

# YAHOOOLA CREEK RESERVOIR MASTER PLAN

LUMPKIN COUNTY, GEORGIA



Prepared By: Lose Design

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Lose Design would like to thank all the Elected Officials, Yahoola Creek Reservoir Property Study Committee, staff, and citizens who participated in the development of this Master Plan. Through your commitment and dedication, we were able to develop this plan to guide the future of recreation and economic development for Lumpkin County.

## Special Acknowledgments

### Board of Commissioners:

Chris Dockery	Chairman
David Miller	District 1
Bobby Mayfield	District 2
Rhett Stringer	District 3
Jeff Moran	District 4

### Yahoola Creek Reservoir Property Study Committee:

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### Partner Agency Representatives:

Rebecca Mincey, Development Authority of Lumpkin County  
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Sam McDuffie, Dahlonega-Lumpkin County Chamber & Visitors Bureau  
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# 1



# INTRODUCTION

# Introduction

The purpose of this master plan is to evaluate the 200 acres of property surrounding the Yahoola Creek Reservoir/Lake Zwerner for Lumpkin County, Georgia and submit recommendations to enhance and improve the level of services provided to citizens over the next decade. The lead consulting firm, Lose Design, is a multi-disciplinary firm specializing in park and recreation planning and is responsible for the development of this report. The process included public participation activities, demographic research, facility, and site assessments. This document serves as both a master and strategic plan. It provides Lumpkin County with guidelines and strategies for future program planning efforts and capital improvement projects.

This master plan is the result of public input sessions, demographic research, and an analysis of programs, facilities, existing green infrastructure connectivity, and Lumpkin County policies. The Yahoola Creek Reservoir Property 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 Lumpkin County programs and services are aligned with critical planning elements. In August 2019, the county engaged Lose Design to investigate alternative options for a revised master plan, and ultimately consolidate these possibilities into a single unified vision that meets the needs of the community now, and in the years to come.

## **The Lumpkin County Mission Statement:**

Lumpkin County will provide an environment that is safe and promotes a higher quality of life for those who live in, work in, and visit our community. We will innovatively manage our resources while preserving our heritage and planning for the future.





### Methodology

The master plan document is based on a literature review of reports and data, best practices analysis, and interviews with stakeholders, focus groups, elected officials, staff, and citizens of Lumpkin County. Lose Design developed a detail inventory of existing programs, policies, services, and planning reports related to the 200 acres of property surrounding the Yahoola Creek Reservoir/ Lake Zwerner. Interviews conducted with stakeholders provide a snapshot of the community's level of utilization and individual perception of the quality of that experience. This is key when determining the needs of residents and prioritization of parks and recreational physical improvements, and programming. To ensure a nuanced understanding of feedback, interviews were conducted with public-private partnerships, recreation management associations, service providers, the local school system and university, and federal, state, regional and local agencies. Finally, to benchmark the recreation programs and facilities in Lumpkin County, several programs from around the country were examined using the National Recreation and Park Association's (NRPA) certification and accreditation programs as a base.

### The History of Lumpkin County

Like many rural communities, Lumpkin County is rich in history. Founded in 1832, it gets its name from Wilson Lumpkin, an American pioneer, attorney, and politician. He served two terms as the governor of Georgia, from 1831 to 1835, and as a United States Representative and U.S. Senator. Its county seat is the City of Dahlonega. The early settlers of Lumpkin County in the mid-18th century were Euro-American explorers, long hunters, and farmers. At that time, Lumpkin County was also part of a vast stretch of land claimed by the Cherokee. In the period of Indian Removal, the Cherokee peoples were forced by the United States government to leave their ancestral homelands in the eastern United States to lands west of the Mississippi River, which had been designated Indian Territory in order to make way for development of their lands by European Americans.

In the 1830s, gold was discovered in Lumpkin County near Auraria, which led to a rush of miners and development. Thousands of settlers came to these former Cherokee lands in search of gold during the Georgia Gold Rush and following the Gold Lottery of 1832. The U.S. government established a mint in Dahlonega, operating for 23 years until the outbreak of the American Civil War. State contractors later acquired gold from Lumpkin County to gild the dome of the current state capitol building in Atlanta. Today, a museum is dedicated to the gold rush. The museum houses many artifacts from the gold rush of 1836, including gold nuggets, gold coins, and gold panning equipment, as well as educational experiences of the period.

Additionally, the citizens of Lumpkin have a unique cultural connection to the Southern Appalachian way of life. The people of Southern Appalachia are described as keepers of the land. They enjoyed bluegrass music and spending time socializing on their front porches. Men were particularly fond of gathering at the nearest "general store," where they received haircuts, told tall tales (and occasionally even a true story or two), traded tools, livestock and other items, and caught up on the latest news. Although life was agrarian, children found time to climb trees, swim in the numerous creeks, fish, and hunt small animals.

More recently, Lumpkin County is the home of U.S. Army Camp Frank D. Merrill, which is the headquarters for the 5th Ranger Training Battalion's U.S. Army Ranger School's mountain phase.

The county features several vineyards and five licensed wineries, which attract many tourists. In 2015, State Senator Steve Gooch introduced Georgia Senate Resolution 125, officially recognizing Lumpkin County as the Wine Tasting Room Capital of Georgia. Long regarded as 'The Heart of Georgia Wine Country,' Dahlonega-Lumpkin County can now officially claim that title with the designation of the 'Dahlonega Plateau' as the newest Viticultural Area in the United States and the first with boundaries contained in the state of Georgia.

Lumpkin County is also home to the University of North Georgia (UNG). A major source of economic development, the college has an enrollment of approximately 20,000 students across five campuses. UNG is the sixth-largest public university in the state of Georgia. Within UNG, there are five colleges which collectively offer over one hundred bachelor's and associate degrees, as well as thirteen master's degrees and one doctoral degree. Most notably, are the students who are involved in the university's ROTC program, which has given it the designation as The Military College of Georgia, and one of only six senior military colleges in the United States.

Overall, the county provides high quality programs, services, and facilities to the citizens of Lumpkin County. The county is well managed, organized, has a vision for the future, and maximizes all its resources to meet the needs of a very diversified community. This plan will help guide future of the reservoir property improvements in the community from 2020 to 2030.



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An aerial photograph showing a large, calm lake nestled between forested hills. In the background, a range of mountains is visible under a clear sky. The foreground shows a smaller body of water and some developed areas with buildings and parking lots.

# 2

Section 2

## COMMUNITY PROFILE



# Community Profile

The economic development opportunities, recreation amenities, and trends of a community are dependent on the preferences and way of life of its residents. Preference and lifestyle are often dependent on age, gender, education and socio-economic status. Demographic research and public input generate data allowing us to anticipate public desires and predict the activities that will likely become popular as a community's demographic profile changes. Although accurate data is available every ten years, demographic factors, such as age, are ever-changing. Age is likely the most influential aspect of recreation trends. For example, a child who is ten (10) years old when a plan is developed may be interested in team sports like baseball; however, at the end of the plan's time frame, he/she may have an interest in individual recreation activities like running and cycling. Knowledge of a community's 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, including Lumpkin County.

As a vibrant and growing area in North Georgia, it is crucial to develop well-planned and enjoyable facilities for the citizens of Lumpkin County to experience now and in the future. The planning team began researching and gathering information from past U.S. Census Bureau surveys, which included a variety of data sets relating to demographic aspects that make up a community. The information collected provide benchmarks as a point of reference in judging what growth or trends may affect Lumpkin County in the future and help determine the types and level of services the community requires in the next ten years. Determining a suitable appropriate approach for the future allows problems to be solved before they become real-time issues.



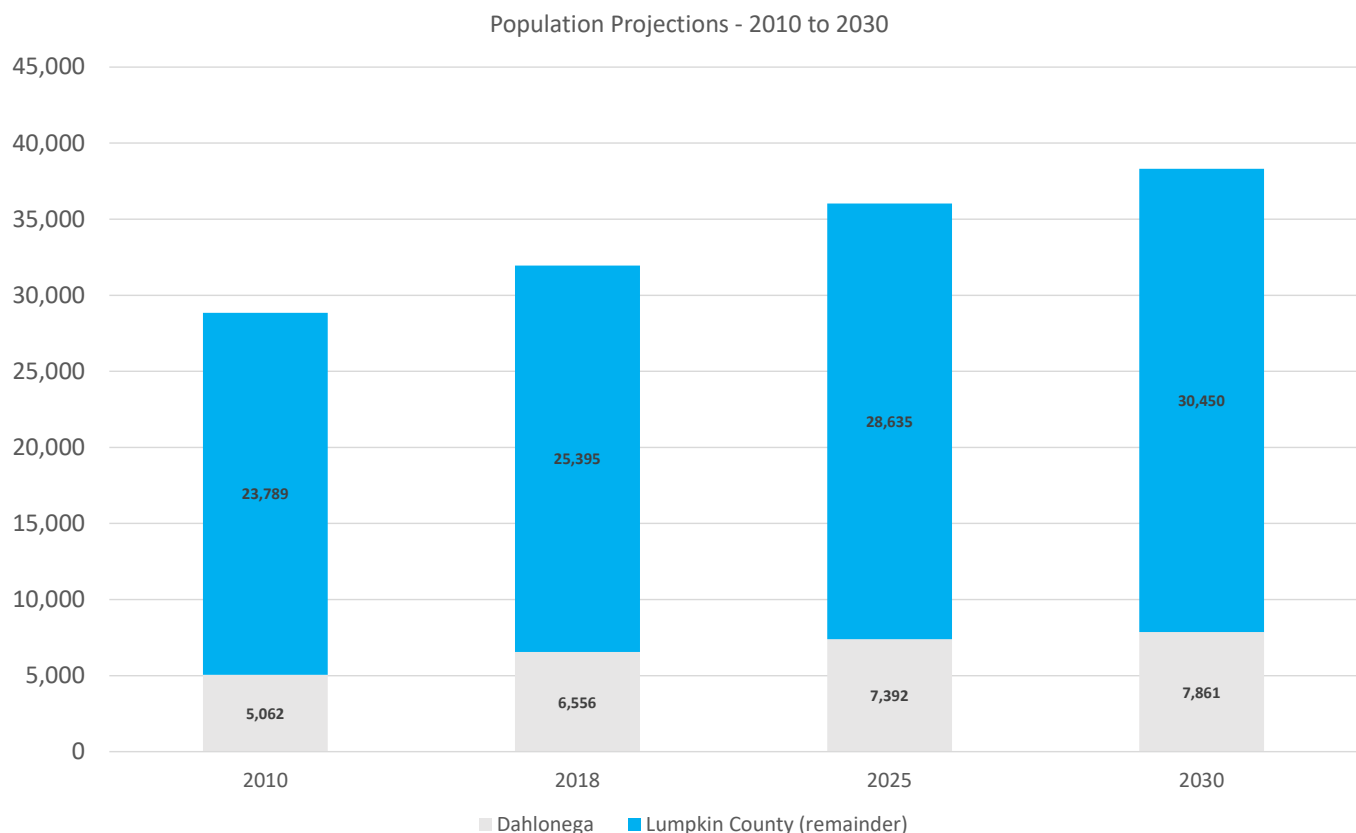
*Image courtesy of Jack Anthony*

## 2 Yahoola Creek Reservoir Master Plan

### Population Trends

Demographics are a description of the population characteristics of an area. Long-term demographic studies help local elected officials identify trends and show how the population is changing. Identifying population characteristics of Lumpkin County is an important element in the planning process. The current and projected population establishes the types of facilities and services needed in the future. Analysis of data collected from the U.S. Census Bureau, Georgia Department of Community Affairs, and Lumpkin County presented information necessary to understand population growth and trends. Several population projection models were used to determine Lumpkin County's population for 2030, including historical growth trends, Georgia Department of Community Affairs projections, and the Governor's Office of Planning and Budget.

The population for the Lumpkin County is projected to be 38,311 for the year 2030. The county has seen steady growth in the last 8 years and continues to grow at a steady rate. Between 2010 and 2018, the county saw a growth of around 10.74%.



# 38,311

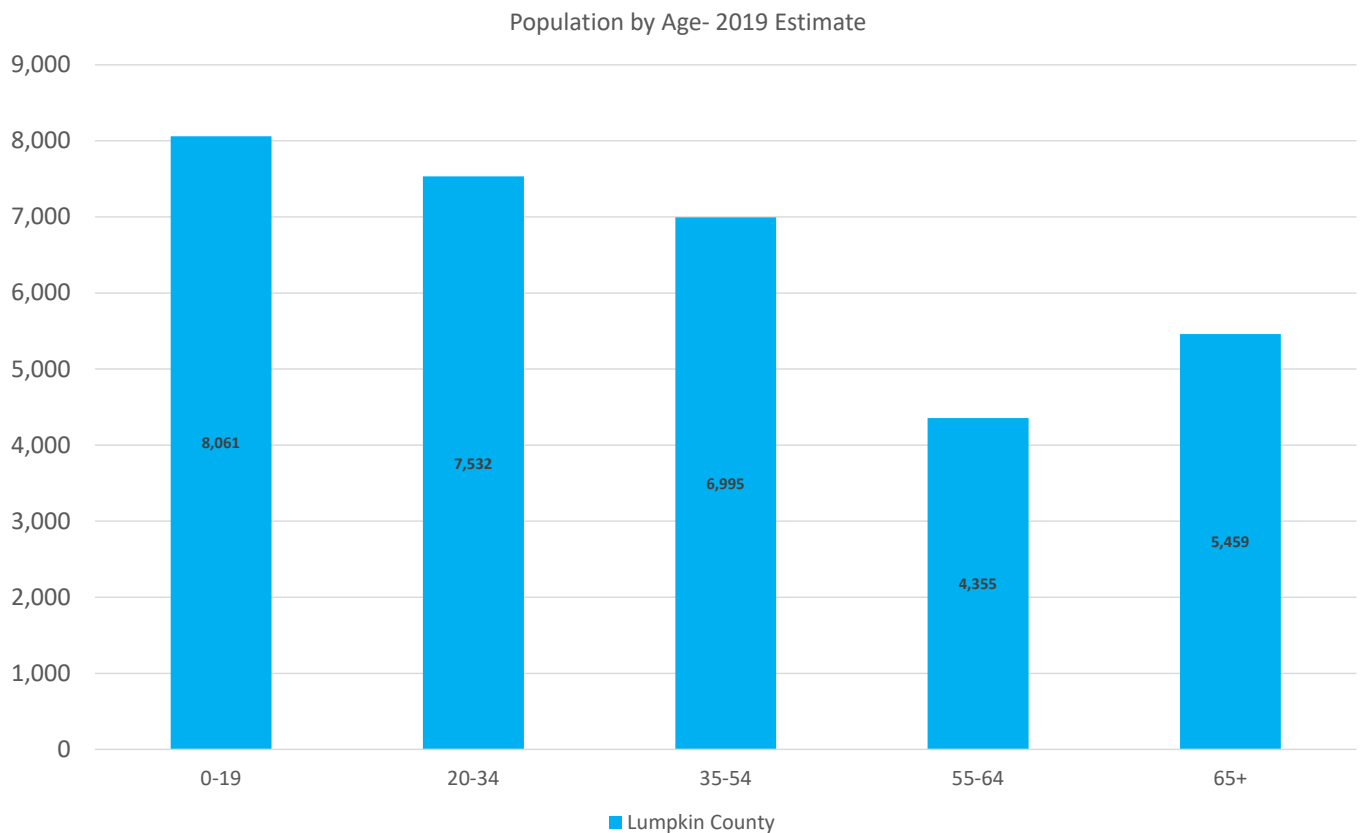
Lumpkin County projected 2030 population



This growth data allows the planning team to anticipate the level of demand for each proposed facility in the coming years. This information can be helpful in decisions focused around expansions, additions, and future programming changes to the county's property surrounding the Yahoola Creek Reservoir/Lake Zwerner.

## Population by Age and Gender

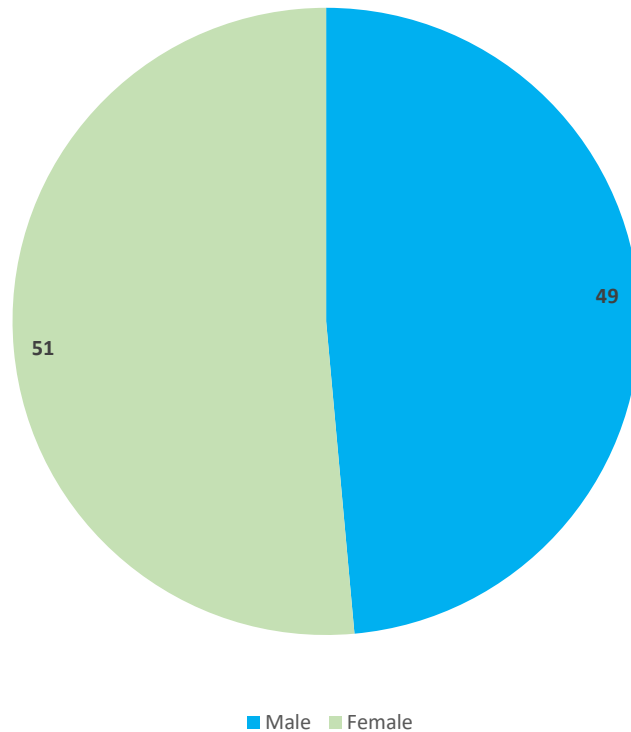
Understanding the age of the population is critical to providing the appropriate amount and variety of recreation programming to serve all age groups. One of the largest segments of the population is comprised of ages 15 to 34. The overall median age for the county is 37.2 years. According to the U.S. Census American Community Survey, the median age for the state of Georgia is 36.5 years. Therefore, a lower median age points to young professionals and young families who are top users of bike and walking trails, cultural arts, and are generally health/fitness focused. This population group has high expectations and should not be ignored. According to a study conducted by Bloomberg News, this age group has direct spending power of as much as \$143 billion, but more importantly, this generation is more willing than its predecessor, to put its money where its values are.



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As relates to gender, the population is nearly evenly split between males (48.56%) and females (51.44%). This trend aligns with both State of Georgia and nation-wide statistics.

Population by Gender- 2019 Estimate



### Education and Socio-Economic Data

According to population estimates from the US Census Bureau (July, 2019), approximately 85% of Lumpkin County residents age 25+ have an educational attainment of High School diploma or higher. Within that same age segment, the Bureau also reports that over 26% of residents have achieved a Bachelors' degree or higher. Both of these estimates are higher than similar population segments for the State of Georgia. The median household income for Lumpkin County is currently estimated at \$51,790 (US Census Bureau, Estimates for July, 2019), which is slightly less than the State of Georgia (\$58,700).

**\$51,790**

Lumpkin County median household income



## Summary

Lumpkin County's unique location provides ready access to the offerings of the Blue Ridge Mountains and to highly developed areas of commerce, including the economic center of the south. Overall, the population has increased slowly, but steadily, over the past five years and, not surprisingly, researchers found that the 15 to 34 age group represents the largest segment of the community. Researchers also found that school-aged children represent a future growth segment of the county. Based on projections conducted as part of this study, Lumpkin County is expected to grow steadily, over the next 10 years. The expansion of the University of North Georgia will have an impact on the county's density and development corridors. As growth occurs in other parts of Lumpkin County, the county may find that competition for county funds will increase.

Residents of Lumpkin County, as well as thousands of tourists from across the country come to Lumpkin County for its wineries, special events, and access to the Blue Ridge Mountains. In order to remain a premier destination for active families and adults, the county should continue to strategically invest in high-quality recreation and park facilities.



*Image courtesy of Jack Anthony*



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# 3





# Community Input

Public input is a critical component in developing a comprehensive site master plan. For the plan to be effective in improving service delivery and facilities, it must accurately reflect the facilities and programs most desired by the citizens of the community, as well as account for Lumpkin County's long term vision for the property. Various public engagement techniques were used to identify potential parks and recreation needs and priorities for the Yahoola Creek Reservoir Master Plan. These included an online survey, staff interviews, public open houses, a pop-up intercept survey, focus groups, and Study Committee workshops. Collectively, over 1,500 residents participated in the process. While there were a variety of specific needs and desires that emerged through the process, the following information provides an overview of the findings from each of the public engagement techniques. These methods are designed to identify needed facilities and programs, public perceptions of the parks and recreation system and the level of support for improving recreation offerings.



## 2 Yahoola Creek Reservoir Master Plan

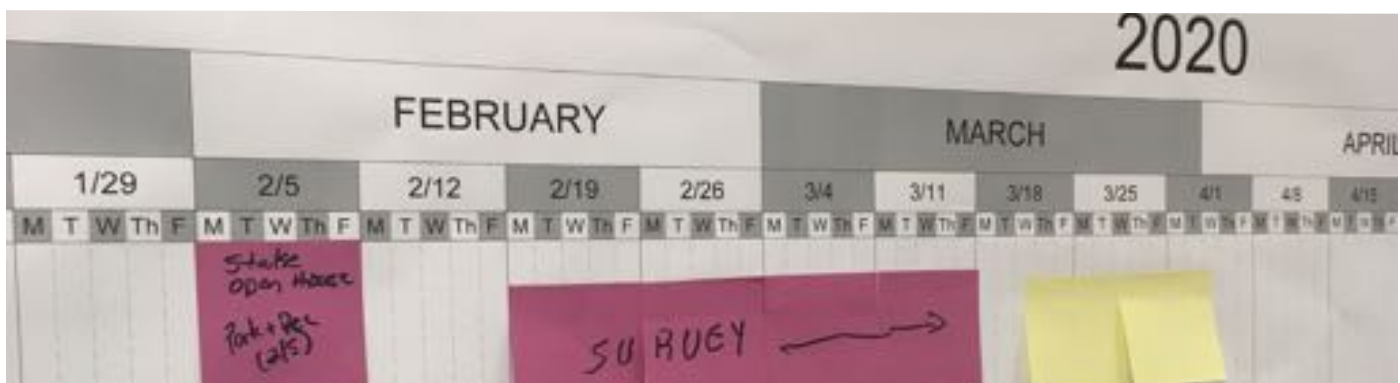
### Interviews

The public input process started with interviews that included meetings with the Yahoola Creek Reservoir Property Study Committee, Development Authority of Lumpkin County Executive Director, Lumpkin County Parks and Recreation Department Director, county and city department heads, elected officials, and individuals representing citizen groups. These interviews were necessary to develop an understanding of how Lumpkin County Government functions. Further, the interviews provided insight into the vision, long-term goals, and priorities for the property.

### Focus Groups

Over a period of three days, the planning team met with members of various provider and interest groups, including those representing outdoor recreation groups, natural resources, walking, biking, running groups, seniors, youth and adult recreation, civic/nonprofits, business community, education/UNG (faculty and staff), and trails and blueways. More than 90 individuals participated in these meetings. Issues centered on the need for additional facilities, maintenance, scheduling, and promotion or marketing of programs and facilities. Most groups utilize volunteers to support their operations. A number of individuals discussed their volunteer services and how they can help the county maintain and support future facilities and programs associated with the project. Suggestions included the development of a public-private partnership to off-set operational and maintenance costs, phased approach to project build-out, passive recreation opportunities, preserving the sites natural beauty, developing a beach area, connecting to Yahoola Creek Park and downtown, providing manual labor to keep properties maintained, and generating funds that are donated to the county for specific uses. Fee structures were discussed which identified inconsistencies in how user fee structures are established between groups. User fees, bonds, and a special-purpose local-option sales tax (SPLOST) were cited as alternative financing methods for funding capital outlay projects. User groups are generally interested in additional facilities for their sport or activity, leading to the ability to grow programs if additional space was available. According to attendees, some facilities are not present, such as restrooms, and some existing facilities are not appropriate/safe to accommodate citizens or visitors. The walking, biking, and running groups cited pedestrian safety and inadequate trails as their primary barrier to using the existing trails around the lake.

Additional way-finding markers and improved parking facilities were cited as the priorities from Focus Group members. Additionally, expanded facilities to connect youth and adults to water activities, visual arts, and outfitter programs would be desirable. The groups also cited a connection to Yahoola Creek's natural waterways and expanded trail system is greatly needed.



## Public Engagement

In an effort to meet citizens where they are, the Development Authority of Lumpkin County (DALC) organized several public engagement events at which Lumpkin citizens were engaged in one-on-one conversations with members of the planning team. Input from the county hosted public open house and public intercept meeting reinforced observations made by the planning team. A brief introduction was given at each meeting to provide an overview of the master plan process, and the next steps in the process. While not statistically valid, these events produced spontaneous, unfiltered responses from active members of the community. The first event was an open house held on February 6, 2020 from 4:00 p.m. to 7:00 p.m. at the Lumpkin County Parks and Recreation Center. The second event was a public intercept meeting held on June 25, 2020, from 10:00 a.m. to 4:00 p.m. at the Yahoola Creek Reservoir.

Allowing residents to drop-in and attend a public open house as their schedule allows provides an opportunity for community participation. Guests were asked to participate in multiple activities to assist the planning team in understanding the recreation needs and desires of the community. Attendees were given an opportunity to “vote” for facilities and programs they would like to see included in the master plan. Voting dots were provided to each attendee and they were asked to indicate their preferences by placing the dots on any of the photographs of facilities and programs that were displayed around the room.





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### Property Site Improvements

Open house participants were asked to review various maps of the Yahoola Creek Reservoir property and provide comments and insights on sticky notes for specific areas on the project site. These maps included graphics that conveyed site elevations, slope analysis, and other existing conditions. The comments were very helpful in understanding user needs and the community's vision for the Yahoola Creek Reservoir/Lake Zwerner property.



### Priority Programs and Facilities

The program preference activity that attendees participated in generated feedback on a number of desired programs. The top programs according to public meeting participation events were:

- Nature Trails
- Trail Head/Restroom
- Canoeing/Kayaking
- Mountain Bike Trails
- Canoeing/Kayaking
- Swimming/Beach



These top interests were immediately followed by programming addressing the needs of zip lines, paved trails, picnic pavilions, boat rentals, and a boat launch. A larger and complete list of program needs can be found in the Appendix.

The planning team received a tremendous amount of information regarding desired facilities for the Yahoola Creek Reservoir/Lake Zwerner property. The top facilities requested according to public participation events were:

- Leave Property as Is
- Connection to Downtown
- Dog park
- Amphitheater
- Native Plant Garden

A larger and complete list of program needs can be found in the Appendix.



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### Funding Priorities

At the public meetings, a station dedicated to funding priorities was used to determine support for various types of parks and recreation initiatives by using poker chips to represent the county's budget for Yahoola Creek Reservoir/Lake Zwerner property improvements. Participants were given 10 poker chips and asked to use the chips as hypothetical funds for 7 spending categories. Individuals could use as many chips as they wished for any of the available categories. Funding priorities in order of votes included: adventure/outdoor recreation, cultural/environmental facilities, maintenance, over night facilities, passive recreation, specialized/support facilities, and water recreation. This funding exercise is designed to put the public in the seat of the decision makers. There is a finite amount of funding available in any community; this exercise allows citizens to express where they want to prioritize the spending of their money. Many times, they find there are more program and facility requests on the list than funds to meet service demands. The top funding priorities according to data collected at public meeting participation events were:

1. Passive Recreation
2. Adventure/Outdoor Recreation
3. Water Recreation
4. Specialized/Support Facilities
5. Cultural/Environmental Facilities

### Other Ideas or Comments

Attendees were also provided the opportunity to give written comments and speak with members of the planning team. Written comments greatly focused on the desire for a variety of improvements, including enhanced pedestrian safety, additional parking, renovations to the existing trail system, providing new restroom facilities, developing mountain bike trails, adding way-finding markers, improved ADA trail access, and a connection to Yahoola Creek Park. Additional written comments focused on developing programming based on residents first, coordinating planning efforts with the City of Dahlonega, low impact development of the property to preserve its natural amenities, development of a public-private partnership to off-set operations and maintenance cost, closely evaluating privatized programs, and not allowing camp sites.

