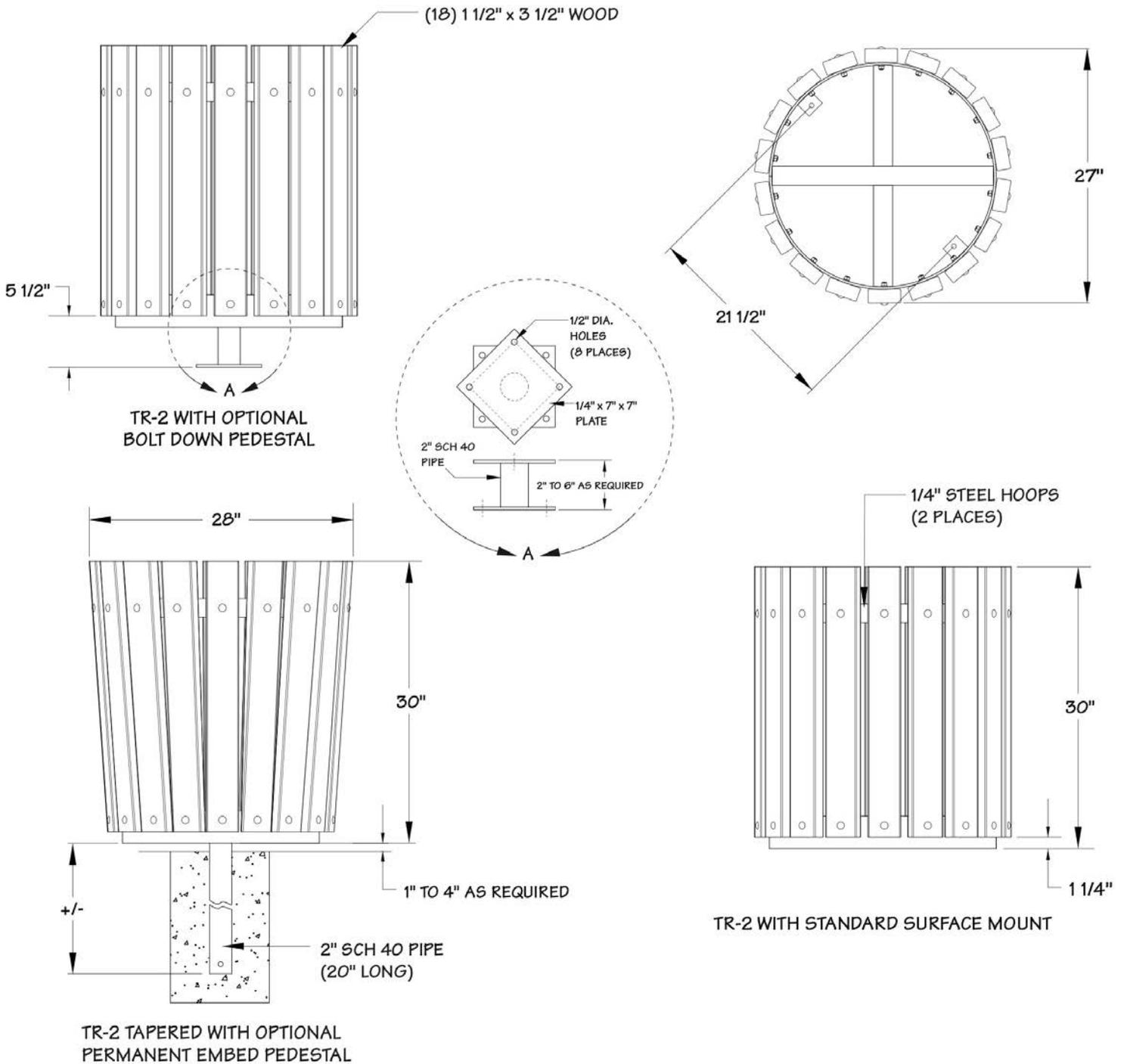
- Canoe/kayak/standup paddleboard rentals + instruction
- Boats/equipment/gear sales
- Personal comfort: clothing, sunscreen, insect repellent + souvenirs
- Guided blueway tours + shuttle services
- Dive tours
- Fishing license sales
- Campsites + lodging
- Picnic lunches/convenience stores/waterside restaurants
- Agritourism - aquaculture tours, oyster tonging demonstrations, vineyards, farms, shrimping trip
- Land-based activities: bike rentals, skateboards, roller skates + running gear
- Blueway Events: paddling clubs, races, triathlons, scavenger hunts, etc

Gulf Coast Outpost is a voluntary program that recognizes nature-based tourism businesses who are knowledgeable about the natural product, prioritize customer safety and protect the natural environment. The target audience for nature-based business recognition includes businesses whose primary purpose is contributing to the enjoyment of South Mississippi’s natural heritage. This includes tour guides, charter boat operators, eco-fitness guides, outfitters, eco-lodges, agritourism and other businesses where nature-based activities are 50 percent or more of the primary business line. Look for the Gulf Coast Outpost seal and consider incorporating businesses as a Point of Interest along blueways.



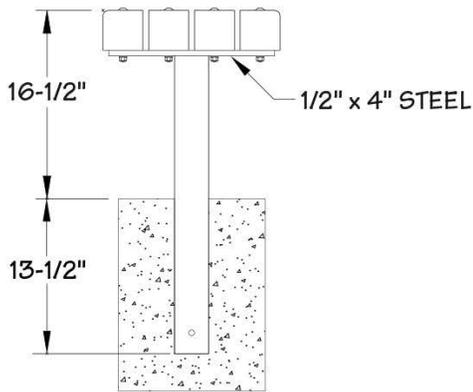
*Standup paddleboard race on Mallini Bayou. Photos by Allison Anderson*

# Amenities: Trash/Recycling



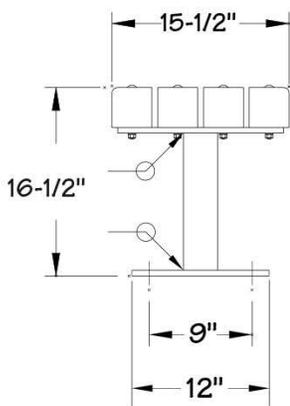
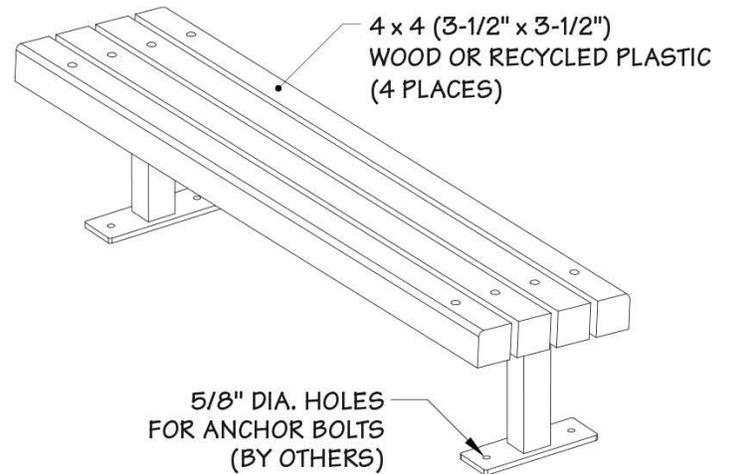
Source: FairWeather Site Furnishings Receptacles

## Amenities: Benches

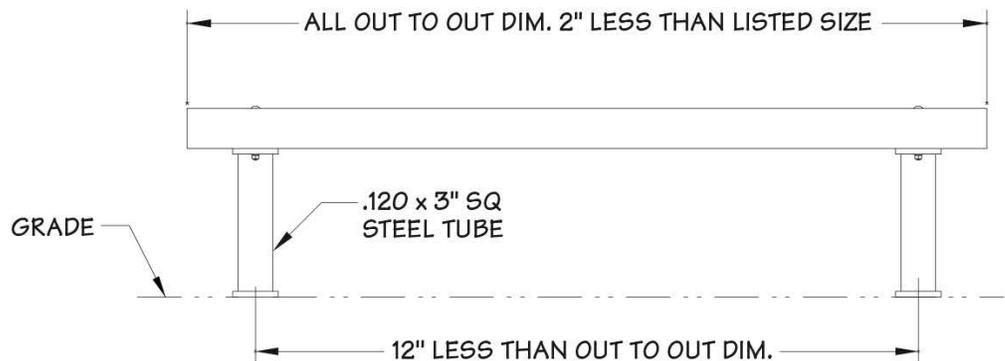


### EMBED MOUNT

**Please Note:** For embed mount, depth and diameter of installation hole may vary with soil conditions. Consult project engineer for correct dimensions.



### SURFACE MOUNT



Source: FairWeather Site Furnishings, Transit bench Model T-1



## Nature-Based Tourism Amenities

The Mississippi Gulf Coast National Heritage Area is a federally designated National Heritage Area along the gulf coast of Mississippi. The designated area comprises six counties recognized for their unique cultural and scenic qualities, which encourage nature-based tourism throughout Mississippi's coastal region. More information may be found at: <http://msgulfcoastheritage.ms.gov/>

### Water Activities



**PADDLING**



**FISHING**



**SWIMMING**



**CRABBING**



**CASTNET**

### Land-Based Activities



**HIKING**



**PICNIC**



**BIKING**



**CAMPING**



**HORSEBACK RIDING**



**BIRDING**



**TOUR**



**CORN MAZE**



**FARM**



**U-PICK**

# Permitting

Permits for Blueways will vary depending on if waterways are tidally influenced and if they travel across federal or state lands.

Once a stream is selected and determined to be tidal, contact the Secretary of State to request confirmation of permit requirements. If permitting is needed by the Secretary of State, an Application for Standard Lease of Public Trust Tidelands, available on the Secretary of State's website, will need to be submitted.

Within the three coastal counties of Mississippi, the Joint Application and Notification Form on the Mississippi Department of Marine Resources (MDMR) website will need to be completed and filed with the MDMR for any wetland activities. MDMR will then file any necessary information with the U.S. Army Corps of Engineers. When filing the Joint Application and Notification Form, be prepared to supply an accurate sample drawing, adjacent property owner authorization for any construction within 10 feet of their property, clear and concise directions to the project site including a map, and payment for any applicable fees.

If the stream flows over federal lands, contact the federal agency managing the lands. Typically the federal agency in the coastal counties will be the Desoto National Forest branch of the US Forestry Service. Standard Form 299 Prescribed by DOI/USDA/DOT will need to be filled out for Application for Transportation and Utility Systems and Facilities on Federal Lands. Form FS-2700-3b will need to be filled out for the US Forestry Service.

MS Department of Wildlife Fisheries & Parks requirements must be met for Blueways through Wildlife Management areas. Contact the Wildlife Management Area (WMA) South East Region Biologist regarding necessary permit applications.

Structures such as docks, launches, buildings for camping and/or protection from weather will need to be permitted by city, county, state, or government agencies that control the land.

Samples of the above mentioned permits and contact information are available in the Appendix.



Old Fort Bayou. Photo by Allison Anderson

## Security

Knowing where you are is essential in an emergency - this is why mile markers are recommended along blueways. Paddlers should remember the last marker passed, file a float plan with someone they trust, go with a friend, bring a first aid kit, and recognize that cell phone coverage may be interrupted.

There may be conflicts between users: motorized/nonmotorized boaters, scheduled athletic events/individual paddlers, and weary paddlers and property owners. Hunting season may limit access to blueway trails at designated periods during the year.

The following general recommendations apply:

- Alcohol is not recommended on blueway trails, and is prohibited in several counties (Stone, George, Pearl River).
- Alcohol is prohibited in Wildlife Management Areas.
- Always wear a life jacket and carry a whistle or other sound-producing device, preferably attached to your life jacket.
- Wildlife may be present in natural areas.
- Paddlers should check water level and tides, weather, and waterway conditions prior to every trip.
- Remove what you bring, and clean up more if you can.
- Avoid trespassing on private lands.
- Be aware of your surroundings.
- Always respect wildlife.
- Report any problems you encounter to the local authorities if appropriate.
- Be aware of hunting activities that may be present near blueway trails, and take appropriate precautions. Mississippi's Wildlife Management Areas allow hunting from October 1 to May 1.

River stages and flood-stage forecasts for most rivers in Mississippi can be found by visiting the website: <http://www.weather.gov/lmrfc/>. NOAA provides information for the Pascagoula and Escatawpa Rivers via telephone at 228-769-6508.



## Habitat Types



### Wet Pine Savanna

With only 3-5% of the original acreage remaining, wet pine savannas are one of South Mississippi's most endangered ecosystems. These communities once extended along the coast from the western edge of Florida to Louisiana in a band approximately 62 miles wide. The Grand Bay Reserve and Weeks Bay Reserve contain some of the best remaining examples of this habitat type along the northern Gulf of Mexico. Pine savannas are fire-maintained grasslands with scattered pines and shrubs and sun loving, species-rich ground cover. These wetland habitats support as many as 40 species per square meter of grass, sedge and wildflower species. Carnivorous plants in the savannas, including pitcher plants, sundews, bladderworts and butterworts, attract, capture and digest prey such as insects and other small animals. Grass Pink and Ladies' Tresses orchids mingle with native grasses. Raccoons, Gulf Fritillary Butterflies, Bluebirds, Blue Grosbeaks, Blue Darner Dragonflies, Red Foxes and Rainbow Snakes regularly visit or live in these habitats. The endangered Mississippi Sandhill Crane is the most notable inhabitant of the wet pine savannas of south Mississippi.



### Swamps and Bottomland Hardwoods

Freshwater wetlands are characterized by the presence of standing water during part of the year and the presence of woody vegetation. It is the coastal swamp that many visitors to our area associate with the Deep South. The most common trees found in these habitats include the Tupelo Gum and two species of cypress – Pond and Bald. These trees have special adaptations that allow them to live in standing water. Both have what is called a buttress (swollen) base. Additionally, the cypress trees have “knees,” structures that arise from the ground and are thought to help the trees deal with the variable conditions that occur in wet soils. Many coastal species of wildlife, such as waterfowl and warblers, utilize these habitats for water, food and protective cover. The swamps and bottomland hardwoods may serve as important breeding sites for many of our coastal species of amphibians and reptiles such as sirens (large, aquatic salamanders), frogs, toads, turtles and alligators.

# Habitat Types



## Salt and Brackish Marshes

Estuaries occur where freshwater from rivers and streams mixes with the saltwater of the sea to form brackish water influenced by the rise and fall of the tides. The Smooth Cordgrass of the lower marsh is found where the brackish tidal waters regularly sweep in, bringing small animals to feed in and among the vegetation. As the tides flush out of the area, they take tiny bits of food called detritus on which many important species of small coastal finfish and shellfish feed. Scattered within the mid-marsh are salty areas of sparse vegetation known as salt pannes. Plants and animals living in these salt pannes must be extremely salt and heat tolerant.

Salt marshes provide nursery, feeding and shelter habitats for many coastal species of fish, shellfish and other animals, buffer the mainland from powerful storm surges, filter pollutants flowing off the adjacent land, and provide recreational opportunities for fishermen, hunters and birdwatchers. Diamondback Terrapins, Raccoons, American Alligators, Oyster Catchers, Brown and White Pelicans (migratory), and Clapper Rails are just a few of the animals that live here.



## Freshwater Marshes

Vegetation in freshwater marshes is generally grass-like, although it can be home to a few water-tolerant species of trees like pond and bald cypress. Dense stands of Sawgrass provide habitat for nesting birds, alligators, frogs, otters, and snakes. Ospreys, fish-eating birds of prey, nest in trees or tall structures on the edges of freshwater marshes. Tidal freshwater marshes are found upstream from brackish waterways. The ebb and flow of the tide still moves the water levels up and down in these streams, but there is very little movement of salt into these systems except during periods of extreme drought or tidal surge. Common plants include Arrowhead, Pickerelweed, Cattail and submerged American Eelgrass. Freshwater marshes filter polluted runoff from adjacent uplands, store floodwaters, recharge groundwater aquifers and provide nesting and over-wintering sites for recreationally important species of fish and waterfowl. Mammals such as beavers, muskrats and the invasive nutria also utilize these habitats throughout the year.

## Habitat Types



### Woodland Habitats

Woodland habitats are dominated by Slash Pines and Wiregrass and are often referred to as wet pine flatwoods; however, there are a few habitats located on higher ridges or relic American Indian shell middens (refuse piles) that support upland (non-wetland) hardwood species such as the evergreen Live Oak. The wooded areas located close enough to the saltwater bayous and bays to be periodically impacted by saltwater flooding or the salt spray are called maritime forests. During the early spring and fall months, these woodland habitats serve as critical “refueling” and resting stopover sites for birds migrating to and from Central and South America across the open water of the Gulf of Mexico. In the spring, it is not unusual to find Redstarts, Black and White Warblers, Wood Thrushes and other birds as they pass through this area on their way to their nesting habitats in the north. Woodland habitats include dry, sandy longleaf pine/scrub oak ridges, frequently flooded tupelo/bald cypress swamps, upland hardwood forests, and pitcher plant savannas.

## Stewardship and Maintenance

Once a blueway is established, stewardship and maintenance is required to maintain the public's level of enjoyment and use. Without a plan to take care of the water trail, the waterway can become littered, or impassable, and assets such as piers, launches and benches can fall into disrepair. Because the habitat types near the blueways can vary with the needs and goals of the surrounding communities, the stewardship and maintenance of each blueway must be unique to each individual area. Proper stewardship and maintenance of a blueway requires 3 steps. First, a management plan should be created to detail the proper goals for the blueway. Second, the plan should be implemented and documented. Last, the plan needs to be reviewed on a periodic basis and updated according to current needs and goals for the community.



# Stewardship and Maintenance

## Management Plan

It is important to work with sponsors and partners, making sure to maximize experience and strengths, as well as incorporating the data gathered from public engagement to guide the development, thus creating a better management plan. By taking the time to solicit this input, a stronger sense of ownership of the blueway will be developed creating a better partnership for executing the management plan.

Take a moment to review the planning strategies and site inventory gathered while creating the blueway, and then identify which areas of emphasis are most important to the community. Using this information, with the help of your community partners, develop a vision statement for the management plan. This should be an overreaching idea for what the community plans to achieve. For example, the Mississippi Coastal Preserves developed the following vision statement for their management plan:

“The long-term vision of this program is the management of Mississippi’s Coastal Preserves sites to provide long-term benefits to the natural resources and economic value of the region. Management goals will enhance and perpetuate approximately 83,000 acres of important coastal wetland resources, provide compatible human recreational use, provide research and data applicable to coastal resource management both on-site and off-site, and protect specific habitat necessary for native, threatened, or endangered species. State trust lands within the Coastal Preserve sites will be effectively managed to perpetuate their natural characteristics, features, ecological integrity, social, economic, and aesthetic values so that future generations may enjoy the benefits of viable wetland ecosystems.” (<http://www.dmr.ms.gov/index.php/wildlife-a-plants/coastal-preserves/60-coastal-preserves-mission-vision-and-goals>)

Once a vision statement is created, areas of emphasis should be defined and prioritized along with clear goals, objectives, and actions for each focus area. Examples of areas of emphasis include recreation, conservation, wildlife and habitat, and education and outreach. If one of the areas of emphasis for the blueway includes outreach and education, a goal may be to provide readily accessible information on the flora and fauna encountered on the blueway. Then one objective could be to create interesting and engaging signage at points of interest along the waterway. Actions for this objective could include plant sampling along the river and collecting data from local bird watching organizations.



# Stewardship and Maintenance

## Implementation and Documentation

Once a management plan is developed, it is useless unless it is put into practice. Activities must be documented and progress monitored in order to ensure not only that plan is being used, but also that the plan is working. Monitoring will also help to assess the impact that human use has on the environment, give early warning for any changes that may occur, and provide insight into the cause of problems. For example, if one action to improve recreation along a blueway is to install a launch, but the launch site rapidly deteriorates due to unseasonal flooding then the monitoring of the launch will provide an early warning that the construction of the launch needs to be modified in order to achieve the goal of increasing recreation.

It is important to develop a monitoring plan and solicit assistance to collect the needed information. When developing a monitoring plan, the following information needs to be defined:

- What type of information should be collected?
- What factors will determine the success or challenges associated with each action?
- How and where will data be collected?
- When and how often will data be collected?

The following items should be monitored:

- Condition of parking lot. Is it overgrown, is there litter, are signs in good condition?
- Signage and Kiosk. Are the signs legible/faded, is there any sign of vandalism, and are sign posts in good condition?
- Is all of the information up to date?
- Is there any outdoor lighting that needs repair?
- Is there a trail to the launch? What condition is it in? Is it overgrown? Are there signs of litter? Are there any invasive species growing along the trail?
- Condition of the launch. Are there any broken boards, signs of erosion, or signs of vandalism?
- Are there benches at the launch or take out sites? What is their condition?
- On the blueway, are all of the trail markers present and in good condition? Are there any signs of tampering? Are sign posts in good condition?
- Is there any sign of invasive species growing along the blueway? What about signs of camp fires or litter? Mark the coordinates with GPS if possible.
- Are there any safety concerns along the blueway like broken trees or branches? Are there signs of erosion along the banks? Is there any storm or wind damage?
- Are there changes in the blueway? Has the current gotten stronger or weaker in any particular location? Is the cause of the change identifiable? What is the color of the water? Is there an odor, oily sheen, algae, foam?

A sample checklist is provided in the Appendix.