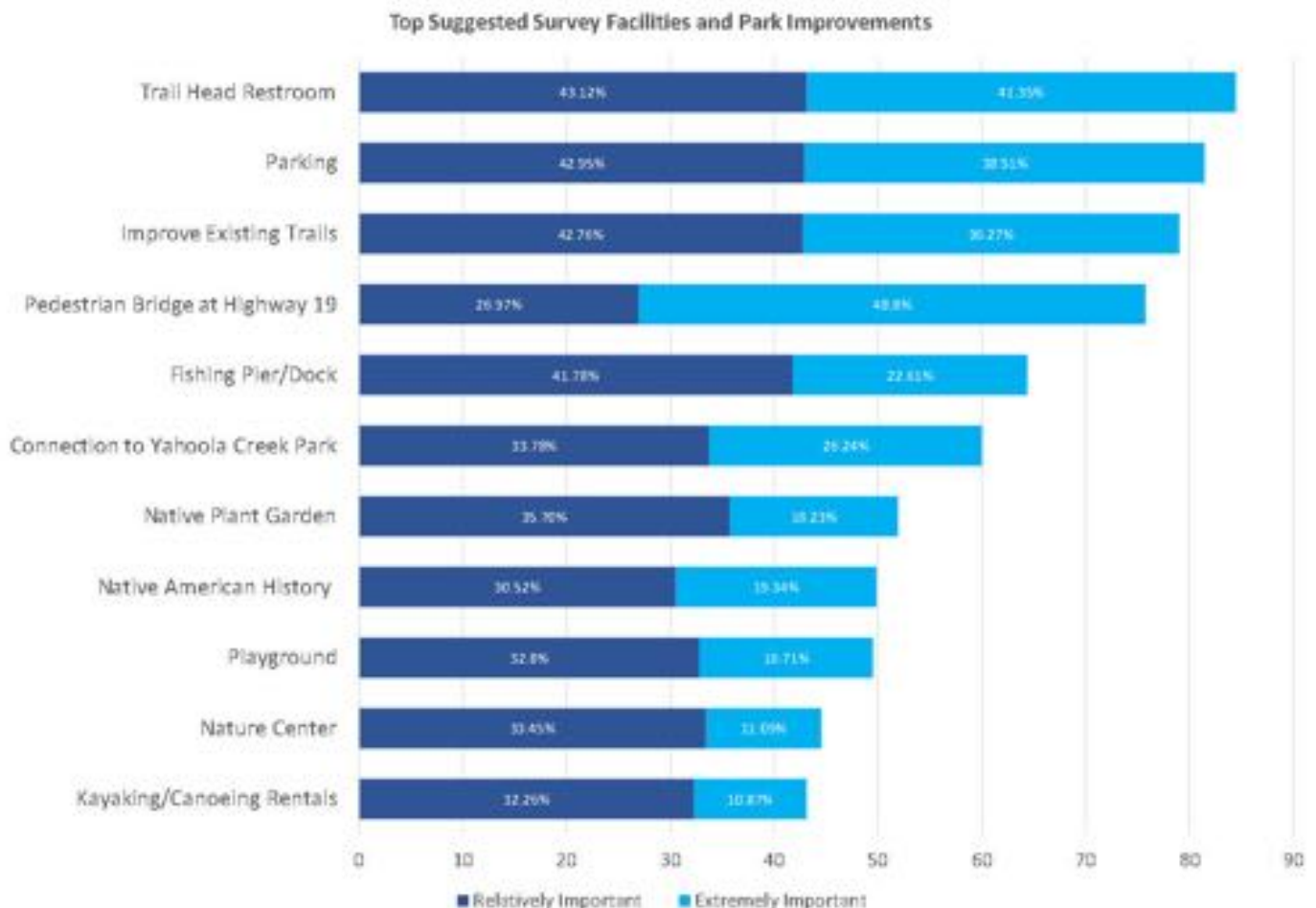
Other comments addressed facility requests such as outdoor classrooms, nature center, and a pedestrian bridge along the Highway 19 lake crossing; and the need for additional funding for maintenance.

## Online Survey

In addition to the public Open House Meetings, the county conducted an community-wide online public survey to identify needs and priorities associated with the Yahoola Creek Reservoir/Lake Zwerner Property Master Plan. The survey was open to anyone that wanted the opportunity to participate. The survey opened from May 25, 2020, to June 19, 2020. The survey was very successful with 1,208 participants. The survey response rate was high based on the Lose Design team's experience with this method. The demographics of respondents were consistent with that of the county and indicated the opinions revealed by the survey are representative of the community. A copy of the summarized survey responses is provided in the Appendix.

The survey results highlight the following:

- Survey participants rate the condition of the restroom facility at the reservoir as "Poor" (worn but functional, needs attention).
- Survey participants rate the condition of the reservoir amenities (trails, boat ramp, parking, and pavilion) as "Fair" (generally adequate but needs updating).
- The parking lot at the dam is the most visited part of the reservoir property followed by the parking lot at the boat dock.



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- A lack of or inadequate parking and the condition of existing trails were identified as the greatest barrier to participation of utilization of the reservoir property followed by unsafe to walk or ride a bike to the reservoir property and concerns about my personal safety at the property (e.g. crime, vagrants, off-leash dogs, unsafe equipment).
- 88.49% support the county's efforts to improve amenities, facilities, and trails.
- 70.84% of respondents travel outside of Lumpkin County to use parks and recreation facilities.
- 80.24% cited that outside entities offer facilities that are not currently available to county residents.
- Survey participants suggested the following top facilities and/or improvements be incorporated into the county's master plan design: Trail Head Restroom (84.47%), parking (81.46%), improving existing trails (79.03%), pedestrian bridge at Highway 19 (75.77%), and fishing pier/dock (64.39%).
- Survey participants suggested the most least desirable facilities and/or improvements not be incorporated into the county's master plan design: Lodging (72.21%), conference center (68.74%), RV camping (66.88%), aerial adventure park (53.81%), and camp sites (primitive, maintained, yurt, etc.)(49.29%).
- 38.73% of the survey respondents have lived in Lumpkin County over 20-years and 21.12% of respondents have lived in the county for 5-years or less.

Over  
**88%**  
community support  
to improve amenities,  
facilities and trails

Over  
**70%**  
of respondents travel  
outside of Lumpkin  
County for parks and  
recreation facilities



## Intercept Survey

Non-traditional public input tools, such as pop-up intercept surveys, have proven exceptionally useful in capturing the needs of a community from residents who may not otherwise participate in other forms of community engagement. In this format, planners are able to engage citizens in an informal setting, at a time and location that would be most beneficial to meet community members during their regular routines or at special community events. For this master plan, the design team set up a survey station at the existing boat launch ramp on Thursday, June 25, 2019 from 10:00am to 4:00pm. A facility/program voting station, funding prioritization station, and comment card station were used to engage visitors to the site- both residents and visitors from outside of the County. Over 20 people participated in the intercept survey; however, it should be noted that nearly 10 other people shared thoughts and insights with the design team, but chose not to participate in the survey exercises.

The top requested programs and facilities for inclusion in the planning process are as follows:

- Trailhead/Restroom
- Amphitheater
- Canoeing/ Kayaking
- Nature Trails
- Connection to Downtown

A larger and more complete list of desired program and facility rankings can be found in the Appendix.



The funding prioritization exercise was furnished in the same format as described previously for the Public Meeting referenced earlier in this section. The prioritized list of funding recommendations is as follows:

1. Passive Recreation
2. Specialized/ Support Facilities
3. Water Recreation
4. Cultural/ Environmental Facilities
5. Adventure/ Outdoor Recreation
6. Overnight Facilities



### Alternative Conceptual Plans

As part of the planning process, the design team developed three alternative conceptual plans and presented them to the public for feedback in advance of producing a preliminary master plan for the site. A more thorough description of that meeting and the corresponding public input can be found in Section 4.

### Summary

The amount of public input received during this process was vital in determining the community's needs and desires for future facilities and/or improvements Yahoola Creek Reservoir/Lake Zwerner property. The planning team gathered information from a variety of perspectives. There were some facilities that rose to the top of the community's interest in all public participation groups, while others were more significant in some community input forums than others.

In summary, the public input process was designed to engage the Lumpkin County community through public engagement meetings and community-wide survey to determine park and recreation needs. Feedback consistently illustrated the community's desire for additional amenities, facilities, and trails. Specific areas of interest that the community felt were important included: a trail head, restroom, parking, improving existing trails, developing a pedestrian bridge at Highway 19, amphitheater, and fishing pier/dock. The team also heard that current facilities and program demands need to be expanded and are not currently meeting the growth needs of the community. This information was crucial in developing recommendations found in this plan.

The public input process brought forward the following consistent themes, which are highlighted below:

- Provide more trails, both paved and natural surface, to connect Downtown, Yahoola Creek Park, and provide recreational opportunities.
- Develop amenities and facilities that meet multi-generational needs.
- An increased variety in the type of park amenities/facilities available on the reservoir property: Amphitheater, mountain bike trails, canoeing/kayaking, swimming/beach, trailhead, restroom, fishing, native plant garden, local history, playground, dog park, plant ID trail, conservation areas, and nature center.
- Based on community input, the desire to leave the site as is was very high while advocacy for lodging, conference center, RV camp sites, aerial adventure park, and camp sites were the most least desirable amenities.
- Acquire land for passive recreation development in the northern section of the property as funding allows.
- Better communication regarding facilities and program opportunities are needed as the project implementation moves forward.

- Improvements to, and maintenance of, existing facilities and trails also ranked very high, reinforcing the idea of individual outdoor facilities being highly desired by the community.
- Although the community indicates support for additional funding, preferred funding methods are mixed.
- Develop programs for youth and adults to include adventure/outdoor recreation, passive recreation, culture/environmental facilities, and water recreation.
- Program priorities indicate the need for a trailhead multi-purpose and/or nature center that would provide adequate space for the types of programming desired.
- While typical youth athletic programs and facilities were not indicated as high priority needs, there were specific improvements mentioned for athletic facilities to accommodate 5K, 10K, bike (bicycle) races, zip lines, and fishing tournaments as a means of generating economic development, tourism, and revenue for the care of the property.
- There is public support for dedicated funding for amenities, facilities, and trail improvements.

Overall, public input appears aligned with the needs of a community where most residents are younger in age. This does not mean the needs of older generations should not be addressed but, the engagement effort did highlight priority facilities, programs, and investments for the County to consider going forward.

The themes identified by the public input process were combined with the goals of the Study Committee to inform the master planning process. Several of the goals of the Study Committee focus on long term improvements and amenities that will support the growing tourism industry of Lumpkin County.

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# 4



## MASTER PLAN RECOMMENDATIONS

# Master Plan Recommendations

The development of the Master Plan Recommendations for the Yahoola Creek Reservoir Property involved multiple steps and included collaboration with the plan's Study Committee, elected officials, City of Dahlonega and Lumpkin County staff, and residents of Lumpkin County. A summary of the steps in this process included:

1. Site Analysis and Inventory
2. Program Development
3. Alternative Conceptual Plans
4. Hybrid Conceptual Plan
5. Preliminary Master Plan
6. Final Master Plan

Multiple meetings and presentations were provided by the design team throughout this process to permit a linear development of the plan that would react to the overall needs of the community. A more thorough description of this planning process and the subsequent recommendations for the future of this valuable County asset are provided on the following pages.



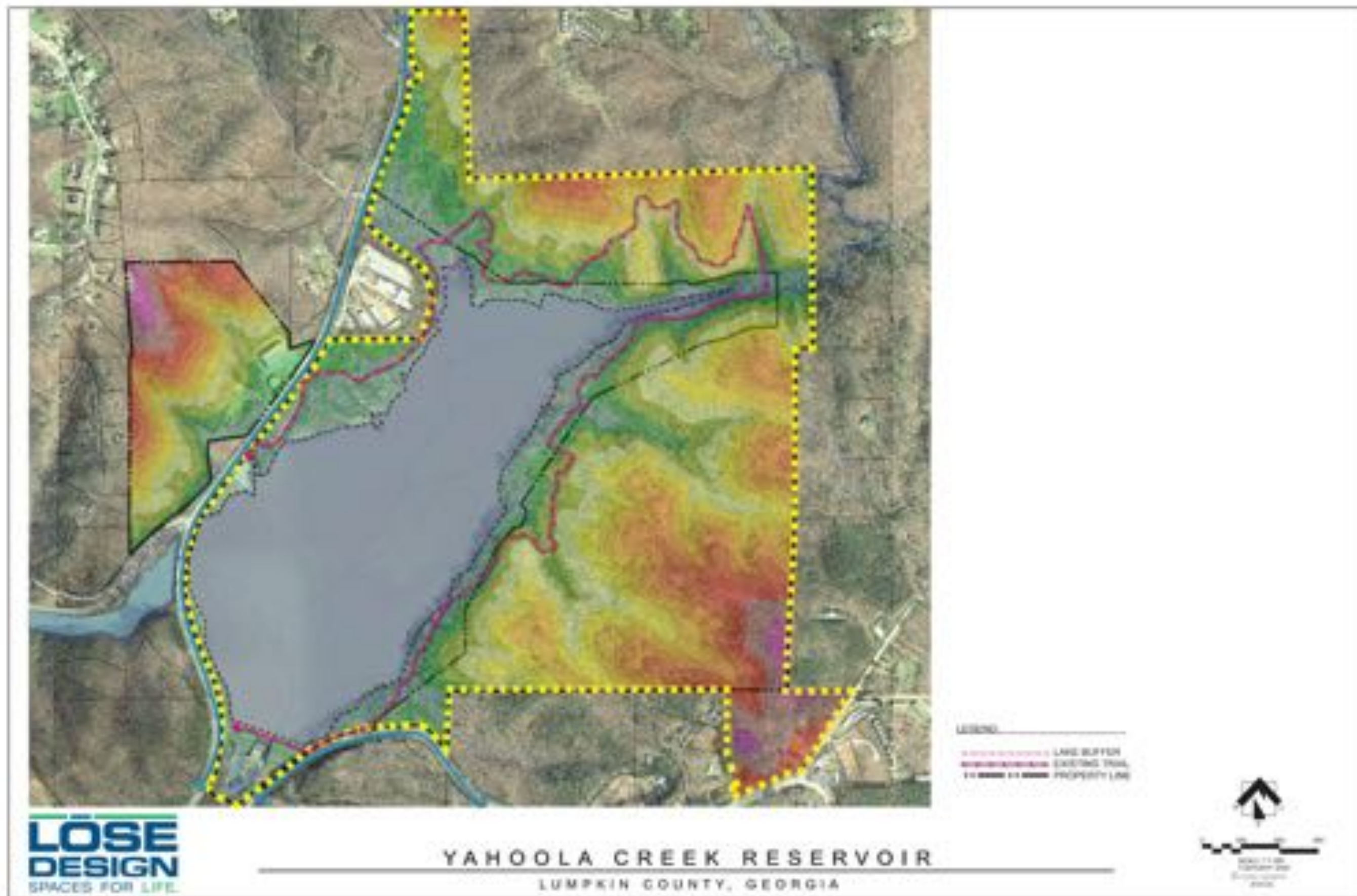
### Site Analysis and Inventory

One of the first steps in any planning process is gaining a thorough understanding of the opportunities and constraints associated with the project. To begin to project, design team members collected background data and other documentation related to the property, including GIS mapping data, previous planning studies, current and proposed reservoir management plans, and environmental and cultural resource data. Once this information was assembled and reviewed, members of the design team made several visits to the site to document existing conditions, observe visitor activities and verify information gathered during data collection.

Following these steps, the design team composed site analysis and inventory maps (which can be seen on the following pages). A summary of notable features, opportunities and constraints that were determined by the design team are as follows:

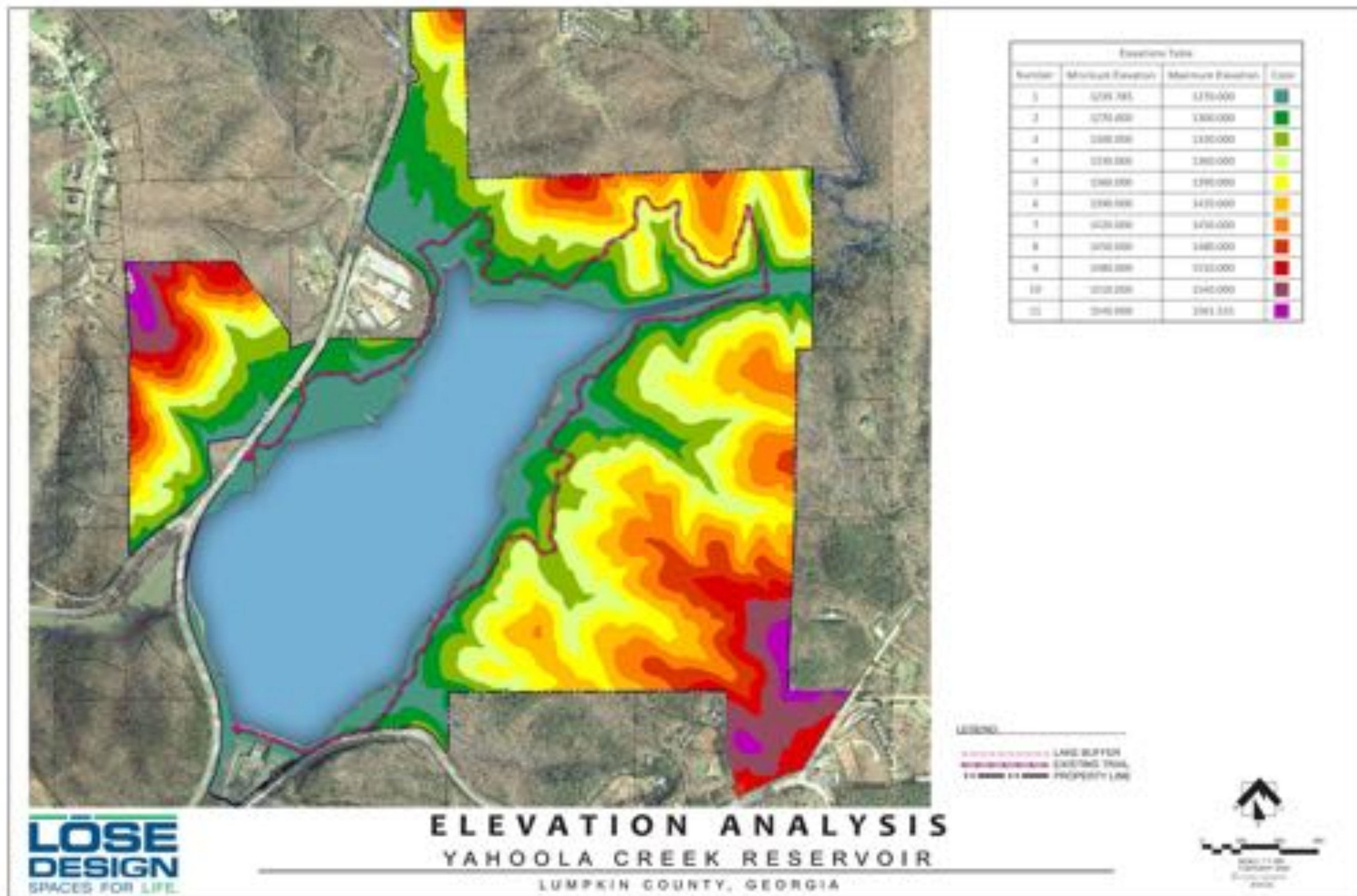
- The land comprised of the planning area is composed of two properties, one which is jointly-owned by the City of Dahlonega and Lumpkin County, and another that is solely owned by Lumpkin County. The jointly-owned property lies on the west side of the reservoir and is accessed at two locations along GA Hwy 9. The County-owned property lies on the north and east sides of the reservoir and was initially only accessible from a single location on Hwy 52. Early in the planning process, the design team cited concerns regarding vehicular access feasibility for the County's parcel and an adjoining 12-acre parcel was acquired at the intersection of Hwy 52 and Rock House Road. This additional parcel provided an alternative access point for the eastern side of the study area.
- With the exception of two developed areas on the jointly-owned parcel, the majority of the site is largely undisturbed. These undisturbed areas have a dense mixture of mature hardwoods and pines and the topography of the land is predominantly covered with steep slopes.
- There are several old roadbeds throughout the undeveloped property as well as some remnants of previous residences on the site.
- The reservoir, itself, has a 150' management buffer along its shoreline that limits development within that boundary. Proposed master plan elements within this area will be limited to natural trails or pervious pavement. In addition to the reservoir, there are several tributaries on the property that have development buffers.
- Public utility connections on the site are limited and will require infrastructure extensions to support potential development on the property.
- Considering its proximity to Downtown, the site is relatively isolated from nearby population centers in that it lacks pedestrian connectivity and lacks adequate signage for way-finding and access points.
- The existing development areas, which include a natural surface hiking trail, gravel parking areas, boat launch and picnic tables are sparsely maintained and are not compliant with current accessibility codes.





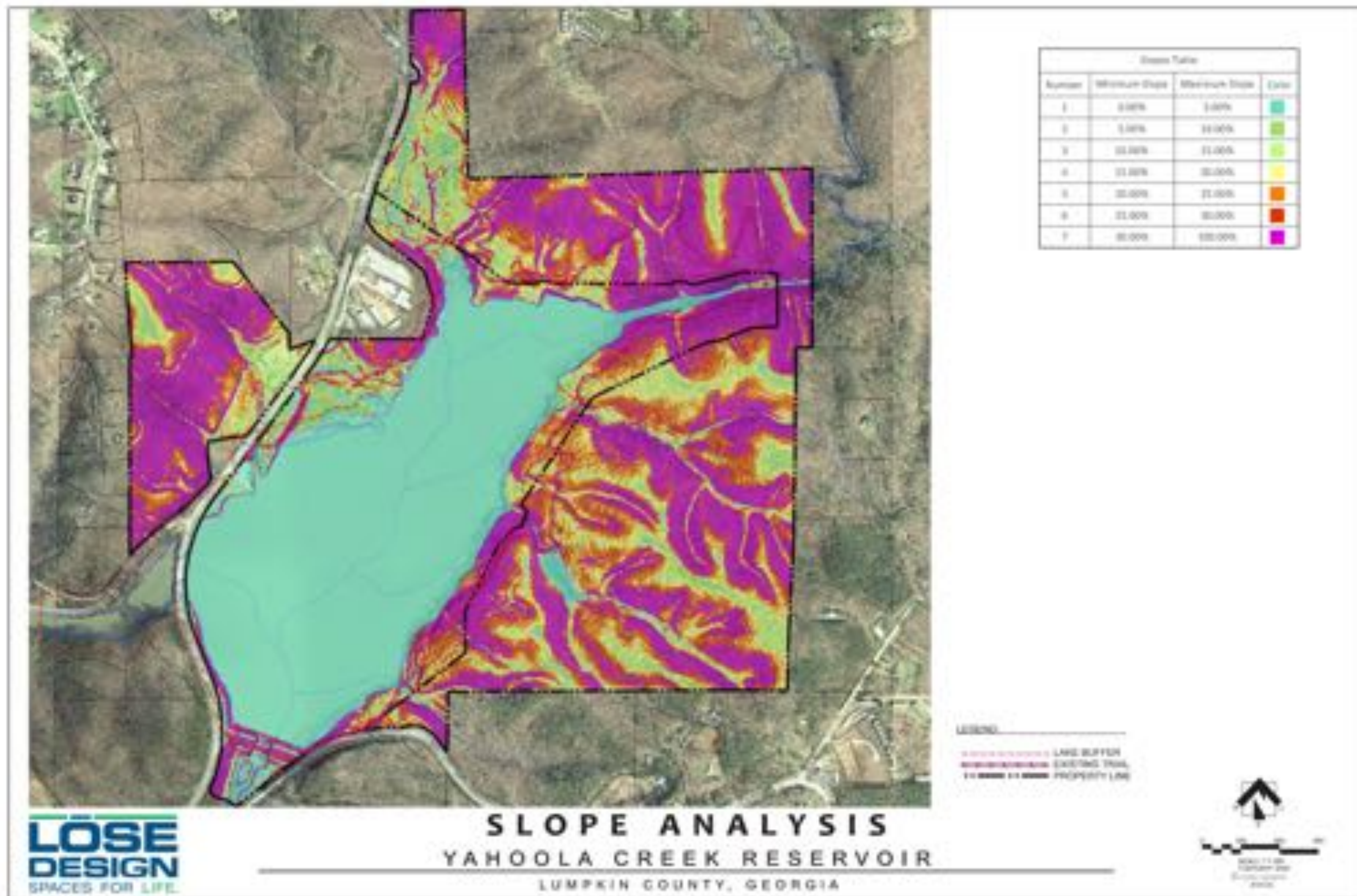
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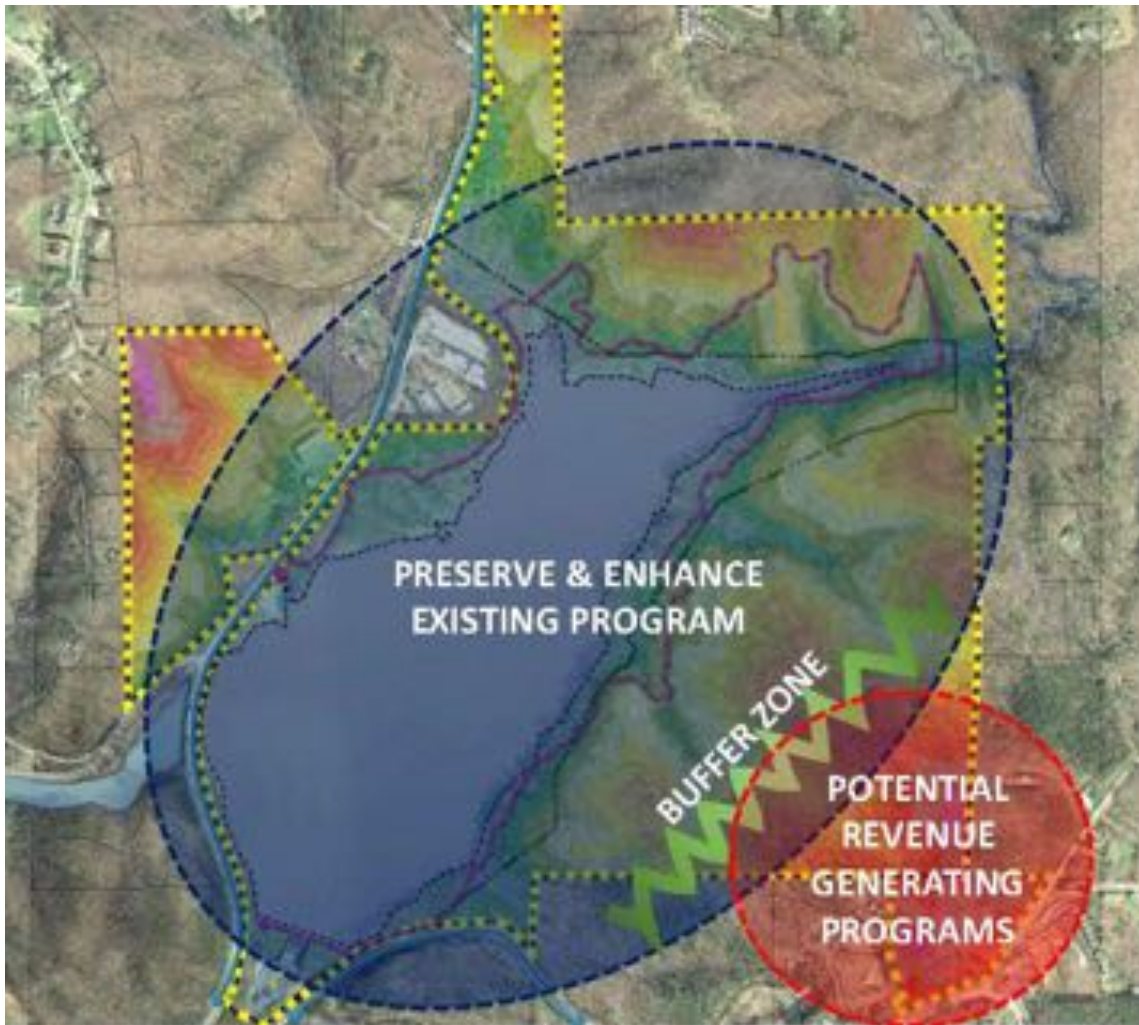






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Using the information gathered during the site analysis and inventory phase, the planning team developed the following site program diagram to help facilitate program recommendation discussions and aid in establishing use zones for current and proposed programs and facilities.



The planning team identified two types of program implementation zones for the property- one that focuses on preserving and enhancing the existing site program (low intensity) and one that provides an opportunity for new revenue generating programs (high intensity). Low intensity programs are better suited in areas immediately surrounding the reservoir and other areas that are subject to more stringent development regulations. High intensity programs are more feasible on the edges of the property, away from sensitive areas. In order to preserve the natural setting of the property, the planning team identified a need to develop a buffer zone, or transition, between high and low intensity use zones. These buffer zones will aid in creating separation to preserve the scenic landscape and facilitate environmental corridors to isolate negative impacts to the site.

### Site Programming

At the beginning of the planning process, the design team coordinated with the Study Committee to develop a list of existing facilities and programs on the site as well as a list of potential programs and facilities that could feasibly be developed in the future. These lists were used to develop the public input exercises that were employed during the public meetings, intercept survey, and online survey. Following the public input process, the planning team first presented the data and initial findings of that process to the Study Committee for guidance. As noted in previous sections, recommendations from the public were generally polarizing. A large portion of participants recommended minimal or no additional development on the site, while an equally large portion of participants supported developing new programs and facilities to support recreation needs.

In order to develop a list of potential programs and facilities that could be supported by the site, the Study Committee, along with the design team, established the following principles to help guide recommendations for site programming:

- Master Plan elements must first address the need to improve on existing programs and facilities on the site.
- Connectivity and access, both within the property and extending outwards from the property, must be included to provide greater opportunity for recreation to residents and visitors.
- Design recommendations must be as sustainable as possible- both in terms of environmental impacts as well as financial investment. Some portions of the master plan recommendations must have the ability to generate revenue in order to offset costs for non-revenue generating program elements and for enhanced maintenance of existing and proposed facilities.

With these principles in mind, the Study Committee recommended the following list of site programs to be studied for implementation on the site:

- Retain and improve the existing primary loop trail. A pedestrian bridge over Yahoola Creek is essential to the development
- Develop additional hiking trail loops
- Plan for future pedestrian connection to downtown
- Expand and improve the existing boat launch
- Develop a new passive community park with pavilions, a playground and restroom
- Plan for potential development of a beach for swimming in the reservoir
- Develop a new mountain bike facility with trailhead
- Develop a small RV campsite with amenities
- Develop areas for cultural and natural resource displays/ exhibits
- Plan for a welcome center to support programs and facilities on the site
- Identify a location and suitable scale for a new community amphitheater
- Identify a location and suitable scale for a new conference center
- Identify a location and suitable scale for a new lodge for overnight accommodations
- Plan for future pedestrian connection to Yahoola Creek Park

## Alternative Conceptual Plans

Using the recommendations from the Study Committee, the design team developed three alternative conceptual plans that incorporated the various site program requirements set forth for the project. The purpose of the conceptual plans is to provide an illustrative representation of scale and relationship between the various program elements. The production of multiple conceptual plans allows the community to weigh the pros and cons associated to each potential design solution. A summary description of each of the alternative concepts is as follows:

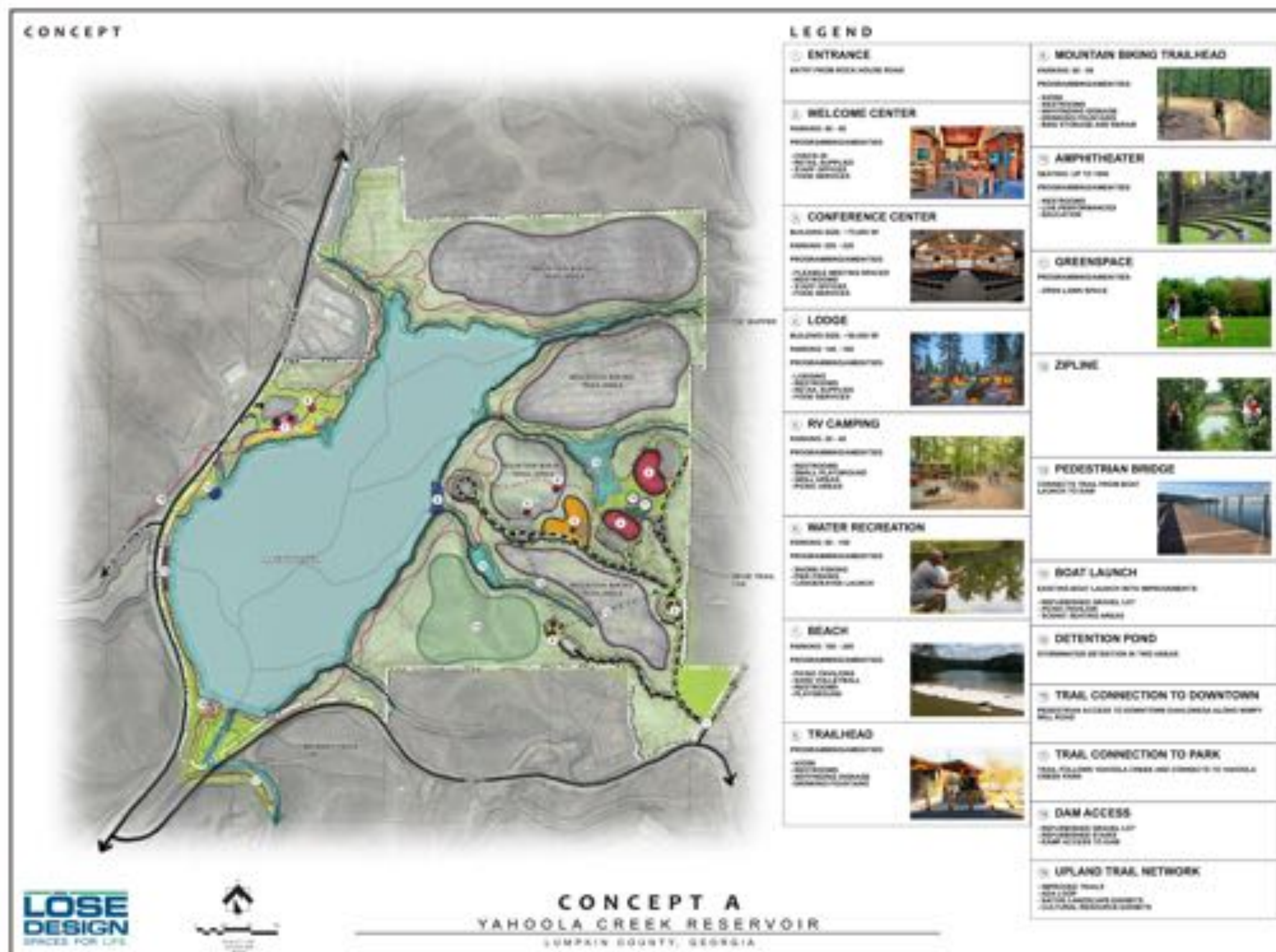
### Concept A

1. Entrance- With the acquisition of the new parcel on the southeast corner of the property, the planning team recommends providing for a new vehicular entrance off of Rock House Road.
2. Welcome Center- Located on the property interior, the welcome center will serve as an orientation point on the site for the various programs and facilities at the reservoir. This facility is also recommended to provide space for a small retail area and food services, and housing staff offices for the site.
3. Conference Center- In this concept, the conference center is located along the back edge of the property and takes advantage of an existing ridge to minimize the development footprint associated with grading. The building footprint encompasses approximately 75,000 SF and contains flexible meeting spaces, food services, restrooms and staff offices. Approximately 200 parking spaces are recommended for a building of this size.
4. Lodge- The 50,000 SF lodge is located near the conference center and is similarly located on an adjacent ridge to minimize impacts to the site. The lodge will provide overnight accommodations as well as food service, restrooms and staff offices. Approximately 150 parking spaces are recommended for a building of this size.
5. RV Camping- The RV camping area is located more towards the site interior and serves as a buffer facility between the high and low intensity developments on the site. Approximately 20-40 campsites are planned within this footprint with each site nestled into the terrain to minimize grading impacts. Support amenities such as restrooms, a small playground, grill areas and picnic areas are recommended for inclusion in this footprint. A spur trail with a trailhead is planned for this area to connect users to the hiking trail network and mountain bike network.
6. Water Recreation Area- In order to facilitate additional reservoir access, a new water recreation area is planned along the eastern edge of the lake. This facility will provide opportunities for additional shore fishing, a new pier for fishing, and a canoe/ kayak launch. Approximately 80 parking spaces are planned to support this area.

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7. Beach- The City of Dahlonega recently submitted a revised reservoir management plan to the Environmental Protection Division of the State of Georgia. Included in that revision is a provision to permit swimming in the lake, which is currently restricted. If this revision is approved, the plan provides a recommended location for a new public beach along the western shoreline of the lake. The beach development includes support facilities similar to a typical County park, such as picnic pavilions, a playground, restrooms, and sand volleyball. Approximately 200 parking spaces are planned for this facility.
8. Trailhead- Multiple trailheads are planned for implementation on the site to facilitate improved access to the various facilities on the site, including the hiking trail network. The primary trailhead for the hiking trails is located near the beach due to visibility and ease of access for visitors. Each trailhead is recommended to include kiosk signage, way-finding signage, restroom facilities and drinking fountains. Depending on the location, there is either dedicated parking or shared parking at each trailhead.
9. Mountain Biking Trailhead/ Area- At the conceptual plan level, the design team provided potential areas that mountain bike trails could feasibly be located. The areas identified on the plan are ideal for supporting mountain bike trails as well as hiking trail spurs. It is anticipated that the areas identified in Concept A could yield 5-7 miles of trails. A dedicated trailhead is identified for this facility to support a kiosk, way-finding signage, restroom facilities, drinking fountains, and bike storage/repair facilities. Approximately 80 parking spaces are planned for this facility.
10. Amphitheater- The amphitheater is located in a valley between the lodge and conference center and provides a public gathering area between these two facilities. The proposed size of this facility will permit seating for up to 1,000 spectators and will provide a covered stage area for live performances. The facility will also include support facilities such as restrooms and food service areas. Parking for the amphitheater is shared with both the Lodge and Conference Center.
11. Greenspace- A small open lawn area serves as the connection between the Conference Center, Lodge and Amphitheater. This greenspace will permit overflow spectator areas for performances and facilitate alternative programming for both the Lodge and Conference Center. The space will also be able to support passive recreation when not being programmed for other uses.
12. Zip Line- Using the existing terrain, a quarter-mile long zip line course is planned to route adventurers through the tree canopy and take advantage of views of the lake. With a starting point at the Welcome Center, the course has stations at two trailheads, with an opportunity for users to return to the starting point via either hiking trails or a roadside pedestrian corridor.
13. Pedestrian Bridge- A new pedestrian bridge is recommended to span the width of Yahoola Creek to provide a safe crossing for trail users.
14. Boat Launch- The existing boat launch will be refurbished to improve the existing gravel parking area and include a new picnic pavilion and scenic seating areas.





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15. Detention Pond- Stormwater management facilities will be required to comply with current codes for all of the development areas. The design team's recommendation is to use as much pervious pavement and bio-retention areas to minimize the size and impacts of providing traditional detention ponds. However, the design team recognizes that these stormwater management facilities can be designed to be an asset to the site, using native plantings and other techniques to make these ponds more appealing.
16. Trail Connection to Downtown- In Concept A, the design team recommends one of two alternative options to connect to downtown. The City of Dahlonega recently installed a sidewalk connection from downtown to Wimpy Mill Park, a nearby City recreation facility. In this concept, the plan calls for a pedestrian connection across GA Hwy 9 to a sidewalk extension that leads to the park.
17. Trail Connection to Park- Lumpkin County's Yahoola Creek Park is located approximately 1.5 miles downstream of the reservoir. By implementing a ramped connection down the dam, the design team identified a potential route along the creek corridor to connect to the County's recreation facility.
18. Dam Access- The existing dam access parking lot will be refurbished with new gravel parking and the stairs leading to the dam will also be renovated. The design team also recommends a ramped access route be provided to facilitate access to the primary loop trail and the dam for handicapped users.
19. Upland Trail Network- Since the majority of the trails on the property are planned to be natural surface with potentially steep grades, this concept recommends an upland trail network be provided near the front of the County-owned parcel. This trail network would include a paved, ADA compliant trail loop as well as natural surface spur trails. This trail would permit access to the site for visitors who are unable to utilize the other hiking trails on the site. This trail network would also serve as an educational opportunity with native landscape exhibits and cultural resource exhibits along its length.

## Concept B

*Note: Much of the program elements in Concept B are the same as those described above in Concept A. The following descriptions for this concept are generally limited to changes or deviations from the design approach mentioned in the previous concept.*

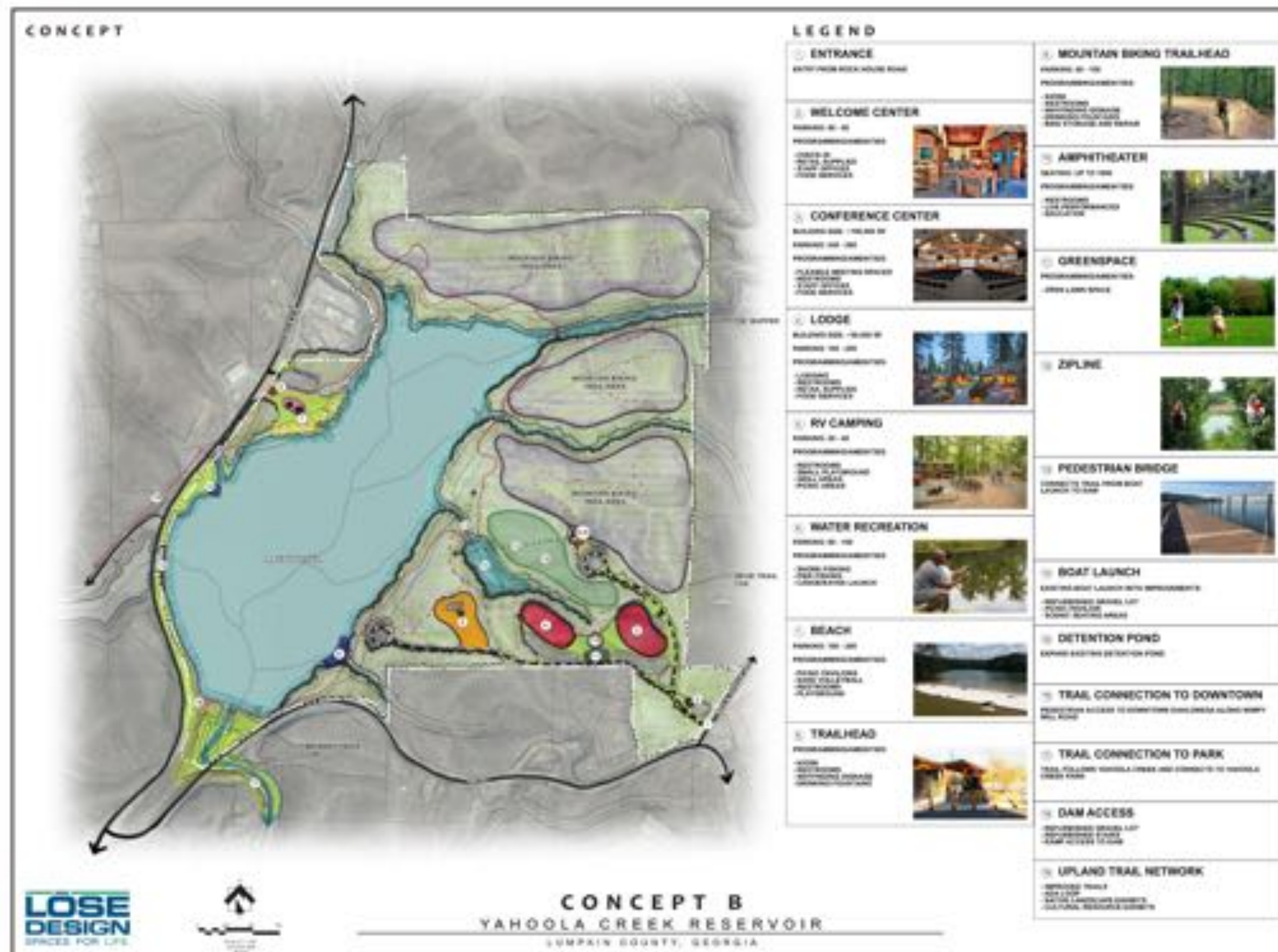
1. Entrance- The new vehicular entrance off of Rock House Road remains unchanged from the previous concept.
2. Welcome Center- In this concept, the Welcome Center is located at the front of the property immediately past the park entrance. This location makes it easier for park staff to oversee all visitors entering and exiting the property. The remainder of the programming for this facility remains the same as the previous concept.
3. Conference Center- In Concept B, the conference center is located closer to the property entrance, permitting more separation from other uses on the site. The terrain in this area

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allows for a terraced development footprint, which would allow the center to grow in size to approximately 100,000 SF. The balance of the programming for this facility is unchanged from the previous concept.

4. Lodge- Once again, the Lodge is located near the conference center and is also recommended to utilize a terraced design to fit within the topography; however the recommended size is unchanged. The balance of the programming for this facility is unchanged from the previous concept.
5. RV Camping- The RV camping area is located on a different ridge near the southern border of the property. This location provides more separation for campers from the other programs on the site and has better access to the trails and the reservoir. The balance of the programming for this facility is unchanged from the previous concept.
6. Water Recreation Area- In Concept B, the new water recreation area is located closer to the dam, allowing easier access to this facility from the existing roadside trail along Hwy 52. This will allow visitors to access this facility without having to route through the new entrance and is closer to the existing parking lot near the dam. The balance of the programming for this facility is unchanged from the previous concept.
7. Beach- The Beach area in this concept is essentially the same as the previous one; however, the scale of the park features are slightly smaller due to the changed location of the parking area and the trailhead.
8. Trailhead- The programming for this facility is unchanged from the previous concept.
9. Mountain Biking Trailhead/ Area- In contrast to the previous plan, this concept consolidates the mountain bike trails to the northeast portion of the property. The trailhead area is recommended to be expanded since it will serve the Upland Trail Network and Zip Line facilities as well. The design team recommends expanding the parking lot capacity to approximately 100 vehicles due to this consolidation. The balance of the programming for this facility is unchanged from the previous concept.
10. Amphitheater- The amphitheater location has been adjusted due to the relocation of the Lodge and Conference Center. The balance of the programming for this facility is unchanged from the previous concept.
11. Greenspace- The greenspace location has been adjusted due to the relocation of the Lodge and Conference Center. The balance of the programming for this facility is unchanged from the previous concept.
12. Zip Line- In Concept B, the zip line route is slightly shorter than the previous concept. In addition to moving the start point to the Mountain Bike Trailhead, the terminal location would require users to return to the start point via the hiking trail network.
13. Pedestrian Bridge- The programming for this facility is unchanged from the previous concept.





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14. Boat Launch- The programming for this facility is unchanged from the previous concept.
15. Detention Pond- The programming for this facility is unchanged from the previous concept.
16. Trail Connection to Downtown- The programming for this facility is unchanged from the previous concept.
17. Trail Connection to Park- The programming for this facility is unchanged from the previous concept.
18. Dam Access- The programming for this facility is unchanged from the previous concept.
19. Upland Trail Network- The location of the upland trail network in this concept brings it to a more centralized location on the site and is more proximate to the other trail systems on the plan. Despite the relocation, this facility is still relatively easy to access since it is near the park entrance. The balance of the programming for this facility is unchanged from the previous concept.

### Concept C

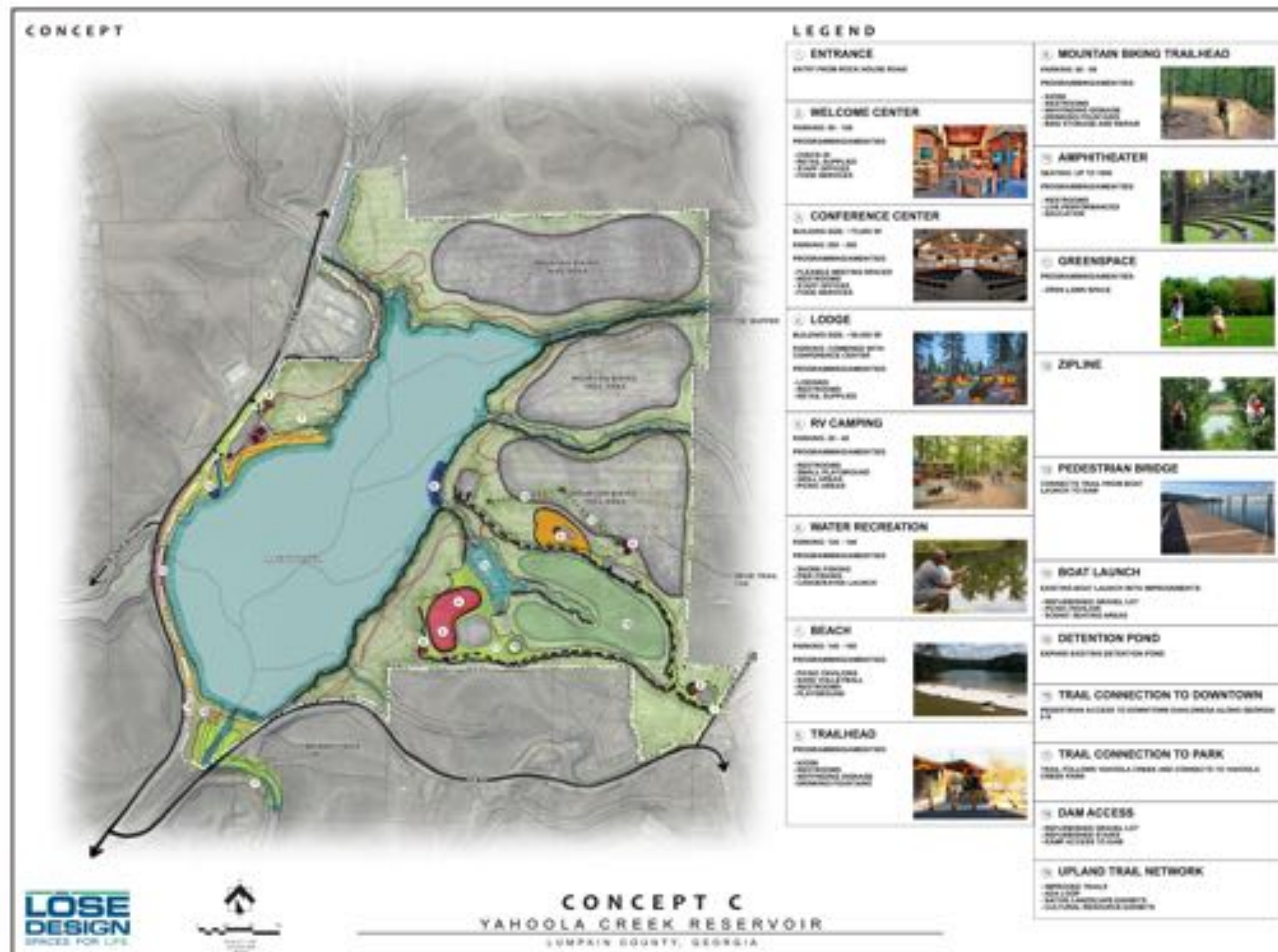
*Note: Much of the program elements in Concept C are the same as those described above in the previous concepts. The following descriptions for this concept are generally limited to changes or deviations from the design approach mentioned in the previous concepts.*

1. Entrance- The new vehicular entrance off of Rock House Road remains unchanged from the previous concept.
2. Welcome Center- The programming for this facility remains the same as the previous concept.
3. Conference Center- In Concept C, the conference center is located closer to the reservoir to take advantage of views overlooking the lake. Although it is closer, there remains a significant buffer of undisturbed area between the two to protect sight lines from the reservoir. This concept also recommends that this facility is merged with the Lodge to share a joint entry and lobby. Similar to Concept B, this structure is terraced to work with the topography and minimize site impacts. The balance of the programming for this facility is unchanged from the previous concepts.
4. Lodge- As noted above, this facility is merged with the Conference Center to share a joint entrance and lobby. The balance of the programming for this facility is unchanged from the previous concept.
5. RV Camping- In this concept, the RV Camping location and programming remains the same as what is presented in Concept A.
6. Water Recreation Area- The location and programming for this facility is unchanged from Concept A.
7. Beach- The Beach area in this concept is once again scaled down to its smallest feasible size to provide greenspace preservation along the shoreline. Also, the parking access to this facility

is planned to connect to the driveway at the existing boat launch area. The balance of the programming for this facility is unchanged from the previous concepts.

8. Trailhead- The programming for this facility is unchanged from the previous concepts.
9. Mountain Biking Trailhead/ Area- The programming for this facility is essentially unchanged from Concept B, except that an alternative location for the trailhead is recommended and the area recommended for mountain bike trails is slightly reduced. The balance of the programming for this facility is unchanged from the previous concepts.
10. Amphitheater- The amphitheater location has been adjusted due to the relocation of the Lodge and Conference Center. In this concept, the facility is separated from the Lodge and Conference Center to isolate the programming and permit functions at the amphitheater that will no conflict with other functions at the Lodge and Conference Center. The balance of the programming for this facility is unchanged from the previous concepts.
11. Greenspace- With the separation of the Amphitheater from the Lodge and Conference Center, the greenspace now primarily serves as overflow seating area for the Amphitheater. This facility may still be used for passive recreation when not otherwise programmed.
12. Zip Line- The programming of this facility is the same as what has been presented in Concept B; however a slightly different routing is provided.
13. Pedestrian Bridge- The programming for this facility is unchanged from the previous concept.
14. Boat Launch- The programming for this facility is unchanged from the previous concept.
15. Detention Pond- The programming for this facility is unchanged from the previous concept.
16. Trail Connection to Downtown- An alternative connection to downtown is provided in this concept. Here, the connection would route along GA Hwy 9 headed south towards Hwy 52. The existing signalized intersection and crosswalks would make this connection feasible along with an extension of the existing sidewalk from Walmart Way/ E Main St.
17. Trail Connection to Park- The programming for this facility is unchanged from the previous concept.
18. Dam Access- The programming for this facility is unchanged from the previous concept.
19. Upland Trail Network- The programming for this facility is unchanged from the previous concepts; however, the size and location has shifted slightly from what is presented in Concept B. This is due to the relocation of the Lodge and Conference Center.







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### Public Input on Alternative Concept Plans- Open House Meeting

An Open House Meeting was held at the Lumpkin County Recreation Center on September 9, 2020 from 4:00pm to 6:00pm to present the alternative concept plans to the public for feedback. Approximately 25 residents attended the meeting and offered their thoughts and recommendations for these concepts. Participants were asked to note their thoughts directly on the plans and offer insights on how the various elements in the concepts might be combined into a unified vision as a preliminary master plan. In general, the concepts were well received by the participants. A summary of the comments received at this meeting are as follows:

- Make sure that the County address fixes to existing facilities and develop support amenities for the existing facilities before any other new development.
- Make sure that mountain bike areas provide for separate hiking trail segments. If there are shared portions of the mountain bike and hiking trails, need to make sure there is appropriate signage.
- There were several concerns that the proposed improvements on the site would increase users on the trail network and diminish the trail experience. Several participants referenced “its like having the Appalachian Trail in your backyard”.
- All participants expressed support for the new pedestrian bridge project and sidewalk connectivity along both Wimpy Mill Road and GA Hwy 9.
- Several participants requested that the actual design for the mountain bike trails be sustainably designed by SORBA.



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- The group expressed a lot of support for the “neighborhood park” area (beach, playground, pavilions, restroom, etc.).
- Several participants noted that the County should explore additional land acquisition adjacent to the current property to make the overall facility larger and protect more of the surrounding lands from development.

A more comprehensive list of comments can be found in the Appendix.

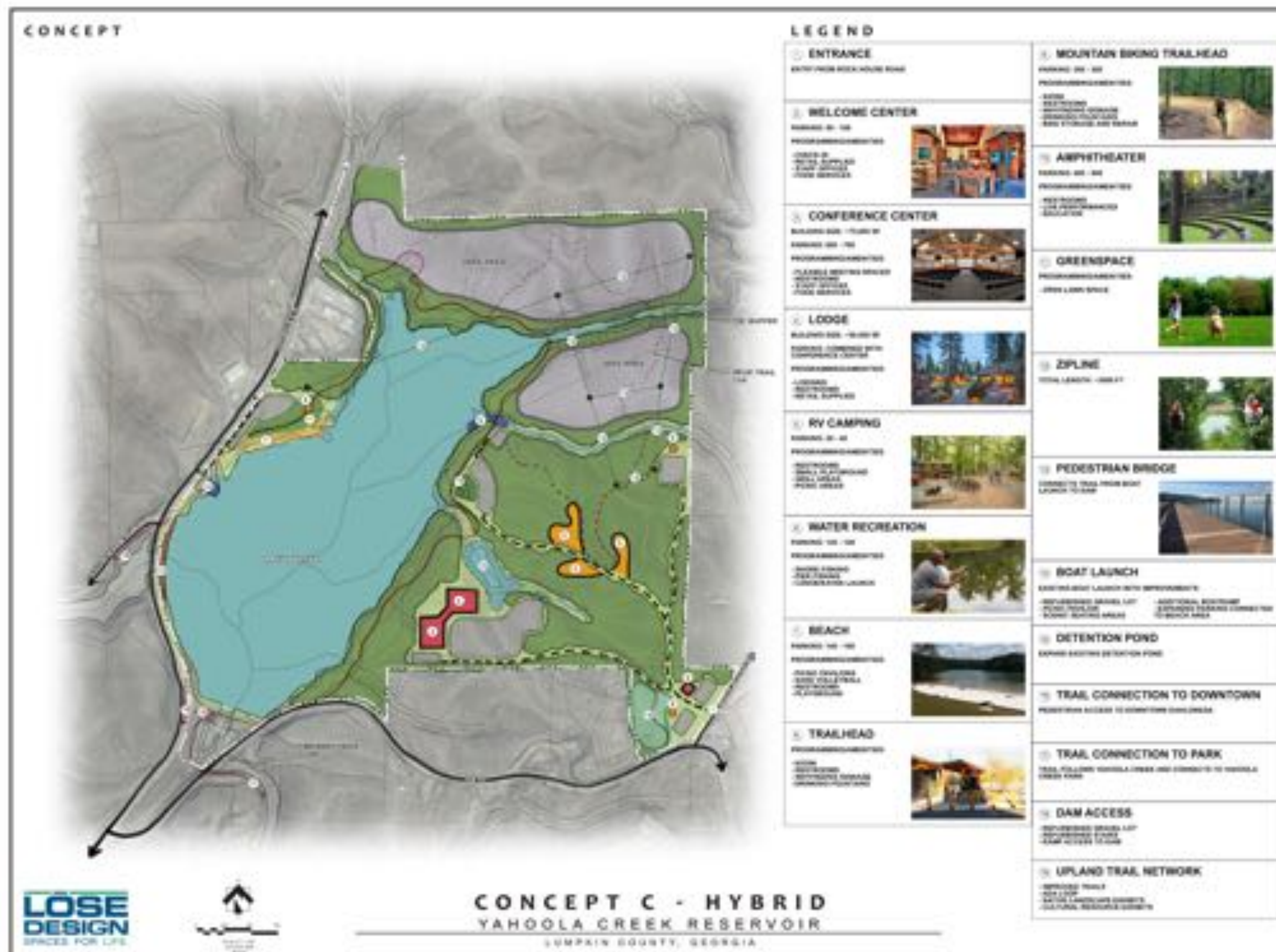
### Public Input on Alternative Concept Plans- Online Survey

Due to events related to the Covid-19 pandemic, County leaders offered an alternative means to solicit feedback from the community by hosting an online survey for residents to comment on the alternative conceptual plans. The survey was hosted by the County from September 10, 2020 through September 11, 2020. The format of the online survey asked participants to rank their satisfaction with the various elements of the concepts on a 5-point scale (1=low satisfaction, 5=highly satisfied). While the survey was open, 10 residents shared their feedback on the plans and offered additional thoughts. A full description of the survey results and comments are available in the Appendix.

### Hybrid Conceptual Plan

After presenting the alternative conceptual plans to both the Study Committee and the public, the design team coordinated with Study Committee members to evaluate the options presented in the plans to identify a feasible path forward. During the discussion, it was determined by all that a hybrid conceptual plan that combined various aspects of the previous alternatives should be developed to better understand the scale and relationships of a merged vision. After receiving feedback from the Committee, the design team composed the following Concept C- Hybrid plan. A summary description of each of the site programs included on the site are as follows:

1. Entrance- The new vehicular entrance to the eastern half of the property is located on Rock House Road.
2. Welcome Center- The Welcome Center is located at the entrance of the property and has a dedicated parking area for approximately 80 vehicles. This facility will allow staff to manage access to and from the property and will serve as an orientation point on the site for the various programs and facilities at the reservoir. This facility is also recommended to provide space for a small retail area, food services, and housing staff offices for the site.
3. Conference Center- Similar to what was presented in Concept C, the Conference Center is located along the southern edge of the property and takes advantage of views overlooking the reservoir while maintaining a suitable distance from it. Although the footprint of the center is 75,000 SF, the terraced design will permit for two levels, which may increase the total interior square footage without causing additional impacts to the site. The entrance and lobby area of



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the center is shared with the Lodge. Approximately 600 parking spaces are shared between the Lodge and Conference Center and a service area is provided along the side of the building. The center contains flexible meeting spaces, food services, restrooms and staff offices.