## Stewardship and Maintenance

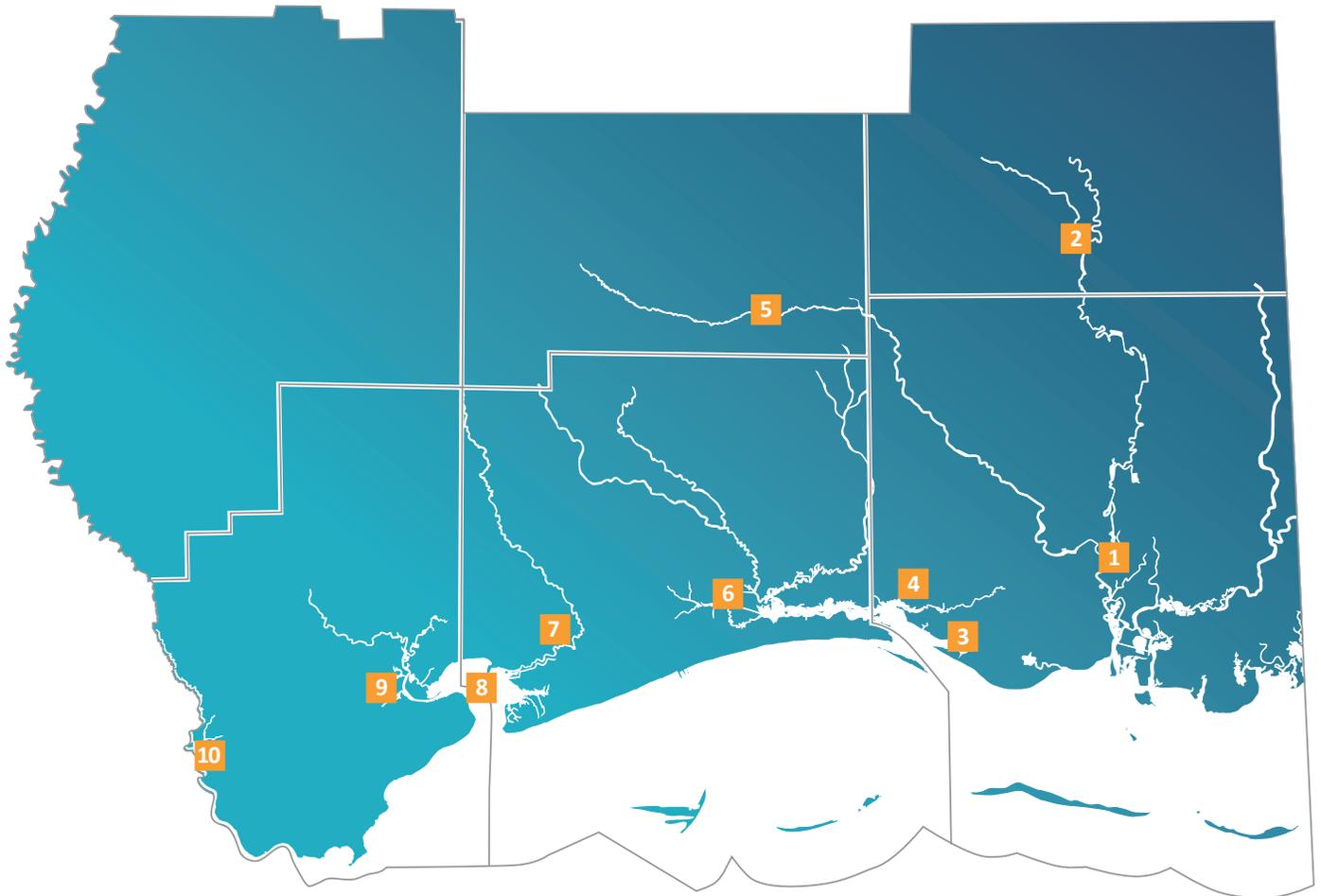
Once a monitoring plan is created, someone needs to carry out the monitoring. Participants could include those who helped with the development of the management plan. Outside help could be requested from organizations such as local non-profits, land management agencies, adopt-a-trail programs, or civic youth organizations. Signage should be developed to properly identify who maintains which segment of the blueway so the public can report any problems to the correct management group. Regular periodic maintenance events such as river clean-ups should be scheduled and publicized. Maintain a website with contact information and list the site on signage along the trail. Site surveys for the public are also useful for identifying issues along the trail.

### Review of Stewardship Plan

Periodically, the management plan should be reviewed to make sure the goals are being met and see if the focus needs to be modified. Allow enough time between reviews to see what impact has been made on the area, usually 5 to 7 years. It would be ideal to gather the same group of people who helped develop the original plan and include some newcomers to the area along with some of the people who have been frequently using the blueway and showing an interest in its maintenance. Evaluate if the Areas of Emphasis are still the same as they were when the plan was developed. Perhaps initially the focus was on education, but the surrounding area has been developed so the focus needs to shift to conservation. Replace strategies that aren't working with new ideas.



## Existing Blueways



### EXISTING BLUEWAYS

- 1 Pascagoula River Jackson County
- 2 Pascagoula River - George County
- 3 Davis Bayou
- 4 Old Fort Bayou
- 5 Red Creek
- 6 Turkey Creek
- 7 Wolf River
- 8 Grassy Point Trail
- 9 Jourdan River
- 10 Bayou Bogue Homa

# PASCAGOULA RIVER JACKSON COUNTY

**THE PASCAGOULA RIVER** is the longest free-flowing waterway in the lower 48 states, and the last unimpeded major river system in the continental U.S.

The Pascagoula River serves as the heart for all who claim this area as home. As a natural estuary, the river hosts abundant animal life including over 22 threatened and endangered species, in addition to over 300 plant species. Two-thirds of the Eastern breeding migratory birds use the Pascagoula River and its marshes as a resting point. It is a haven for abundant life, and its banks hold many notable historic locations and economic treasures.

Travel the ten mile Pascagoula River Blueway to discover everything from boat launches and piers to historical landmarks and natural wonders. The trail can be reversed or start or end at any one of the launches. If not round trip, plan for transportation at the end.

## Points of Interest

**1. The Magnolia Birding Pier** is accessible from Magnolia Street and Dupont Avenue and is home to many native birds including brown pelicans, blue herons and white egrets.

N30° 21' 42.96" W88° 33' 36.22"

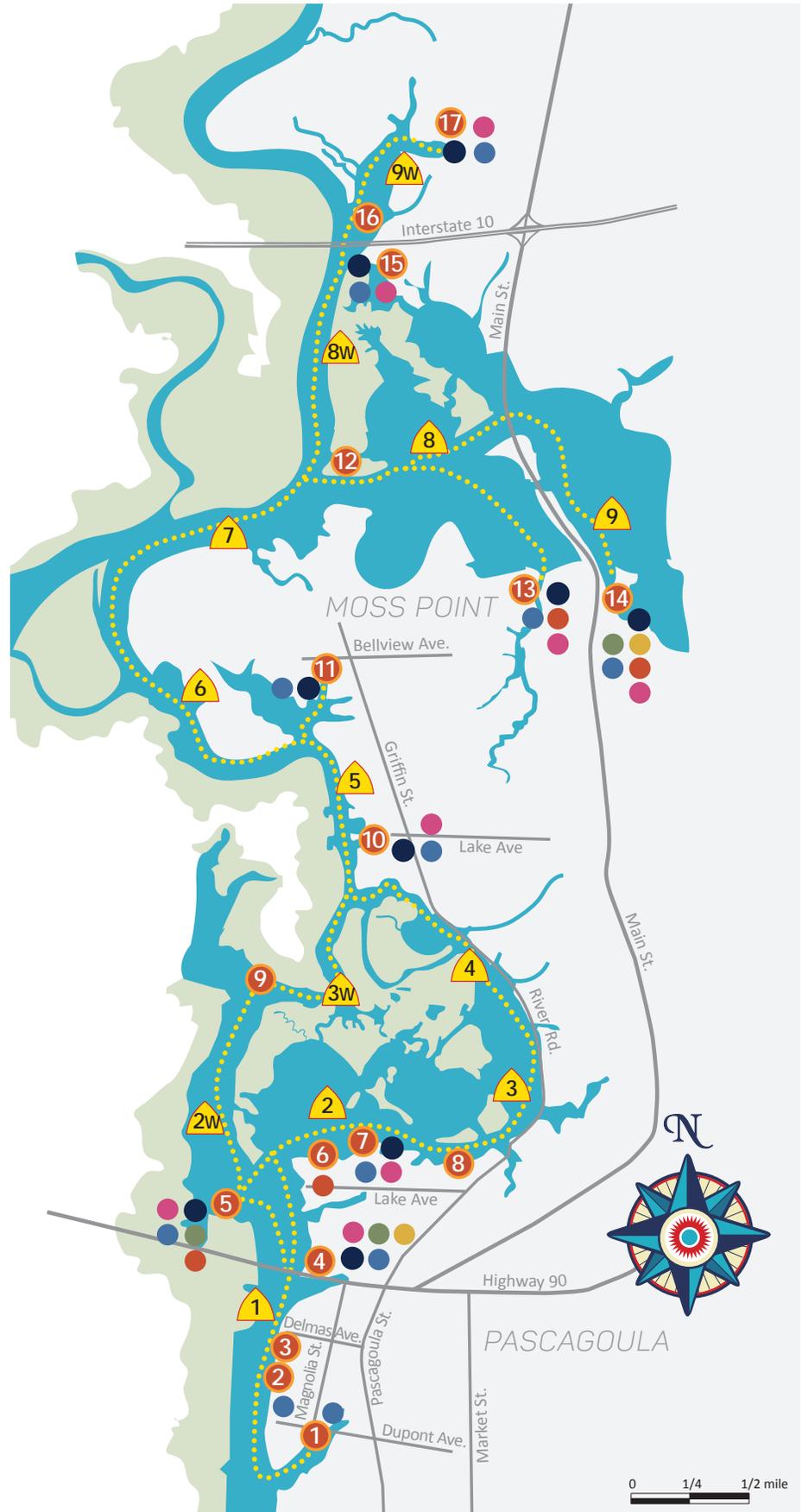
**2. The Pascagoula Riverfront** is a mixed-use economic hub with retail, restaurant, and residential space.

N30° 21' 53.68" W88° 33' 49.51"

## MAP LEGEND

Mile Marker			Parking
Canoe/Kayak Launch			Facilities
Blueway Trail			Piers
Point of Interest			Picnicking
			Food & Drink

<b>LEVEL</b>	Intermediate to Experienced
<b>START/END</b>	Dupont Avenue/Bennett Bayou
<b>TRAIL MILES</b>	10 miles (12 miles if east loop is included)
<b>PADDLING TIME</b>	6 hours one way for a complete trip including east loop at Moss Point
<b>DESCRIPTION</b>	River currents and deep water
<b>SCENERY</b>	Salt/brackish marshes
<b>ACCESS</b>	Several Public Boat Launches





## Points of Interest (cont.)

- 3. The National Oceanic and Atmospheric Administration's (NOAA) Gulf Marine Support Facility and Mississippi Laboratory** is the home port of the NOAA ships Gordon Gunter and Pisces. [N30° 21' 58.69" W88° 33' 47.81"](#)
- 4. The Lighthouse Park** is home to the 1859 Round Island Lighthouse, the Pascagoula Environmental Education Trail, an outdoor classroom, playground, pavilion, fishing pier, and a fish cleaning station. The Park also serves as the trailhead for the Pascagoula River Jackson County Blueway Trail, Historic Pascagoula Bike Trail, and the Pascagoula Historic Pathway. [N30° 22' 17.15" W88° 33' 39.93"](#)
- 5. River Park** is home to the Scranton Museum, a 70' Shrimp Boat, fishing piers, a boat launch, an ADA accessible floating kayak launch, restrooms, a pavilion, and a dog park. Future plans for the site include boat storage, a fuel dock, and a restaurant. [N30° 22' 26.75" W88° 33' 50.74"](#)
- 6.** As the oldest structure in the Mississippi Valley, the **LaPointe-Krebs House** is an example of French Colonial architecture dating to 1757 and is the earliest settlement in Pascagoula. While the house is under restoration efforts, the interpretive museum is open for tours. [N30° 22' 49.80" W88° 33' 29.27"](#)
- 7. Krebs Cemetery** lies next to the La Pointe-Krebs House, where many of the first settlers of the area are buried. [N30° 22' 50.60" W88° 33' 27.10"](#)
- 8. Mariners Cove** offers boat slips and is accessible from Lake Avenue near the Lake Avenue Fire Station, . [N30° 22' 45.27" W88° 32' 56.67"](#)
- 9. The Mouth of McInnis Bayou** provides access to the lower end of McInnis Bayou for fishing and exploring marshes. [N30° 23' 24.45" W88° 33' 51.82"](#)
- 10. McInnis Boat Launch** is located on Hemlock Avenue near Griffin Street and accesses McInnis Bayou. [N30° 23' 59.08" W88° 33' 20.34"](#)
- 11. Bellview Street** is a small neighborhood boat launch with paved parking. [N30° 24' 38.02" W88° 33' 35.14"](#)
- 12. The Gateway to the Escatawpa River** provides access to the Escatawpa River for fishing and exploring marshes. [N30°25'23.73" W88°33'33.19"](#)
- 13. The Pascagoula River Audubon Center** is one of several gateways to exploring the rich natural history of the River. From interpretive boat tours, kayak adventures, on-site trails and exhibits, and programs designed to provide hands-on experiences in nature, the Center promotes Audubon's mission of promoting birds, wildlife and the habitats that support them. [N30° 24' 55.34" W88° 32' 36.28"](#)
- 14. Downtown Moss Point** is home to a river walk, shopping, dining, and the **Riverfront Welcome Center** which provides kayak rentals, an EZ-Dock Kayak Launch, concessions, and space for rentals, meetings, and special events. [N30° 24' 57" W88° 32' 17"](#)
- 15. I-10 Launch** offers easy access and a boat launch. [N30° 26' 14.60" W88° 33' 27.26"](#)
- 16. The Mouth of Bennett Bayou** covers five acres and is a direct tributary to the Pascagoula River. [N30° 26' 21.93" W88° 33' 25.71"](#)
- 17. Bennett Bayou, Land Trust Conservation Preserve** is an excellent location to experience the rich river environment. Natural area suitable for launching a kayak. [N30° 26' 37.78" W88° 33' 3.31"](#)



AVOID PADDLING UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. ALWAYS WEAR YOUR LIFE JACKET AND CARRY A WHISTLE OR OTHER SOUND PRODUCING DEVICE, PREFERABLY ATTACHED TO YOUR LIFE JACKET. PADDLERS SHOULD CHECK WATER LEVEL AND TIDES, WEATHER, AND WATERWAY CONDITIONS PRIOR TO EVERY TRIP. REMOVE WHAT YOU BRING, CLEAN UP MORE IF YOU CAN. AVOID TRESPASSING ON PRIVATE LANDS. PLEASE BE AWARE OF YOUR SURROUNDINGS AND ALWAYS RESPECT THE WILDLIFE. REPORT ANY PROBLEMS YOU ENCOUNTER TO THE LOCAL AUTHORITIES IF APPROPRIATE.



# PASCAGOULA RIVER GEORGE COUNTY

## THE PASCAGOULA RIVER BLUEWAY

is almost 22 miles in length and is best for experienced and intermediate paddlers because of distance between access points and strong currents. Those hoping to enjoy fish and wildlife in the slower backwaters should visit Points of Interest accessible by road just off the main river. The Pascagoula River is formed where the Leaf and Chickasawhay Rivers join. It is allowed to move naturally (no dams) over 80 miles where it empties into the Mississippi Sound. Over 50,000 acres are now protected for conservation along the stunning landscapes of the free-flowing river.

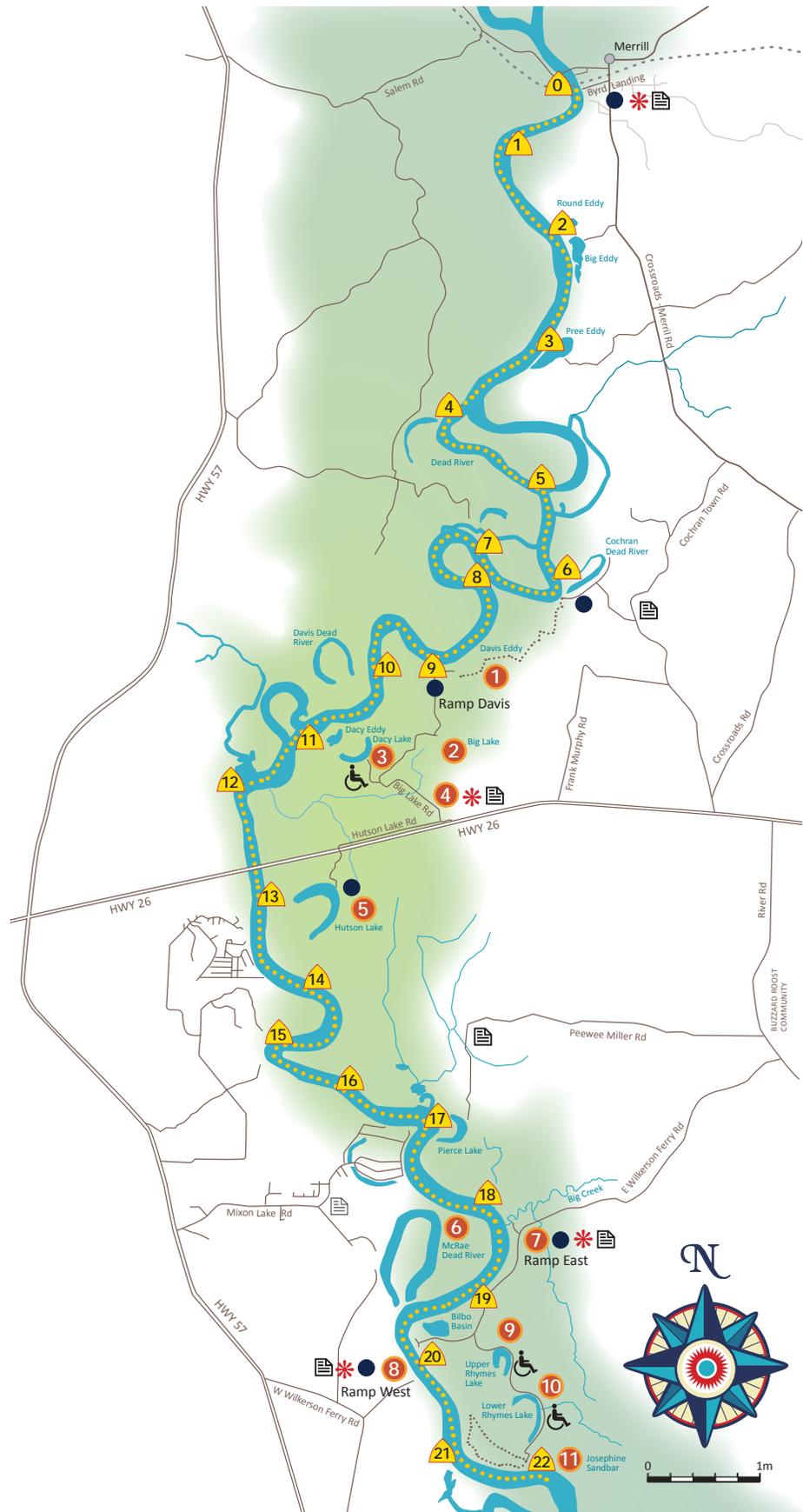
### Wildlife Management Areas (WMAs)

are lands set aside to conserve Mississippi's wildlife resources. Within the Pascagoula River WMA hunting, fishing, camping, hiking, wildlife watching, and boating are all acceptable activities. Aside from the river, visitors may see oxbow lakes and other backwater sloughs, cypress-tupelo swamps, small creeks, pine savanna and longleaf pine forests within the 37,000 acres of the Pascagoula River WMA. Within this fascinating landscape of habitats, over 327 species of birds live or migrate each year to feed, nest and roost. Deer are plentiful; fox, river otters, beaver, skunks, bobcat, alligators, snakes and even black bear can be found within the river habitats.

### MAP LEGEND

- Mile Marker   Information Kiosk
- Canoe/Kayak Launch   Permit Station
- Blueway Trail   Handicap Pier
- Point of Interest   Hiking Trail

<b>LEVEL</b>	Intermediate to Experienced
<b>START/END</b>	Merrill
<b>TRAIL MILES</b>	22 miles in length
<b>PADDLING TIME</b>	8 hours
<b>DESCRIPTION</b>	River currents and deep water
<b>SCENERY</b>	Bottomland Hardwoods, Oxbow Lakes, Cypress Ponds
<b>ACCESS</b>	Several Public Boat Launches





## Points of Interest

Often called "Bird Lake", **1** Davis Eddy Lake is a must-see for nesting herons and egrets in the spring. For additional scenic views, hike the 2 mile nature trail to Cochran Dead River.

Big Lake **2** is a long, narrow lake that was most likely a "drowned" stream dammed naturally over time.

Dacy Lake **3**, a former river channel often called a "dead river" or oxbow, is a scenic locale ideal for nature and wildlife photography.

Just north of HWY 26 **4**, this area showcases many migratory songbirds in spring and fall as well as ducks and other waterfowl in winter and early spring.

Another former river channel now isolated from the main river, Hutson Lake **5** is a bird sanctuary easily accessible by road or boat launch.

McRae Dead River **6** is a former river channel of the Pascagoula River. From the water, paddlers can get a sense of how the river changes course over time. During high water events, the oxbow may be accessible to the main river channel. Access the area from Mixon Lake Road off Hwy 57.

Formerly the site of Wilkerson Ferry **7, 8**, a historic ferry carrying passengers across the river, the locations host primitive camping, port-a-lets, and running water (Artesian well).