4. Lodge- As mentioned above, the Lodge is combined with the Conference Center and also shares a terraced design. The 50,000 SF footprint is sufficient to support the desired number of overnight accommodations but can easily be reduced due to the two level design, if desired. In addition to visitor rooms, the lodge will also provide food service, restrooms, and staff offices.
5. RV Camping- In order to minimize potential impacts to the site, the RV Camping area is split into multiple pods that are situated on top of existing ridges. As with the previous concepts, the plan should accommodate up to 40 RV parking bays that are tucked into the topography to minimize impacts to the site while also providing additional amenities such as restrooms, a playground, grill areas and picnic areas. The campsite is also connected to the hiking trail network.
6. Water Recreation Area- The Water Recreation area is located adjacent to an existing tributary to the lake and provides additional access to the shore along the eastern edge of the lake. This facility will provide opportunities for additional shore fishing as well as a new pier for fishing and a canoe/ kayak launch. Approximately 120 parking spaces are planned to support this area.
7. Beach- As noted previously, if a new Reservoir Management Plan is approved by the State of Georgia, the plan provides for a public beach area along GA Hwy 9. The Beach is planned to work in conjunction with a new roadside park area that will have restrooms, pavilions, and a large community playground. New parking for 150 vehicles that connects to the existing boat launch is recommended.
8. Trailhead- Multiple trailheads are planned for implementation on the site to facilitate improved access to the various facilities on the site, including the hiking trail network. The primary trailhead for the hiking trails is located near the beach due to visibility and ease of access for visitors. Each trailhead is recommended to include kiosk signage, way-finding signage, restroom facilities and drinking fountains. Depending on the location, there is either dedicated parking or shared parking at each trailhead.
9. Mountain Biking Trailhead/ Area- The size of the mountain bike trail area was scaled down from the initial concepts to reduce overall impacts to the site and allow more area for the hiking trail network. The mountain bike trails are accessed via a dedicated parking lot with space for over 200 vehicles. A dedicated trailhead is also recommended that will have kiosk signage, way-finding signage, restrooms, drinking fountains and bike storage/ repair facilities. The scale of the mountain biking trail area should feasibly yield around 5 miles of trail.
10. Amphitheater- In this hybrid concept, the amphitheater is isolated from the Lodge/Conference Center and the other overnight facilities to avoid conflicts in programming. The proposed location is located in an existing valley and takes advantage of views overlooking the lake. The proposed size of this facility will permit seating for up to 1,000 spectators and will provide a covered stage area for live performances. The facility will also include support facilities such as restrooms and food service areas. Dedicated parking for up to 500 vehicles is recommended.

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in this concept.

11. Greenspace- Unlike the previous concepts, the greenspace is relocated to work with the Beach to provide a larger passive recreation area.
12. Zip Line- A larger zip line model is proposed in this hybrid concept. This facility now uses multiple ridges along the northeast corner of the property to create a circular loop of over 3000 LF. The layout is intended to provide a shared start/stop area at the Mountain Bike Trailhead. Another feature of this new model is a single run across the northern edge of the lake that is over one-quarter mile long. This route would terminate at the Beach and would require the operator to provide transportation back to the start area for participants.
13. Pedestrian Bridge- Immediately after the completion of the initial alternative concept plans, the design team was informed that the City of Dahlonega, Lumpkin County, and GDOT are currently underway with plans to provide the pedestrian bridge that crosses Yahoola Creek. This feature will be greatly beneficial to the functionality of the hiking trail loop and provide enhanced safety for trail users.
14. Boat Launch- In addition to refurbishing the existing gravel lot, the plan calls for some expansion to accommodate trailer parking for boat users. The concept still retains recommendations for picnic pavilions and scenic seating areas while also providing for expanding the launch to include an additional ramp.
15. Detention Pond- Stormwater management facilities will be required to comply with current codes for all of the development areas. The design team's recommendation is to use as much pervious pavement and bio-retention areas to minimize the size and impacts of providing traditional detention ponds. However, the design team recognizes that these stormwater management facilities can be designed to be an asset to the site, using native plantings and other techniques to make these ponds more appealing.
16. Trail Connection to Downtown- In this hybrid concept, the design team recommends that both alternative routes be implemented for the plan. The City is currently planning on developing sidewalk extension projects along both Wimpy Mill Road and GA Hwy 9 to provide pedestrian connectivity to the reservoir property.
17. Trail Connection to Park- Lumpkin County's Yahoola Creek Park is located approximately 1.5 miles downstream of the reservoir. By implementing a ramped connection down the dam, the design team identified a potential route along the creek corridor to connect to the County's recreation facility.
18. Dam Access- The existing dam access parking lot will be refurbished with new gravel parking and the stairs leading to the dam will also be renovated. The design team also recommends a ramped access route be provided to facilitate access to the primary loop trail and the dam for handicapped users.
19. Upland Trail Network- After further assessment following the initial concepts, the design team recommended that the upland trail network be relocated to the front of the property near the entrance and Welcome Center. The paved, ADA compliant trail would still be retained, as well

as spur trail connections to the overall hiking network. As noted previously, both natural and cultural resource exhibits are planned along the loop trail as an educational facility about the native ecosystem and history of Lumpkin County. This relocation will also aid in access for large groups as the dedicated parking lot has space for approximately 50 vehicles as well as bus parking. A dedicated trailhead with signage, restrooms and a drinking fountain is also recommended.

## Preliminary Master Plan

Following a presentation of the hybrid concept plan to the Study Committee, the members noted that the revised concept embodied their vision and requested that the plans be progressed to a preliminary master plan level. The design team refined the hybrid concept and developed an overall plan as well as two enlargement plans to assist in conveying the future of the reservoir property. These graphics can be found on the following pages. A summary description of each of the design elements is as follows:

### Overall Plan Elements

- **Entrance-** A development of this size will likely require acceleration and deceleration lanes be implemented along Hwy 52 for vehicles turning into and out of the property. Based on the available frontage along the highway, the planning team feels that it is not currently feasible to have direct access from the property onto the highway without additional land acquisition. With that the plan still provides for a paved entry road off of Rock House Road. In addition to recommendations for entry signage along the highway, the design team notes that additional way-finding signage to the facility should be provided along key roadway corridors leading to the area.
- **Welcome Center-** Upon arrival to the site, visitors will immediately see the Welcome Center. Paved parking for 50 vehicles is available as well as ADA compliant sidewalks leading up to the building. Due to the nature of the site, the planning team recognized an opportunity to use the Welcome Center as location for water resource management exhibits, located both on the exterior and interior of the building to demonstrate water harvesting techniques, stormwater management techniques, as well as provide educational exhibits as to the history of the development of the reservoir. The Welcome Center will house staff offices and a concierge desk for visitors to check-in for RV Camping and other rentals on the site. Small areas for retail and food services (camping supplies, sandwich/snack shop) would also be present on the interior. It should be noted that there is presently an old residential structure in this area that may be relocated/re-purposed to function as a Welcome Center. Additional studies will have to be performed to determine the feasibility of that transition. A small maintenance yard with storage shed is also recommended to be located behind this facility.
- **Upland Trail Network-** Immediately adjacent to the Welcome Center at the site entrance is the Upland Trail Network. This paved, ADA compliant path makes an approximately one-quarter mile loop on gentle slopes and will feature multiple outdoor exhibits. Landscape areas with native plantings and plant ID signage will function as natural resource exhibits and relocated mining

and farm equipment will function as cultural resource exhibits. The loop trail is connected to the hiking trail network via a natural surface spur trail. Paved parking for 50 vehicles, including 2 bus spaces are planned for this facility.

- **Conference Center and Lodge-** After entering the property and passing the Welcome Center, visitors will have an opportunity to turn left onto a paved road that leads to the Conference Center and Lodge. A large paved parking lot that accommodates 520 vehicles and 20 buses sits in front of the buildings. To minimize cut and fill slopes and also work with the exiting topography, the road and parking lot will require some retaining walls as well as a terraced approach to grading the parking lot. A drop off area is planned in front of the shared lobby area onto an upper level of the building. A second, lower level is recommended to provide for a terraced structure that fits into the topography and provides enhanced opportunities for views overlooking the lake. It is envisioned that the lower level will have an outdoor plaza/patio for gatherings and entertainment to support the programming of the building while also taking advantage of these views. The limits of the development for this facility should still provide for nearly 300 feet of existing vegetation to remain undisturbed to protect environmentally sensitive areas as well as retaining views from the reservoir onto the land.
- **RV Camping Areas-** Continuing past the road leading to the Conference Center and Lodge, the paved main entry road continues downhill towards the RV Camping Area. Three pods of RV Campsites are planned for the property on separate ridges to minimize impacts to the site due to grading. In total, up to 48 campsites are feasible in these areas. Each campsite will have a large pull-in space for a trailer and tow vehicle, as well as a paved picnic pad, grill and fire pit. Water and electrical service connections will also be present at each campsite for convenience for guests. Based on other campsites in the region, the planning team believes that it is feasible to grade the campsites into the terrain to minimize impacts to the site and retain much of the existing tree stands within each pod. Restroom and shower facilities are planned for each pod and a small centralized playground is planned to be shared by all three camping pods. Each pod is within easy walking distance of the expanded hiking trail network for users to explore the property. A central sanitary waste disposal station is also recommended in this plan.

*Note: Continuing down the main access road past the RV Campsites, visitors to the property will encounter the Amphitheater and Water Recreation Areas, which will be described later.*

- **Hiking Trail Network-** Throughout the planning process, it was noted that the hiking trail loop on the property is the primary feature of the site. With that in mind, the design team has included recommendations to renovate and expand hiking trails on the property. The primary loop trail is a natural surface trail (with the exception of a segment along GA Hwy 9) that encircles the reservoir. A portion of the current loop was re-routed to avoid extreme terrain in the northeast corner. This older segment of the trail loop is now part of a network of natural surfaced spur trails that provide varying levels of intensity as well as overall connectivity throughout the site. Where the trail crosses water features, a combination of floating docks, boardwalks and footbridges are recommended, depending on the specific need for that location. In total the hiking trail network encompasses nearly 9 miles of trails. Several trailheads are planned to serve the hiking trails, including the primary trailhead at the New Roadside Park (see description in enlargement plan), and will include a kiosk sign, restrooms, drinking fountains and benches.







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- **Mountain Bike Trail Network-** Before reaching the RV Campsites, visitors traveling along the main park road will encounter a gravel road to the right that leads to the Mountain Bike Trail Network. A gravel lot that is large enough to support 150 vehicles is present in front of the trailhead area. The trailhead has a large grassed gathering area for groups to assemble before and after their rides as well as a kiosk sign, restroom facility, and bike maintenance stations. The layout of the trails is still conceptual but it indicates the potential for up to 7 miles of trails with varying degrees of difficulty. While most of the mountain biking trails are isolated from the hiking trail network, there are some stream crossings that will have to be shared to minimize impacts to the sites. Where trail routes are shared-use, adequate trail width and appropriate signage should be developed to enhance safety for trail users. Trail crossings should also have appropriate warning signage to help protect visitors. The final layout of the trail should be performed in the field with a professional trail designer and development of the trails should involve sustainable practices to minimize impacts to the environment and long term maintenance.
- **Zip Line Facility-** Using the existing elevations on the site, the design team was able to develop a zip line network that provides for over one mile of canopy adventure. The primary loop spans the northeast corner of the property and can feasibly utilize the same start/stop location near the Mountain Bike Trailhead. In addition to the primary loop, the plan illustrates the potential for a quarter mile single run over the reservoir that terminates at the New Roadside Park. It is understood that the operator of this facility will have to consider transportation options for zip line users to return to the other side of the reservoir if they chose this alternative route. The actual layout and design of the Zip Line Facility should be performed in the field by a qualified designer and will likely be impacted by existing tree stands, elevations, safety practices, and other considerations.
- **Dam Access Area-** The existing gravel lot at the dam is considerably small for the amount of visitors that come to the reservoir property. It is the intention of the design team to retain its current size since additional parking and trail access points are provided elsewhere on the site. Still, the team recommends that the existing lot be refurbished with fresh gravel, new wheelstops and appropriate facility identification signage. Some ADA improvements including paved ramp access from the parking lot to the dam are recommended. It is in this area that the planning team recommends converting the primary loop trail to a paved surface trail. The remainder of the paved trail will continue north along GA Hwy 9 to the New Roadside Park.
- **Pedestrian Bridge-** The City of Dahlonega, Lumpkin County, and GDOT are currently underway with implementing a new Pedestrian Bridge along GA Hwy 9 where it crosses Yahoola Creek. The improved paved trail loop will extend from the dam to this point and continue northward. Final alignment of the trail in this area will depend on the actual location and elevation of the new bridge.
- **Wimpy Mill Park Connection-** The City of Dahlonega currently has plans to extend the existing sidewalk along Wimpy Mill Road towards GA Hwy 9 to create a pedestrian connection between the reservoir and Wimpy Mill Park. The City is still working to allocate funding for the design and construction of that connection.
- **Connection to Downtown-** The City of Dahlonega currently has plans to extend the existing

sidewalk along GA Hwy 9 from Walmart Way/ E Main St towards intersection with Hwy 52. The existing signalized intersection and crosswalk will permit a safe connection between the reservoir and downtown. The City is still working to allocate funding for the design and construction of that connection. On the reservoir property, the planning team recommends a paved sidewalk connection along the roadside from the Dam Access Area to this intersection. The sidewalk should be set back as far away from the road as possible to facilitate a safe connection and enhance the overall experience.

- **Yahoola Creek Park Connection-** As noted previously in this report, Yahoola Creek Park is only 1.5 miles downstream of the reservoir property. Connecting these two properties with a trail corridor would be a tremendous asset to the County and its residents. To facilitate this connection, the design team believes there is an opportunity to provide a ramped connection from the primary loop trail down the side of the dam to the streambank along the creek. Proceeding along the streambank, the trail can easily pass beneath the GA 52 bridge and continue towards the park. Designers observed old roadbeds along both sides of the creek on the downstream side of Hwy 52. Both of these corridors are located on private property and the County will have to engage the owners to negotiate the acquisition of easements to continue the trail. Additional studies will be required to determine the proposed alignment, materials and other design features of the trail as it proceeds towards Yahoola Creek Park.
- **Detention Facilities-** As noted previously in this report, stormwater management facilities will be required to offset development impacts associated with implementation of this plan. Where required, stormwater detention facilities should be engineered to blend into the surrounding landscape and support the scenic beauty of the property. The design team noted the opportunity to take advantage of the existing pond on the property to expand it to serve as an aesthetic water feature with potential for recreation activities while also managing runoff and water quality associated with large development areas. Additional recommendations regarding stormwater management strategies will be presented later in the report.

### New Roadside Park Enlargement

The development of a new community park along the reservoir will provide additional recreation opportunity for residents while also taking advantage of the scenic landscape. Along with the implementation of new facilities, the plan also provides for improvements to the existing facilities on the property. A description of the proposed improvements in this area are as follows:

- **Entrance and Parking-** Access and parking to this area is located along GA Hwy 9. The planning team has included acceleration and deceleration lanes coming onto and leaving the property. Additional coordination with transportation officials will be needed to determine if additional improvements will be required to implement these enhanced access points. The parking at the existing Boat Ramp is recommended to be renovated and expanded to connect to the new park area. Gravel parking for 75 standard spaces and 20 trailer spaces is provided here due to reservoir management buffers. In order to facilitate this parking expansion, some portion of the reservoir will be impacted and stabilized with a sea wall to provide enough space for the parking expansion. The balance of the parking shown on the plan will include 158 paved





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parking spaces to support the New Roadside Park. A turnaround is located at the end of the parking to facilitate fire truck access as required to protect the proposed structures on the plan. The paved primary trail loop continues northward from the Pedestrian Bridge to this area and runs alongside GA Hwy 9 before crossing the parking lot in an enlarged parking lot island with an at-grade crossing. The paved trail loop continues through the new park area towards the trailhead. Entry signage along the road will be required to identify the site and additional way-finding signage along nearby road corridors should be implemented to help guide visitors to this facility.

- **Existing Boat Ramp-** In addition to the parking lot renovations, paved sidewalk connections are recommended to provide ADA access to the expanded boat ramp (2 lanes), courtesy dock, and restroom facility. It is anticipated that the restroom facility at this location will likely require underground tanks to store waste, much like those encountered at remote locations in state and national parks. Where feasible, benches should be furnished along the shoreline to provide quiet reflection areas for visitors.
- **Upper Lawn Area-** The existing topography on this portion of the site allowed the designers to develop the New Roadside Park into terraces, which would minimize the grading impacts on the site and take advantage of additional views overlooking the reservoir. The Upper Lawn Area is located near the parking lot turnaround and is on the highest terrace. This area features a large rental pavilion for family gatherings or corporate events. The proximity of the large rental pavilion to the parking lot is important to make loading and unloading of food service supplies and other equipment easier for renters. Adjacent to the pavilion is a large open lawn area for passive recreation or as a set-up area for equipment/ facilities associated with large rentals. The trailhead associated with the Hiking Trail Network is also located nearby to provide restroom accommodations for this development area.
- **Lower Lawn Area-** The middle terrace below the Upper Lawn Area features a large passive greenspace that is flanked on both sides by small picnic shelters, a large 8,000 SF community playground and a restroom/shower building. The large community playground is sized to accommodate a full ADA-compliant play structure, swings and other free-standing play equipment. The restroom/shower building supports the park facilities on the Lower Lawn Area but also provides accommodations for visitors using the Beach. Large landscape islands break up the space and are recommended to be designed with native grasses and other materials to compliment the surrounding site. The Lower Lawn Area also features a quarter mile sidewalk loop.
- **Beach Area-** The lowest terrace in this new park encompasses the proposed Beach Area. Multiple access points are provided using a combination of ramps and stairs to an imported sand beach that leads to the water. In the event that permitting for swimming is not approved, the design team recognizes this area as another opportunity for shore fishing and quiet rest areas with benches.
- **Primary Loop Trail-** As noted earlier, the primary loop trail passes through several of the improvements recommended in this area. The majority of this section of the trail is paved to facilitate ease of access to the other facilities but transitions back to a natural surface one visitors go beyond the trailhead.

- **Trailhead Area-** This trailhead is considered the primary trailhead for the Hiking Trail Network due to its visibility from the highway and ease of access for users. The trailhead consists of a large paved gathering area with seat walls and tables, as well as a restroom building. The design team recommends a large kiosk sign that can convey the location and distances of the various loops and spur trails on the property. Additional signage should be placed on the interior of the property at various trail access points and connections to further aid visitors in navigating the trails.
- **Zip Line Terminus-** As discussed in the overall plan description, the Zip Line Facility includes a large over-water connection from the east side of the property to the New Roadside Park Area. The terminus of this route is located on a upper terrace near the Trailhead and is proximate to the parking area to facilitate transport of zip line users back to their starting point.
- **Naturalized Landscape Areas-** Given the environmental sensitivity of the site and the opportunity to educate visitors about the landscape of Lumpkin County, the design team recommends large naturalized landscape areas be implemented. Sensitive areas such as slopes between the terraces and areas along the shoreline should be permitted to “heal” after development by planting native species in such a manner that they might flourish and add to the scenic beauty of the property.

### Amphitheater Area Enlargement

The provision of a new community amphitheater to facilitate large community gatherings and develop an economic engine for the County was identified as a high priority by many of the participants in the planning process. The purpose of this enlargement is to provide a sufficient level of detail to convey the potential of such a facility and how it relates to other programs on the site. A description of the proposed improvements in this area are as follows:

- **Primary Parking Lots-** At the end of the primary park road on the east side of the property, visitors will approach the Primary Parking Lots that support the Amphitheater. Approximately 420 paved parking spaces are provided in this area. The layout and the grading of the parking lots are designed to work with the topography by utilizing a terraced design and the implementation of retaining walls. The parking provides direct access to each of the primary entry points at the amphitheater via paved sidewalk connections.
- **Overflow Parking Lot-** Due to the potential seating capacity of the Amphitheater, the design team recognized the need to provide adequate parking without developing parking facilities that will remain dormant between events. An Overflow Parking Lot capable of accommodating 150 additional vehicles is planned on the opposite side of the main park road. This lot is recommended to have stabilized grass parking to reduce wear and may be utilized for alternative programming when not in use.
- **Amphitheater-** The Amphitheater is located in an existing valley near the reservoir to minimize grading impacts and provide the opportunity for background views overlooking the reservoir during events. The facility features a 7,000 SF covered performance stage with a large indoor back-of-house structure for equipment, performers and other functions. A secured loading area





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is located behind the structure for equipment and is connected to the main park road loop. The amphitheater has capacity for 600 terraced seats (fixed or seat walls) and approximately a 1,650 seating capacity in the sloped lawn. Three entry points with ticketing stations are available for access. In addition, there are 4 areas for concessions/ vendor stations that may be either built structures or open plaza areas for food trucks or retail tents. The entire facility is intended to be controlled with security fencing and appropriate lighting that is compatible with performances.

- **Primary Trail Loop-** The natural surface trail that composes the primary loop for the Hiking Trail Network makes a connection to the Water Recreation Area before diverging away back into the existing tree canopy along the shore. Spur trails are also present in this area to provide connections to other facilities on the property.
- **Water Recreation Area-** During the development of the plan, there was an identified need to provide additional shoreline access on the eastern side of the property and to provide a separate access point for canoes and kayaks. The proposed Water Recreation Area achieved both of those goals while also helping to facilitate vehicular access at the end of the main park road. Due to reservoir management restrictions, gravel drive aisles and parking spaces are provided for up to 88 vehicles in this area. Paved sidewalk connections from the parking lot provide access to a fishing pier that also has a specialized canoe/kayak launch for visitors. Although it is not shown on the plan, it is feasible to provide an outfitter station at the pier for storage and rentals of non-powered watercraft. Additional recommendations are made to provide shoreline stabilization techniques through effective planning of access points and landscape plantings.
- **RV Camping Areas-** While a full description can be found in the Overall Preliminary Master Plan narrative, the RV Camping Area is shown on this enlargement to show the separation of this facility from others as well as the potential connectivity via the spur trails on the Hiking Trail Network.

### Preliminary Master Plan Presentations

Following the development of the preliminary master plan, the design team met with Study Committee Members on December 1, 2020, to present the new recommendations. Overall, the plan was well received by the meeting participants and no revisions were recommended. The meeting continued to discuss the prioritization of the implementation of these new facilities. The group requested the following order of improvements for consideration:

1. Repair and renovation of exiting facilities
2. Development of the improvements associated with the New Roadside Park along GA Hwy 9
3. New Entrance, Welcome Center and trail access points on the east side of the property.
4. Mountain Bike Trail Network
5. Lodge and Conference Center Area
6. Water Recreation Area
7. RV Camping Area
8. Amphitheater Area

These priorities will be developed into an opinion of probable costs that will be used to formulate a capital improvement plan that will be discussed in a later section of this report.

Immediately following the Study Committee Presentation, the design team presented the preliminary master plan to the Lumpkin County Board of Commissioners at their Work Session on December 1, 2020. Again, the plan was well received by elected officials. Comments and questions from the Board of Commissioners were focused on the design process and how the planning team arrived at their recommendations. Other questions focused on constructibility phasing, and costs. No revisions were requested and the design team was permitted to progress the plans to a Final Master Plan.



## Final Master Plan

Once the preliminary master plan was approved, the design team advanced the document to a final master plan level. The hand-drawn graphics in the previous plans were drafted to scale and a conceptual grading plan was applied. This process permitted the design team to identify the potential site impacts due to implementation of these improvements as well as develop an opinion of probable costs. This opinion of probable costs was used to develop Capital Improvement Recommendations, which involves a phased implementation plan based on the Study Committee's recommendations. Refer to the Capital Improvement Recommendations section of this report for additional information. The final master plan graphics can be found on the following pages.

Since there were no requested adjustments to the previous plan, the proposed facilities and other site improvements described in the preliminary master plan narrative are still valid. Therefore, this portion of the master plan narrative will focus on key insights for planning and implementation efforts in the future.

## Facility Design Standards

Lumpkin County has many attributes that make the area appealing to residents and visitors, alike. The blend of small town life, outdoor adventure, entertainment and education against the backdrop of the mountains and the national forest is unlike any other community in the region. When moving forward in the implementation of this master plan, the planning team recommends that the designs incorporate materials and forms that reflect the unique characteristics of the area. From architectural finishes to signage and site furnishings, the future design should be readily identifiable with Lumpkin County and its surrounding landscape.

## Water Resource Education and Storm Water Management

As noted throughout this document, water plays a central role in the defining characteristics of the project site. Lake Zwerner, itself, was developed as a water source to support the community. Understanding the management of critical resources such as water should be a core theme throughout the implementation of these designs. Implementing sustainable practices such as rainwater harvesting, groundwater recharge, and high efficiency irrigation should be carried forth on the property. Educational exhibits that demonstrate these practices and their benefits should be developed wherever feasible. These efforts will assist the County in becoming a leader in effective water management and demonstrate to residents and visitors that Lumpkin County is a good steward of the land and its many resources.

In a similar manner, sustainable storm water management practices should be employed throughout the development. Where required and whenever feasible, the implementation of pervious pavement systems should be installed. This approach will not only contribute to water resource management practices, but it will also offset or reduce many of the required infrastructure requirements, such as detention facilities that are associated with development. When storm water management facilities are required, they should be designed to have minimal impacts to the site, both in terms of appearance and footprint. Breaking up stormwater management facilities into smaller systems, such as bio-retention ponds and infiltration facilities that are present throughout the site will aid in reducing the likelihood of implementing typical engineered solutions that are



commonly associated with commercial development. Storm water ponds that do need to be developed should be designed to blend into the landscape using proper grading techniques and native landscape materials.

### Grading Considerations

The conceptual grading plans included in the master plan reflect the design team's approach to minimize the development footprint on the site. The overriding intent behind this approach is to retain as much of the existing vegetation and wildlife habitat on the property. In order to facilitate the implementation of these efforts, the design team recommends that retaining walls be utilized as necessary. Some of the walls identified on the plan are required in order to work the proposed development areas into the steep terrain on the property. Others are recommended to reduce cut and fill slopes so that tree stands can remain. It should be noted that GIS topography was utilized during this study, so field-run topography will be required for designers to accurately determine the true grading impacts associated with development. It is also important to note that geotechnical investigations were not performed during the development of this master plan. Given the region's geology, the planning team anticipates that surface and subsurface rock will likely be encountered during grading operations. When a geotechnical investigation is performed, the results may require the adjustment to proposed design grades to minimize site impacts and development costs.

### Utilities

Many of the utilities required for the implementation of this master plan are not present on the site and will need to be developed in advance, if possible. Large developments such as the Lodge and Conference Center, as well as the Amphitheater, will require sanitary sewer connections to public utility lines that are not present. Other facilities have the opportunity to be served by on-site waste management systems (septic systems) due to lower capacity requirements. Soil testing, in compliance with local codes, will be required to determine the feasibility of sanitary systems not tied to public infrastructure. In a similar fashion public water main extensions will be required throughout the development areas to provide fire protection and potable water for use. Assumptions and estimates related to the implementation of the provision of these and other utilities have been included in this master plan document, but the final costs will vary depending on the ultimate engineering design for development areas.



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LEGEND

1 ENTRANCE AND PARKING

- A. ROADSIDE PARK SIGNAGE
- B. DECELERATION AND ACCELERATION LANES AT ENTRANCE AND EXIT
- C. IMPROVED, ENLARGED GRAVEL PARKING AREA AT EXISTING BOAT LAUNCH INCLUDES 20 TRAILER SPACES AND 60 STANDARD PARKING SPACES
- D. SEAWALL/BULKHEAD AS NEEDED FOR IMPROVEMENTS
- E. 152 PAVED PARKING SPACES WITH TURNAROUND
- F. SIDEWALK CONNECTIONS TO PRIMARY TRAIL LOOP AND OTHER FACILITIES



2 EXISTING BOAT RAMP

- A. TWO-LANE BOAT RAMP
- B. PAVED CONNECTION TO COURTESY DOCK
- C. SMALL RESTROOM BUILDING
- D. SHORELINE STABILIZATION



3 UPPER LAWN AREA

- A. UPPER LAWN TERRACE OVERLOOKING THE RESERVOIR
- B. LARGE RENTAL PAVILION WITH GRILLS
- C. DIRECT CONNECTION TO PARKING AREA



4 LOWER LAWN AREA

- A. CENTRAL LAWN AREA WITH RESERVOIR VIEWS
- B. SIDEWALK LOOP
- C. SMALL WALK-UP PAVILIONS
- D. RESTROOM/SHOWER BUILDING
- E. 8,000 SF INCLUSIVE PLAYGROUND
- F. NATIVE LANDSCAPE ISLANDS



5 BEACH AREA

- A. RAMP AND STAIR ACCESS TO BEACH AREA
- B. SHORELINE STABILIZATION



6 PRIMARY LOOP TRAIL

- A. PAVED SECTION ALONG HIGHWAY 9 N CONNECTING TO DAM
- B. NATURAL SURFACE BEYOND TRAILHEAD
- C. RAISED CROSSING AT PARKING LOT LOCATED IN WIDENED LANDSCAPE ISLAND



7 TRAILHEAD AREA

- A. PRIMARY LOOP TRAIL STARTING POINT
- B. RESTROOM BUILDING
- C. GATHERING PLAZA WITH SEAT WALLS AND PICNIC TABLES
- D. TRAIL KIOSK WITH INFORMATION SIGNAGE



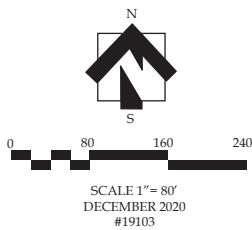
8 ZIP-LINE TERMINUS

- A. END STATION FOR OVER-WATER ZIP-LINE ROUTE
- B. CLOSE PROXIMITY TO PARKING FOR PICK-UP AND RETURN TO START POINT



9 NATURALIZED LANDSCAPE AREAS

- A. NATIVE PLANTINGS TO RE-ESTABLISH DEVELOPMENT AREAS
- B. SLOPE STABILIZATION BETWEEN TERRACES AND BEACH
- C. FACILITATES PEDESTRIAN ACCESS CONTROL



FINAL MASTER PLAN  
NEW ROADSIDE PARK ENLARGEMENT  
YAHOO LA CREEK RESERVOIR - LUMPKIN COUNTY, GEORGIA





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LEGEND

- ① PRIMARY PARKING LOTS
- A. 436 TOTAL PARKING SPACES
  - B. TERRACED PARKING TO MINIMIZE GRADING IMPACTS
  - C. ORIENTATION DESIGNED TO WORK WITH EXISTING SLOPES
  - D. DIRECT ACCESS TO AMPHITHEATER ENTRY POINTS
  - E. PERMEABLE PAVEMENT



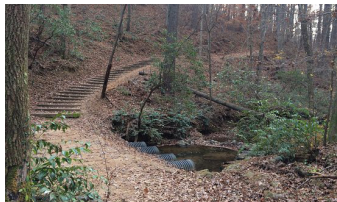
- ② OVERFLOW PARKING LOT
- A. GRASS OVERFLOW PARKING LOT FOR LARGE EVENTS
  - B. 156 ADDITIONAL PARKING SPACES
  - C. CAN BE UTILIZED FOR OTHER PROGRAMMING WHEN NOT IN USE



- ③ AMPHITHEATER
- A. LOCATED IN EXISTING VALLEY NEAR RESERVOIR TO MINIMIZE GRADING IMPACTS AND PROVIDE BACKGROUND VIEWS OF RESERVOIR
  - B. 7000 SF COVERED STAGE AREA WITH BACK-OF-HOUSE FACILITY
  - C. 600 TERRACED SEATING CAPACITY
  - D. 1650 OPEN LAWN SEATING CAPACITY
  - E. 3 ENTRY POINTS WITH TICKET STATIONS
  - F. 4 CONCESSION/VENDOR STATIONS ALONG PERIMETER
  - G. LOADING AREA AT BACK-OF-HOUSE FACILITY



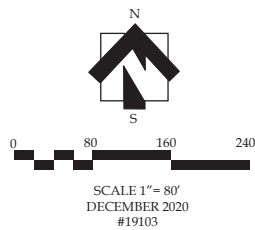
- ④ PRIMARY TRAIL LOOP
- A. NATURAL SURFACE TRAIL WITH SPUR CONNECTIONS TO OTHER FACILITIES
  - B. SEE OVERALL PLAN FOR ADDITIONAL INFORMATION



- ⑤ WATER RECREATION AREA
- A. 98 PARKING SPACES, GRAVEL
  - B. PAVED CONNECTION TO FISHING PIER AND CANOE/KAYAK LAUNCH
  - C. VENDOR STATION FOR WATERCRAFT RENTALS
  - D. SHORELINE STABILIZATION



- ⑥ RV CAMPING AREAS
- A. 500 LF BUFFER FROM AMPHITHEATER
  - B. SEE OVERALL PLAN FOR ADDITIONAL INFORMATION



FINAL MASTER PLAN  
AMPHITHEATER AREA ENLARGEMENT  
YAHOOOLA CREEK RESERVOIR - LUMPKIN COUNTY, GEORGIA





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## Final Master Plan Presentation

Upon completion of the final master plan and the Opinion of Probable Cost, the design team met with the Study Committee members on January 5, 2021 to present the plan and discuss the Opinion of Probable Cost (provided in the Appendix) for the project. The plan was well received and discussion continued to potential funding mechanisms for the project. The following funding mechanisms were discussed for consideration:

1. Special Purpose Local Ordinance Sales Tax (SPLOST)
2. Low interest loans
3. Bond funding
4. Grant funding
5. Partnerships
6. Other funding mechanisms (Use fees, annual passes, donations, and sponsorships)

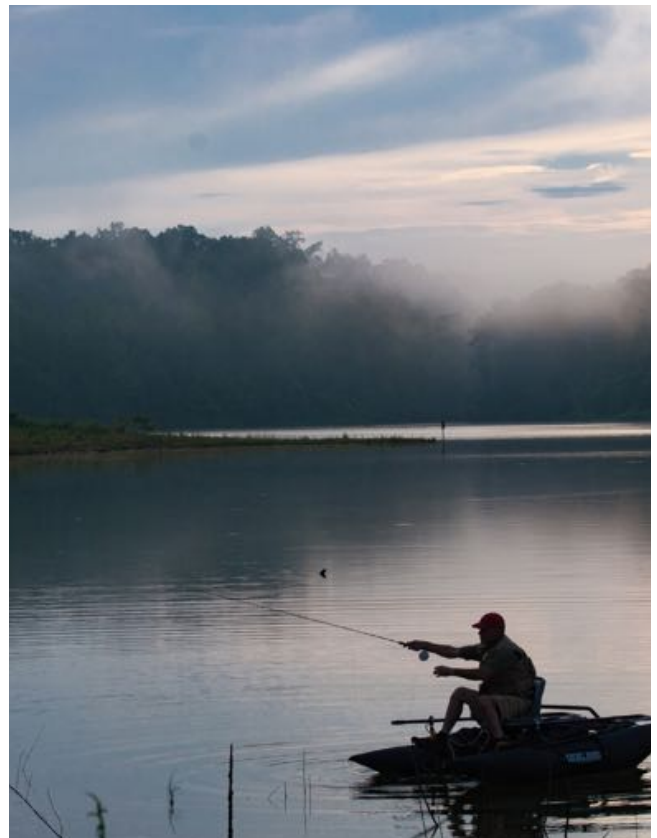
Discussion centered around which funding mechanisms should be used for the various amenities. It was noted that several of the funding mechanisms have timelines that must be accounted for when applying for funds. Following is a summary of the proposed amenities broken out by funding mechanism:

### 1. SPLOST / Low Interest Loans / Bond Funding:

- General Site Work / Infrastructure Improvements
- Welcome Center and Upland Trail Area
- Roadside Park
- The next SPLOST cycle for Lumpkin County is the 2026 SPLOST, applications for SPLOST funding would be required to be submitted ahead of that date.
- Low interest loans and bond funding would require amenities to generate fees to fund repayment of the loan or bond.

### 2. Grant Funding

- Outdoor recreation items such as Trails, Canoe and Kayak facilities, and possible rowing



*Image courtesy of Jack Anthony*



- Noted that grants may be available to help offset costs on other portions, such as the proposed playground at the Roadside Park.
- Several grant options are available based on the proposed uses of the park.
- Grants typically require a fund match from the applicant, the fund matching mechanism could include selling annual use passes, daily use fees, parking fees, and community support (donations of time or dollars).

### 3. Partnerships

- Public / Private partnerships for the Lodge and Conference Center, Amphitheater, and the Zip Line
- City / County Partnerships should be explored for some elements of the Roadside Park (infrastructure, for example)
- Partnerships with the Schools and the University of North Georgia may help with funding for trail development (mountain bike and cross country use) and water sports.
- Terms of any partnership may require some funding from the County, depending on the facility being developed and the amenities already in place.

### 4. Other Groups / Sponsorships

- 'Friends Of' group, Rotary, Boy Scouts, etc may be able to help with awareness and donation based fundraising
- Sponsorship opportunities for local businesses to support / help develop amenities on the property (such as a medical group sponsoring a segment of trail because it helps with community health)
- Direct donations to the park
- Could be used for matching grant applications or as a stand alone funding source.



Following the funding discussion, the group revisited the prioritization of the new facilities. The updated order of improvements for consideration is:

1. Trails updates with Amenities (Restrooms / Kiosks / Trail Heads)
2. Develop Roadside Park
3. Entrance, Welcome Center, and Upland Trail facility
4. Mountain Bike Trail Head
5. Water Recreation Area (note, requires development of main loop road)
6. RV Campsites
7. Zip Line / Lodge and Conference Center / Amphitheater should be lower tier, however, should be planned such that if a partnership opportunity were to become available the amenity could be developed

Immediately following the Committee presentation and discussion, the design team presented the final master plan to the Lumpkin County Board of Commissioners at their Work Session on January 5, 2021. During the presentation, a brief overview of the funding mechanisms discussed was shared. The plan was well received by elected officials. Questions were about the total project costs and the funding mechanisms proposed, however, these were primarily clarification based. No revisions were requested to the documents. The design team was permitted to prepare the Final Master Plan and Report for adoption by the Board of Commissioners, tentatively scheduled for the January 19, 2021 meeting.



*Image courtesy of Jack Anthony*

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# 5



## CAPITAL IMPROVEMENT RECOMMENDATIONS



# Capital Improvement Recommendations

Prior to the beginning of the planning process, the leaders of Lumpkin County understood the value of an asset such as the Yahoola Creek Reservoir Property. Although it has served the community well over the past years, the full potential of the property- both in terms of a meaningful recreation facility and an economic engine- has yet to come to fruition. Through the planning process, the County has come do develop a unified vision for the property that will provide even more value to residents and surrounding communities.

A total re-envisioning of a property such as this requires proper financial planning to develop a path forward for implementation of this vision. Facilities such as those proposed for the lands surrounding the reservoir are generally developed in phases over time in order to facilitate the acquisition of funding, establishment of partnerships, and the development of operations procedures and staff. Over the course of the master plan process, the design team identified an estimated \$140,000,000 worth of improvements to the site. Based on the phasing prioritization recommendations from the Study Committee, a 10-year capital improvement plan was developed to help guide the financial planning process.

## **Partnership Opportunities**

Throughout the planning process, it was understood that some of the anticipated facility recommendations are not typically projects that are assumed by local government. Development areas such as the Lodge and Conference Center represent a large financial undertaking to construct, operate and maintain. Therefore, the design team recommends that the County engage private entities to develop partnership opportunities to share in capital costs and ongoing operations and maintenance. A summary description of some potential opportunities are described as follows:

### **Lodge and Conference Center**

Many communities have collaborated with private developers to construct and operate large commercial facilities such as conference centers and hotels. While terms of each partnership can vary greatly, there are several practical agreements that can be negotiated for the Lodge and Conference Center here at the reservoir property. One such example would be for the County to partner with a developer who can design, construct and operate these facilities under a long-term lease while the County is responsible for the overall site development and infrastructure. Of the \$140,000,000 of recommendations, the Lodge and Conference Center development represents more than half of that total. Any partnership that can alleviate the financial burden of developing this facility would be of immediate benefit to the County and reduce long term costs to staff, operate and maintain the development.

## 2 Yahoola Creek Reservoir Master Plan

### Mountain Bike Facility

The mountain biking community is a very passionate group that is committed to fun, safe and sustainable outdoor trails for users of all ages. The Southern Off-Road Bicycle Association (SORBA) is a large non-profit organization with nearly 50 chapters throughout the southeast. This organization is committed to developing volunteer networks and funding resources to design, build and maintain mountain bike trails. By entering into a partnership with such an organization, the County could realize a savings in the upfront costs associated with developing the Mountain Bike Trail Network. The County could also potentially benefit from long term operation and maintenance savings by collaborating with this organization to develop local volunteer groups to regularly maintain the trails.



### Zip Line Facility

In many communities, local governments have partnered with private entities to design, construct and operate zip lines and other forms of tree canopy courses on public property. Many parks and recreation departments simply do not have sufficient staff and training to operate these facilities, so partnerships with private operators has proven to be a tremendous asset to recreation providers. The recommendations for the Zip Line Facility in this master plan are for a large scale attraction that has a regional draw. When compared to similar facilities in the southeast, the capital costs to develop a facility of this size and complexity is in excess of \$2,500,000. By engaging in a partnership for this facility, the financial obligations for building and operating a zip line facility is significantly reduced.

### Intergovernmental Relationships and Inter-Departmental Support

Lumpkin County and the City of Dahlonega have been engaged in a meaningful partnership with the reservoir for many years. The recommendations in the master plan provide additional opportunities to build on that relationship to the benefit of all residents. As noted in the master plan narrative, the City has already begun the initiative of implementing the Pedestrian Bridge and has future plans to develop sidewalk extensions to provide enhanced connectivity between downtown and the reservoir. Continued collaboration with the City on implementing various aspects of this master plan is strongly recommended by the design team.

For many local governments, it is not uncommon for other departments to collaborate and assist in capital outlay and ongoing operations. Many water and sewer departments allocate funding for roads and paved trails on property operated by parks and recreation departments to facilitate access to public utilities. Transportation departments often provide similar contributions to

the development of park and recreation facilities. Collaboration with other departments also provides a wider opportunity for grants and other fundraising. Communities that operate under the mentality that the total government body works together for the benefit of its citizens - not individual departments- are often those that are more successful in developing economic health, a higher quality of life and a greater sense of community.

### Other Potential Partnerships

In addition to the examples provided above, many communities collaborate with local school boards, colleges and universities, and health care systems. Since many of the recommendations included in this master plan are focused on enhancing wellness, education, and cultural preservation, there are ample opportunities for the County to collaborate with these groups and other organizations to acquire funding for development.

Collaboration with local business owners for sponsorship of development and maintenance is also a valuable partnership to develop. “Build-A-Mile” programs could be easily implemented to aid in developing the many trails on the site and trail maintenance sponsorships are also feasible to reduce costs associated with long-term maintenance.

Throughout the design process, the planning team had many opportunities to engage the community and gauge their interest in the reservoir property. Our team was pleasantly surprised to learn

of many active and past volunteer programs, organizations and associations that share a passion for this project and are willing to contribute their time and talents wherever feasible. Engaging volunteer organizations to support in the care of parks and recreation facilities is very typical and should continue to be developed and nurtured.



### Capital Improvement Plan

As noted previously, the master plan has identified more than \$140,000,000 worth of potential improvements to develop the Yahoola Creek Reservoir Property. At that level, this would require funding in excess of \$14,000,000 per year over the next ten years. It is understood that this level of funding is likely not realistic for a single project in a community of this size. Therefore, given the fact that effective partnerships are essential to the fruition of the implementation of this plan, the planning team has redistributed capital costs that will likely be assumed by others. The balance of the capital funding was distributed over ten years to align with the phasing prioritization by the Study Committee. Using the estimates from the design team's opinion of probable costs, the value of these phased developments was adjusted to provide recommended capital budgets for each year in the plan.

In total, the adjusted Capital Improvement Plan totals \$73,850,000, which equates to an average annual spending of \$7,385,000. The plan is broken up into three levels of priority, or tiers, to illustrate levels of potential funding categories. Tier 1 represents capital outlay that feasibly be achieved through current funding methods. Tier 2 represents capital projects that may need enhanced funding beyond current sources. Tier 3 includes projects that will likely need additional funding sources for implementation.

### Considerations Related to Capital Improvements

The purpose of this Capital Improvement Plan is to establish an order of magnitude associated with the implementation of this plan and a guide for potential phased implementation. There are a multitude of factors that will have to be considered going forward that could impact this recommendation. The following is a brief description of items that should be taken into account when allocating funding for these projects:

- In order to facilitate a break down of development costs for the Committee's recommended phasing, there is a loss of efficiency in terms of anticipated development costs. Grading estimates were preformed for each individual development area, resulting in costs associated with both excess and insufficient fill material. Combining multiple grading operations at a single time will likely provide the opportunity to achieve a balanced grading solution, which could potentially result in a total savings of over \$10,000,000 over the total project area.
- As noted previously in the report, no geotechnical investigations were performed during the course of this plan to determine the potential scale of rock removal costs associated with the development of this plan. Designers relied on past experience from similar scale projects with similar geographic features to gauge the costs associated with rock removal and to establish reasonable budgets within the opinion of probable costs. Depending on the actual conditions of the site, grading may be adjusted to assist in reducing these costs.
- The actual timeline for implementation of these development areas is largely dependent on available funding for both the County and development partners. The timeline presented represents a recommend sequencing of development over the next 10 years but the duration of the phased implementation may exceed this time frame.



Yahoola Creek Reservoir Property Master Plan -- 10 -Year Capital Improvement Plan

	TIER 1		TIER 2			TIER 3						
MASTER PLAN RECOMMENDATIONS: COUNTY	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Future	TOTAL
Existing Facility Renovations	\$1,000,000											\$1,000,000
New Roadside Park		\$5,500,000										\$5,500,000
Park Entrance, Welcome Center, Initial Infrastructure			\$9,986,820									\$9,986,820
Hiking Trail Network Expansion- Phase 1				\$275,000								\$275,000
Mountain Bike/ Zip Line Infrastructure				\$2,939,300								\$2,939,300
Hiking Trail Network Expansion- Phase 2					\$175,000							\$175,000
Upland Trail Network					\$1,800,000							\$1,800,000
Lodge/ Conference Center Infrastructure						\$22,500,000						\$22,500,000
Water Recreation Area							\$2,073,600					\$2,073,600
Second Phase Infrastructure								\$3,256,750				\$3,256,750
RV Camping Area									\$3,114,600			\$3,114,600
Amphitheater										\$18,987,600		\$18,987,600
Yahoola Creek Park Connection											TBD	\$0
TOTAL: RECOMMENDATIONS FOR COUNTY	\$1,000,000	\$5,500,000	\$9,986,820	\$3,214,300	\$1,975,000	\$22,500,000	\$2,073,600	\$3,256,750	\$3,114,600	\$18,987,600	\$0	\$71,608,670
OTHER CAPITAL COSTS												
Architecture/ Engineering Fees	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
Surveying and Testing Services	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD	TBD
COUNTY YEARLY TOTAL	\$1,000,000	\$5,500,000	\$9,986,820	\$3,214,300	\$1,975,000	\$22,500,000	\$2,073,600	\$3,256,750	\$3,114,600	\$18,987,600	\$0	\$71,608,670
YEARLY COUNTY RECOMMENDED BUDGET	\$1,250,000	\$600,000	\$10,500,000	\$3,750,000	\$2,500,000	\$25,000,000	\$2,500,000	\$3,750,000	\$3,500,000	\$20,500,000	\$0	\$73,850,000

Tier 1 and Tier 2 TOTAL \$18,600,000  
Tier 3 TOTAL \$55,250,000  
TOTAL \$73,850,000  
FUTURE \$0

GRAND TOTAL \$73,850,000

2021-2030 TOTAL \$73,850,000  
Ten Year Average Spending \$7,385,000

MASTER PLAN RECOMMENDATIONS: OTHERS												
Mountain Bike Trails	\$240,000											\$240,000
Zip Line Facility	\$2,700,000											\$2,700,000
Lodge/ Conference Center	\$66,000,000											\$66,000,000
Pedestrian Bridge	TBD											\$0
Connections to Downtown	TBD											\$0
TOTAL: RECOMMENDATIONS FOR OTHERS	\$68,940,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$68,940,000

Land acquisition costs not included.  
Opinion of cost estimates as of {MONTH} 2020.  
\*Based on current market trends, anticipate construction cost escalation of approximately 5-7% annually for budgeting

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- Architectural and Engineering fees for design, permitting, bidding and construction management are unknown at this time and can vary greatly depending on scope of services and the scale of the development area included in the design scope. The County should plan for funding for these services in addition to the capital budgets presented.
- Surveying, Testing and Inspection services are unknown at this time and can vary greatly depending on the scope of services. The County should plan for funding for these services in addition to the capital budgets presented.



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# APPENDIX

# Public Input First Public Meeting



## CULTURAL/ ENVIRONMENTAL FACILITIES

Directions: Place a sticker on each item you would like to add to the park.  
Remember: You have a limited number of stickers

BIRD WATCHING	CULTURAL EXHIBITS	CONSERVATION AREAS	OUTDOOR CLASSROOM	PLANT ID TRAIL	IDEAS/SUGGESTIONS
					<p>Place a sticker and write-in your own idea next to it.</p> <p><i>None of these -&gt; Leave alone and watch the vegetation of what is available. Make this is the best place to go to see the best of the area.</i></p>
PLACE STICKER HERE	PLACE STICKER HERE	PLACE STICKER HERE	PLACE STICKER HERE	PLACE STICKER HERE	

NATURE CENTER	WELCOME CENTER	NATIVE PLANT GARDEN
		
PLACE STICKER HERE	PLACE STICKER HERE	PLACE STICKER HERE

Number	Minimum Elevation	Maximum Elevation	Color
1	1239.785	1270.000	
2	1270.000	1300.000	
3	1300.000	1330.000	
4	1330.000	1360.000	
5	1360.000	1390.000	
6	1390.000	1420.000	
7	1420.000	1450.000	
8	1450.000	1480.000	
9	1480.000	1510.000	
10	1510.000	1540.000	
11	1540.000	1561.511	

### LEGEND

LAKE BUFFER  
EXISTING TRAIL  
PROPERTY LINE









YAHOOOLA CREEK RESERVOIR

NG BOARDS

LOSE DESIGN

MPKIN COUNTY, GA

YAHOOOLA CREEK RESERVOIR MASTER PLAN

WATER RECREATION

SHORE FISHING

PLACE STICKER HERE

PIER FISHING

PLACE STICKER HERE

CANOING/KAYAKING

PLACE STICKER HERE

SWIMMING/BEACH

PLACE STICKER HERE

SPLASH PAD

PLACE STICKER HERE

BOAT RENTALS

PLACE STICKER HERE

COMPETITIVE ROWING

PLACE STICKER HERE

BOAT LAUNCH

PLACE STICKER HERE

IDEAS/SUGGESTIONS

Place a sticker and write-in your own idea next to it.

- Aquatic Center

- Boat rentals + AT needed to be substituted

- (Suggested)

- Aquatic Center at Yahoola, not reservoir

- suggested

- 100 - 1500 - 1500 - 1500

LEAVE NAME

45-15

Directions: Place a sticker on each item you would like to add to the park.

Remember: You have a limited number of stickers

YAHOOOLA CREEK RESERVOIR

OTING BOARDS

LOSE DESIGN

MPKIN COUNTY, GA

YAHOOOLA CREEK RESERVOIR MASTER PLAN

WATER RECREATION

SHORE FISHING

PLACE STICKER HERE

PIER FISHING

PLACE STICKER HERE

CANOING/KAYAKING

PLACE STICKER HERE

SWIMMING/BEACH

PLACE STICKER HERE

SPLASH PAD

PLACE STICKER HERE

BOAT RENTALS

PLACE STICKER HERE

COMPETITIVE ROWING

PLACE STICKER HERE

BOAT LAUNCH

PLACE STICKER HERE

IDEAS/SUGGESTIONS

Place a sticker and write-in your own idea next to it.

- Aquatic Center

- Boat rentals + AT needed to be substituted

- (Suggested)

- Aquatic Center at Yahoola, not reservoir

- suggested

- 100 - 1500 - 1500 - 1500

LEAVE NAME

45-15

Directions: Place a sticker on each item you would like to add to the park.

Remember: You have a limited number of stickers

[illegible]



LUMPKIN COUNTY, GA

YAHOOOLA CREEK RESERVOIR MASTER PLAN

# ADVENTURE/ OUTDOOR RECREATION

Directions: Place a sticker on each item you would like to add to the park  
Remember: You have a limited number of stickers









<p><b>ROCK CLIMBING</b></p>  <p>PLACE STICKER HERE</p>	<p><b>AXE THROWING</b></p>  <p>PLACE STICKER HERE</p>	<p><b>ARCHERY</b></p>  <p>PLACE STICKER HERE</p>	<p><b>NINJA COURSE</b></p>  <p>PLACE STICKER HERE</p>	<p><b>PUMP TRACK</b></p>  <p>PLACE STICKER HERE</p>	<p><b>IDEAS/SUGGESTIONS</b></p> <p>Place a sticker and write-in your own idea next to it.</p> <p><i>Not agreed idea</i></p> <p><i>I love these ideas we need more for 3/15 for teams &amp; more adventures available</i></p> <p><i>Put Pump course!</i></p> <p><i>People come to Yahooola for recreation, things that they can't find anywhere else &amp; they will stay for longer stays, not a quick stop &amp; go. I don't think they will come back if they don't have something to do. I think we need to have something that is not just a pump track. I think we need to have something that is not just a pump track. I think we need to have something that is not just a pump track.</i></p>
<p><b>ZIP LINES</b></p>  <p>PLACE STICKER HERE</p>	<p><b>ROPES COURSE</b></p>  <p>PLACE STICKER HERE</p>	<p><b>MOUNTAIN BIKE TRAILS</b></p>  <p>PLACE STICKER HERE</p>			

LUMPKIN COUNTY, GA

YAHOOOLA CREEK RESERVOIR MASTER PLAN

# PASSIVE RECREATION

Directions: Place a sticker on each item you would like to add to the park  
Remember: You have a limited number of stickers

<p><b>OPEN GREENSPACE</b></p>  <p>PLACE STICKER HERE</p>	<p><b>PLAYGROUND</b></p>  <p>PLACE STICKER HERE</p>	<p><b>TRAIL HEAD/RESTROOM</b></p>  <p>PLACE STICKER HERE</p>	<p><b>EXERCISE STATIONS</b></p>  <p>PLACE STICKER HERE</p>	<p><b>BIKE RENTALS</b></p>  <p>PLACE STICKER HERE</p>	<p><b>IDEAS/SUGGESTIONS</b></p> <p>Place a sticker and write-in your own idea next to it.</p> <p><i>Lake shore trail for landscaping</i></p> <p><i>Have trails connect topography and a few different types not easily made by people</i></p> <p><i>changeable trails</i></p> <p><i>Also put a bunch of trails on maps I do see people who are surprised at existing trail length</i></p> <p><i>Trail maintenance needed</i></p> <p><i>None</i></p>
<p><b>PAVED TRAILS</b></p>  <p>PLACE STICKER HERE</p>	<p><b>NATURE TRAILS</b></p>  <p>PLACE STICKER HERE</p>	<p><b>PICNIC PAVILIONS</b></p>  <p>PLACE STICKER HERE</p>			

# Public Input Online Survey





## Yahoola Creek Reservoir Property Survey

**Dear Resident:**

**Welcome to the Yahoola Creek Reservoir Property Master Plan Survey. We are conducting this survey to gather input in order to better serve the community. Your answers will be used to help develop the County's new Yahoola Creek Reservoir Property Master Plan, which includes determining our priorities and funding strategies for moving forward with property improvements.**

**Even if you do not currently use the reservoir and surrounding County owned property and facilities, or participate in any programs, your survey answers will still be important.**

**It is estimated that the survey will take 8-10 minutes to complete, and we are asking that each household respond just once to this survey. For more information on this project, contact the Development Authority of Lumpkin County: [info@picklumpkincounty.org](mailto:info@picklumpkincounty.org)**

**Thank you for your time!**

**Sincerely,**

**Rebecca A. Mincey  
Executive Director  
Lumpkin County Development Authority  
194 Courthouse Hill  
Annex A  
Dahlonega, GA 30533**



## Yahoola Creek Reservoir Property Survey

### 1. How would you rate the existing condition of the Yahoola Creek Reservoir amenities?

"Good" = good condition with few  
or no maintenance problems

"Fair" = fair condition and generally  
adequate, but needs updating

"Poor" = worn, but functional and  
needs attention

Trail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Boat Ramp	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Restroom Facility	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pavilion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. In previous public meetings, county residents suggested the following facilities and/or parks improvements be considered. How important is it for you that each of these be incorporated into the County's master plan design?

	Not at all important	Relatively unimportant	Neutral/No opinion	Relatively important	Extremely important
Kayaking/Canoeing Rentals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leave Natural/Do nothing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Native Plant Garden	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Trail Head Restroom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Improve Existing Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Develop Mountain Bike Trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pedestrian Bridge at Highway 19	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
RV Camping Sites	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conference Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connection to Downtown	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lodging	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Camp Sites (primitive, maintained, tree house, yurt, etc)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Nature Center	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Connection to Yahoola Creek Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fishing Pier/Dock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Native American History	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Swimming Area/Beach	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Playground	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Outdoor Fitness Stations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Aerial Adventure Park	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Yahoola Creek Reservoir Property Survey

3. For each of the sites, indicate how often you and/or members of your household have visited the Yahoola Creek property in the last 12 months.

	1-5 visits	6-11 visits	12 or more visits	No visits in the last 12 months	Not aware of this property
Parking lot at the dam	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Parking lot at the boat dock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ramp or fishing by boat	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ramp for kayaking or stand up paddle boarding	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hiking or running the trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Picnic tables	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Picnic pavilions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Crossing State HWY 19 bridge while using the trails	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



4. Please indicate if any of the following prevents you and/or members of your household from using the Yahoola Creek Reservoir property, recreation facilities, or trails. Please check all that apply.