Upper Rhymes **9** is home to large cypress and tupelo gum trees. Watch for alligators and wading birds amid the cypress knees and buttressed (swollen) trunks.

Lower Rhymes Lake **10** is another large oxbow that provides great opportunity for intrepid paddlers to get close to giant cypress and tupelo gum trees. Many wading birds and waterfowl use these areas for feeding and nesting.

Josephine Sandbar **11** is currently the largest accessible sandbar on the Pascagoula River. The site boasts an artesian well, a continuous source of freshwater.

All visitors must purchase and carry a WMA User Permit (purchased wherever licenses are sold). Permit use is strictly enforced. Additionally, visitors must complete a daily use permit card before entering the WMA. These permit cards are available at permit stations located at major entrances to the WMA. For questions about the Pascagoula River WMA, visit the website at [www.mdwfp.com/wma](http://www.mdwfp.com/wma) or call 228-588-3878.

### The Land Trust for the Mississippi Coastal Plain

works with landowners to conserve special places in perpetuity. With local, state and federal agencies, the Land Trust protects natural areas that benefit residents and visitors to south Mississippi: abundant seafood, rich timberlands, pristine water, and unsurpassed recreational activities. [www.ltmcp.org](http://www.ltmcp.org)

**The National Park Service** is collaborating with state and local agencies and organizations to promote the conservation, stewardship, and public use of the Pascagoula River, the last large unimpeded river system in the lower 48 states. The Pascagoula River Blueway is part of America's Great Outdoors Rivers Program to conserve and restore key rivers across the nation, expand recreational opportunities and support jobs in local communities.



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# DAVIS BAYOU



## MAP LEGEND

Mile Marker			Parking
Canoe/Kayak Launch			Facilities
Blueway Trail			Pickniking
Visitor Center			Interpretive Sign

<b>LEVEL</b>	Beginner to Intermediate
<b>START/END</b>	Boat Launch
<b>DESCRIPTION</b>	Bayou and Maritime Forest
<b>SCENERY</b>	Coastal marsh, views to open sound and tree lined banks
<b>ACCESS</b>	Accessible Kayak/canoe launch

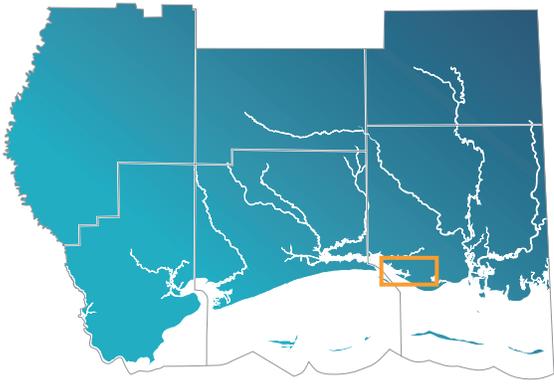
**The Davis Bayou Blueway** connects Davis, Stark and Halstead Bayous. The winding marshes are rich in plant and animal diversity, but also demonstrate the extremes of the salt marsh environment.

Developed by the National Park Service, National Park Foundation and Heritage Trails Partnership and made possible in part by a grant from the National Park Foundation through the generous support of the Coca-Cola Foundation, the Davis Bayou Blueway offers an excellent example of a unique and productive ecosystem.

**Bayou** - A brackish tidal water environment with large areas of saltwater tolerant grasses. Dolphins, alligators, and osprey are often visible.

**Maritime Forest** - Found beyond the bayou grasses, this type of forest is made up of bush and tree species adapted to salt spray, occasional flooding, and endurance to strong prevailing winds. Loblolly pine, magnolia, live oak, and yaupon holly make up some of these species.

Approximate	distances:	times:
Halstead Leg	1.4 Miles	70 Minutes
McGhee Leg	.6 Miles	40 Minutes
Visitor Center Leg	1.3 Miles	60 Minutes



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# OLD FORT BAYOU



## MAP LEGEND

- Mile Marker 
- Canoe/Kayak Launch 
- Blueway Trail 
- Point of Interest 

<b>LEVEL</b>	Beginner to Intermediate
<b>START/END</b>	Hwy 609 (Washington avenue) under bridge or Bristol avenue public boat launch/The Shed, Vanclave, Ms
<b>TRAIL MILES</b>	13 miles one way
<b>PADDLING TIME</b>	6 hours
<b>DESCRIPTION</b>	Subtidal estuarine marsh to slash pine savanna
<b>SCENERY</b>	Small tidal creeks with a variety of marsh grasses
<b>ACCESS</b>	Public Boat Launch

Old Fort Bayou is a beautiful meandering waterway in Jackson County, Mississippi. Its origins (headwaters) begin in the longleaf pine savannas south of Vanclave. The bayou continues through many important natural areas including the Mississippi Sandhill Crane National Wildlife Refuge, The Nature Conservancy's Old Fort Bayou mitigation property, Land Trust's Twelve Oaks Conservation Park and Mississippi's Old Fort Bayou Coastal Preserve deepening and widening towards its mouth at Biloxi Bay in Ocean Springs.

A variety of habitats exist along Old Fort Bayou. The mouth of the bayou is considered an estuary, a place where the river meets the sea. This area hosts ecological communities of submerged aquatic vegetation such as widgeon grass or tape grass beds; its presence is vital in the developmental stages of many estuarine wildlife species such as native juvenile blue crabs, fish and other species that spend early developmental stages in shallow estuaries where they can hide from large predators. These grasses also help to stabilize sediments to prevent erosion.

This is typically a one-way trip and the direction may be reversed for convenience.

Fly fishing on the Old Ft. Bayou Blueway is a great experience for all ages. The bayou is like a neonatal unit for shrimp and many types of gulf fish. Fishing from a boat or kayak, being able to float up into the winding grass paths of the bayou's inlets, is a beautiful experience that highlights the natural resources of the gulf.



## Points of Interest

	Piers	Parking	Camping	Facilities	Picnicking	Boat Ramps	Food and Drinks	Points of Interest
Gulf Hills	1	●	●	●	●	●	●	●
McElroy's on the Bayou	2	●	●	●	●	●	●	●
Aunt Jenny's	3	●	●	●	●	●	●	●
Hwy 609 (Washington Avenue)	4	●	●	●	●	●	●	●
Anthony's	5	●	●	●	●	●	●	●
Mikey's on the Bayou	6	●	●	●	●	●	●	●
Ocean Springs Cemetery	7	●	●	●	●	●	●	●
Twelve Oaks	8	●	●	●	●	●	●	●
Bristol Ave. Public Boat Launch	9	●	●	●	●	●	●	●
The Shed / Camp Journeys End	10	●	●	●	●	●	●	●
The Preserve Golf Course	11	●	●	●	●	●	●	●



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# RED CREEK



## MAP LEGEND

- Mile Marker
- Canoe/Kayak Launch
- Blueway Trail
- Point of Interest

**LEVEL** Beginner to Intermediate

**START/END** Starts in Lamar County and Ends at the headwaters of Black Creek. Segments can be done within that range as well

**TRAIL MILES** 29.9 miles in length

**PADDLING TIME** 22 hours one-way

**DESCRIPTION** Black water, flowing through DeSoto National Forest, some times of the year water level in some sections is low

**SCENERY** Natural Springs, sand bars, bluffs and some small Rapids

**ACCESS** Public Boat Launch

**Red Creek** is a coastal blackwater stream that forms near Lumberton in Lamar County and ends when it meets Black Creek near the Pascagoula River in Jackson County. It gets its name from the reddish stain that naturally occurring tannins impart to the water. In 2004, the watershed was documented as 66% forested with a 100 foot, well-forested riparian zone extending from Highway 26 (west of Wiggins) to its confluence with Black Creek. This section of Red Creek is a public waterway and according to Ernest Herndon's *Canoeing Mississippi*, is a beautiful float trip.

The Mississippi Museum of Natural Science has documented 61 species of freshwater and diadromous fish with a recreational fishery for at least 5 species. Red Creek has been designated as one of Mississippi's Scenic Streams. Red Creek is in the East Gulf Coastal Plain Ecoregion and is a major tributary in the Pascagoula River watershed.

The entire drainage area of Red Creek is over 400 square miles. Red Creek flows through Lamar, Stone, George, and Jackson Counties. It also touches Pearl River and Forrest Counties. It is an important sub-basin of the Pascagoula River Watershed, a nationally significant eco-system with the largest unimpeded river in the continental United States.

Red Creek Blueway covers mile markers 29 - 59. Mile marker 0 is at the junction with Black Creek in Jackson County.

### **59 Clay Shelves Segment**

A 9.7 mile float from Highway 26 to Highway 49. To float a flat bottom boat plan for 9.5 hours. Canoes and kayaks plan for 7.5 hours. While floating this upper reach segment you'll discover first hand how Red Creek got its name. As you traverse along the red clay shelves, you'll also encounter several small rapids.



**GPS Coordinates for Launch Locations:**

- Hwy 26 at mile marker 59** – 30° 51' 06" N, 89° 12' 52" W
- Old Hwy 26 at mile marker 58** – 30° 50' 45" N, 89° 12' 18" W
- Hwy 49 at mile marker 49** – 30° 47' 32" N, 89° 08' 09" W
- City Bridge Road at mile marker 43** – 30° 46' 14" N, 89° 03' 27" W
- Cable Bridge Road at mile marker 34** (approach from the south)  
30° 46' 31" N, 88° 57' 03" W
- Hwy 15 at mile marker 29** – 30° 46' 24" N, 88° 54' 46" W



**49 Railroad Trestle Segment**

A 6.2 mile float from Highway 49 to City Bridge. To float a flat bottom boat plan for 6 hours. Canoes and Kayaks plan for 5 hours. Discover large white sandbars and Red Creek meanders its way through the sandy soils of mid Stone County. You'll also pass beneath the high railroad trestle still in service today.

**43 Red Buff Segment**

A 9.6 mile float from City Bridge to Cable Bridge. To float a flat bottom boat plan for 8.5 hours. Canoes and Kayaks plan for 6.5 hours. You will navigate through the remains of several old rail dummy lines bearing witness to the vast timber harvest of the early 1900's. If you're lucky, you'll see glimpses through the trees of the famous "Red Bluff."

**34 Natural Springs Segment**

A 4.4 mile float from Cable Bridge to Highway 15. To float a flat bottom boat plan for 4 hours. Canoes and kayaks plan for 3 hours. Enjoy a short but picturesque float through the Desoto National Forest. Floaters will discover the natural springs feeding the creek as they get closer to the historical site of the Ramsey Springs Hotel.

**29 Hwy 15** Situated just below the hill from the historic Ramsey Springs Hotel, this refurbished boat/kayak launch is the take out point for several float segments. If putting in at this launch, be prepared for an overnight trip. Careful planning is recommended before enjoying this segment of the creek. As Red Creek winds toward the Pascagoula River, you will see why it is classified as a 'black water river' as the waters slow down and get deep.

**Points of Interest**

1 Kirby Creek	30°49'20" N	89°10'50" W
2 Four Mile Creek	30°48'43" N	89°09'28" W
3 KCS Railroad Trestle	30°47'32" N	89°07'57" W
4 Old Hwy 49	30°47'21" N	89°07'51" W
5 Ten Mile Creek	30°46'57" N	89°07'16" W
6 Flint Creek	30°46'19" N	89°03'48" W
7 Old City Bridge	30°46'13" N	89°03'23" W
8 Long Branch Island	30°45'17" N	89°00'40" W
9 Old Creek Island	30°46'13" N	88°57'51" W
10 Cypress creek	30°46'30" N	88°57'07" W
11 Little Sandy creek	30°46'22" N	88°56'38" W
12 Ramsey Spring Hotel	30°46'16" N	88°54'55" W



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# TURKEY CREEK



## MAP LEGEND

Mile Marker



Canoe/Kayak Launch



Blueway Trail



Point of Interest



**LEVEL** Beginner to Intermediate

**START/END** Gulfport Lake Boat Launch

**TRAIL MILES** 5 miles round-trip

**PADDLING TIME** 3 hours round-trip

**DESCRIPTION** Light chop in Bernard Bayou to flat water with light current in Turkey Creek

**SCENERY** Wet Pine Savanna, Marsh Coastline, Historic

**ACCESS** Public Boat Launch

## Turkey Creek

is an historic black community settled in 1866 by emancipated men and women emboldened by slavery and the Civil War, who dared to sow the seeds of freedom, faith, and self-reliance which still flourish in this place.

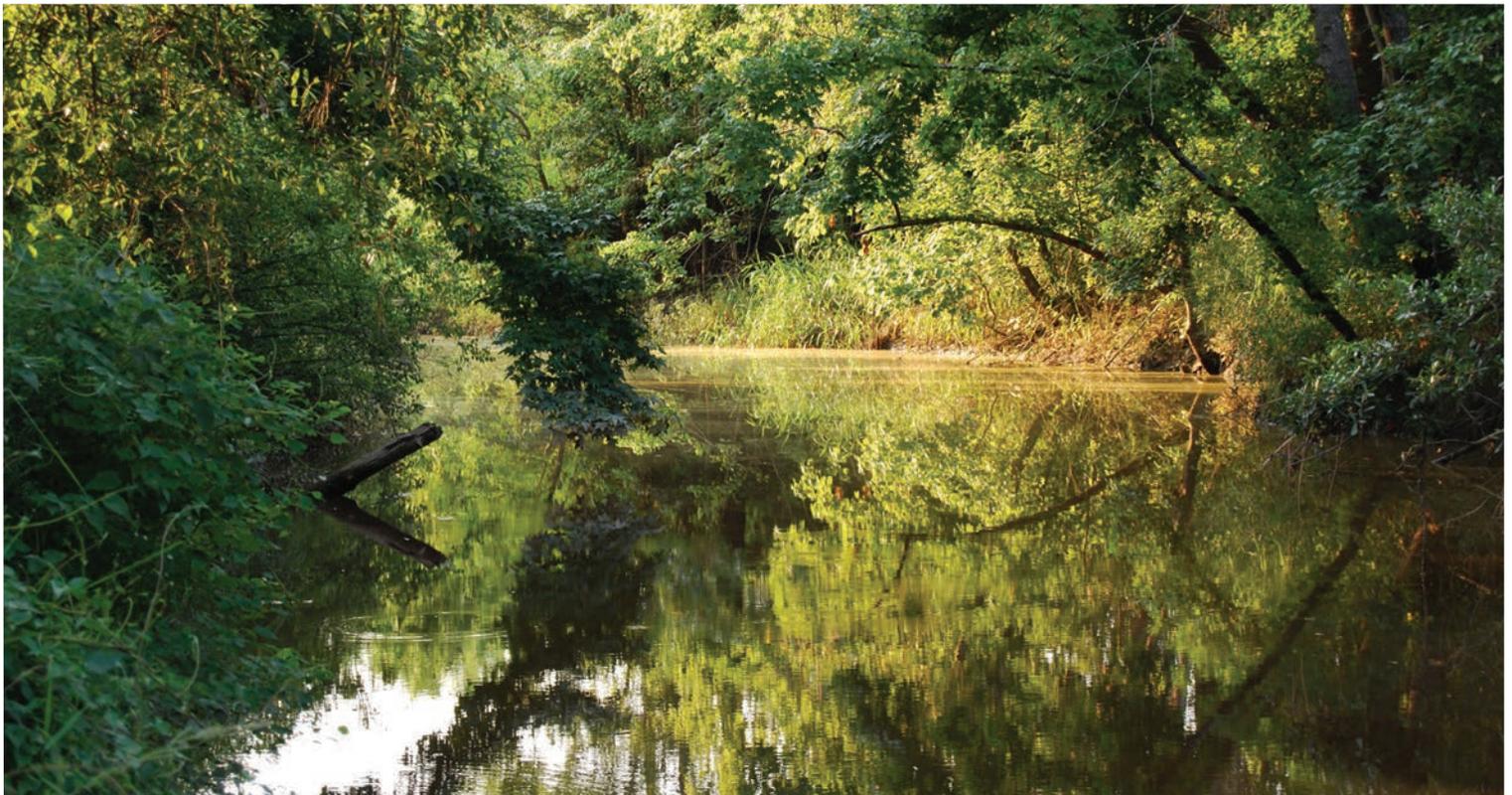
Turkey Creek begins in central, rural Harrison County and flows toward its confluence with Bayou Bernard, just north of the Gulfport-Biloxi International Airport. **The creek is popular for fishing, swimming, and canoeing and is a historic and present contributor to the local culture and quality of life.** Turkey Creek watershed drains just over 17 square miles of land that has relatively flat topography, creating a slow-moving coastal stream with tidally influenced areas near the coast. The upper watershed is composed mostly of rural lands covered by wet-pine savannas and forests whereas the lower portion of watershed has a lot of developed lands. This more developed area includes Gulfport-Biloxi International Airport, Gulfport and Long Beach, and the Interstate-10 business corridor.

The Gulfport Lake Boat Launch is located behind Bayou Vista Golf Course on Washington Avenue, in Harrison County, MS at N30.42419° W89.06040°. Local fishing boats use the ramp year round, with pleasure boats and jet skis in warmer months, especially on weekends. There is an asphalt parking area, and a sandbeach to the side of the boat ramp for kayak and canoe launching. The usual tidal range is less than 2' between high tide and low tide, influenced by the Mississippi Sound. The water in Bayou Bernard is brackish, and Turkey Creek is mostly freshwater in the upper reaches. There may be times in the year when the upper reaches (generally past mile marker 2) are too shallow for paddling.

## Points of Interest

- 1 Mouth of Turkey Creek
- 2 Rippy Road Bridge
- 3 Island Loop
- 4 Bait Pond
- 5 Sloping Bend
- 6 Historic African American Cemetery
- 7 Ashton Park Apartments
- 8 Inlet
- 9 Airport Road Bridge

Bernard Bayou is part of the Biloxi River Marshes Preserve. The oligohaline marshes in this area are dominated by needle rush (*Juncus roemerianus*) with duck-potato (*Sagittaria latifolia*). Narrow disjunct bands of smooth cordgrass (*Spartina alterniflora*) occur along the creeks with bands of high-level salt-meadow grass (*Spartina patens*) occurring along the upland borders. This unique location provides excellent feeding, resting, and wintering habitat for numerous types of migratory bird species, such as the Brown Pelican, White Pelican, Ospreys and cormorants, and this area is known to be an Osprey rookery.



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# WOLF RIVER

**Wolf River Canoe Trail** is a 15.2 mile, one-way trek from Cemetery Landing **5** to Tucker Road **3**. Privately owned, Wolf River Canoe & Kayak provides shuttle service and several trips depending on your schedule and interests. For more information about the canoe trail and outfitter services, call Wolf River Canoes, 228-452-7666.

**Little Bay Loop** leaves and ends at Necaise Public Boat Launch **30° 21' 25.3" N, 89° 16' 23.3" W** **1**

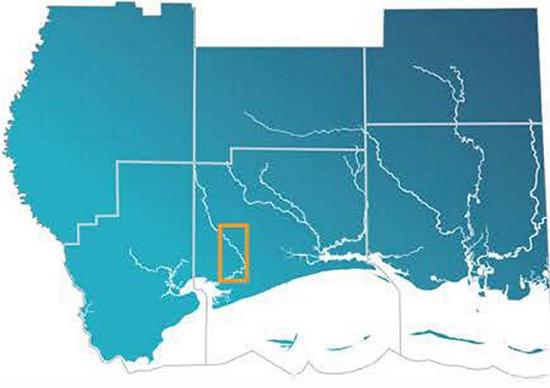
The 5 mile loop circles Little Bay just west of Wittman Avenue. From the boat launch, paddle northeast/north to DeLisle Bayou. See beautiful, large, historic oak trees and a few homes and piers along the northern shore of DeLisle Bayou. Once into St. Louis Bay, the trail turns south, following the western extent of the Wolf River marshes to the mouth of the Wolf River. From there, it's a short paddle eastward back to the boat launch. Little Bay Loop provides a leisurely paddle and offers several short cuts and side adventures to fit your schedule and fitness level. Usually, kayakers will see a few fishermen along the banks and in small boats. Weekends bring heavier motor boat traffic which can be avoided by paddling close in to the marsh where you may see or hear shore birds such as marsh hens or clapper rails.



## MAP LEGEND

- Mile Marker
- Canoe/Kayak Launch
- Wolf River Blueway Trail
- Little Bay Blueway trail
- Point of Interest
- Bells Ferry Blueway Trail

<b>LEVEL</b>	Intermediate to Experienced
<b>TRAIL MILES</b>	22 miles overall
<b>DESCRIPTION</b>	Shallow black water, sand bars, salt marsh and bottomland hardwoods
<b>SCENERY</b>	First designated scenic stream in Mississippi. Spring offers native azaleas and flowering dogwoods
<b>ACCESS</b>	Several Public Boat Launches



Bells Ferry Trail is a 9.8 mile round trip from Necaize Boat Launch **1** up the Wolf River 4.9 miles to Bells Ferry Preserve **2**, a natural area managed by Mississippi Department of Marine Resources. There is no loop but plenty of marsh to keep you interested on the way back to Necaize Boat Launch. At the DeLisle Coastal Preserve, there is a nature trailhead on Bells Ferry Road (accessible by car) that provides a nice half hour walk to the river's edge. Currently there is no ramp or take out, but the trail may be accessible from the water in the future.