- |  |  |
|--|--|
| <input type="checkbox"/> Not interested in recreation                                  | <input type="checkbox"/> Inadequate parking  |
| <input type="checkbox"/> Condition of exiting boat ramp                                | <input type="checkbox"/> Condition of existing trails  |
| <input type="checkbox"/> Not aware of facilities available                             | <input type="checkbox"/> Unsafe to walk or ride a bike to the reservoir property   |
| <input type="checkbox"/> Not aware of programs available                               | <input type="checkbox"/> Concern about my personal safety at the property (e.g. crime, vagrants, off-leash dogs, unsafe equipment) |
| <input type="checkbox"/> Accessibility concerns (e.g. lacks wheelchair access)         | <input type="checkbox"/> Not aware of of the Yahoola Creek Reservoir property and trails   |
| <input type="checkbox"/> Belong to private organization that meets my recreation needs |  |
| <input type="checkbox"/> Other – please explain  |  |



## Yahoola Creek Reservoir Property Survey

5. Please indicate if you agree, disagree or do not know about the following statements:

	Agree	Disagree	Do not know
Compared to other priorities (public safety, streets, utilities, schools), developing the Yahoola Creek Reservoir property to support recreation is important to our community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Compared to other priorities (public safety, streets, utilities, schools), developing the Yahoola Creek Reservoir property to support revenue generation and employment opportunities is important to our community.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am able to obtain information about programs and events for the Yahoola Creek Reservoir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to be a volunteer to improve the existing trails at the Yahoola Creek Reservoir.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to help with fundraisers to improve our recreation amenities at the Yahoola Creek Reservoir property.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I support the County's efforts to improve parks and recreation facilities and programs at the Yahoola Creek Reservoir property, over time, as funding options become available.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. How far would you be willing to walk, drive, or ride a bicycle to the Yahoola Creek Reservoir property?

	Walk	Drive	Ride a Bike
Check ONE choice per drop-down menu	<input type="text"/>	<input type="text"/>	<input type="text"/>

If you would not walk, drive or bicycle, why?



## Yahoola Creek Reservoir Property Survey

7. Do you travel outside Lumpkin County to use parks and recreation facilities?

☐ Yes

☐ No

If yes, where and why?

8. Do you use recreation facilities offered by a church, other private provider, or other municipal provider?

	Yes	No
Church	<input type="radio"/>	<input type="radio"/>
Private Club (example: country club, health club or gym, exercise studio)	<input type="radio"/>	<input type="radio"/>
Private or gated neighborhood facilities	<input type="radio"/>	<input type="radio"/>
Private School	<input type="radio"/>	<input type="radio"/>
Other municipality	<input type="radio"/>	<input type="radio"/>
University of North Georgia	<input type="radio"/>	<input type="radio"/>

9. If you answered yes above, please check the factors that influence your decision to use these other facilities:

	Yes	No
They are closer to my residence	<input type="radio"/>	<input type="radio"/>
They offer facilities that are not available	<input type="radio"/>	<input type="radio"/>
They offer better quality facilities	<input type="radio"/>	<input type="radio"/>
Their programs are better operated	<input type="radio"/>	<input type="radio"/>

Other (please specify)





## Yahoola Creek Reservoir Property Survey

10. Would you be supportive of the County prioritizing funding for increased quality of parks and recreation facilities and programs, as well as increased opportunities for public events at the Yahoola Creek Reservoir property?

- ☐ Extremely supportive
- ☐ Relatively supportive
- ☐ Neutral/No opinion
- ☐ Relatively unsupported
- ☐ Not at all supportive

If opposed, why?

11. How long have you lived in Lumpkin County?

- ☐ 0 – 5 Years
- ☐ 6 – 10 Years
- ☐ 11 – 20 Years
- ☐ Over 20 Years
- ☐ I do not live in Lumpkin County.



## Yahoola Creek Reservoir Property Survey

12. Please indicate your age.

- ☐ 18 and Under ☐ 19-24 ☐ 25-34 ☐ 35-44 ☐ 45-54 ☐ 55-64 ☐ 65-74 ☐ 75+

13. Which of the following best describes your household?

- ☐ Single
- ☐ Couple with no children
- ☐ Single-parent household with children 18 and under living at home
- ☐ Couple with children 18 and under living at home
- ☐ Couple with children but they do not live at household

Other (please specify)

14. If you indicated you have children at home, how many children do you have in each of the following age groups living at home?

	0 to 4 years of age	5 to 11 years of age	12 to 18 years of age
Age Groups	<div></div>	<div></div>	<div></div>



## Yahoola Creek Reservoir Property Survey

15. The fact that you are reading this message indicates that you have completed the survey questionnaire, and that we owe you a debt of thanks. We are very appreciative of the time you have taken to assist in our facilities analysis, and commit to utilizing the information gained to enhance our capital improvement program. Once again, we are extremely grateful that contributed your valuable time, your honest information, and your thoughtful suggestions. If you are interested in following the progress of the Yahoola Creek Reservoir Master Plan project, the Lumpkin County Development Authority, invites you to visit the following social media sites:

Facebook - <https://www.facebook.com/PickLumpkinGA/>

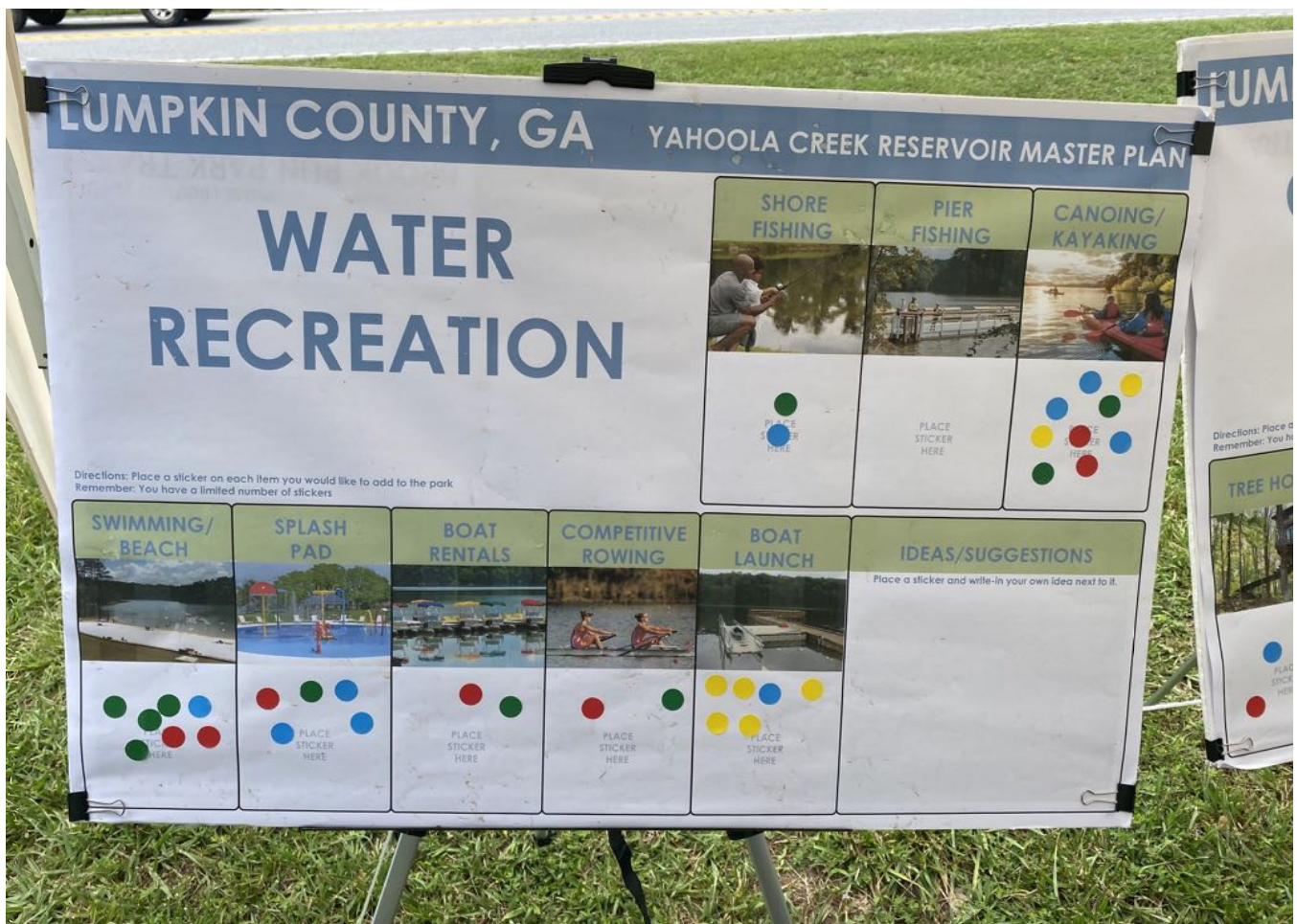
Website - <https://picklumpkincounty.org/reservoir-master-planning/>

THANK YOU for taking the time to complete this survey.

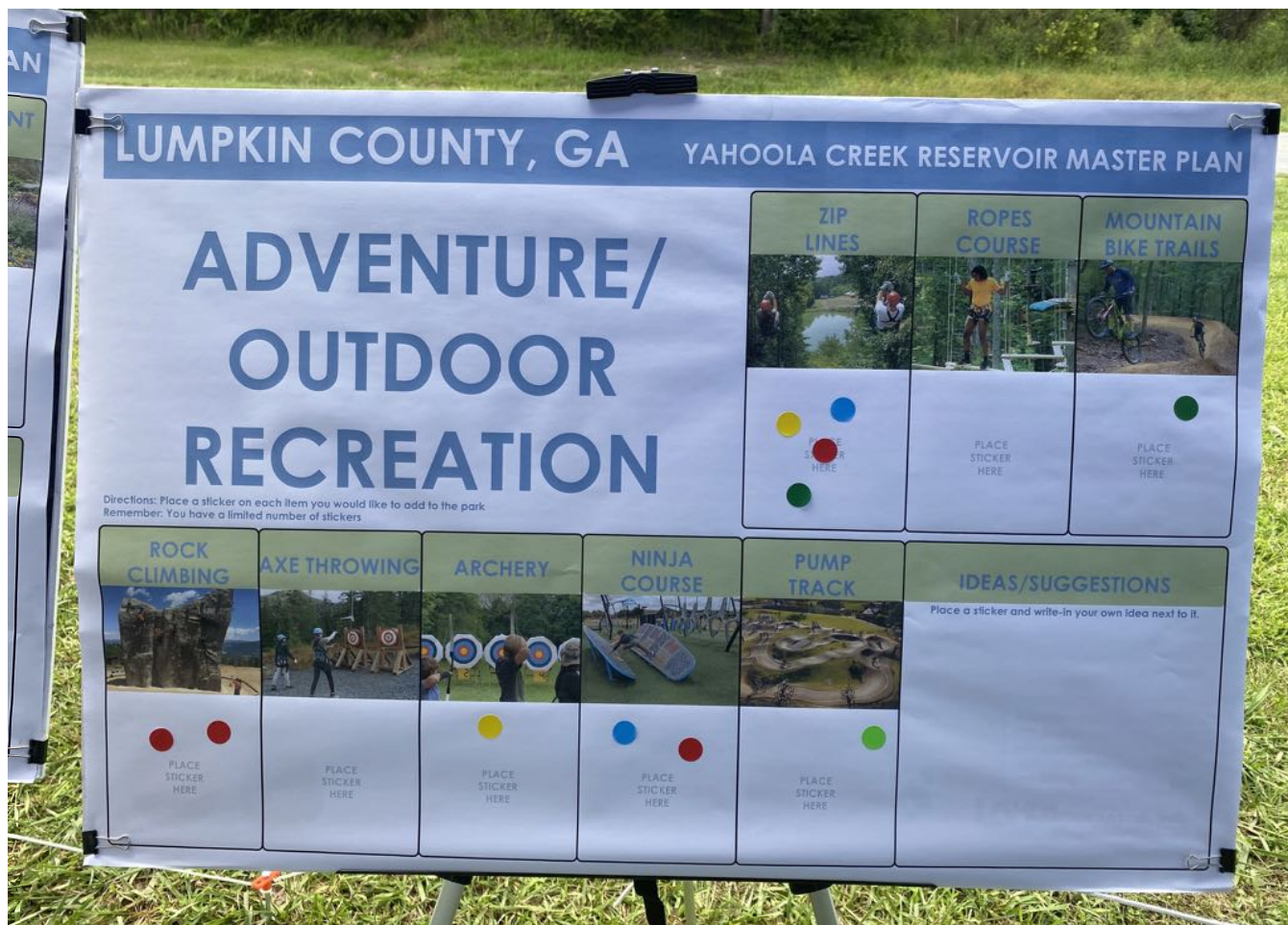
Please provide any additional comments you have about the County-owned Yahoola Creek Reservoir project that you feel will aid in this process.

# Public Input Intercept Survey







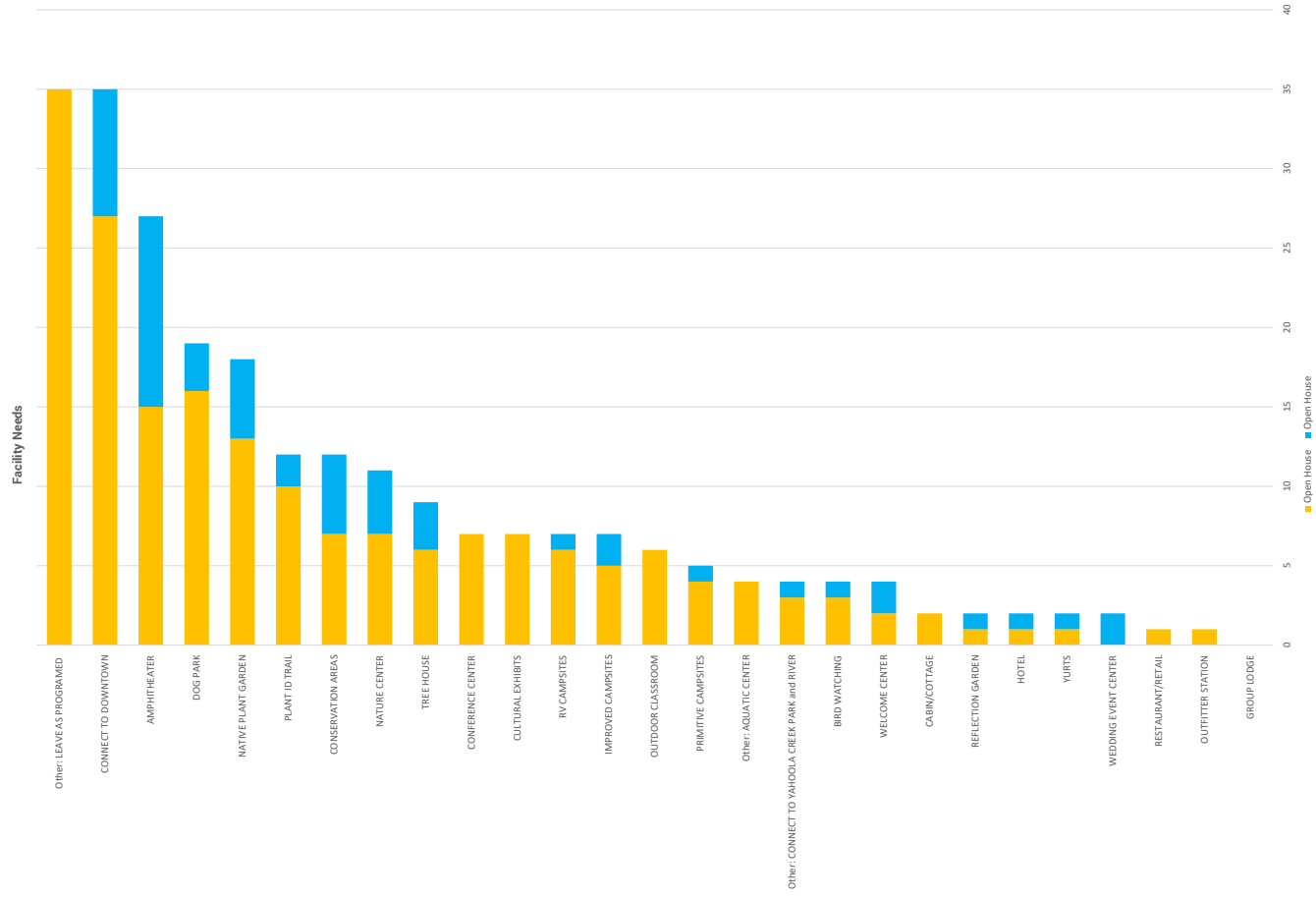


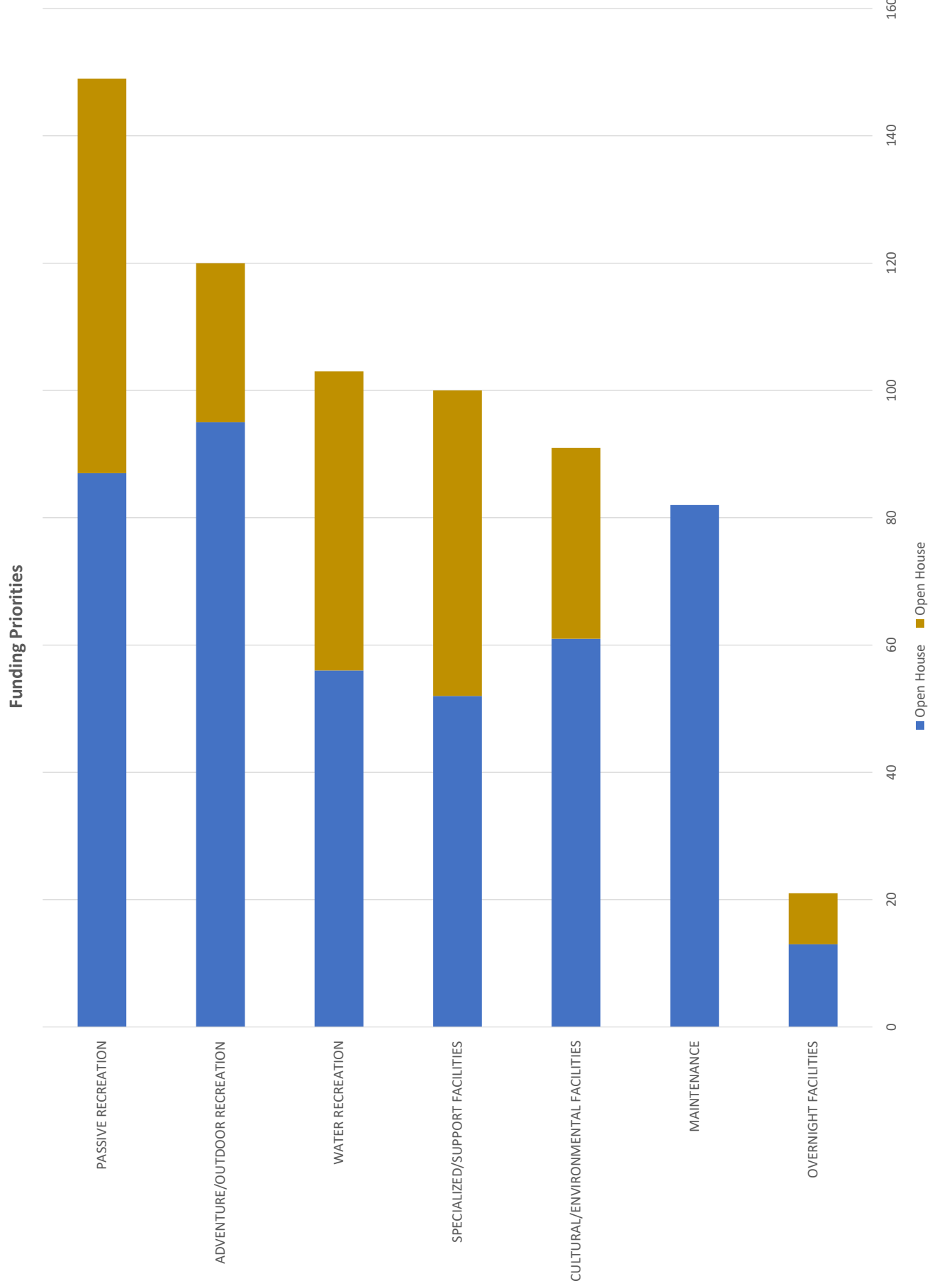




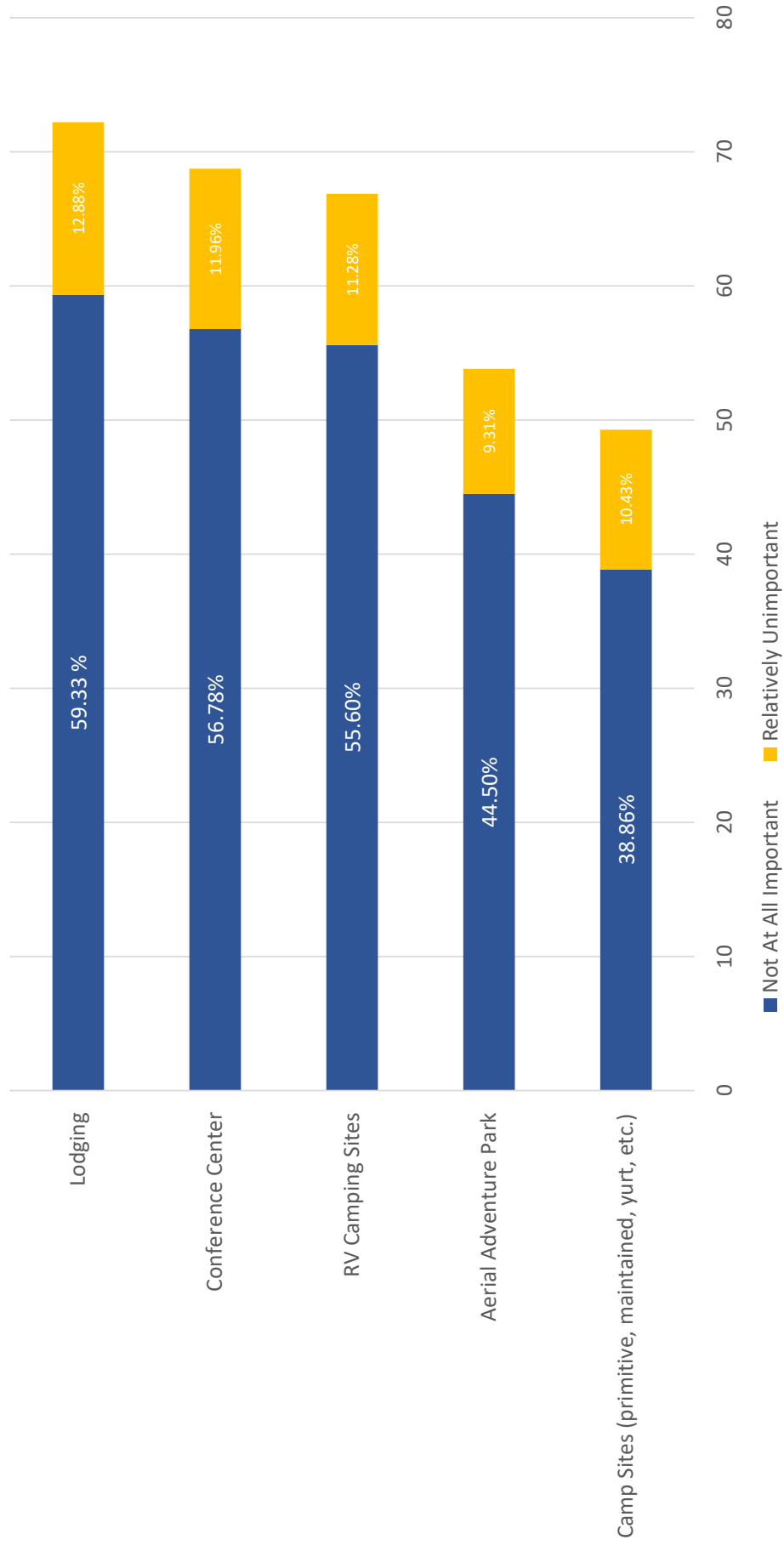
# Public Input Analysis



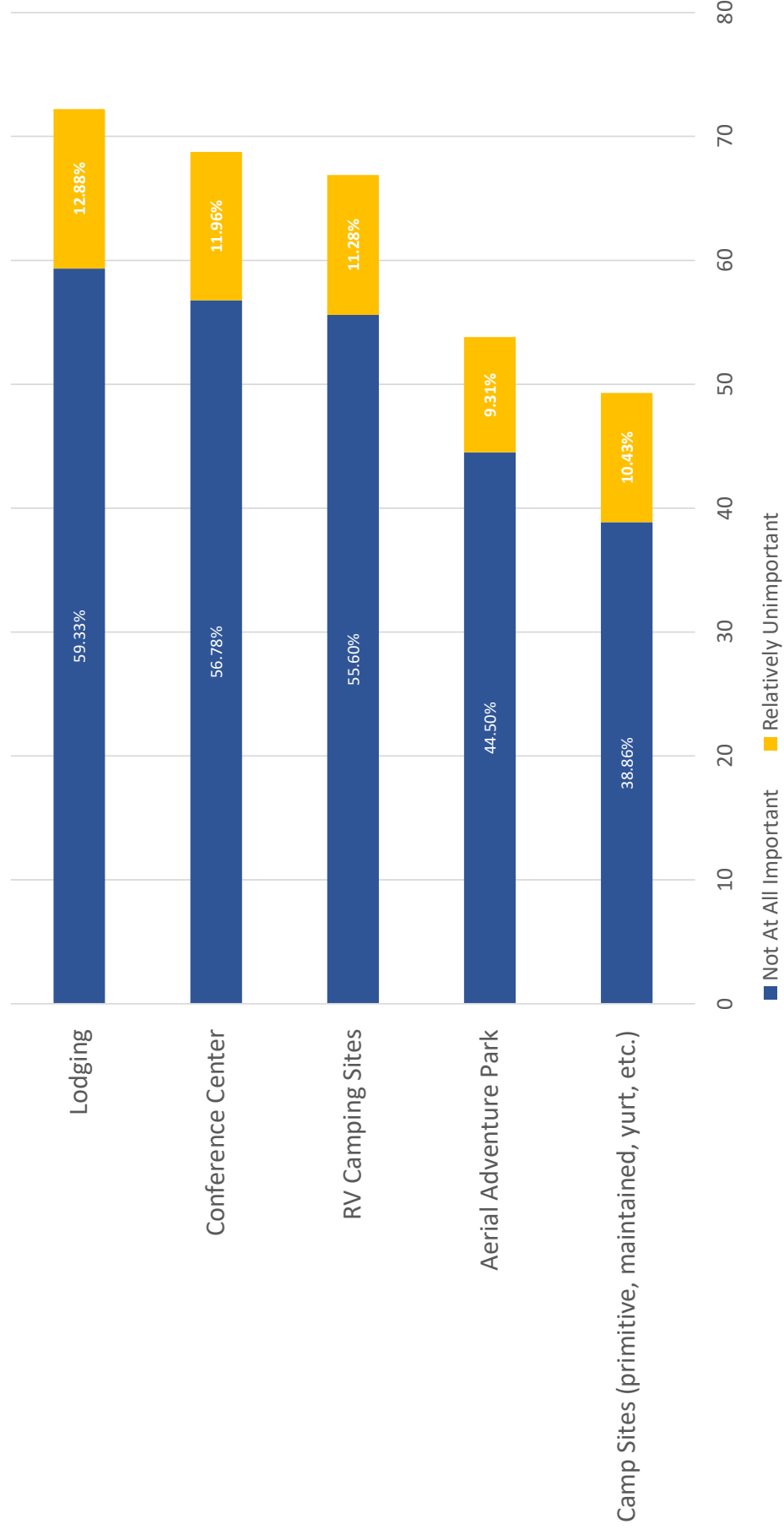




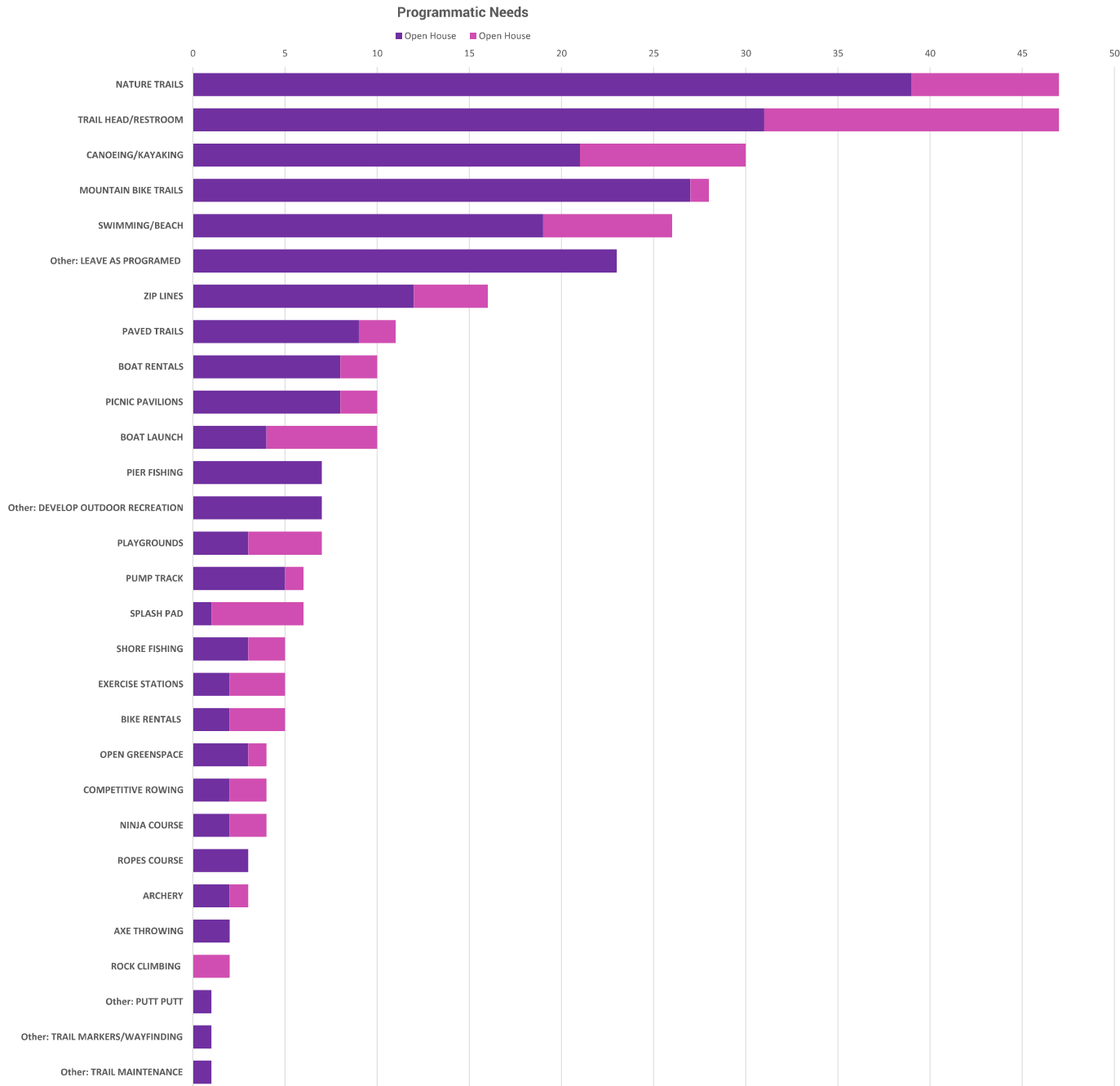
### Least Desirable Facilities and Park Improvements