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# GRASSY POINT TRAIL



## MAP LEGEND

Mile Marker



Canoe/Kayak Launch



Blueway Trail



Point of Interest



**LEVEL** Intermediate

**START/END** Necaise Boat Launch on the Wolf River/ Diamondhead Marina

**TRAIL MILES** 10.2 miles one way

**PADDLING TIME** 3 hours

**DESCRIPTION** Open Water in the Bay of St Louis surrounded by Saltwater marsh

**SCENERY** Saltwater Marsh, Pines and Ancient Oaks - Landscape view of the Bay of Saint Louis and the beautiful Hwy 90 bridge

**ACCESS** Public Boat Launch

**Grassy Point Trail** is a 10.2 mile trip, one way to Diamondhead. Leaving from Necaise Boat Launch on the Wolf River, travel northeast/north to DeLisle Bayou and out to St. Louis Bay. Once in the bay, this trail meanders along the marshes of northern St. Louis Bay. End the long paddle at the Marina restaurant in Diamondhead where you may enjoy refreshments, lunch or dinner and see the beautiful view of St. Louis Bay from the decks.

Kayak rentals are available at this site

## Points of Interest

**1** Merlin Necaise Public Boat Launch 30° 55' 69" N, 89° 27' 31" W

**2** Diamondhead Marina



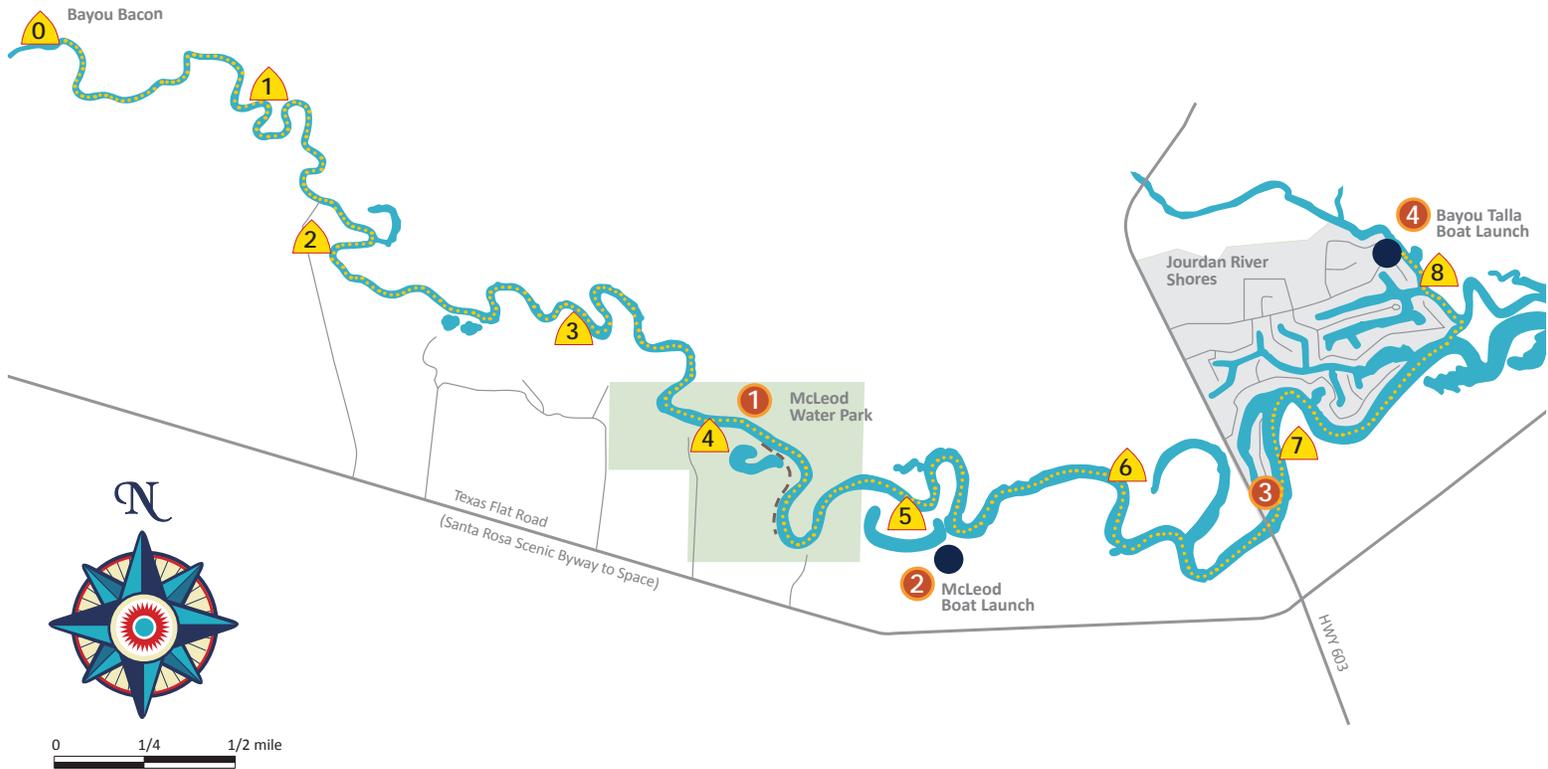
**The Wolf River** was named for the red wolf, once found throughout the southeastern US. Although you won't see any red wolves along the river today, the area is teeming with other wildlife including fox, coyotes, deer, turkey, rabbits, and many songbirds. In the swamp areas along the river, ducks, geese and other wading birds coexist with mink, muskrats, nutria, otter, beaver, opossum, and turtles. If you're lucky, you may spot an alligator sunning on the riverbank or the shadow of a black bear slipping through the trees.



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# JOURDAN RIVER



## MAP LEGEND

- Mile Marker
- Canoe/Kayak Launch
- Blueway Trail
- Point of Interest
- Hiking Trail

<b>LEVEL</b>	Beginner to Intermediate
<b>START/END</b>	Bayou Talla Boat Launch
<b>TRAIL MILES</b>	8.5 miles in length
<b>PADDLING TIME</b>	5 hours one-way
<b>DESCRIPTION</b>	Shallow river upstream with light river currents. Smooth waters
<b>SCENERY</b>	Spring-fed river with Oxbow lakes. Woodland habitats downstream and white sandy beaches upstream
<b>ACCESS</b>	Private access at Bayou Bacon and Public Boat Launch

The Jourdan River Blueway Trail invites canoers and kayakers to explore a 8.5 mile trail through coastal floodplains and a riverine ecological system. The river trail links the McLeod Park canoe launch to the Bayou Talla boat launch.

The tranquil waters of the upper Jourdan River offer a haven for birds, wildlife... and paddlers! From Bayou Bacon to Bayou Talla, the blueway trail guides kayakers and canoe enthusiasts past artesian springs, hardwood forests, and through the natural beauty of Hancock County.

From the boat launch at McLeod Park, paddlers may go upriver past oxbow lakes and bluffs to Bayou Bacon. The trail continues downriver past sandbars, the Highway 603 bridge, and houses and restaurants of Jourdan River Shores to the Bayou Talla boat launch. The Jourdan River below McLeod Park is a popular area for high-speed water sports, so remain aware!

### Bayou Bacon

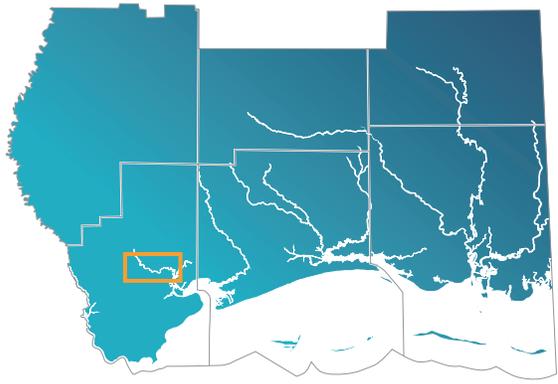
The Jourdan River is one of the major coastal streams that bring water to the Gulf of Mexico. It is a tidally-influenced freshwater river, with cypress/gum swamp scattered along the river. All year, fishermen will find largemouth bass, freshwater catfish, striped bass... and alligator gar the size of your kayak.

### Sandbars

These deposits are ever-changing formations that shift with winds and tides, but often form at the curve of the river. Sandbars are popular spots to picnic and play. No motorized vehicles are allowed, so paddlers can enjoy a quiet resting spot. Please respect the privacy of adjacent landowners.

### Birds

This area has excellent feeding, resting, and wintering habitat for migrating birds such as brown pelicans, white pelicans, and cormorants. Throughout the year hawks, osprey, eagles and other species make their homes in the tall trees.



**Directions:**

From Interstate 10 take Exit #13 north toward Kiln, Mississippi. At Texas Flat Road which has been recently designated the Santa Rosa Scenic Byway to Space, go left to reach McLeod Park, which will be on your right.

**Accommodations:**

McLeod has RV campsites and primitive camping. If camping is not your thing, there are a number of hotels on Highway 90 in Waveland and Bay St Louis, less than five miles from McLeod Park.

**3 Oxbow Lakes** are formed when rivers meander and the main stream of a river is cut off to form a lake. In low coastal plains, the river meanders widely, curving across marshes and floodplains. Oxbow lakes were once a part of the river, but now hold water in the channels remaining from when they once flowed to the sea.

**The McLeod Nature Trail 1** provides a beautiful 1.25 mile walk, winding through a pine and hardwood forest parallel to the Jourdan River. Many trees are identified with botanical names, and birds and animals will probably cross your path!

**5 McLeod Park**

The park includes 328 acres with a park store, RV campsites, primitive campsites, bathhouses, pavilions, play areas, two boat launches, and fishing piers. **The McLeod Boat Launch 2** provides canoers and kayakers a safe spot to put in, with a no wake zone. The river is lined with smooth cordgrass and wild rice along the Upper Jourdan River, with floating leafed cow-lily along the shoreline. The Kiln is named for the charcoal kilns which provided fuel for cooking and heating in this area, made from the forests of pine trees.

**3 Highway 603** is the main thoroughfare through the Kiln, and great restaurants are nearby. Choctaw and Creek native americans were once residents of this area. Shell middens are reminders of their lives – and their love of shellfish. A shell midden is a type of archaeological site made up almost entirely of shells. Over time, plants and then trees cover some of the shells, eventually forming an island of maritime forest.

**7 Artesian Springs**

When the groundwater beneath the earth’s crust is stored in a confined area, it bubbles up to form an artesian spring. Near this mile marker is an artesian spring that bubbles up through the river! Look for it on the south side of the river – it is especially easy to spot at low tide. The Jourdan is a spring-fed river.

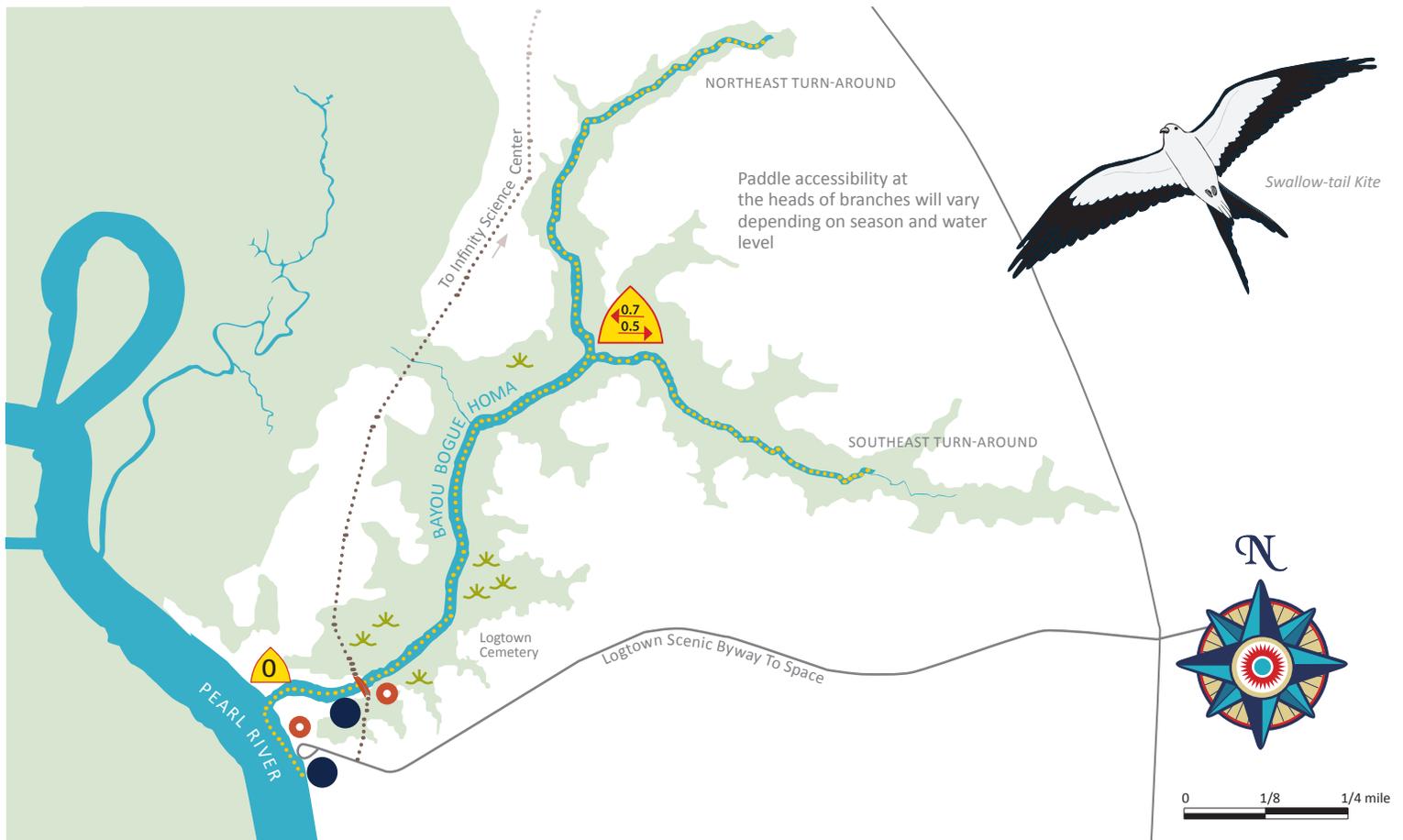
**The Bayou Talla Boat Launch 4** is located at the end of Comanche Street in Kiln, Mississippi. There is no charge to launch, and parking is available. A rollicking trade in homemade liquor once flourished in this area. Moonshine such as “Jourdan River Dew” had the reputation for high alcoholic content. Raids often found copper stills, but it was difficult to catch the smugglers... they might have used this launch to spirit their white lightning to New Orleans and across the country!



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# BOGUE HOMA BAYOU



## MAP LEGEND

- Mile Marker
- Canoe/Kayak Launch
- Blueway Trail
- Swamp
- Interpretive Sign
- Possum Walk Trail

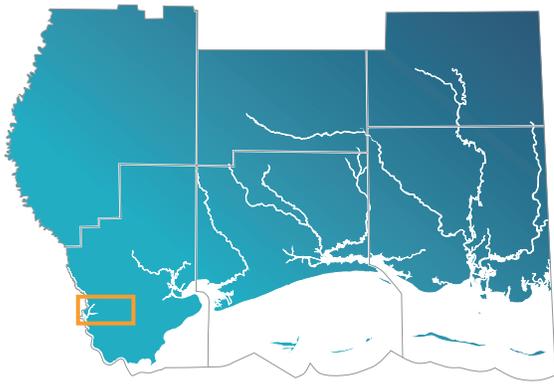
<b>LEVEL</b>	Beginner to Intermediate
<b>START/END</b>	East Pearl River Boat Launch
<b>TRAIL MILES</b>	2.25 miles
<b>PADDLING TIME</b>	2-1/2 hours round-trip
<b>DESCRIPTION</b>	Freshwater Swamp
<b>SCENERY</b>	Cypress along the bank with hanging Spanish Moss, native flowering vegetation, very calm and relaxing
<b>ACCESS</b>	Accessible Kayak/canoe launch

The East Pearl River watershed has been home to people of many backgrounds: tribal cultures, explorers, pioneers, logging employees, traders, slaves and freedmen, and settlers from across the globe. Possum Walk was a traditional African-American community along the banks of Bayou Bogue Homa. In these waters people from Possum Walk and Logtown fished, drew water, washed clothing, and met their everyday needs.

The Possum Walk Heritage Trail opened on August 14, 2013 to hiking, off-road bicycling, and kayaking. The bayhead swamp offers unparalleled wildlife due to the thousands of acres of buffer zone that surround the site.



The Bayou Bogue Homa meets the marshes of the East Pearl River, hosting bald cypress (*Taxodium distichum*) and blackgum (*Nyssa sylvatica*). The banks contain scattered patches of southern wild-rice (*Zizaniopsis*), pickerelweed (*Pontederia cordata*) and occasionally wild-rice (*Zizania aquatica*). Keep an eye out for alligators, as they have been spotted regularly in these waters! Birds of the area include: Anhinga, Osprey, Cooper's Hawk and other raptors, Bald Eagle, Kingfisher, Vulture species, Woodpecker species (although no evidence of the Ivory-Billed variety... yet.) Species of particular interest include: Brown-headed Nuthatch, Swallow-tailed Kite and Mississippi Kite (summer residents), Prothonotary Warbler, Swainson's Warbler, and Cerulean Warbler (an annual visitor), Painted Bunting, and Rusty Blackbird (a winter resident).



After the Weston mill closed in 1930, Logtown's population decreased steadily. A rich community life continued, however, in Logtown and in the Point, the mostly African-American community north across the Bogue Homa from Logtown. According to local lore and some former residents, the making of homemade whiskey, or moonshine, became common until the end of Prohibition in Hancock County after the closing of area timber mills.



Lumberjacks at Logtown, circa 1890.

Following the Depression, life went on in Logtown and the Point, and area residents enjoyed Sunday church picnics, bought supplies at Forest and Eldora Summers' general store, fished, hunted turkey and wild boar, went to Moultrie's tavern in the Point, and had parties, or "come-overs." The Point had its own cemetery, which still lies northeast of Logtown cemetery, between the forks of the Bogue Homa. In 1961, NASA announced plans to build Stennis Space Center, and the process of relocating residents of the acoustic buffer zone began



AVOID PADDLING UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. ALWAYS WEAR YOUR LIFE JACKET AND CARRY A WHISTLE OR OTHER SOUND PRODUCING DEVICE, PREFERABLY ATTACHED TO YOUR LIFE JACKET. PADDLERS SHOULD CHECK WATER LEVEL AND TIDES, WEATHER, AND WATERWAY CONDITIONS PRIOR TO EVERY TRIP. REMOVE WHAT YOU BRING, CLEAN UP MORE IF YOU CAN. AVOID TRESPASSING ON PRIVATE LANDS. PLEASE BE AWARE OF YOUR SURROUNDINGS AND ALWAYS RESPECT THE WILDLIFE. REPORT ANY PROBLEMS YOU ENCOUNTER TO THE LOCAL AUTHORITIES IF APPROPRIATE.



## Proposed Blueways

The following blueways along the Mississippi Gulf Coast National Heritage Area have been proposed:

- Bartram Trail
- Bernard Bayou Blueway
- Boley Creek
- Buccaneer Blueway
- Deer Island Blueway
- Escatawpa Blueway
- Grand Bay National Estuarine Research Reserve
- Graveline Bayou Blueway
- Gulf Coast Saltwater Paddling Trail

See following pages for the current information available on the proposed blueways.

# Bartram Trail

It was mid summer of 1775, “..hot as pitch and sticky as tar,” when the American naturalist William Bartram crossed into the present state of Louisiana on his epic journey along the Gulf Coast from Pensacola to the Mississippi River. Since 1773, he had already explored other southeastern states of Tennessee, North and South Carolina, Georgia, Florida, Alabama and Mississippi; carefully describing, drawing, and recording the native trees, plants, and flowers; and observing the native Cherokee, Creek, Choctaw, and Seminoles of the region.

William was the son of John Bartram, who through the intercession of close friend, Benjamin Franklin, was appointed colonial Royal Botanist for North America by Britain’s King George III. John Bartram is credited with being the first American naturalist to perform successful experiments in plant hybridization. As a young man, William accompanied his renowned father on numerous trips around the colonies; discovering and collecting botanical specimens for shipment to the Royal Society in England and other European collectors. The William Bartram Trail is conceived as an eight-state Bartram Heritage Corridor that will become a Lakes & Rivers National Heritage Area across fourteen Florida & River Parishes.

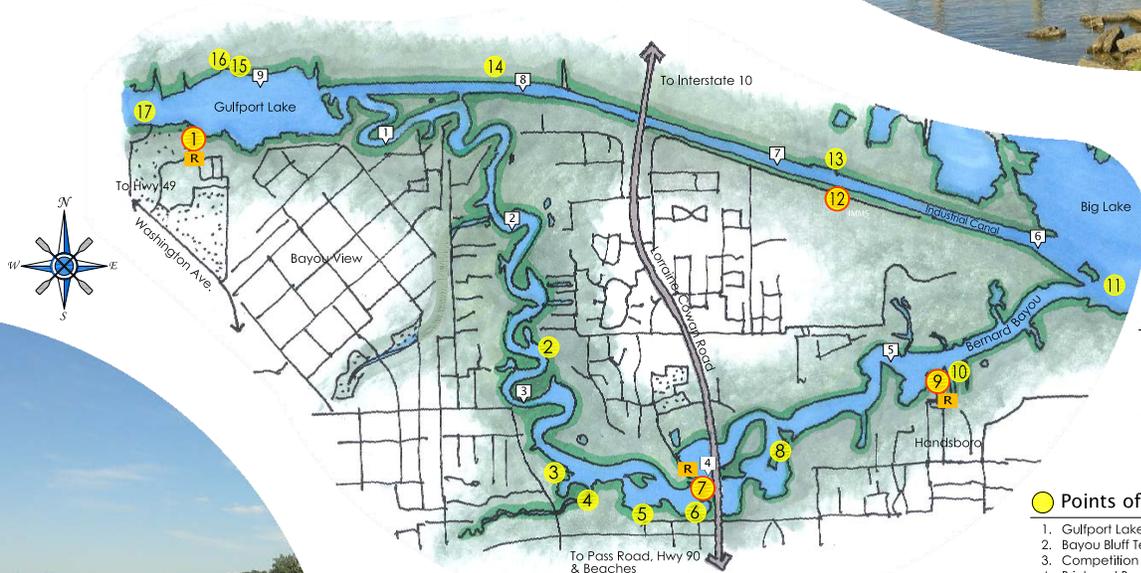
The development of a Bartram Heritage Trail revolves around: (1) a sense of William Bartram, the man; (2) a sense of the places he visited; (3) a sense of the historical times in which he lived. As only the physical places remain today, they must be sensitively developed to evoke the feelings of the other two categories: “the man” and “the times.” In many cases, the literal tracing of Bartram’s footsteps is not the most appropriate way to commemorate his travels. Where the environment of the actual trail has been irrevocably altered, for example, the development of the trail in its historical location would fail to properly evoke the spirit of Bartram, his times, or even the land as he knew it.



# Bernard Bayou

## Bernard Bayou Blueway

Is a meandering tidal waterway located in Gulfport, MS that offers a diversity of wildlife, natural beauty and a variety of dining and recreational opportunities. The bayou connects Gulfport Lake to Big Lake running to the south of the industrial canal. This Blueway is a looped route that begins and ends at the Gulfport Lake Boat Launch. The main route is a 9.2 mile loop with an optional routes south into Brickyard Bayou and East to Big Lake Area.



- Map Key**
- Mile Marker
  - Points of Interest
  - Paddle Launch
  - Restroom

- Points of Interest**
1. Gulfport Lake Boat Launch
  2. Bayou Bluff Tennis Resort
  3. Competition Marine
  4. Brickyard Bayou
  5. Blowfly Inn Restaurant
  6. Bridge St. / Magnolia on the Bayou Bungalows
  7. Kremer's Landing
  8. Bird Rookery
  9. Historic Handsboro Community Center
  10. James Hill Park
  11. To Biloxi Back Bay
  12. Institute for Marine Mammal Studies
  13. DMR Artificial Reef Program Site
  14. Ship Yards & Industry
  15. The Dock Bar & Grill
  16. 'WatsUP' Paddle Company
  17. To Turkey Creek

### Historic Handsboro / Bernard Bayou

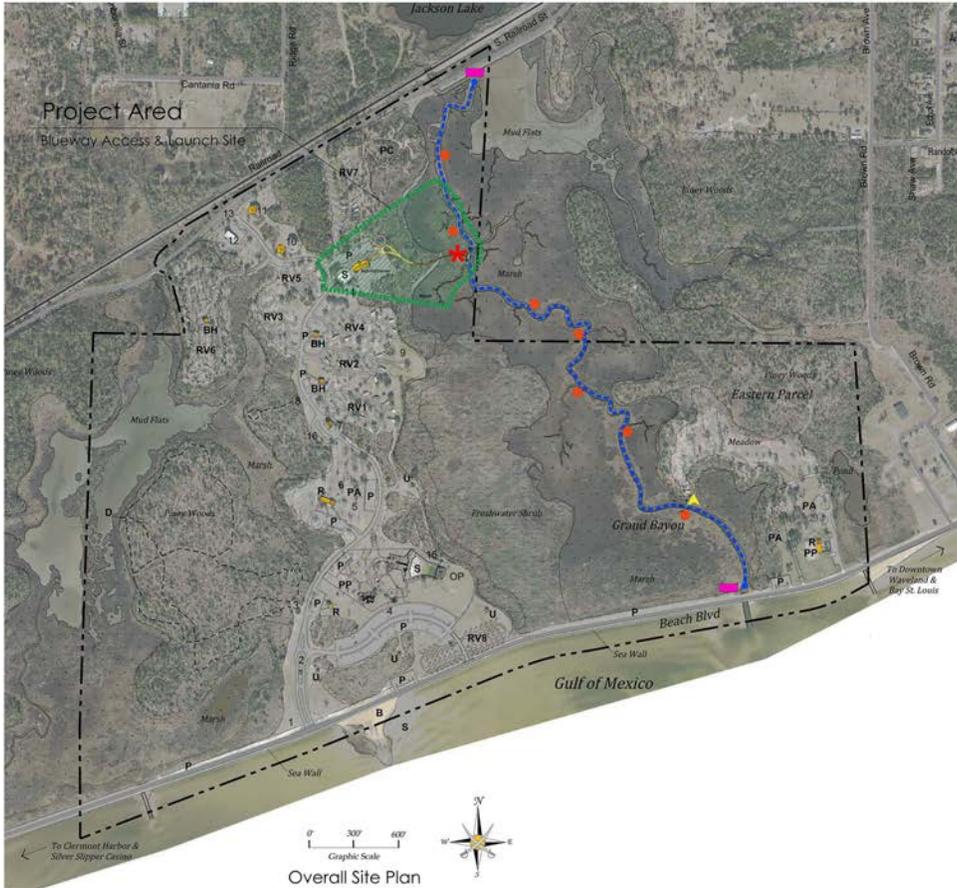
English and Scots-Irish pioneers settled the Buena Vista community (now Handsboro, MS) on Bayou Bernard, the latter named for a former blacksmith and shepherd, who lived on the north shore of the bayou. In 1840, New York brothers Miles and Shelton Hand arrived and built a foundry that in a short few years was supplying the Coast's growing timber and fishing industries with machines. In honor of the Hand brothers, Buena Vista changed its name in 1856 to Handsborough, now Handsboro.



# Boley Creek



# Buccaneer Blueway



## BLUEWAY SYMBOL KEY:

- Blue dashed line: Blueway Route
- Red star: Public Launch Site - Start/Finish
- Yellow triangle: Non-Public Launch Site - Emergency Access
- Orange circle: Blueway Marker Signage (2-sided)
- Pink square: Blueway Turnaround Signage

## RV CAMPSITE KEY

- RV1 - Jean Lafitte (1-25)
- RV2 - Baretaria Bay (26-47)
- RV3 - Long John Silver (48-68)
- RV4 - Pirates Cove (69-93)
- RV5 - Blackbeard (94-104)
- RV6 - Treasure Cove (105-149)
- RV7 - Royal Cay (150-200)
- RV8 - Beach Overflow (207-276)

## MAP KEY

1. Park Entrance
2. Fee Gate
3. Trailhead
4. Waterpark Entrance
5. Playground
6. Disc Golf Course
7. Office / Gate
8. Trailhead
9. Multi-Use Field
10. Asst. Park Managers Res.
11. Park Managers Residence
12. Maintenance Building
13. Maint. / Employee Entrance
14. Wading Pool
15. Wave Pool
16. RV Dump Station

## LEGEND

- B - Beach
- BH - Bath House
- D - Dock
- GC - Group Camping
- GP - Group Picnic
- P - Parking
- PA - Picnic Area
- PC - Primitive Camping
- PP - Picnic Pavilion
- R - Restroom
- RVC - RV Camping
- S - Swimming
- U - Utility Platform

## Sheet Index:

- Blueway Route - 1
- Existing Site Conditions & Site Analysis - 2
- Concept Diagram & Program Objectives - 3
- Concept Plan & Details - 4



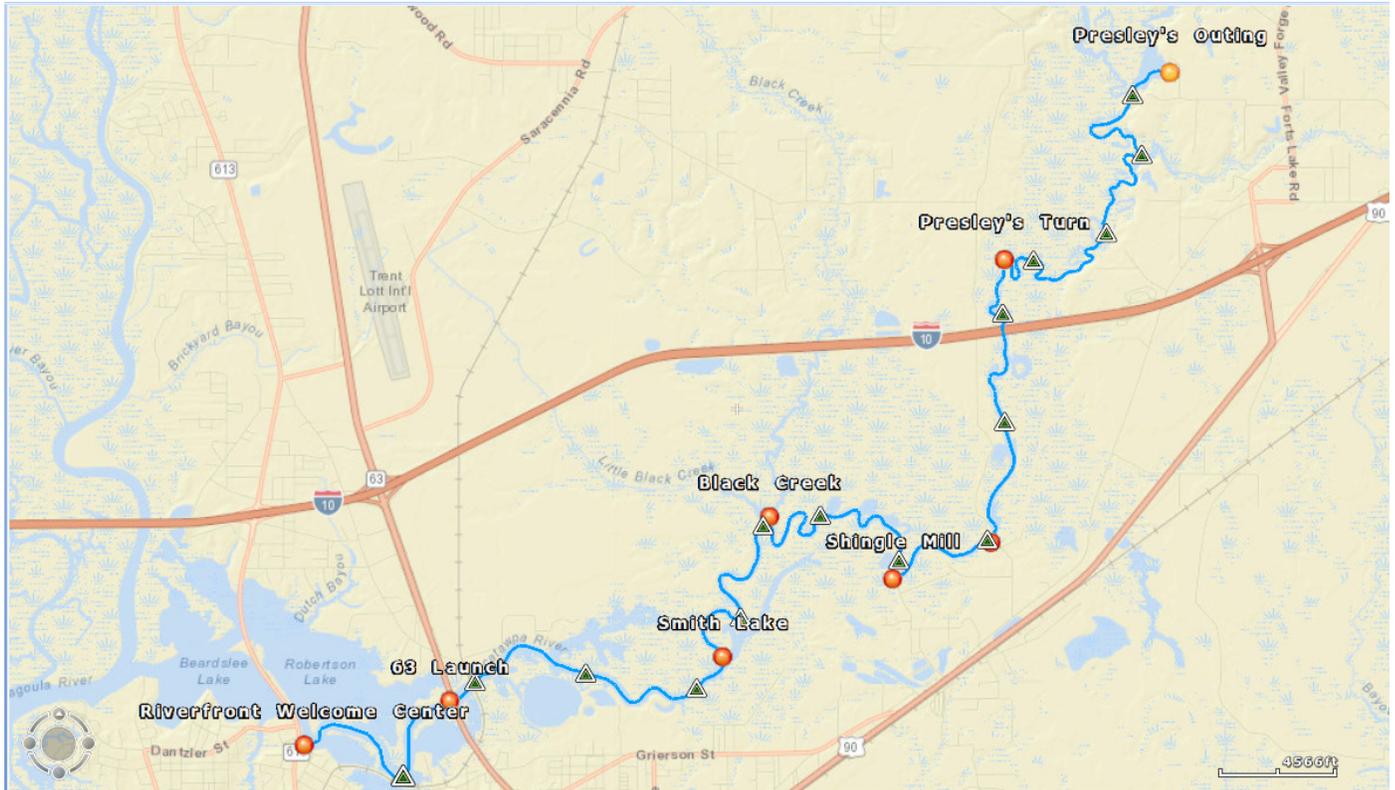
Buccaneer State Park  
**Blueway Access & Launch**  
 Schematic Drawings  
 January 4, 2017



# Deer Island Blueway



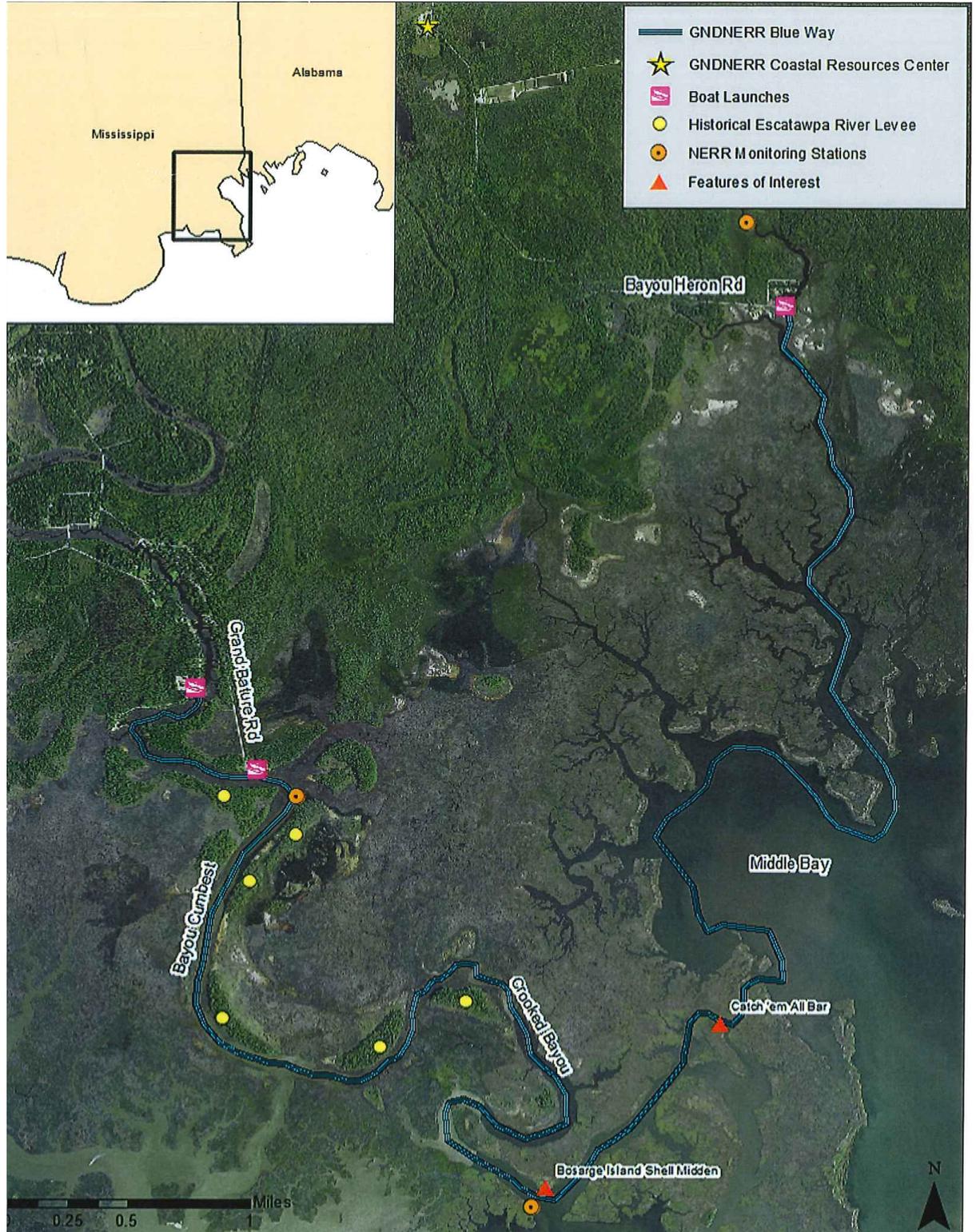
# Escatawpa River



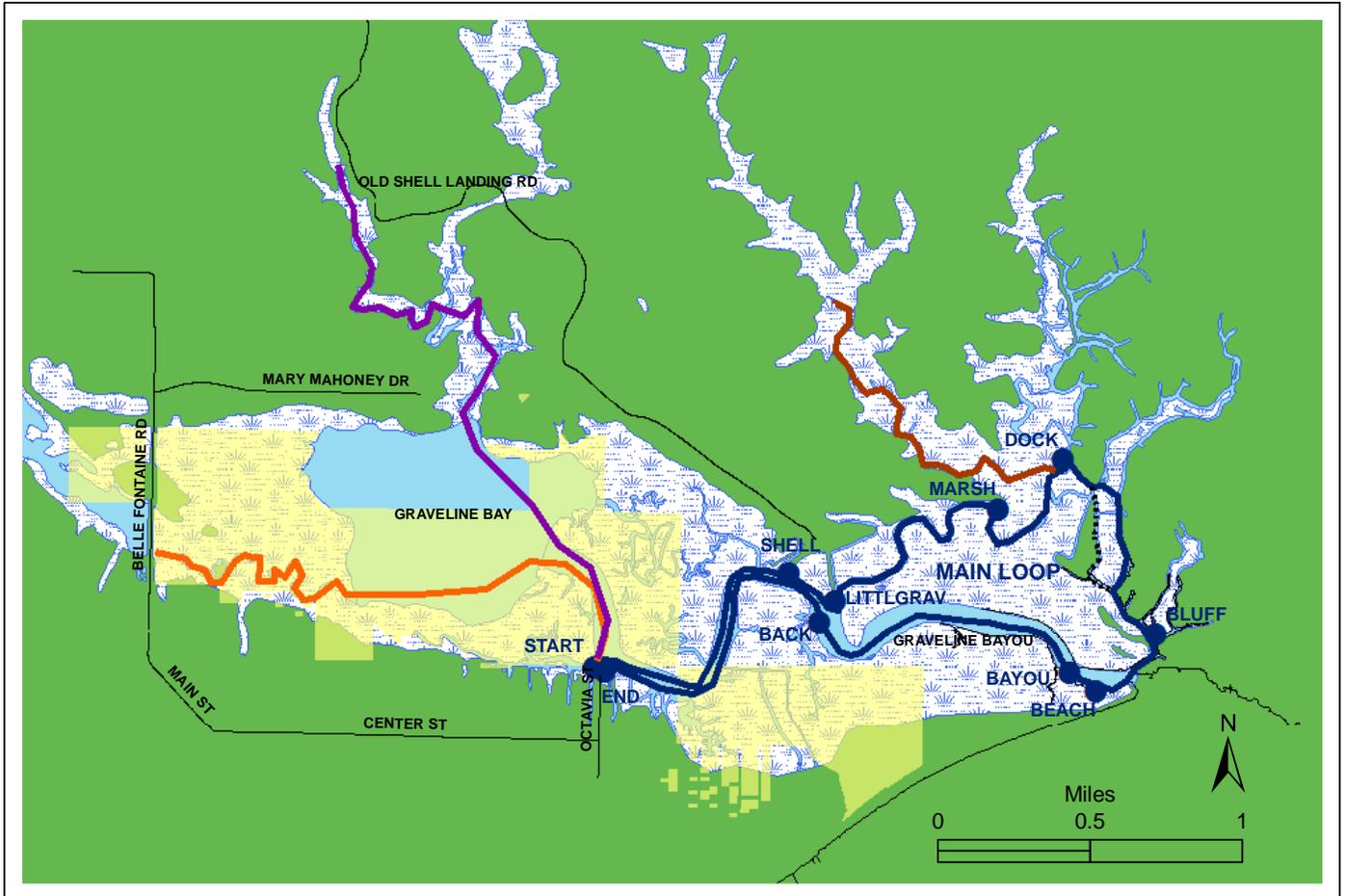
GPS coordinances for Waypoints on the Escatawpa River Blueway:

- 63 Launch:  
30 25'9" N 88 31'12" W
- Smith Lake:  
30 25'26" N 88 29'10" W
- Black Creek:  
30 26'20" N 88 28'49" W
- Shingle Mill:  
30 25' 56" N 88 27'54" W
- Presley's Turn:  
30 27'59" N 88 27'4" W
- Presley's Outing:  
30 29'11" N 88 25' 50" W
- Riverfront Welcome Center:  
30 24'52" N 88 32'17" W
- Pollock's Ferry Rd Launch:  
30 26'10" N 88 27'10" W

# Grand Bay National Estuarine Research Reserve



# Graveline Bayou



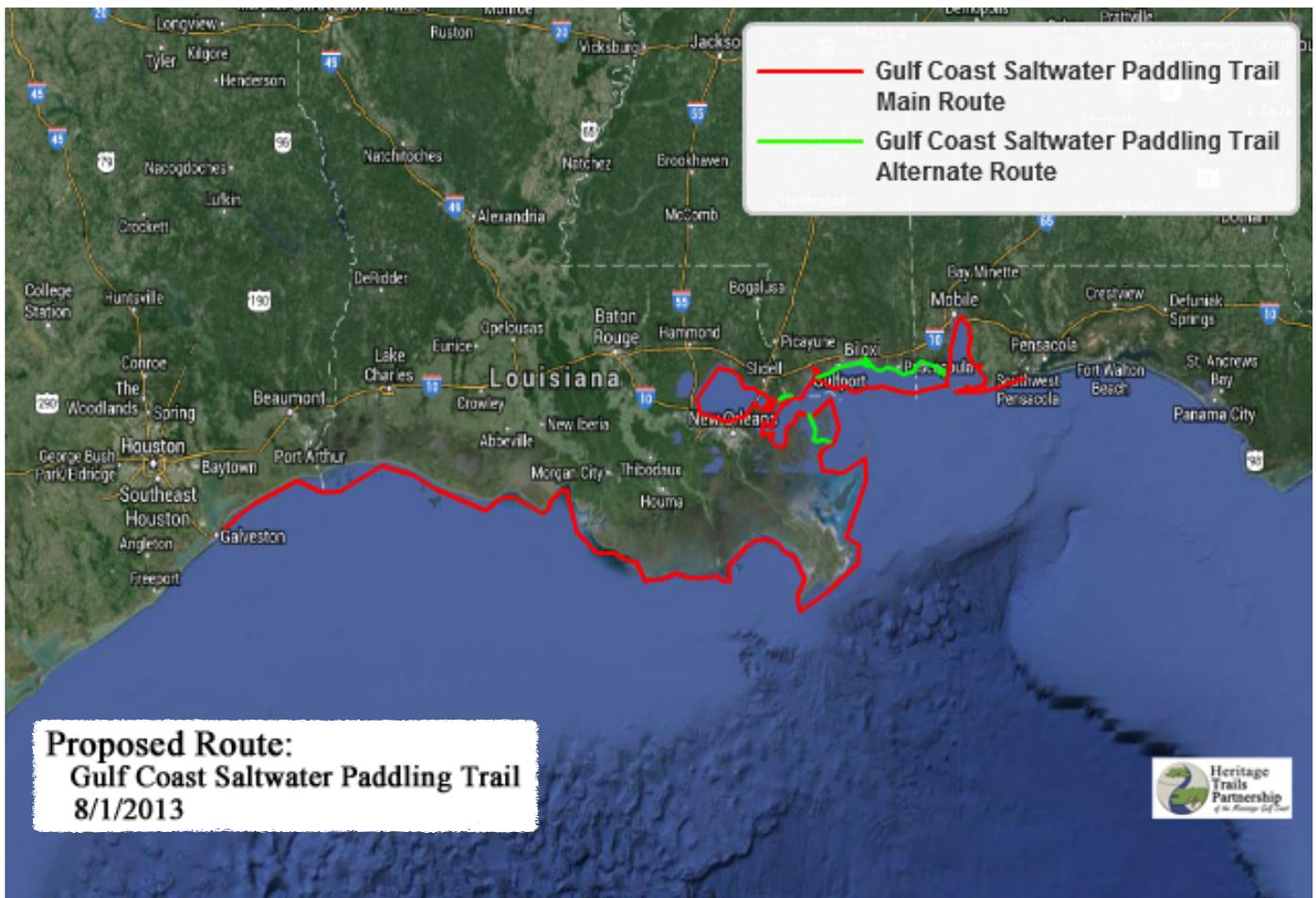
## Graveline Bayou Blueway Kayak & Canoe Trail

- Main Loop
- Xplore\_LG\_Ext
- Xplore\_CarlooseBayou
- Xplore\_CrosswayBayou
- WAYPOINT
- Public\_Land
- ⋯ Island\_shortcut

Graveline Bay and Bayou Coastal Preserve  
 Jackson County, Mississippi  
 Mississippi Department of Marine Resources  
 Feb, 2012

# Gulf Coast Saltwater Paddling Trail

Gulf Coast Saltwater Paddling Trail (GCSPT): The vision provides an educational, recreation and tourism opportunity for paddlers planning a trip to see the natural beauty of the entire Gulf Coast Region including Florida, Alabama, Mississippi, Louisiana and Texas. The GCSPT will have a network of launch and landing sites, or “trail heads,” that allows people in human-powered boats and beachable sail craft to enjoy the historic, scenic and environmental richness of Gulf Coastal communities through continuous, multiple-day and single-day trips. This trail is part of a larger initiative called the Southeast Coast Saltwater Paddle Trail which has identified a blueway corridor that stretches from the Captain John Smith Chesapeake National Historic Trail in Virginia, through the coasts of North Carolina, South Carolina, and Georgia, and connects with the Florida Circumnavigational Saltwater Paddling Trail.