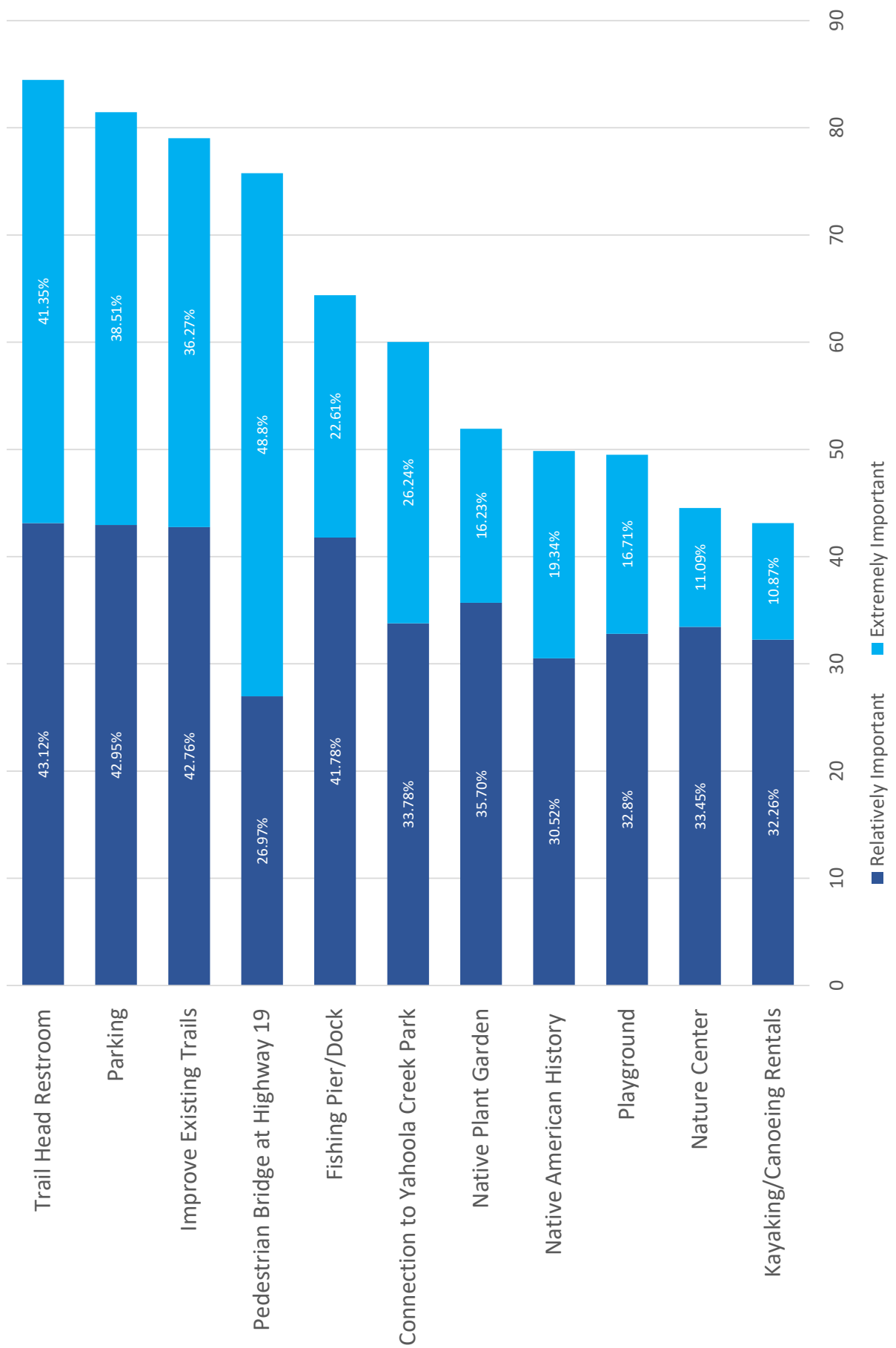
### Least Desirable Facilities and Park Improvements



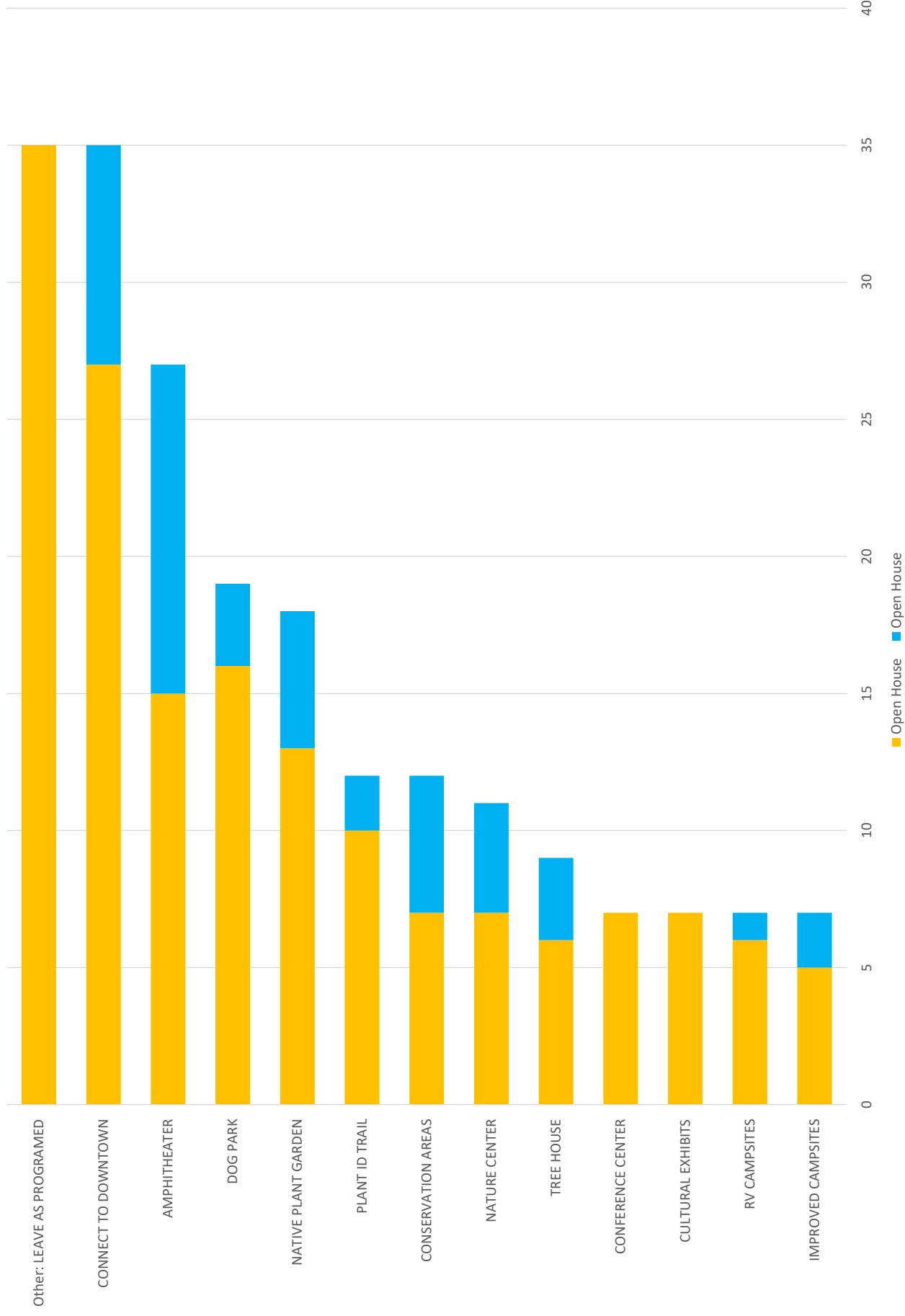




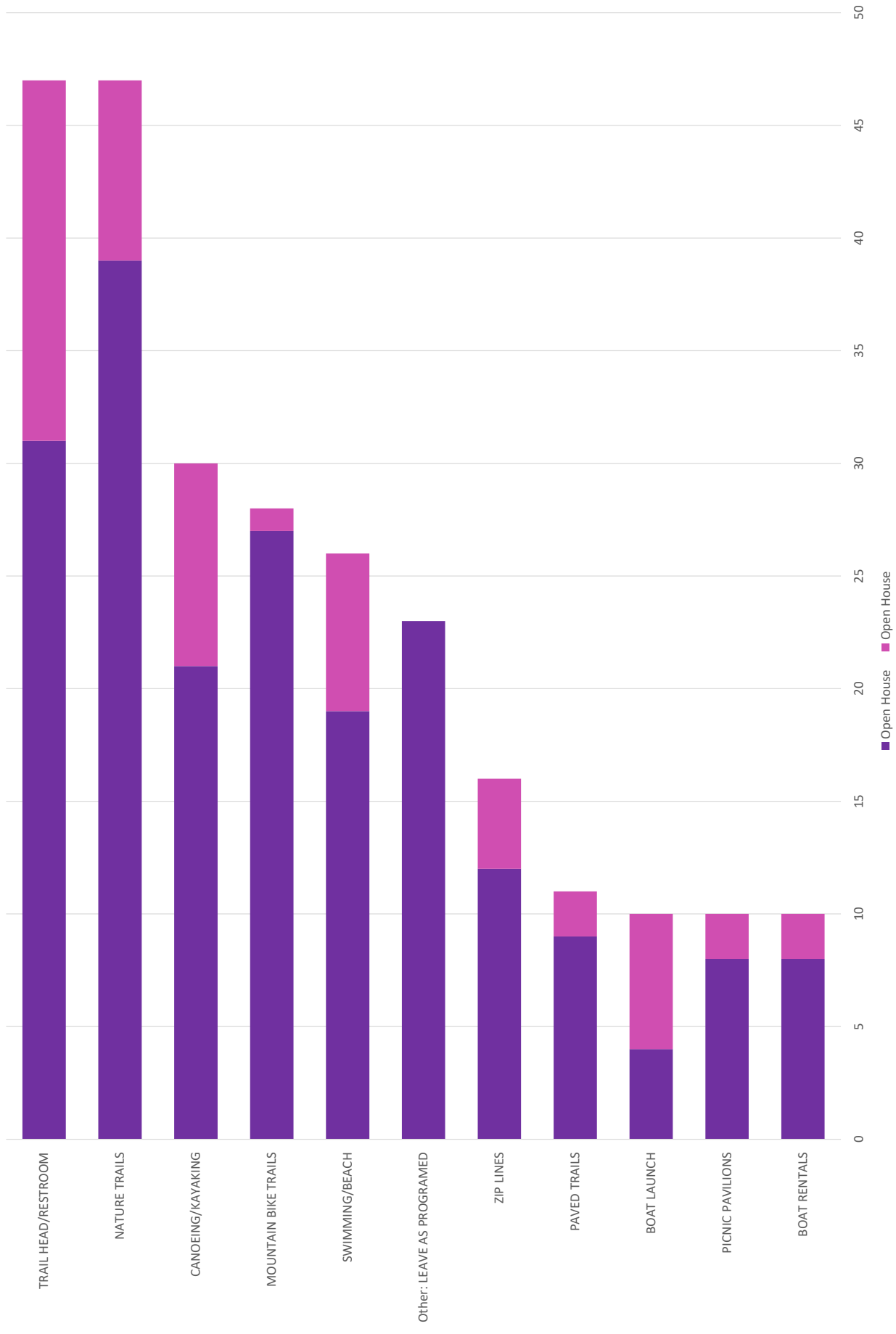
Top Suggested Survey Facilities and Park Improvements



Top Facility Needs

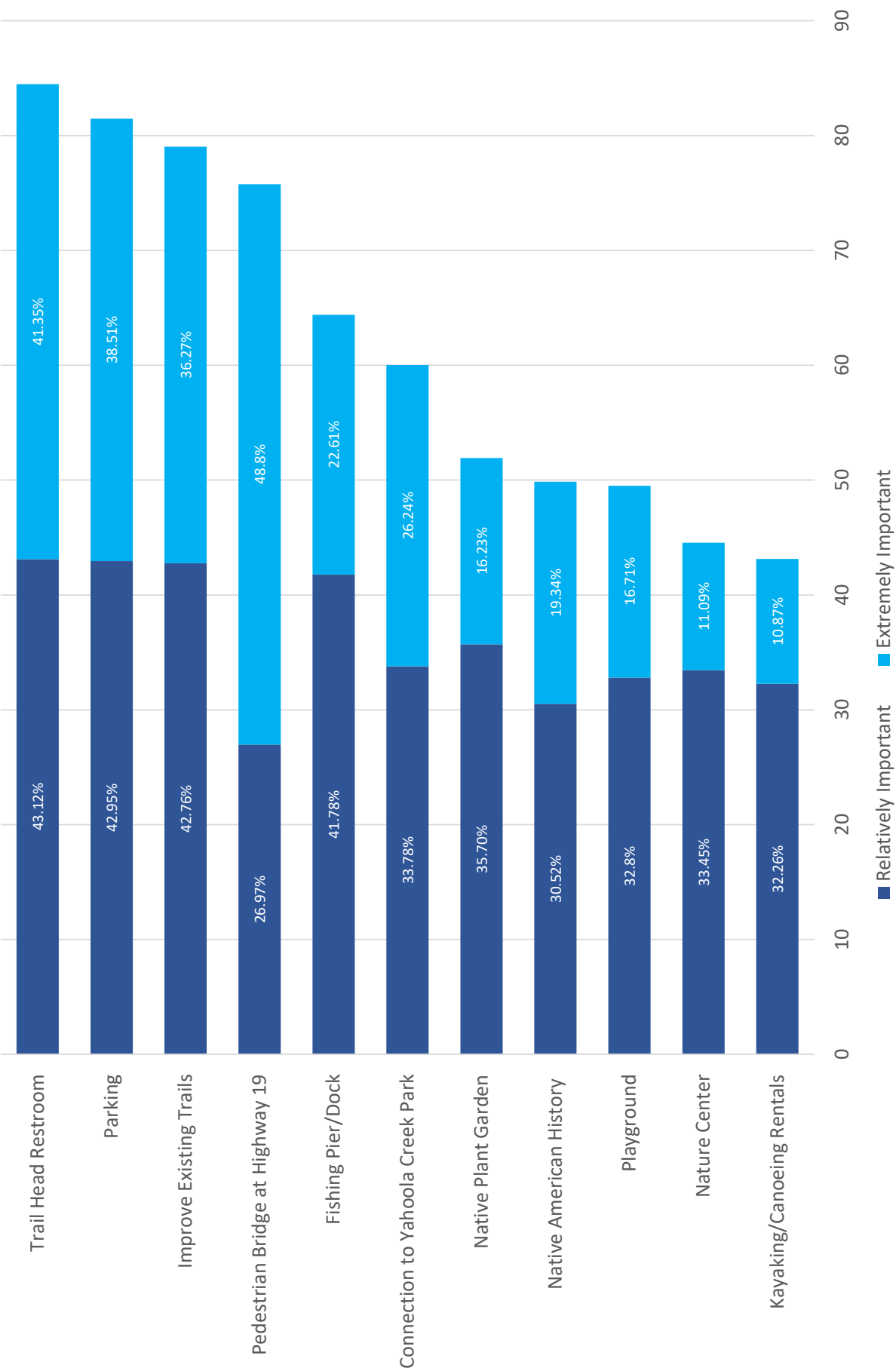


Top Programmatic Needs





Top Suggested Survey Facilities and Park Improvements



# Alternative Concept Plans Public Meeting Comments

**COMMENT CARDS:**

"We have an amphitheater in this county already and it has been sitting unused for ages (at Blackburn Park). If we need an amphitheater, why not use the one that already exists?"

"If development of buildings is necessary, keep them off steeper terrain and closer to food access. Steeper terrain is more useful as trail beds."

"I think it would've been good to include timeline of different phases. Less emphasis on mountain bike trails. More footpath!"

"It seems that this is trying to do a little bit of everything, not try to keep the site pure and for RX activity. Lodge, amphitheater, RV, conference center seem out of place."

"Fix the existing trail first using SORBA sustainable trail standards."

"We have all these features already present. We also have a large elderly population; they don't need a zipline. Revitalize Blackburn Park! You're just going to turn our town into one of those big cities."

"Don't shrink existing trail. Fix it!"

"This is way too much development! I think the mountain bike trails are good, but everything else is just too much."

"Please do not develop the reservoir. Please leave it natural. We simply do not need many of the items listed on the concept maps. Keep Dahlenega special and unspoiled."

**CONCEPT A COMMENTS:**

"Less emphasis on building development on steep terrain... large potential for erosion. Also too steep for RVs."

"Love emphasis on environmentally sustainable recreation opportunities. More trails (mtb and hiking) and educational resources."

"No RV camping"

"No RV Park"

"Yonah Preserve Trail"

"13 – Pedestrian Bridge is a must"

"Having 4 areas to Mt. [bike] helps have different levels of skill."

"Conference and lodge seems not to fit."

"Too much emphasis on Mountain Biking Trails. Would rather see more footpaths."

"Would be nice to have hiking trail extensions into mountain biking areas."

"Like presentation of large upland trail network."

"Like the large amount of natural areas left in this version. Combine [lodge and conference] like in concept C."

"Liked this concept"

"Like the distance of amenities from the existing trail"

**CONCEPT B COMMENTS:**

"No RV Camping"

"13 – Pedestrian Bridge is a must"

"No need for RV"

"Like the 3 mt [biking] access. How will you go from area to area?"

"Conference and lodge seems not to fit"

**CONCEPT C COMMENTS:**

"We already have all these features"

"No RVs"

"13 – Pedestrian Bridge is a must"

"No need for RV"

"Keep the RV facilities but eliminate the RV parking"

"1: Fix walking trails to prepare for mountain bikes trails

2: restrooms

3: beach area

4: water recreations

Forget the rest."

"Liked lodge + conference center together"

"16 – do not like pedestrian access on 9N"

"I am disappointed to see these plans. I would like to see the reservoir undeveloped. Revitalize Blackburn Park for Camping, amphitheater, etc."

"No RV camping"

"Leave it alone!"

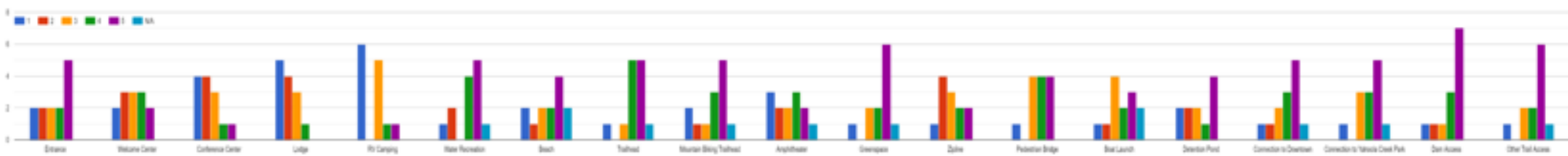
"Conference and lodge seems not to fit"

"Zip lines? Why"

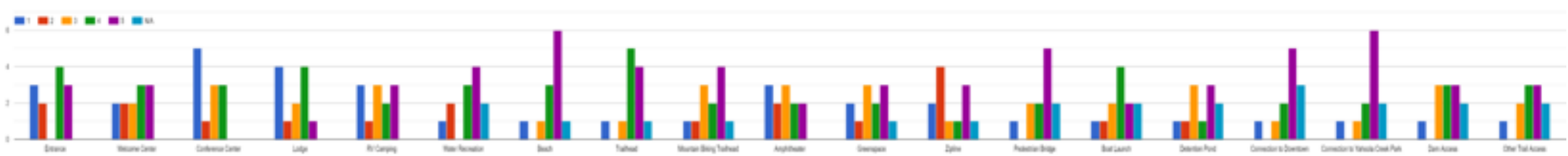


# Alternative Concept Plans Online Survey Results

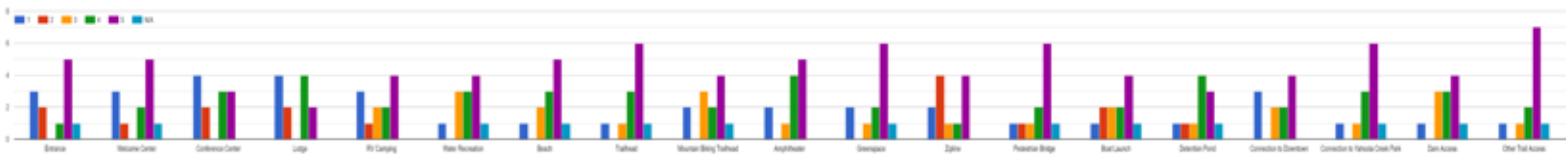
How satisfied are you with the programming (camp facility locations in Concept A)?



How satisfied are you with the programming (camp facility locations in Concept B)?

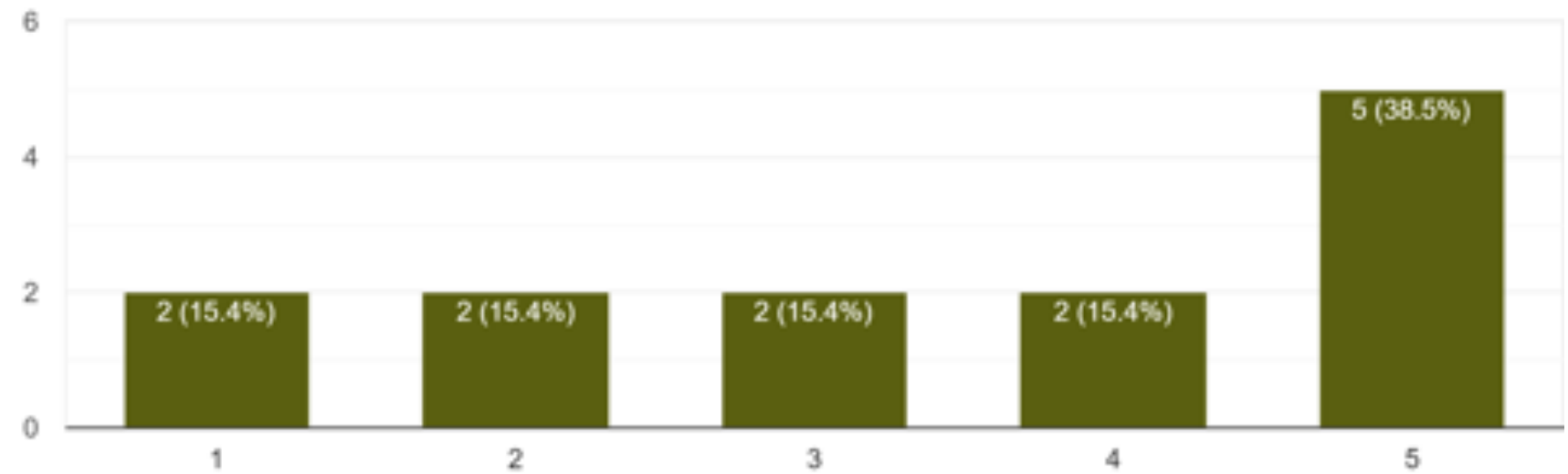


How satisfied are you with the programming (camp facility locations in Concept C)?



How satisfied were you with the overall direction of the Yahoola Creek Reservoir Master Plan so far?

13 responses



Other Comments:

- Place the RV park far away from the conference center.
- "I feel like Mountain Biking is the main focus and shouldn't be. The reservoir needs to be for everyone and its taking up and lot of the space. More family activities, paddleboating, disc golf, hiking trails"
- Leave it be!
- Plan B, no trails should intersect any mountain bike areas. All 3 plans, why such a huge amount of mtn bike areas, and how will the entry location impact CHP, particularly on such a bad curve? One of these areas could be for tent camping. Plan A, welcome ctr too far from entry, and recreation area is in a bad spot. Plan C is better than A or B in that the conference ctr and lodge are in a separate area, along with amphitheater. I don't see why either a lodge or conference ctr is necessary, or a zip line. Why not pavilions or similar? This looks like an attempt to make it an expensive place that caters to tourists, not taxpaying residents!
- I see no need for a lodge, conference center, or rv camping. You will need a light at your proposed entrance and the curve in 52 there makes that a dangerous intersection.
- Not to pleased regarding having a conference center, lodge and camping but love the improvements to boat launches and trail systems.
- Appreciate opportunity for community input
- Building the Mt area with tier level trails gives younger and older people a safe level, to off road bike. Experienced riders can use trails of higher level built for them in the other areas, topo of each area will make for a fun ride for all level, single and double track make for variety of outdoor recreation. on the minus side, building too many ideas of combine venues will over use the space, Conference center, Lodge, Amphitheater, seems too packed in to one location and will detract from the overall experience.
- Keep it simple and natural as much as possible. Prefer a nature park over amusement park approach. Parking looks inadequate for the planned development.

# Preliminary Master Plan Opinion of Probable Costs





YAHOOOLA CREEK RESERVOIR  
OPINION OF PROBABLE COST  
12/7/2020

Project No. 19103

SUMMARY SHEET

ITEM NO.	DESCRIPTION		TOTAL
1	GENERAL SITE	\$	8,181,500.00
2	LODGE & CONFERENCE	\$	73,881,000.00
3	AMPHITHEATER AREA	\$	15,776,600.00
4	WELCOME CENTER - UPLAND TRAIL	\$	6,222,800.00
5	RV CAMPSITES	\$	2,595,500.00
2	ROADSIDE PARK	\$	4,827,000.00
3	MOUNTAIN TRAILHEAD & ZIP-LINE	\$	5,151,100.00
4	TRAILS	\$	895,000.00
SUBTOTAL		\$	117,530,500.00
PROJECT FEES AND BONDS (3% OF SUBTOTAL)		\$	3,525,915.00
MOBILIZATION (2% OF SUBTOTAL)		\$	2,350,610.00
DESIGN CONTINGENCY (15% OF SUBTOTAL)		\$	17,629,575.00
TOTAL		\$	141,036,600.00

ADDITIONAL NOTES

- 1 Unless otherwise noted, all unit prices reflect the furnishing of all labor, mobilization, materials, supplies, services, etc. and all items of cost, overhead, profit, insurance, taxes, fees permits, etc.
- 2 Unless otherwise noted, all unit prices DO NOT include earth moving necessary for installation; earth moving shall be reflected in specified line items (e.g. Earthwork, Undercutting, etc.)
- 3 All unit prices are current as of the date listed on this document.
- 4 Estimates of construction quantities and opinion of probable costs provided by us are made on the basis of our experience and the level of design. They represent our best judgment as design professionals. We cannot and do not, however, guarantee that the actual construction quantities or costs will not vary from our quantities and cost estimates. Lose Design makes no warranty, expressed or implied, for the accuracy of such opinions as compared to bid or actual costs.