# Appendix

- Contact Information
- MGCNHA Surveys
- Blueway Trail Inspection Checklist
- Points of Interest Permission (sample)
- Mile Markers Permission Letter (sample)
- Standard Lease of Public Trust Tidelands (sample)
- Joint Application and Notification (sample)
- USDA/Forest Service Permit (sample)
- Application for use of Federal Lands (sample)



## Contact Information



Mississippi Secretary of State (Coast Office)  
1701 24th Avenue  
Gulfport, MS 39501  
(228) 864-0254

Mississippi Department of Marine Resources  
1141 Bayview Avenue  
Suite 101  
Biloxi, MS 39530  
(228) 374-5000

Mississippi Gulf Coast National Heritage Area  
1141 Bayview Avenue  
Biloxi, MS 39530  
(228) 523-4150

United States Army Corps of Engineers  
109 St. Joseph Street  
Mobile, AL 36602  
(251) 690-2511

Mississippi Forestry Commission  
Southeast District Office  
1528 S. Azalea Drive  
Wiggins, MS 39577  
(601) 928-5261

Mississippi Department of Wildlife Fisheries and Parks  
1505 Eastover Drive  
Jackson, MS 39211  
(601) 432-2400

Mississippi Department of Transportation  
401 North West Street  
Jackson, MS 39201  
(601) 359-7001

ABC Board/Mississippi Department of Revenue  
1286 Gluckstadt Road  
Madison, MS 39110  
(601) 923-7700

Land Trust for the Mississippi Coastal Plain  
955-A Howard Ave.  
Biloxi, MS 39533  
228-435-9191



## We would like to meet you! VISITOR SURVEY

Please take a moment to fill out BOTH SIDES of the survey, and return it in the completed survey box. This will help us to assess nature-based tourism priorities.

**THANK YOU!**

1. Date of Visit:

2. City and State of Residence:

3. Number of people in your party:

4. Purpose of visit:  Visit Friends/Family  Leisure  
 Business  Vacation  Event If so, What event?

5. If visiting, length of stay: Days \_\_\_\_\_ Nights \_\_\_\_\_

6. Accommodations (Check One):  Hotel/Motel  Casino  
 Campground/RV Park  Bed & Breakfast  Condo  
 Staying with Friends or Family  Resident

7. During this visit, how much money did you spend per day on the following:

\_\_\_\_\_ Lodging \_\_\_\_\_ Food \_\_\_\_\_ Transportation  
\_\_\_\_\_ Events/Attractions \_\_\_\_\_ Shopping  
\_\_\_\_\_ Nature-related Experience \_\_\_\_\_ Misc.

8. Education (Check one): \_\_\_\_\_ High School Graduate  
\_\_\_\_\_ College Degree \_\_\_\_\_ Graduate School

9. Your age(s):

10. Gender:  Male  Female

11. Occupation:

12. Which category is closest to your family income:

- Less than \$29,999  \$30,000 - \$59,000  
 \$60,000 - \$89,999  \$90,000 - \$129,999  
 \$130,000 - \$159,999  \$160,000+

13. How many nature-based locations did you visit on this trip?

14. Do you prefer guided tours or independent trips to nature sites?

15. What are your nature-based interests (Check all that apply):  Leisure  Fishing  Nature/Exploration  
 Wildlife Observation  Other

16. Please rate your experience at this location on a scale from 1 to 5: \_\_\_\_\_ 1 -Poor - 3 - It was okay - 5 - Excellent!

17. How did you find this destination?

- Word of Mouth  Website \_\_\_\_\_  
 Web Search (List search words) \_\_\_\_\_  
 Advertisement \_\_\_\_\_  
 Other \_\_\_\_\_

18. Have you been to this location before?  Y  N

19. Do you plan to return to this destination?  Y  N

20. Please let us know any comments you may have!

Finally, please sign up to receive more information about nature-based opportunities on the MS Gulf Coast:

Name \_\_\_\_\_

Email \_\_\_\_\_

**Visit our website: [MSGulfCoastHeritage.ms.gov](http://MSGulfCoastHeritage.ms.gov)**

# BLUEWAY TRAIL INSPECTION CHECKLIST

Date of Inspection: \_\_\_\_\_ Weather Condition: \_\_\_\_\_

Location / Address: \_\_\_\_\_ Inspector: \_\_\_\_\_

CONCERNS / OBSERVATIONS	No Defect Found	Needs Service	Concerns/Observations	Recommendation(s) Action Required	Completed Date
Parking Lot	<input type="checkbox"/>	<input type="checkbox"/>			
Signage/Kiosk	<input type="checkbox"/>	<input type="checkbox"/>			
Broken Glass and Garbage	<input type="checkbox"/>	<input type="checkbox"/>			
Exterior Lighting	<input type="checkbox"/>	<input type="checkbox"/>			
Garbage Containers	<input type="checkbox"/>	<input type="checkbox"/>			
Signs of Vandalism	<input type="checkbox"/>	<input type="checkbox"/>			
Trail Markers	<input type="checkbox"/>	<input type="checkbox"/>			
Launch Site	<input type="checkbox"/>	<input type="checkbox"/>			
Invasive Species	<input type="checkbox"/>	<input type="checkbox"/>			
Unauthorized Camp Fires	<input type="checkbox"/>	<input type="checkbox"/>			
Benches	<input type="checkbox"/>	<input type="checkbox"/>			
Broken Trees and Branches	<input type="checkbox"/>	<input type="checkbox"/>			
Signs of Erosion	<input type="checkbox"/>	<input type="checkbox"/>			
Any Storm/Wind Damage	<input type="checkbox"/>	<input type="checkbox"/>			
Condition of Water	<input type="checkbox"/>	<input type="checkbox"/>			





**Land Trust for the Mississippi Coastal Plain**  
**PO Box 245**  
**Biloxi, MS 39533**  
**228-435-9191 228-435-5749 fax**

The Land Trust for the Mississippi Coastal Plain, a nonprofit organization, has my permission to install a sign measuring 18" x 24" on my property within the Old Fort Bayou waterway for purposes of marking our site as a Point of Interest along the blueway trail.

**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Name (print)** \_\_\_\_\_

**Address** \_\_\_\_\_

**Phone** \_\_\_\_\_ **E-mail** \_\_\_\_\_

**Point of Interest #** \_\_\_\_\_

**Name of location** \_\_\_\_\_



**Land Trust for the Mississippi Coastal Plain  
PO Box 245  
Biloxi, MS 39533  
228-435-9191 228-435-5749 fax**

The Land Trust for the Mississippi Coastal Plain, a nonprofit organization, has my permission to install a sign measuring 18” x 24” on the bank of my property along the Red Creek waterway for purposes of marking the blueway trail.

It is my understanding that LTMCP knowingly assumes all risks involved with installing the Red Creek Blueway signs and agrees to hold the undersigned landowner harmless. That LTMCP, does hereby release, discharge, indemnify and hold harmless the undersigned landowner, myself, my spouse, legal representatives, heirs, next of kin and assigns from and against any liability or responsibility for injury or damages resulting from the installation of the Blueway signs LTMCP proposes to install on my property.

**Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

**Name (print)** \_\_\_\_\_

**Address** \_\_\_\_\_

**Phone** \_\_\_\_\_ **E-mail** \_\_\_\_\_

**Mile Marker #**

**Name of location** \_\_\_\_\_



DELBERT HOSEMANN  
Secretary of State

FOR OFFICE USE ONLY:  
No. \_\_\_\_\_  
Date: \_\_\_\_\_

## APPLICATION FOR STANDARD LEASE OF PUBLIC TRUST TIDELANDS

1. APPLICATION BY: (Please check ONE)

\_\_\_\_\_ Individual      \_\_\_\_\_ Partnership      \_\_\_\_\_ Corporation      \_\_\_\_\_ Public Agency

Applicant's Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_ Business      (\_\_\_\_) \_\_\_\_\_ Other

Email: \_\_\_\_\_

Preferred Communication:  
(Check One)  
 Email  
 Mail (USPS)

2. APPLICANT'S ATTORNEY AND/OR AUTHORIZED AGENT (IF APPLICABLE)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Telephone: (\_\_\_\_) \_\_\_\_\_ Email: \_\_\_\_\_

3. GEOGRAPHIC LOCATION OF SUBMERGED LAND: (Attach vicinity map - preferably a reproduction of appropriate portion of current United States Geological Survey Quadrangle Map)

\_\_\_\_\_ Section      \_\_\_\_\_ Township      \_\_\_\_\_ Range      \_\_\_\_\_ County

Nearest City/Community: \_\_\_\_\_

Name of Waterbody (if any): \_\_\_\_\_

Estimated area of project (square feet): \_\_\_\_\_

4. PLANNED USE OF TIDELANDS: (Check All that Apply)

- Commercial
- Industrial
- Residential
- Recreational

- Private
- Public
- Other (Please Explain):



9. **DESCRIBE ALL ACTIVITIES TO BE CONDUCTED ON THE LEASED PROPERTY:**

Please describe:

**If the property to be leased is to be used for any purpose other than single family residential property, attach two (2) prints of a survey prepared, signed and sealed by a person properly registered as a land surveyor by the Mississippi State Board of Registration for Professional Engineers and Land Surveyors with the following requirements:**

- (1) Utilizing an appropriate scale on 8½" x 11" size paper, unless a larger size is necessary to provide sufficient clarity and detail;
- (2) Showing the line of mean high tide, if any;
- (3) Showing the location of shoreline and submerged vegetation, if any;
- (4) Showing the location of any proposed structures and all existing structures, if any;
- (5) Showing the applicant's or assignor's upland parcel property lines, if property to be leased abuts on property which is outside the public trust;
- (6) Showing the primary navigation channels or direction to the center of the affected waterbody; and
- (7) Including a legal description of area to be leased with State Plane coordinates of reference point.

**If the property to be leased is to be used as a single family residential property, attach two (2) copies of dimensioned site plan drawing(s) with the following requirements:**

- (1) Utilizing an appropriate scale on 8½" x 11" size paper;
- (2) Showing the approximate water's edge;
- (3) Showing the location of shoreline vegetation, if any;
- (4) Showing the location of the existing structures and proposed structures, if any;
- (5) Showing the applicant's upland parcel property lines, if property to be leased abuts on property which is outside the public trust;
- (6) Showing the primary navigation channels or direction to the center of the affected waterbody; and
- (7) Including a legal description of area to be leased.

10. LIST ALL APPROVALS OR CERTIFICATIONS RECEIVED OR APPLIED FOR FROM FEDERAL, STATE OR LOCAL AGENCIES FOR ANY STRUCTURES, CONSTRUCTION, OR OTHER ACTIVITIES DESCRIBED IN THIS APPLICATION.

<u>AGENCY</u>	<u>Approval Type</u>	<u>Application No.</u>	<u>Approval Date</u>
U.S. Army Corps of Engineers	_____	_____	_____
Dept. of Marine Resources	_____	_____	_____
MDEQ, Office of Pollution Control	_____	_____	_____
City/County	_____	_____	_____
Other	_____	_____	_____

Explanation, if applicable:  
Explanation:

*NOTE: ANY OF THE APPROVALS OBTAINED MUST BE SUBMITTED AS AN ATTACHMENT TO THIS APPLICATION ALONG WITH DETAILED PLAN OR PLOT OF LEASED AREAS, VICINITY MAPS, OWNERSHIP MAPS, STRUCTURAL PLANS OR CONSTRUCTION BLUEPRINTS.*

11. ATTACH SATISFACTORY EVIDENCE OF OCCUPANCY AND PAYMENT OF TAXES BY THE APPLICANT AND/OR HIS PREDECESSOR IN INTEREST PRIOR TO JULY 1, 1973, IF APPLICABLE, OR A STATEMENT ACKNOWLEDGING OCCUPANCY OF THE PROPERTY COMMENCED ON OR AFTER JULY 1, 1973.

12. TERM OF LEASE:

Request the lease be granted for \_\_\_\_\_ years with the option to renew for \_\_\_\_\_ years upon expiration of the primary term.

*NOTE: MAXIMUM TERM IS FORTY (40) YEARS AND MAXIMUM RENEWAL TERM IS TWENTY-FIVE (25) YEARS.*

13. PUBLIC ACCESS: (Please circle ONE)                      ALLOWED                      NOT ALLOWED

If public access is allowed, please describe extent of available public access and all barriers or hindrances thereto.

Describe:

If public access is not allowed, please state reasons for restriction.

Describe:

If the facility includes a marina, will at least 50% of berths be available for use by members of the general public at the same rates charged other customers and/or members? (Please circle ONE)

YES  NO

**14. SIGNATURE AND CERTIFICATION:**

**All statements contained above and attached exhibits are true and correct to the best of my knowledge and belief. I agree to provide any additional data or information which may be required or requested by the Secretary of State's Office.**

I enclose a non-refundable application processing fee in the amount of:

- \$50.00 for single family residential use
- \$150.00 for all other uses

---

**Signature of Applicant or Agent**

**Date**

---

**Title**

# JOINT APPLICATION AND NOTIFICATION

U.S. ARMY CORPS OF ENGINEERS  
MISSISSIPPI DEPARTMENT OF MARINE RESOURCES  
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY/OFFICE OF POLLUTION CONTROL

This form is to be used for proposed activities in waters of the United States in Mississippi and for the erection of structures on suitable sites for water dependent industry. Note that some items, as indicated, apply only to projects located in the coastal area of Hancock, Harrison and Jackson Counties.

**1. Date**

\_\_\_\_\_ month day year

**2. Applicant name, mailing address, phone number and email address:**

**Agent name, mailing address, phone number and email address:**

**3. Official use only**

COE \_\_\_\_\_  
DMR \_\_\_\_\_  
DEQ \_\_\_\_\_  
A95 \_\_\_\_\_  
DATE RECEIVED \_\_\_\_\_

**4. Project location**

Street Address \_\_\_\_\_ City/Community \_\_\_\_\_  
Name of Waterway \_\_\_\_\_ Latitude \_\_\_\_\_ Longitude (if known) \_\_\_\_\_  
Geographic location: Section \_\_\_\_\_ Township \_\_\_\_\_ Range \_\_\_\_\_ County \_\_\_\_\_

**5. Project description**

New work \_\_\_ Maintenance work \_\_\_

**Dredging**

___ Channel	length _____	width _____	existing depth _____	proposed depth _____
___ Canal	length _____	width _____	existing depth _____	proposed depth _____
___ Boat Slip	length _____	width _____	existing depth _____	proposed depth _____
___ Marina	length _____	width _____	existing depth _____	proposed depth _____
___ Other-Mooring Basin	length _____	width _____	existing depth _____	proposed depth _____

Cubic yards of material to be removed \_\_\_\_\_ Type of material \_\_\_\_\_  
Location of spoil disposal area \_\_\_\_\_  
Dimensions of spoil area \_\_\_\_\_ Method of excavation \_\_\_\_\_  
How will excavated material be contained? \_\_\_\_\_

**Construction of structures**

___ Bulkhead	Total length _____	Height above water _____
___ Pier	length _____	width _____ height _____
___ Boat Ramp	length _____	width _____ slope _____
___ Boat House	length _____	width _____ height _____

\_\_\_ Structures on designed sites for water dependent industry (Coastal area only). Explain in item 11 or include as attachment.

\_\_\_ Other (explain) \_\_\_\_\_

**Filling**

Dimensions of fill area \_\_\_\_\_  
Cubic yards of fill \_\_\_\_\_ Type of fill \_\_\_\_\_

**Other regulated activities (i.e. Seismic exploration, burning or clearing of marsh) Explain.**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

---

**6. Additional information relating to the proposed activity**

Does project area contain any marsh vegetation? Yes \_\_\_\_\_ No \_\_\_\_\_

(If yes, explain) \_\_\_\_\_

Is any portion of the activity for which authorization is sought now complete? Yes \_\_\_\_\_ No \_\_\_\_\_

(If yes, explain) \_\_\_\_\_

Month and year activity took place \_\_\_\_\_

If project is for maintenance work on existing structures or existing channels, describe legal authorization for the existing work. Provide permit number, dates or other form(s) of authorization. \_\_\_\_\_

Has any agency denied approval for the activity described herein or for any activity that is directly related to the activity described herein?

Yes \_\_\_\_\_ No \_\_\_\_\_ (If yes, explain) \_\_\_\_\_

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**7. Project schedule**

Proposed start date \_\_\_\_\_ Proposed completion date \_\_\_\_\_

Expected completion date (or development timetable) for any projects dependent on the activity described herein. \_\_\_\_\_

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**8. Estimated cost of the project** \_\_\_\_\_

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**9. Describe the purpose of this project. Describe the relationship between this project and any secondary or future development the project is designed to support.** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Intended use: Private \_\_\_\_\_ Commercial \_\_\_\_\_ Public \_\_\_\_\_ Other (Explain) \_\_\_\_\_

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**10. Describe the public benefits of the proposed activity and of the projects dependent on the proposed activity. Also describe the extent of public use of the proposed project.**

**11. Narrative Project Description:**

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12. Provide the names and addresses of the adjacent property owners. Also identify the property owners on the plan view of the drawing described in Attachment "A". (Attach additional sheets if necessary.)

1.

2.

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13. List all approvals or certifications received or applied for from Federal, State and Local agencies for any structures, construction, discharges, deposits or other activities described in this application. Note that the signature in Item 14 certifies that application has been made to or that permits are not required from the following agencies. If permits are not required, place N/A in the space for Type Approval.

<u>Agency</u>	<u>Type Approval</u>	<u>Application Date</u>	<u>Approval Date</u>
Dept. of Environmental Quality			
Dept. of Marine Resources			
Army Corps of Engineers			
City/County_____			
Other_____			

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**14. Certification and signatures**

Application is hereby made for authorization to conduct the activities described herein. I agree to provide any additional information/data that may be necessary to provide reasonable assurance or evidence to show that the proposed project will comply with the applicable state water quality standards or other environmental protection standards both during construction and after the project is completed. I also agree to provide entry to the project site for inspectors from the environmental protection agencies for the purpose of making preliminary analyses of the site and monitoring permitted works. I certify that I am familiar with and responsible for the information contained in this application, and that to the best of my knowledge and belief, such information is true, complete and accurate. I further certify that I am the owner of the property where the proposed project is located or that I have a legal interest in the property and that I have full legal authority to seek this permit.

U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willingly falsifies, conceals, or covers up by any trick, scheme or device a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

**Mississippi Coastal Program (Coastal area only)**

I certify that the proposed project for which authorization is sought complies with the approved Mississippi Coastal Program and will be conducted in a manner consistent with the program.

\_\_\_\_\_  
Signature of Applicant or Agent

\_\_\_\_\_  
Date

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**15. Fees**

Payable to MS Dept. of Marine Resources  
\$50.00 Single-family residential application fee  
\$500.00 Commercial application fee  
Public notice fee may be required

Please include appropriate fees for all projects proposed in coastal areas of Hancock, Harrison and Jackson Counties.

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**16. If project is in Hancock, Harrison or Jackson Counties, send one completed copy of this application form and appropriate fees listed in Item 15 to:**

Department of Marine Resources  
Bureau of Wetlands Permitting  
1141 Bayview Avenue  
Biloxi, MS 39530  
(228) 374-5000

**If project IS NOT in Hancock, Harrison or Jackson Counties, send one completed copy of this application form to each agency listed below:**

District Engineer  
Mobile District  
Attn: CESAM-RD  
P.O. Box 2288  
Mobile, AL 36628-0001

District Engineer  
Vicksburg District  
Regulatory Branch  
Attn: CEMVK-OD-F  
4155 Clay Street  
Vicksburg, MS 39183-3435

Director  
Mississippi Dept. of Environmental Quality  
Office of Pollution Control  
P.O. Box 10385  
Jackson, MS 39289

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**17. In addition to the completed application form, the following attachments are required:**

***Attachment "A" Drawings***

Provide a vicinity map showing the location of the proposed site along with a written description of how to reach the site from major highways or landmarks. Provide accurate drawings of the project site with proposed activities shown in detail. All drawings must be to scale or with dimensions noted on drawings and must show a plan view and cross section or elevation. Use 8 1/2 x 11" white paper or drawing sheet attached.

***Attachment "B" Authorized Agent***

If applicant desires to have an agent or consultant act in his behalf for permit coordination, a signed authorization designating said agent must be provided with the application forms. The authorized agent named may sign the application forms and the consistency statement.

***Attachment "C" Environmental Assessment (Coastal Area Only)***

Provide an appropriate report or statement assessing environmental impacts of the proposed activity and the final project dependent on it. The project's effects on the wetlands and the effects on the life dependent on them should be addressed. Also provide a complete description of any measures to be taken to reduce detrimental offsite effects to the coastal wetlands during and after the proposed activity. Alternative analysis, minimization and mitigation information may be required to complete project evaluation.

***Attachment "D" Variance or Revisions to Mississippi Coastal Program (Coastal area only)***

If the applicant is requesting a variance to the guidelines in Section 2, Part III or a revision to the Coastal Wetlands Use Plan in Section 2, Part IV of the Rules, Regulations, Guidelines and Procedures of the Mississippi Coastal Program, a request and justification must be provided.

**Attachment "A" Drawings**

Auth ID: #AUTH\_ID#  
Use Code: #USE\_CODE#  
Expiration Date: #EXPIRATION\_DATE#

**U.S. DEPARTMENT OF AGRICULTURE**  
**Forest Service**  
**SPECIAL-USE PERMIT FOR**  
**NONCOMMERCIAL GROUP USE**  
(Ref.: 36 CFR 251.54)  
Authority: Organic Act of 1897, 16 U.S.C. 551  
**PART I - APPLICATION**

**1. APPLICANT INFORMATION:**

Name of Group or Event: \_\_\_\_\_ Address of Group or Contact: \_\_\_\_\_  
(whichever is applicable)

Name of Contact: \_\_\_\_\_  
**The contact shall be available to the Forest Service from the date this application is signed until it is accepted, rejected, or denied.**  
Day Phone: ( ) - \_\_\_\_\_ Evening Phone: ( ) - \_\_\_\_\_

**2. DESCRIPTION OF PROPOSED ACTIVITY:**

**3. LOCATION & DESCRIPTION OF NATIONAL FOREST SYSTEM LANDS & FACILITIES APPLICANT WOULD LIKE TO USE:**

**4. ESTIMATED NUMBER OF PARTICIPANTS & SPECTATORS FOR PROPOSED ACTIVITY:**

Participants: \_\_\_\_\_ Spectators: \_\_\_\_\_

**5. STARTING & ENDING DATE & TIME OF PROPOSED ACTIVITY:**

Start \_\_\_\_\_ End: \_\_\_\_\_  
Date Time Date Time

**6. NAME OF PERSONS WHO WILL SIGN A SPECIAL USE PERMIT ON BEHALF OF THE GROUP (May be same as contact listed in item 1.):**

Name: \_\_\_\_\_ Name: \_\_\_\_\_  
Address: \_\_\_\_\_ Address: \_\_\_\_\_  
Day & Evening Phone: ( ) - / ( ) - Day & Evening Phone: ( ) - / ( ) -  
Signature: \_\_\_\_\_ Signature: \_\_\_\_\_  
Date: \_\_\_\_\_ Date: \_\_\_\_\_

**APPLICATION NOT VALID UNLESS SIGNED BY CONTACT**

\_\_\_\_\_  
Signature of Contact Date

18 U.S.C. § 1001 makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction. Anyone who knowingly or willfully makes or uses any false writing shall be fined not more than \$10,000 or imprisoned not more than five years, or both.

**<User Note: Case File: Attach part II "Permit" to part I "Application" >**

**PART II – PERMIT**

Purpose:

Noncommercial group use permits do not grant or deny freedom of assembly or freedom of speech. The rights to freedom of assembly and freedom of speech are guaranteed by the United States Constitution. These rights are fully respected by the Forest Service. When noncommercial group use permits are issued, they regulate time, place, and manner with respect to the exercise of these rights by groups of 75 or more people on National Forest System lands. Noncommercial group use permits authorize the holder to use and occupy the National Forest System lands covered by the permit, subject to rights retained by the United States, including continuing rights of access, a continuing right of physical entry for inspection, monitoring, or for any other purposes consistent with any right or obligation of the United States, and the right to require common use of the land or to authorize use by others in any way that is not inconsistent with the privileges granted by the permit. The use and occupancy authorized by a noncommercial group use permit would not be allowed without the permit. The primary purposes of noncommercial group use permits include protection of National Forest System lands and resources, promotion of public health and safety, and allocation of space among competing uses of National Forest System lands.

1. Use under this permit shall begin on <ENTER TIME AND DATE> and end on <ENTER TIME AND DATE> .  
The permit shall not be extended.
2. \_\_\_\_\_ (Holder Name) (the holder) is hereby authorized to use, subject to the terms of this permit, National Forest System lands described as \_\_\_\_\_, as shown in attached Exhibit(s) \_\_\_\_\_. This permit covers approximately \_\_ acres and/or \_\_\_\_\_ miles.
3. The holder is authorized to conduct the following activities and install the following improvements in the permitted area:  
  
#PURPOSE#
4. The holder shall conduct the authorized activities according to the attached approved plans and specifications, Exhibit(s) \_\_\_\_\_. The holder shall not install any improvements not specifically identified and approved in clause 3, in exhibits attached to this permit, or by the authorized officer during the activity authorized by this permit.
5. No soil, trees, or other vegetation may be destroyed or removed from National Forest System lands without specific prior written permission from the authorized officer.
6. The holder shall comply with all federal, state, county, and municipal laws, ordinances, and regulations which are applicable to the area or operations covered by this permit.
7. The holder shall maintain the improvements and premises to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer. The holder shall fully repair and bear the expense for all damages, other than ordinary wear and tear, to National Forest System lands, roads and trails caused by the holder's activities.
8. The holder has the responsibility of inspecting the use area and adjoining areas for dangerous trees, hanging limbs, and other evidence of hazardous conditions which would pose a risk of injury to individuals. After securing permission from the authorized officer, the holder shall remove such hazards.
9. The holder shall be liable for any injury, loss, or damage, including fire suppression costs and environmental harm or injury to natural resources, that arises in connection with the use and occupancy authorized by this permit.
10. The holder shall indemnify and hold harmless the United States for any injury, loss, or damage, including third-party claims, damage to federal property, fire suppression costs, and environmental harm or injury to natural resources, that arises in connection with the use and occupancy authorized by this permit.
11. The persons who sign this permit are not subject to any individual liability under this permit as a result of that signature. They provide their name solely to allow notice of actions pertaining to the permit to be communicated to the holder and to give the permit legal effect. At least one of the persons who sign this permit shall be available to the Forest Service from the date this permit is issued until the use authorized by this permit has concluded.

- 12. The holder agrees to permit free and unrestricted access to and upon the premises at all times for all lawful and proper purposes not inconsistent with the intent of the permit or with the reasonable exercise and enjoyment by the holder of the privileges thereof.
- 13. This permit is subject to all valid existing rights and claims outstanding in third parties.
- 14. This authorization may be revoked or suspended only in accordance with 36 CFR 251.60(a)(1)(i). Upon expiration or revocation of this permit, the holder shall immediately remove all improvements except those owned by the United States, and shall restore the site within \_\_\_\_\_ days, unless otherwise agreed upon in writing. If the holder fails to remove the improvements, they shall become the property of the United States, but that will not relieve the holder of liability for the cost of their removal and the restoration of the site.
- 15. This permit is a license for the use of federally owned land. It does not grant any interest in real property. This permit is not transferable. The holder shall not enter into any agreements with third parties for occupancy of the authorized premises and improvements.
- 16. Any decision concerning this permit, including but not limited to suspension or revocation and modification of permit terms and conditions, is not subject to administrative appeal and is immediately subject to judicial review.
- 17. This permit is accepted subject to the conditions set forth herein, including any conditions in any exhibits attached to and made a part of this permit.
- 18. The above clauses shall control if they conflict with additional clauses or provisions.

#INSERT TERM HERE#

I have read and understand the terms and conditions and agree to abide by them.

U.S. DEPARTMENT OF AGRICULTURE  
Forest Service

HOLDER:

Authorization is granted:

By: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**HOLDER MUST HAVE THIS PERMIT (OR A LEGIBLE COPY) IN POSSESSION DURING THE AUTHORIZED ACTIVITY**

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082.

This information is needed by the Forest Service to evaluate requests to use National Forest System lands and manage those lands to protect natural resources, administer the use, and ensure public health and safety. This information is required to obtain or retain a benefit. The authority for that requirement is provided by the Organic Act of 1897 and the Federal Land Policy and management Act of 1976, which authorizes the Secretary of Agriculture to promulgate rules and regulations for authorizing and managing National Forest System lands. These statutes, along with the Term Permit Act, National Forest Ski Area Permit Act, Granger-Thye Act, Mineral Leasing Act, Alaska Term Permit Act, Act of September 3, 1954, Wilderness Act, National Forest Roads and Trails Act, Act of November 16, 1973, Archeological Resources Protection Act, and the Alaska National Interest Lands Conservation Act, authorize the Secretary of Agriculture to issue authorizations for the use and occupancy of National Forest System lands. The Secretary of Agriculture's regulations at 36 CFR Part 251, Subpart B, establish procedures for those authorizations.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service. Public reporting burden for this collection of information is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

**APPLICATION FOR TRANSPORTATION AND  
UTILITY SYSTEMS AND FACILITIES  
ON FEDERAL LANDS**

FOR AGENCY USE ONLY

NOTE: Before completing and filing the application, the applicant should completely review this package and schedule a preapplication meeting with representatives of the agency responsible for processing the application. Each agency may have specific and unique requirements to be met in preparing and processing the application. Many times, with the help of the agency representative, the application can be completed at the preapplication meeting.

Application Number

Date Filed

1. Name and address of applicant (*include zip code*)

2. Name, title, and address of authorized agent if different from item 1 (*include zip code*)

3. Telephone (*with area code*)

Applicant

Authorized Agent

4. As applicant are you? (*check one*)

- a.  Individual
- b.  Corporation\*
- c.  Partnership/Association\*
- d.  State Government/State Agency
- e.  Local Government
- f.  Federal Agency

\* If checked, complete supplemental page

5. Specify what application is for: (*check one*)

- a.  New authorization
- b.  Renewing existing authorization number
- c.  Amend existing authorization number
- d.  Assign existing authorization number
- e.  Existing use for which no authorization has been received \*
- f.  Other\*

\* If checked, provide details under item 7

6. If an individual, or partnership, are you a citizen(s) of the United States?  Yes  No

7. Project description (describe in detail): (a) Type of system or facility, (*e.g., canal, pipeline, road*); (b) related structures and facilities; (c) physical specifications (*Length, width, grading, etc.*); (d) term of years needed; (e) time of year of use or operation; (f) Volume or amount of product to be transported; (g) duration and timing of construction; and (h) temporary work areas needed for construction (*Attach additional sheets, if additional space is needed.*)

8. Attach a map covering area and show location of project proposal

9. State or Local government approval:  Attached  Applied for  Not Required

10. Nonreturnable application fee:  Attached  Not required

11. Does project cross international boundary or affect international waterways?  Yes  No (*if "yes," indicate on map*)

12. Give statement of your technical and financial capability to construct, operate, maintain, and terminate system for which authorization is being requested.

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13a. Describe other reasonable alternative routes and modes considered.

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b. Why were these alternatives not selected?

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c. Give explanation as to why it is necessary to cross Federal Lands.

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14. List authorizations and pending applications filed for similar projects which may provide information to the authorizing agency. *(Specify number, date, code, or name)*

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15. Provide statement of need for project, including the economic feasibility and items such as: (a) cost of proposal (construction, operation, and maintenance); (b) estimated cost of next best alternative; and (c) expected public benefits.

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16. Describe probable effects on the population in the area, including the social and economic aspects, and the rural lifestyles.

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17. Describe likely environmental effects that the proposed project will have on: (a) air quality; (b) visual impact; (c) surface and ground water quality and quantity; (d) the control or structural change on any stream or other body of water; (e) existing noise levels; and (f) the surface of the land, including vegetation, permafrost, soil, and soil stability.

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18. Describe the probable effects that the proposed project will have on (a) populations of fish, plantlife, wildlife, and marine life, including threatened and endangered species; and (b) marine mammals, including hunting, capturing, collecting, or killing these animals.

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19. State whether any hazardous material, as defined in this paragraph, will be used, produced, transported or stored on or within the right-of-way or any of the right-of-way facilities, or used in the construction, operation, maintenance or termination of the right-of-way or any of its facilities. "Hazardous material" means any substance, pollutant or contaminant that is listed as hazardous under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. 9601 et seq., and its regulations. The definition of hazardous substances under CERCLA includes any "hazardous waste" as defined in the Resource Conservation and Recovery Act of 1976 (RCRA), as amended, 42 U.S.C. 6901 et seq., and its regulations. The term hazardous materials also includes any nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended, 42 U.S.C. 2011 et seq. The term does not include petroleum, including crude oil or any fraction thereof that is not otherwise specifically listed or designated as a hazardous substance under CERCLA Section 101(14), 42 U.S.C. 9601(14), nor does the term include natural gas.

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20. Name all the Department(s)/Agency(ies) where this application is being filed.

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I HEREBY CERTIFY, That I am of legal age and authorized to do business in the State and that I have personally examined the information contained in the application and believe that the information submitted is correct to the best of my knowledge.

---

Signature of Applicant

Date

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Title 18, U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious, or fraudulent statements or representations as to any matter within its jurisdiction.

GENERAL INFORMATION  
ALASKA NATIONAL INTEREST LANDS

This application will be used when applying for a right-of-way, permit, license, lease, or certificate for the use of Federal lands which lie within conservation system units and National Recreation or Conservation Areas as defined in the Alaska National Interest Lands Conservation Act. Conservation system units include the National Park System, National Wildlife Refuge System, National Wild and Scenic Rivers System, National Trails System, National Wilderness Preservation System, and National Forest Monuments.

Transportation and utility systems and facility uses for which the application may be used are:

1. Canals, ditches, flumes, laterals, pipes, pipelines, tunnels, and other systems for the transportation of water.
2. Pipelines and other systems for the transportation of liquids other than water, including oil, natural gas, synthetic liquid and gaseous fuels, and any refined product produced therefrom.
3. Pipelines, slurry and emulsion systems, and conveyor belts for transportation of solid materials.
4. Systems for the transmission and distribution of electric energy.
5. Systems for transmission or reception of radio, television, telephone, telegraph, and other electronic signals, and other means of communications.
6. Improved right-of-way for snow machines, air cushion vehicles, and all-terrain vehicles.
7. Roads, highways, railroads, tunnels, tramways, airports, landing strips, docks, and other systems of general transportation.

This application must be filed simultaneously with each Federal department or agency requiring authorization to establish and operate your proposal.

In Alaska, the following agencies will help the applicant file an application and identify the other agencies the applicant should contact and possibly file with:

Department of Agriculture  
Regional Forester, Forest Service (USFS)  
P.O. Box 21628  
Juneau, Alaska 99802-1628  
Telephone: (907) 586-7847 (or a local Forest Service Office)

Department of the Interior  
Bureau of Indian Affairs (BIA)  
Alaska Regional Office  
709 West 9th Street  
Juneau, Alaska 99802  
Telephone: (907) 586-7177

Department of the Interior  
Alaska State Office  
Bureau of Land Management  
222 West 7th Avenue #13  
Anchorage, Alaska 99513  
Public Room: 907-271-5960  
FAX: 907-271-3684  
(or a local BLM Office)

U.S. Fish & Wildlife Service (FWS)      National Park Service (NPS)  
Office of the Regional Director      Alaska Regional Office  
1011 East Tudor Road                      240 West 5th Avenue  
Anchorage, Alaska 99503                  Anchorage, Alaska 99501  
Telephone: (907) 786-3440                  Telephone: (907) 644-3510

Note - Filings with any Interior agency may be filed with any office noted above or with the Office of the Secretary of the Interior, Regional Environmental Officer, P.O. Box 120, 1675 C Street, Anchorage, Alaska 99513.

Department of Transportation  
Federal Aviation Administration  
Alaska Region AAL-4, 222 West 7th Ave., Box 14  
Anchorage, Alaska 99513-7587  
Telephone: (907) 271-5285

NOTE - The Department of Transportation has established the above central filing point for agencies within that Department. Affected agencies are: Federal Aviation Administration (FAA), Coast Guard (USCG), Federal Highway Administration (FHWA), Federal Railroad Administration (FRA).

OTHER THAN ALASKA NATIONAL INTEREST LANDS

Use of this form is not limited to National Interest Conservation Lands of Alaska.

Individual department/agencies may authorize the use of this form by applicants for transportation and utility systems and facilities on other Federal lands outside those areas described above.

For proposals located outside of Alaska, applications will be filed at the local agency office or at a location specified by the responsible Federal agency.

SPECIFIC INSTRUCTIONS  
(Items not listed are self-explanatory)

- 7 Attach preliminary site and facility construction plans. The responsible agency will provide instructions whenever specific plans are required.
- 8 Generally, the map must show the section(s), township(s), and range(s) within which the project is to be located. Show the proposed location of the project on the map as accurately as possible. Some agencies require detailed survey maps. The responsible agency will provide additional instructions.
- 9, 10, and 12 The responsible agency will provide additional instructions.
- 13 Providing information on alternate routes and modes in as much detail as possible, discussing why certain routes or modes were rejected and why it is necessary to cross Federal lands will assist the agency(ies) in processing your application and reaching a final decision. Include only reasonable alternate routes and modes as related to current technology and economics.
- 14 The responsible agency will provide instructions.
- 15 Generally, a simple statement of the purpose of the proposal will be sufficient. However, major proposals located in critical or sensitive areas may require a full analysis with additional specific information. The responsible agency will provide additional instructions.
- 16 through 19 Providing this information with as much detail as possible will assist the Federal agency(ies) in processing the application and reaching a decision. When completing these items, you should use a sound judgment in furnishing relevant information. For example, if the project is not near a stream or other body of water, do not address this subject. The responsible agency will provide additional instructions.

Application must be signed by the applicant or applicant's authorized representative.

EFFECT OF NOT PROVIDING INFORMATION: Disclosure of the information is voluntary. If all the information is not provided, the application may be rejected.

DATA COLLECTION STATEMENT

The Federal agencies collect this information from applicants requesting right-of-way, permit, license, lease, or certification for the use of Federal lands. The Federal agencies use this information to evaluate the applicant's proposal. The public is obligated to submit this form if they wish to obtain permission to use Federal lands.

**SUPPLEMENTAL**

NOTE: The responsible agency(ies) will provide instructions	CHECK APPROPRIATE BLOCK	
<b>I - PRIVATE CORPORATIONS</b>	ATTACHED	FILED*
a. Articles of Incorporation	<input type="checkbox"/>	<input type="checkbox"/>
b. Corporation Bylaws	<input type="checkbox"/>	<input type="checkbox"/>
c. A certification from the State showing the corporation is in good standing and is entitled to operate within the State	<input type="checkbox"/>	<input type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input type="checkbox"/>
e. The name and address of each shareholder owning 3 percent or more of the shares, together with the number and percentage of any class of voting shares of the entity which such shareholder is authorized to vote and the name and address of each affiliate of the entity together with, in the case of an affiliate controlled by the entity, the number of shares and the percentage of any class of voting stock of that affiliate owned, directly or indirectly, by that entity, and in the case of an affiliate which controls that entity, the number of shares and the percentage of any class of voting stock of that entity owned, directly or indirectly, by the affiliate.	<input type="checkbox"/>	<input type="checkbox"/>
f. If application is for an oil or gas pipeline, describe any related right-of-way or temporary use permit applications, and identify previous applications.	<input type="checkbox"/>	<input type="checkbox"/>
g. If application is for an oil and gas pipeline, identify all Federal lands by agency impacted by proposal.	<input type="checkbox"/>	<input type="checkbox"/>
<b>II - PUBLIC CORPORATIONS</b>		
a. Copy of law forming corporation	<input type="checkbox"/>	<input type="checkbox"/>
b. Proof of organization	<input type="checkbox"/>	<input type="checkbox"/>
c. Copy of Bylaws	<input type="checkbox"/>	<input type="checkbox"/>
d. Copy of resolution authorizing filing	<input type="checkbox"/>	<input type="checkbox"/>
e. If application is for an oil or gas pipeline, provide information required by item "I - f" and "I - g" above.	<input type="checkbox"/>	<input type="checkbox"/>
<b>III - PARTNERSHIP OR OTHER UNINCORPORATED ENTITY</b>		
a. Articles of association, if any	<input type="checkbox"/>	<input type="checkbox"/>
b. If one partner is authorized to sign, resolution authorizing action is	<input type="checkbox"/>	<input type="checkbox"/>
c. Name and address of each participant, partner, association, or other	<input type="checkbox"/>	<input type="checkbox"/>
d. If application is for an oil or gas pipeline, provide information required by item "I - f" and "I - g" above.	<input type="checkbox"/>	<input type="checkbox"/>

\*If the required information is already filed with the agency processing this application and is current, check block entitled "Filed." Provide the file identification information (e.g., number, date, code, name). If not on file or current, attach the requested information.

## NOTICES

Note: This applies to the Department of Agriculture/Forest Service (FS)

This information is needed by the Forest Service to evaluate the requests to use National Forest System lands and manage those lands to protect natural resources, administer the use, and ensure public health and safety. This information is required to obtain or retain a benefit. The authority for that requirement is provided by the Organic Act of 1897 and the Federal Land Policy and Management Act of 1976, which authorize the secretary of Agriculture to promulgate rules and regulations for authorizing and managing National Forest System lands. These statutes, along with the Term Permit Act, National Forest Ski Area Permit Act, Granger-Thye Act, Mineral Leasing Act, Alaska Term Permit Act, Act of September 3, 1954, Wilderness Act, National Forest Roads and Trails Act, Act of November 16, 1973, Archeological Resources Protection Act, and Alaska National Interest Lands Conservation Act, authorize the Secretary of Agriculture to issue authorizations or the use and occupancy of National Forest System lands. The Secretary of Agriculture's regulations at 36 CFR Part 251, Subpart B, establish procedures for issuing those authorizations.

### **BURDEN AND NONDISCRIMINATION STATEMENTS**

*According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 8 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.*

*The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).*

*To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.*

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## **APPENDIX C**

### **PASCAGOULA RIVER GEORGE COUNTY BLUEWAY MAP**

# PASCAGOULA RIVER GEORGE COUNTY

**THE PASCAGOULA RIVER BLUEWAY** is almost 22 miles in length and is best for experienced and intermediate paddlers because of distance between access points and strong currents. Those hoping to enjoy fish and wildlife in the slower backwaters should visit Points of Interest accessible by road just off the main river. The Pascagoula River is formed where the Leaf and Chickasawhay Rivers join. It is allowed to move naturally (no dams) over 80 miles where it empties into the Mississippi Sound. Over 50,000 acres are now protected for conservation along the stunning landscapes of the free-flowing river.

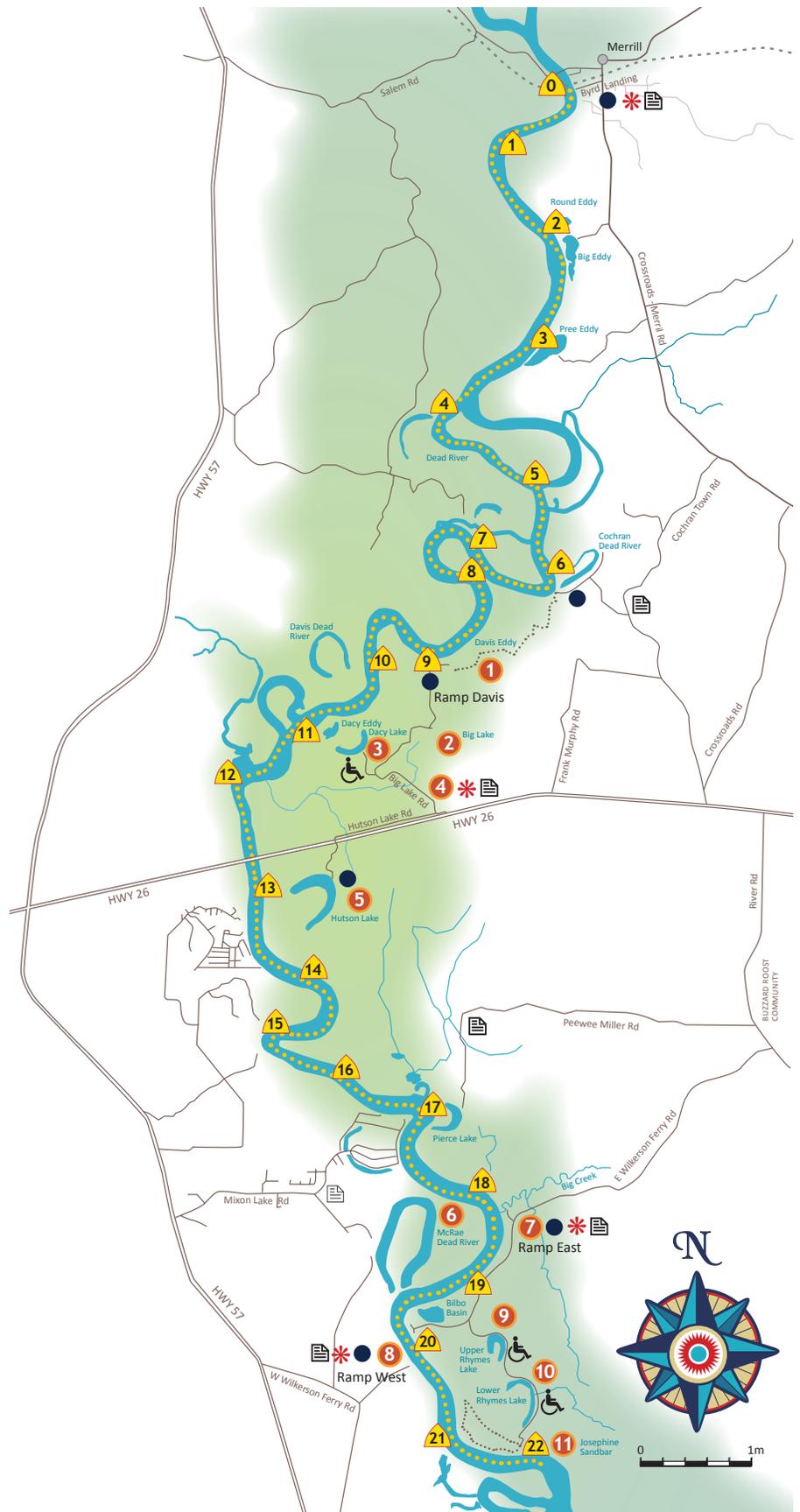
**Wildlife Management Areas (WMAs)** are lands set aside to conserve Mississippi's wildlife resources. Within the Pascagoula River WMA hunting, fishing, camping, hiking, wildlife watching, and boating are all acceptable activities. Aside from the river, visitors may see oxbow lakes and other backwater sloughs, cypress-tupelo swamps, small creeks, pine savanna and longleaf pine forests within the 37,000 acres of the Pascagoula River WMA. Within this fascinating landscape of habitats, over 327 species of birds live or migrate each year to feed, nest and roost. Deer are plentiful; fox, river otters, beaver, skunks, bobcat, alligators, snakes and even black bear can be found within the river habitats.

**MAP LEGEND**

Mile Marker			Information Kiosk
Canoe/Kayak Launch			Permit Station
Blueway Trail			Handicap Pier
Point of Interest			Hiking Trail

<b>LEVEL</b>	Intermediate to Experienced
<b>START/END</b>	Merrill
<b>TRAIL MILES</b>	22 miles in length
<b>PADDLING TIME</b>	8 hours
<b>DESCRIPTION</b>	River currents and deep water
<b>SCENERY</b>	Bottomland Hardwoods, Oxbow Lakes, Cypress Ponds
<b>ACCESS</b>	Several Public Boat Launches





## Points of Interest

Often called “Bird Lake”, **1** Davis Eddy Lake is a must-see for nesting herons and egrets in the spring. For additional scenic views, hike the 2 mile nature trail to Cochran Dead River.

Big Lake **2** is a long, narrow lake that was most likely a “drowned” stream dammed naturally over time.

Dacy Lake **3**, a former river channel often called a “dead river” or oxbow, is a scenic locale ideal for nature and wildlife photography.

Just north of HWY 26 **4**, this area showcases many migratory songbirds in spring and fall as well as ducks and other waterfowl in winter and early spring.

Another former river channel now isolated from the main river, Hutson Lake **5** is a bird sanctuary easily accessible by road or boat launch.

McRae Dead River **6** is a former river channel of the Pascagoula River. From the water, paddlers can get a sense of how the river changes course over time. During high water events, the oxbow may be accessible to the main river channel. Access the area from Mixon Lake Road off Hwy 57.

Formerly the site of Wilkerson Ferry **7, 8**, a historic ferry carrying passengers across the river, the locations host primitive camping, port-a-lets, and running water (Artesian well).

Upper Rhymes **9** is home to large cypress and tupelo gum trees. Watch for alligators and wading birds amid the cypress knees and buttressed (swollen) trunks.

Lower Rhymes Lake **10** is another large oxbow that provides great opportunity for intrepid paddlers to get close to giant cypress and tupelo gum trees. Many wading birds and waterfowl use these areas for feeding and nesting.

Josephine Sandbar **11** is currently the largest accessible sandbar on the Pascagoula River. The site boasts an artesian well, a continuous source of freshwater.

All visitors must purchase and carry a WMA User Permit (purchased wherever licenses are sold). Permit use is strictly enforced. Additionally, visitors must complete a daily use permit card before entering the WMA. These permit cards are available at permit stations located at major entrances to the WMA. For questions about the Pascagoula River WMA, visit the website at [www.mdwfp.com/wma](http://www.mdwfp.com/wma) or call 228-588-3878.

### The Land Trust for the Mississippi Coastal Plain

works with landowners to conserve special places in perpetuity. With local, state and federal agencies, the Land Trust protects natural areas that benefit residents and visitors to south Mississippi: abundant seafood, rich timberlands, pristine water, and unsurpassed recreational activities. [www.ltmcp.org](http://www.ltmcp.org)

**The National Park Service** is collaborating with state and local agencies and organizations to promote the conservation, stewardship, and public use of the Pascagoula River, the last large unimpeded river system in the lower 48 states. The Pascagoula River Blueway is part of America’s Great Outdoors Rivers Program to conserve and restore key rivers across the nation, expand recreational opportunities and support jobs in local communities.



AVOID PADDLING UNDER THE INFLUENCE OF DRUGS OR ALCOHOL. ALWAYS WEAR YOUR LIFE JACKET AND CARRY A WHISTLE OR OTHER SOUND PRODUCING DEVICE, PREFERABLY ATTACHED TO YOUR LIFE JACKET. PADDLERS SHOULD CHECK WATER LEVEL AND TIDES, WEATHER, AND WATERWAY CONDITIONS PRIOR TO EVERY TRIP. REMOVE WHAT YOU BRING, CLEAN UP MORE IF YOU CAN. AVOID TRESPASSING ON PRIVATE LANDS. PLEASE BE AWARE OF YOUR SURROUNDINGS AND ALWAYS RESPECT THE WILDLIFE. REPORT ANY PROBLEMS YOU ENCOUNTER TO THE LOCAL AUTHORITIES IF APPROPRIATE.





## **APPENDIX D**

### **PASCAGOULA RIVER JACKSON COUNTY BLUEWAY MAP**

# PASCAGOULA RIVER JACKSON COUNTY

**THE PASCAGOULA RIVER** is the longest free-flowing waterway in the lower 48 states, and the last unimpeded major river system in the continental U.S.

The Pascagoula River serves as the heart for all who claim this area as home. As a natural estuary, the river hosts abundant animal life including over 22 threatened and endangered species, in addition to over 300 plant species. Two-thirds of the Eastern breeding migratory birds use the Pascagoula River and its marshes as a resting point. It is a haven for abundant life, and its banks hold many notable historic locations and economic treasures.

Travel the ten mile Pascagoula River Blueway to discover everything from boat launches and piers to historical landmarks and natural wonders. The trail can be reversed or start or end at any one of the launches. If not round trip, plan for transportation at the end.

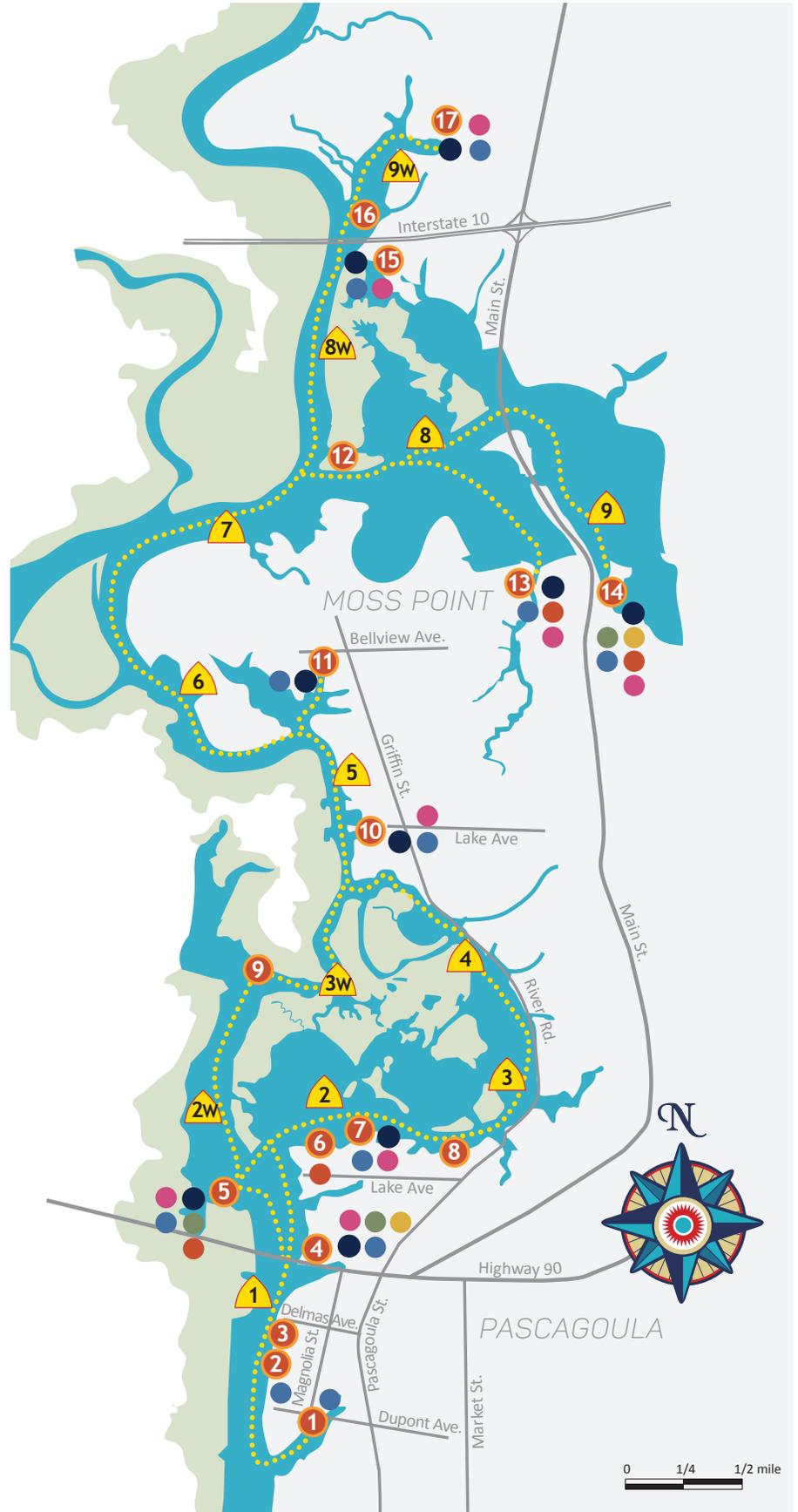
## Points of Interest

**1. The Magnolia Birding Pier** is accessible from Magnolia Street and Dupont Avenue and is home to many native birds including brown pelicans, blue herons and white egrets.

N30° 21' 42.96" W88° 33' 36.22"

**2. The Pascagoula Riverfront** is a mixed-use economic hub with retail, restaurant, and residential space.

N30° 21' 53.68" W88° 33' 49.51"



## MAP LEGEND

Mile Marker			Parking
Canoe/Kayak Launch			Facilities
Blueway Trail			Piers
Point of Interest			Picnicking
			Food & Drink

**LEVEL** Intermediate to Experienced

**START/END** Dupont Avenue/Bennett Bayou

**TRAIL MILES** 10 miles (12 miles if east loop is included)

**PADDLING TIME** 6 hours one way for a complete trip including east loop at Moss Point

**DESCRIPTION** River currents and deep water

**SCENERY** Salt/brackish marshes

**ACCESS** Several Public Boat Launches

## Points of Interest (cont.)

**3. The National Oceanic and Atmospheric Administration's (NOAA) Gulf Marine Support Facility and Mississippi Laboratory** is the home port of the NOAA ships Gordon Gunter and Pisces. [N30° 21' 58.69" W88° 33' 47.81"](#)

**4. The Lighthouse Park** is home to the 1859 Round Island Lighthouse, the Pascagoula Environmental Education Trail, an outdoor classroom, playground, pavilion, fishing pier, and a fish cleaning station. The Park also serves as the trailhead for the Pascagoula River Jackson County Blueway Trail, Historic Pascagoula Bike Trail, and the Pascagoula Historic Pathway. [N30° 22' 17.15" W88° 33' 39.93"](#)

**5. River Park** is home to the Scranton Museum, a 70' Shrimp Boat, fishing piers, a boat launch, an ADA accessible floating kayak launch, restrooms, a pavilion, and a dog park. Future plans for the site include boat storage, a fuel dock, and a restaurant. [N30° 22' 26.75" W88° 33' 50.74"](#)

**6.** As the oldest structure in the Mississippi Valley, the **LaPointe-Krebs House** is an example of French Colonial architecture dating to 1757 and is the earliest settlement in Pascagoula. While the house is under restoration efforts, the interpretive museum is open for tours. [N30° 22' 49.80" W88° 33' 29.27"](#)

**7. Krebs Cemetery** lies next to the La Pointe-Krebs House, where many of the first settlers of the area are buried. [N30° 22' 50.60" W88° 33' 27.10"](#)

**8. Mariners Cove** offers boat slips and is accessible from Lake Avenue near the Lake Avenue Fire Station. [N30° 22' 45.27" W88° 32' 56.67"](#)

**9. The Mouth of McInnis Bayou** provides access to the lower end of McInnis Bayou for fishing and exploring marshes. [N30° 23' 24.45" W88° 33' 51.82"](#)

**10. McInnis Boat Launch** is located on Hemlock Avenue near Griffin Street and accesses McInnis Bayou. [N30° 23' 59.08" W88° 33' 20.34"](#)

**11. Bellview Street** is a small neighborhood boat launch with paved parking. [N30° 24' 38.02" W88° 33' 35.14"](#)

**12. The Gateway to the Escatawpa River** provides access to the Escatawpa River for fishing and exploring marshes. [N30°25'23.73" W88°33'33.19"](#)

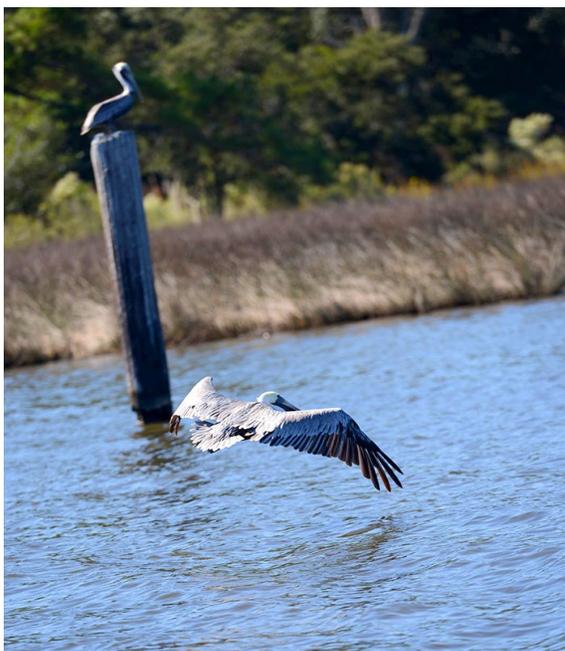
**13. The Pascagoula River Audubon Center** is one of several gateways to exploring the rich natural history of the River. From interpretive boat tours, kayak adventures, on-site trails and exhibits, and programs designed to provide hands-on experiences in nature, the Center promotes Audubon's mission of promoting birds, wildlife and the habitats that support them. [N30° 24' 55.34" W88° 32' 36.28"](#)

**14. Downtown Moss Point** is home to a river walk, shopping, dining, and the **Riverfront Welcome Center** which provides kayak rentals, an EZ-Dock Kayak Launch, concessions, and space for rentals, meetings, and special events. [N30° 24' 57" W88° 32' 17"](#)

**15. I-10 Launch** offers easy access and a boat launch. [N30° 26' 14.60" W88° 33' 27.26"](#)

**16. The Mouth of Bennett Bayou** covers five acres and is a direct tributary to the Pascagoula River. [N30° 26' 21.93" W88° 33' 25.71"](#)

**17. Bennett Bayou, Land Trust Conservation Preserve** is an excellent location to experience the rich river environment. Natural area suitable for launching a kayak. [N30° 26' 37.78" W88° 33' 3.31"](#)



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