## GENERAL SITE

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 8,181,500.00</b>
1.01	MASS GRADING (BUDGET)	145,000	CY	\$ 6.00	\$ 870,000.00
1.02	EXPORT MATERIAL (BUDGET)	53,000	CY	\$ 25.00	\$ 1,325,000.00
1.03	ROCK REMOVAL (BUDGET)	18,000	CY	\$ 165.00	\$ 2,970,000.00
1.04	CLEARING & GRUBBING (BUDGET)	8.5	AC	\$ 12,000.00	\$ 102,000.00
1.05	EROSION CONTROL (BUDGET)	1	LS	\$ 250,000.00	\$ 250,000.00
1.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	5,000	LF	\$ 200.00	\$ 1,000,000.00
1.07	GRAVEL PARKING & DRIVEWAYS (INCLUDES WHEELSTOPS, BUDGET)	1	LS	\$ 124,000.00	\$ 124,000.00
1.08	WATER RECREATION DOCK & ADA CANOE LAUNCH (BUDGET)	1	LS	\$ 54,000.00	\$ 54,000.00
1.09	RETAINING WALLS (MODULAR BLOCK, BUDGET)	28,500	SFF	\$ 30.00	\$ 855,000.00
1.10	SITE LIGHTING (BUDGET)	34	EA	\$ 6,000.00	\$ 204,000.00
1.11	SITE SIGNS (ENTRY, BUDGET)	1	LS	\$ 15,000.00	\$ 15,000.00
1.12	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
1.13	FIRE SERVICE (8" DIP, BUDGET)	3,500	LF	\$ 35.00	\$ 122,500.00
1.14	FIRE HYDRANTS (BUDGET)	5	EA	\$ 6,000.00	\$ 30,000.00
1.15	SANITARY SEWER (8" PVC, INCLUDES STRUCTURES, BUDGET)	2,400	LF	\$ 70.00	\$ 168,000.00
1.16	STORMWATER INFRASTRUCTURE (BUDGET)	8.5	AC	\$ 10,000.00	\$ 85,000.00

**LODGE & CONFERENCE**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 73,881,000.00</b>
2.01	MASS GRADING (BUDGET)	372,000	CY	\$ 4.00	\$ 1,488,000.00
2.02	EXPORT MATERIAL (BUDGET)	195,000	CY	\$ 25.00	\$ 4,875,000.00
2.03	ROCK REMOVAL (BUDGET)	46,500	CY	\$ 165.00	\$ 7,672,500.00
2.04	CLEARING & GRUBBING (BUDGET)	15	AC	\$ 12,000.00	\$ 180,000.00
2.05	EROSION CONTROL (BUDGET)	15	AC	\$ 12,000.00	\$ 180,000.00
2.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	2,800	LF	\$ 200.00	\$ 560,000.00
2.07	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	570	EA	\$ 2,900.00	\$ 1,653,000.00
2.08	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 575,000.00	\$ 575,000.00
2.09	LODGE & CONFERENCE CENTER (TWO STORY, 200,000 SF, BUDGET)	1	LS	\$ 55,000,000.00	\$ 55,000,000.00
2.10	RETAINING WALLS (MODULAR BLOCK, BUDGET)	26,000	SFF	\$ 30.00	\$ 780,000.00
2.11	SITE LIGHTING (BUDGET)	12	EA	\$ 6,000.00	\$ 72,000.00
2.12	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
2.13	SITE FURNISHINGS (BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
2.14	FIRE SERVICE (8" DIP, BUDGET)	2,500	LF	\$ 35.00	\$ 87,500.00
2.15	FIRE HYDRANTS (BUDGET)	4	EA	\$ 6,000.00	\$ 24,000.00
2.16	WATER SERVICE (4" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 102,000.00	\$ 102,000.00
2.17	SANITARY SEWER (8" PVC, INCLUDES STRUCTURES & TAP FEE, BUDGET)	1,000	LF	\$ 75.00	\$ 75,000.00
2.18	STORMWATER INFRASTRUCTURE (BUDGET)	15	AC	\$ 10,000.00	\$ 150,000.00
2.19	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
2.20	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 200,000.00	\$ 200,000.00

**AMPHITHEATER AREA**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 15,776,600.00</b>
3.01	MASS GRADING (BUDGET)	160,000	CY	\$ 6.00	\$ 960,000.00
3.02	IMPORT MATERIAL (BUDGET)	96,500	CY	\$ 40.00	\$ 3,860,000.00
3.03	ROCK REMOVAL (BUDGET)	20,000	CY	\$ 165.00	\$ 3,300,000.00
3.04	CLEARING & GRUBBING (BUDGET)	10.4	AC	\$ 12,000.00	\$ 124,800.00
3.05	EROSION CONTROL (BUDGET)	10.4	AC	\$ 12,000.00	\$ 124,800.00
3.06	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	420	EA	\$ 2,900.00	\$ 1,218,000.00
3.07	OVERFLOW PARKING AREA (REINFORCED GRASS PAVERS, BUDGET)	82,000	SF	\$ 4.00	\$ 328,000.00
3.08	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 400,000.00	\$ 400,000.00
3.09	TICKET BOOTH (BUDGET)	4	EA	\$ 150,000.00	\$ 600,000.00
3.10	CONCESSIONS & RESTROOM BUILDING (BUDGET)	4	EA	\$ 338,000.00	\$ 1,352,000.00
3.11	AMPHITHEATER (INCLUDES STAGE, RAMPS, SHADE STRUCTURE, STORAGE, MECHANICAL, BUDGET)	1	LS	\$ 1,500,000.00	\$ 1,500,000.00
3.12	SEAT WALLS (CIP, BUDGET)	138	CY	\$ 500.00	\$ 69,000.00
3.13	RETAINING WALLS (MODULAR BLOCK)	28,500	SFF	\$ 30.00	\$ 855,000.00
3.14	SITE LIGHTING (BUDGET)	8	EA	\$ 6,000.00	\$ 48,000.00
3.15	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
3.16	SITE FURNISHINGS (BUDGET)	1	LS	\$ 300,000.00	\$ 300,000.00
3.17	FIRE SERVICE (8" DIP, BUDGET)	1,400	LF	\$ 35.00	\$ 49,000.00
3.18	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
3.19	WATER SERVICE (4" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 120,000.00	\$ 120,000.00
3.20	SANITARY SEWER (8" PVC, INCLUDES STRUCTURES & TAP FEE, BUDGET)	1	LS	\$ 170,000.00	\$ 170,000.00
3.21	STORMWATER INFRASTRUCTURE (BUDGET)	10.4	AC	\$ 10,000.00	\$ 104,000.00
3.22	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
3.23	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 175,000.00	\$ 175,000.00



**WELCOME CENTER - UPLAND TRAIL**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 6,222,800.00</b>
4.01	MASS GRADING (BUDGET)	140,000	CY	\$ 6.00	\$ 840,000.00
4.02	IMPORT MATERIAL (BUDGET)	3,600	CY	\$ 40.00	\$ 144,000.00
4.03	ROCK REMOVAL (BUDGET)	17,500	CY	\$ 165.00	\$ 2,887,500.00
4.04	CLEARING & GRUBBING (BUDGET)	3.7	AC	\$ 12,000.00	\$ 44,400.00
4.05	EROSION CONTROL (BUDGET)	3.7	AC	\$ 12,000.00	\$ 44,400.00
4.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	600	LF	\$ 200.00	\$ 120,000.00
4.07	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	100	EA	\$ 2,900.00	\$ 290,000.00
4.08	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 320,000.00	\$ 320,000.00
4.09	WELCOME CENTER (BUDGET)	1	LS	\$ 850,000.00	\$ 850,000.00
4.10	RESTROOM BUILDING (BUDGET)	1	LS	\$ 225,000.00	\$ 225,000.00
4.11	KIOSK (BUDGET)	1	EA	\$ 6,500.00	\$ 6,500.00
4.12	RETAINING WALLS (MODULAR BLOCK, BUDGET)	3,500	SFF	\$ 30.00	\$ 105,000.00
4.13	CULTURAL RESOURCE EXHIBITS (BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
4.14	SITE LIGHTING (BUDGET)	6	EA	\$ 6,000.00	\$ 36,000.00
4.15	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
4.16	SITE FURNISHINGS (BUDGET)	1	LS	\$ 50,000.00	\$ 50,000.00
4.17	FIRE SERVICE (8" DIP, BUDGET)	400	LF	\$ 35.00	\$ 14,000.00
4.18	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
4.19	EXISTING WATER SERVICE (BUDGET)	1	LS	\$ 20,000.00	\$ 20,000.00
4.20	SEPTIC SYSTEM (BUDGET)	1	LS	\$ 70,000.00	\$ 70,000.00
4.21	STORMWATER INFRASTRUCTURE (BUDGET)	3.7	AC	\$ 10,000.00	\$ 37,000.00
4.22	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
4.23	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 50,000.00	\$ 50,000.00

**RV CAMPSITES**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 2,595,500.00</b>
5.01	MASS GRADING (BUDGET)	10,000	CY	\$ 8.00	\$ 80,000.00
5.02	CLEARING & GRUBBING, SELECTIVE	5.3	AC	\$ 7,500.00	\$ 39,750.00
5.03	EROSION CONTROL (BUDGET)	5.3	AC	\$ 6,500.00	\$ 34,450.00
5.04	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	600	LF	\$ 200.00	\$ 120,000.00
5.05	RV PARKING (PERVIOUS CONCRETE, INCLUDES GRILL, FIREPIT, WATER	48	EA	\$ 10,350.00	\$ 496,800.00
5.06	RESTROOM BUILDING ( 1,500 SF, BUDGET)	3	LS	\$ 337,000.00	\$ 1,011,000.00
5.07	SMALL PLAYGROUND (BUDGET)	1	LS	\$ 150,000.00	\$ 150,000.00
5.08	RETAINING WALLS (MODULAR BLOCK, BUDGET)	4,000	SFF	\$ 30.00	\$ 120,000.00
5.09	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
5.10	SITE FURNISHINGS (BUDGET)	1	LS	\$ 250,000.00	\$ 250,000.00
5.11	FIRE SERVICE (8" DIP, BUDGET)	400	LF	\$ 35.00	\$ 14,000.00
5.12	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
5.13	WATER SERVICE (1.5" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 69,000.00	\$ 69,000.00
5.14	SANITARY WASTE STATION (BUDGET)	1	LS	\$ 40,000.00	\$ 40,000.00
5.15	SANITARY SEWER DISPOSAL (BUDGET)	1	LS	\$ 5,000.00	\$ 5,000.00
5.16	STORMWATER INFRASTRUCTURE (BUDGET)	5.3	AC	\$ 5,000.00	\$ 26,500.00
5.17	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
5.18	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 175,000.00	\$ 175,000.00

**ROADSIDE PARK**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 4,827,000.00</b>
6.01	MASS GRADING (BUDGET)	15,000	CY	\$ 8.00	\$ 120,000.00
6.02	IMPORT MATERIAL (BUDGET)	3,500	CY	\$ 40.00	\$ 140,000.00
6.03	ROCK REMOVAL (BUDGET)	1,800	CY	\$ 165.00	\$ 297,000.00
6.04	CLEARING & GRUBBING (BUDGET)	11.5	AC	\$ 12,000.00	\$ 138,000.00
6.05	EROSION CONTROL (BUDGET)	11.5	AC	\$ 6,500.00	\$ 74,750.00
6.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	120	LF	\$ 200.00	\$ 24,000.00
6.07	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	158	EA	\$ 2,900.00	\$ 458,200.00
6.08	GRAVEL PARKING & DRIVEWAYS (INCLUDES WHEELSTOPS, BUDGET)	1	LS	\$ 140,000.00	\$ 140,000.00
6.09	BEACH DEVELOPMENT (SAND IMPORT, BUDGET)	3,600	CY	\$ 45.00	\$ 162,000.00
6.10	ACCELERATION & DECELERATION LANE (HD ASPHALT)	5,300	SF	\$ 8.50	\$ 45,050.00
6.11	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 560,000.00	\$ 560,000.00
6.12	BOAT LAUNCH EXPANSION (HD CONCRETE, BUDGET)	1	LS	\$ 18,000.00	\$ 18,000.00
6.13	LARGE PAVILION (BUDGET)	1	LS	\$ 275,000.00	\$ 275,000.00
6.14	SMALL PAVILION (BUDGET)	1	LS	\$ 125,000.00	\$ 125,000.00
6.15	RESTROOM BUILDING ( BUDGET)	3	EA	\$ 225,000.00	\$ 675,000.00
6.16	KIOSK (BUDGET)	1	EA	\$ 6,500.00	\$ 6,500.00
6.17	LARGE PLAYGROUND (BUDGET)	1	LS	\$ 800,000.00	\$ 800,000.00
6.18	RETAINING WALLS (MODULAR BLOCK, BUDGET)	2,000	SFF	\$ 30.00	\$ 60,000.00
6.19	SEA WALL (BUDGET)	1	LS	\$ 75,000.00	\$ 75,000.00
6.20	SITE LIGHTING (BUDGET)	12	EA	\$ 6,000.00	\$ 72,000.00
6.21	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
6.22	SITE FURNISHINGS (BUDGET)	1	LS	\$ 150,000.00	\$ 150,000.00
6.23	FIRE SERVICE (8" DIP, BUDGET)	500	LF	\$ 35.00	\$ 17,500.00
6.24	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
6.25	WATER SERVICE (2" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 40,000.00	\$ 40,000.00
6.26	SEPTIC SYSTEM (BUDGET)	1	LS	\$ 75,000.00	\$ 75,000.00
6.27	STORMWATER INFRASTRUCTURE (BUDGET)	11.5	AC	\$ 10,000.00	\$ 115,000.00
6.28	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
6.29	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 120,000.00	\$ 120,000.00

**MOUNTAIN TRAILHEAD & ZIP-LINE**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 5,151,100.00</b>
7.01	MASS GRADING (BUDGET)	40,000	CY	\$ 8.00	\$ 320,000.00
7.02	EXPORT MATERIAL (BUDGET)	3,500	CY	\$ 25.00	\$ 87,500.00
7.03	ROCK REMOVAL (BUDGET)	5,000	CY	\$ 165.00	\$ 825,000.00
7.04	CLEARING & GRUBBING (BUDGET)	5.3	AC	\$ 12,000.00	\$ 63,600.00
7.05	EROSION CONTROL (BUDGET)	1	LS	\$ 250,000.00	\$ 250,000.00
7.06	GRAVEL PARKING & DRIVEWAYS (INCLUDES WHEELSTOPS, BUDGET)	1	LS	\$ 310,000.00	\$ 310,000.00
7.07	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 45,000.00	\$ 45,000.00
7.08	TRAILHEAD (INCLUDES RESTROOMS, SIGNAGE, BIKE REPAIR, KIOSK, BUDGET)	1	LS	\$ 375,000.00	\$ 375,000.00
7.09	ZIP-LINE FACILITIES (BUDGET)	1	LS	\$ 2,250,000.00	\$ 2,250,000.00
7.10	RETAINING WALLS (MODULAR BLOCK, BUDGET)	3,750	SFF	\$ 30.00	\$ 112,500.00
7.11	SITE LIGHTING (BUDGET)	14	EA	\$ 6,000.00	\$ 84,000.00
7.12	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
7.13	SITE FURNISHINGS (BUDGET)	1	LS	\$ 20,000.00	\$ 20,000.00
7.14	FIRE SERVICE (8" DIP, BUDGET)	1,500	LF	\$ 35.00	\$ 52,500.00
7.15	FIRE HYDRANTS (BUDGET)	3	EA	\$ 6,000.00	\$ 18,000.00
7.16	WATER SERVICE (4" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 103,000.00	\$ 103,000.00
7.17	SEPTIC SYSTEM (BUDGET)	1	LS	\$ 50,000.00	\$ 50,000.00
7.18	STORMWATER INFRASTRUCTURE (BUDGET)	5.3	AC	\$ 10,000.00	\$ 53,000.00
7.19	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
7.20	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00



**TRAILS**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 895,000.00</b>
8.01	12' W PRIMARY LOOP TRAIL (2.5 MILES, SELECTIVE CLEARING & GRUBBING, NATURAL SURFACE, BUDGET)	1	LS	\$ 75,000.00	\$ 75,000.00
8.02	SPUR TRAILS (8.8 MILES, SELECTIVE CLEARING & GRUBBING, NATURAL SURFACE, BUDGET)	1	LS	\$ 220,000.00	\$ 220,000.00
8.03	MOUNTAIN BIKE TRAILS (7.2 MILES, SELECTIVE CLEARING & GRUBBING, NATURAL SURFACE, BUDGET)	1	LS	\$ 200,000.00	\$ 200,000.00
8.04	SMALL BRIDGE (BUDGET)	5	EA	\$ 50,000.00	\$ 250,000.00
8.05	LARGE BRIDGE (BUDGET)	2	EA	\$ 75,000.00	\$ 150,000.00

# Final Master Plan Opinion of Probable Costs



**YAHOOOLA CREEK RESERVOIR**  
**OPINION OF PROBABLE COST**  
 1/13/2021

Project No. 19103

**SUMMARY SHEET**

ITEM NO.	DESCRIPTION	TOTAL
1	GENERAL SITE	\$ 8,241,500.00
2	LODGE & CONFERENCE	\$ 73,209,900.00
3	AMPHITHEATER AREA	\$ 15,823,000.00
4	WELCOME CENTER - UPLAND TRAIL	\$ 6,315,600.00
5	RV CAMPSITES	\$ 2,595,500.00
6	ROADSIDE PARK	\$ 4,809,600.00
7	MOUNTAIN BIKE TRAILHEAD	\$ 2,891,100.00
8	TRAILS	\$ 895,000.00
9	ZIP LINE FACILITIES (BUDGET)	\$ 2,250,000.00
<b>SUBTOTAL</b>		<b>\$ 117,031,200.00</b>
	PROJECT FEES AND BONDS (3% OF SUBTOTAL)	\$ 3,510,936.00
	MOBILIZATION (2% OF SUBTOTAL)	\$ 2,340,624.00
	DESIGN CONTINGENCY (15% OF SUBTOTAL)	\$ 17,554,680.00
<b>TOTAL</b>		<b>\$ 140,437,440.00</b>

**ADDITIONAL NOTES**

- Unless otherwise noted, all unit prices reflect the furnishing of all labor, mobilization, materials, supplies, services, etc. and all items of cost, overhead, profit, insurance, taxes, fees permits, etc.
- Unless otherwise noted, all unit prices DO NOT include earth moving necessary for installation; earth moving shall be reflected in specified line items (e.g. Earthwork, Undercutting, etc.)
- All unit prices are current as of the date listed on this document.
- Estimates of construction quantities and opinion of probable costs provided by us are made on the basis of our experience and the level of design. They represent our best judgment as design professionals. We cannot and do not, however, guarantee that the actual construction quantities or costs will not vary from our quantities and cost estimates. Lose Design makes no warranty, expressed or implied, for the accuracy of such opinions as compared to bid or actual costs.

## GENERAL SITE

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 8,241,500.00</b>
1.01	MASS GRADING (BUDGET)	145,000	CY	\$ 6.00	\$ 870,000.00
1.02	EXPORT MATERIAL (BUDGET)	53,000	CY	\$ 25.00	\$ 1,325,000.00
1.03	ROCK REMOVAL (BUDGET)	18,000	CY	\$ 165.00	\$ 2,970,000.00
1.04	CLEARING & GRUBBING (BUDGET)	8.5	AC	\$ 12,000.00	\$ 102,000.00
1.05	EROSION CONTROL (BUDGET)	1	LS	\$ 250,000.00	\$ 250,000.00
1.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	5,000	LF	\$ 200.00	\$ 1,000,000.00
1.07	GRAVEL PARKING & DRIVEWAYS (INCLUDES WHEELSTOPS, BUDGET)	1	LS	\$ 124,000.00	\$ 124,000.00
1.08	WATER RECREATION DOCK & ADA CANOE LAUNCH (BUDGET)	1	LS	\$ 54,000.00	\$ 54,000.00
1.09	RETAINING WALLS (MODULAR BLOCK, BUDGET)	30,500	SFF	\$ 30.00	\$ 915,000.00
1.10	SITE LIGHTING (BUDGET)	34	EA	\$ 6,000.00	\$ 204,000.00
1.11	SITE SIGNS (ENTRY, BUDGET)	1	LS	\$ 15,000.00	\$ 15,000.00
1.12	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
1.13	FIRE SERVICE (8" DIP, BUDGET)	3,500	LF	\$ 35.00	\$ 122,500.00
1.14	FIRE HYDRANTS (BUDGET)	5	EA	\$ 6,000.00	\$ 30,000.00
1.15	SANITARY SEWER (8" PVC, INCLUDES STRUCTURES, BUDGET)	2,400	LF	\$ 70.00	\$ 168,000.00
1.16	STORMWATER INFRASTRUCTURE (BUDGET)	8.5	AC	\$ 10,000.00	\$ 85,000.00



**LODGE & CONFERENCE**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 73,209,900.00</b>
2.01	MASS GRADING (BUDGET)	365,000	CY	\$ 4.00	\$ 1,460,000.00
2.02	EXPORT MATERIAL (BUDGET)	180,000	CY	\$ 25.00	\$ 4,500,000.00
2.03	ROCK REMOVAL (BUDGET)	46,000	CY	\$ 165.00	\$ 7,590,000.00
2.04	CLEARING & GRUBBING (BUDGET)	15	AC	\$ 12,000.00	\$ 180,000.00
2.05	EROSION CONTROL (BUDGET)	15	AC	\$ 12,000.00	\$ 180,000.00
2.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	2,800	LF	\$ 200.00	\$ 560,000.00
2.07	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	506	EA	\$ 2,900.00	\$ 1,467,400.00
2.08	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 575,000.00	\$ 575,000.00
2.09	LODGE & CONFERENCE CENTER (TWO STORY, 200,000 SF, BUDGET)	1	LS	\$ 55,000,000.00	\$ 55,000,000.00
2.10	RETAINING WALLS (MODULAR BLOCK, BUDGET)	26,000	SFF	\$ 30.00	\$ 780,000.00
2.11	SITE LIGHTING (BUDGET)	12	EA	\$ 6,000.00	\$ 72,000.00
2.12	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
2.13	SITE FURNISHINGS (BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
2.14	FIRE SERVICE (8" DIP, BUDGET)	2,500	LF	\$ 35.00	\$ 87,500.00
2.15	FIRE HYDRANTS (BUDGET)	4	EA	\$ 6,000.00	\$ 24,000.00
2.16	WATER SERVICE (4" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 102,000.00	\$ 102,000.00
2.17	SANITARY SEWER (8" PVC, INCLUDES STRUCTURES & TAP FEE, BUDGET)	1,000	LF	\$ 75.00	\$ 75,000.00
2.18	STORMWATER INFRASTRUCTURE (BUDGET)	15	AC	\$ 10,000.00	\$ 150,000.00
2.19	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
2.20	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 200,000.00	\$ 200,000.00

**AMPHITHEATER AREA**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 15,823,000.00</b>
3.01	MASS GRADING (BUDGET)	160,000	CY	\$ 6.00	\$ 960,000.00
3.02	IMPORT MATERIAL (BUDGET)	96,500	CY	\$ 40.00	\$ 3,860,000.00
3.03	ROCK REMOVAL (BUDGET)	20,000	CY	\$ 165.00	\$ 3,300,000.00
3.04	CLEARING & GRUBBING (BUDGET)	10.4	AC	\$ 12,000.00	\$ 124,800.00
3.05	EROSION CONTROL (BUDGET)	10.4	AC	\$ 12,000.00	\$ 124,800.00
3.06	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	436	EA	\$ 2,900.00	\$ 1,264,400.00
3.07	OVERFLOW PARKING AREA (REINFORCED GRASS PAVERS, BUDGET)	82,000	SF	\$ 4.00	\$ 328,000.00
3.08	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 400,000.00	\$ 400,000.00
3.09	TICKET BOOTH (BUDGET)	4	EA	\$ 150,000.00	\$ 600,000.00
3.10	CONCESSIONS & RESTROOM BUILDING (BUDGET)	4	EA	\$ 338,000.00	\$ 1,352,000.00
3.11	AMPHITHEATER (INCLUDES STAGE, RAMPS, SHADE STRUCTURE, STORAGE, MECHANICAL, BUDGET)	1	LS	\$ 1,500,000.00	\$ 1,500,000.00
3.12	SEAT WALLS (CIP, BUDGET)	138	CY	\$ 500.00	\$ 69,000.00
3.13	RETAINING WALLS (MODULAR BLOCK)	28,500	SFF	\$ 30.00	\$ 855,000.00
3.14	SITE LIGHTING (BUDGET)	8	EA	\$ 6,000.00	\$ 48,000.00
3.15	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
3.16	SITE FURNISHINGS (BUDGET)	1	LS	\$ 300,000.00	\$ 300,000.00
3.17	FIRE SERVICE (8" DIP, BUDGET)	1,400	LF	\$ 35.00	\$ 49,000.00
3.18	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
3.19	WATER SERVICE (4" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 120,000.00	\$ 120,000.00
3.20	SANITARY SEWER (8" PVC, INCLUDES STRUCTURES & TAP FEE, BUDGET)	1	LS	\$ 170,000.00	\$ 170,000.00
3.21	STORMWATER INFRASTRUCTURE (BUDGET)	10.4	AC	\$ 10,000.00	\$ 104,000.00
3.22	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
3.23	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 175,000.00	\$ 175,000.00

**WELCOME CENTER - UPLAND TRAIL**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 6,315,600.00</b>
4.01	MASS GRADING (BUDGET)	140,000	CY	\$ 6.00	\$ 840,000.00
4.02	IMPORT MATERIAL (BUDGET)	3,600	CY	\$ 40.00	\$ 144,000.00
4.03	ROCK REMOVAL (BUDGET)	17,500	CY	\$ 165.00	\$ 2,887,500.00
4.04	CLEARING & GRUBBING (BUDGET)	3.7	AC	\$ 12,000.00	\$ 44,400.00
4.05	EROSION CONTROL (BUDGET)	3.7	AC	\$ 12,000.00	\$ 44,400.00
4.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	600	LF	\$ 200.00	\$ 120,000.00
4.07	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	132	EA	\$ 2,900.00	\$ 382,800.00
4.08	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 320,000.00	\$ 320,000.00
4.09	WELCOME CENTER (BUDGET)	1	LS	\$ 850,000.00	\$ 850,000.00
4.10	RESTROOM BUILDING (BUDGET)	1	LS	\$ 225,000.00	\$ 225,000.00
4.11	KIOSK (BUDGET)	1	EA	\$ 6,500.00	\$ 6,500.00
4.12	RETAINING WALLS (MODULAR BLOCK, BUDGET)	3,500	SFF	\$ 30.00	\$ 105,000.00
4.13	CULTURAL RESOURCE EXHIBITS (BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
4.14	SITE LIGHTING (BUDGET)	6	EA	\$ 6,000.00	\$ 36,000.00
4.15	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
4.16	SITE FURNISHINGS (BUDGET)	1	LS	\$ 50,000.00	\$ 50,000.00
4.17	FIRE SERVICE (8" DIP, BUDGET)	400	LF	\$ 35.00	\$ 14,000.00
4.18	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
4.19	EXISTING WATER SERVICE (BUDGET)	1	LS	\$ 20,000.00	\$ 20,000.00
4.20	SEPTIC SYSTEM (BUDGET)	1	LS	\$ 70,000.00	\$ 70,000.00
4.21	STORMWATER INFRASTRUCTURE (BUDGET)	3.7	AC	\$ 10,000.00	\$ 37,000.00
4.22	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
4.23	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 50,000.00	\$ 50,000.00

**RV CAMPSITES**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 2,595,500.00</b>
5.01	MASS GRADING (BUDGET)	10,000	CY	\$ 8.00	\$ 80,000.00
5.02	CLEARING & GRUBBING, SELECTIVE	5.3	AC	\$ 7,500.00	\$ 39,750.00
5.03	EROSION CONTROL (BUDGET)	5.3	AC	\$ 6,500.00	\$ 34,450.00
5.04	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	600	LF	\$ 200.00	\$ 120,000.00
5.05	RV PARKING (PERVIOUS CONCRETE, INCLUDES GRILL, FIREPIT, WATER	48	EA	\$ 10,350.00	\$ 496,800.00
5.06	RESTROOM BUILDING ( 1,500 SF, BUDGET)	3	LS	\$ 337,000.00	\$ 1,011,000.00
5.07	SMALL PLAYGROUND (BUDGET)	1	LS	\$ 150,000.00	\$ 150,000.00
5.08	RETAINING WALLS (MODULAR BLOCK, BUDGET)	4,000	SFF	\$ 30.00	\$ 120,000.00
5.09	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
5.10	SITE FURNISHINGS (BUDGET)	1	LS	\$ 250,000.00	\$ 250,000.00
5.11	FIRE SERVICE (8" DIP, BUDGET)	400	LF	\$ 35.00	\$ 14,000.00
5.12	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
5.13	WATER SERVICE (1.5" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 69,000.00	\$ 69,000.00
5.14	SANITARY WASTE STATION (BUDGET)	1	LS	\$ 40,000.00	\$ 40,000.00
5.15	SANITARY SEWER DISPOSAL (BUDGET)	1	LS	\$ 5,000.00	\$ 5,000.00
5.16	STORMWATER INFRASTRUCTURE (BUDGET)	5.3	AC	\$ 5,000.00	\$ 26,500.00
5.17	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
5.18	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 175,000.00	\$ 175,000.00

**ROADSIDE PARK**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 4,809,600.00</b>
6.01	MASS GRADING (BUDGET)	15,000	CY	\$ 8.00	\$ 120,000.00
6.02	IMPORT MATERIAL (BUDGET)	3,500	CY	\$ 40.00	\$ 140,000.00
6.03	ROCK REMOVAL (BUDGET)	1,800	CY	\$ 165.00	\$ 297,000.00
6.04	CLEARING & GRUBBING (BUDGET)	11.5	AC	\$ 12,000.00	\$ 138,000.00
6.05	EROSION CONTROL (BUDGET)	11.5	AC	\$ 6,500.00	\$ 74,750.00
6.06	ROADS & DRIVEWAYS (24' W, PERVIOUS ASPHALT W/ CONCRETE CURB & GUTTER, BUDGET)	120	LF	\$ 200.00	\$ 24,000.00
6.07	PARKING (PERVIOUS ASPHALT DRIVELANE, PERMEABLE PAVER BAYS, CONCRETE CURB & GUTTER, WHEELSTOPS, STRIPING)	152	EA	\$ 2,900.00	\$ 440,800.00
6.08	GRAVEL PARKING & DRIVEWAYS (INCLUDES WHEELSTOPS, BUDGET)	1	LS	\$ 140,000.00	\$ 140,000.00
6.09	BEACH DEVELOPMENT (SAND IMPORT, BUDGET)	3,600	CY	\$ 45.00	\$ 162,000.00
6.10	ACCELERATION & DECELERATION LANE (HD ASPHALT)	5,300	SF	\$ 8.50	\$ 45,050.00
6.11	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 560,000.00	\$ 560,000.00
6.12	BOAT LAUNCH EXPANSION (HD CONCRETE, BUDGET)	1	LS	\$ 18,000.00	\$ 18,000.00
6.13	LARGE PAVILION (BUDGET)	1	LS	\$ 275,000.00	\$ 275,000.00
6.14	SMALL PAVILION (BUDGET)	1	LS	\$ 125,000.00	\$ 125,000.00
6.15	RESTROOM BUILDING ( BUDGET)	3	EA	\$ 225,000.00	\$ 675,000.00
6.16	KIOSK (BUDGET)	1	EA	\$ 6,500.00	\$ 6,500.00
6.17	LARGE PLAYGROUND (BUDGET)	1	LS	\$ 800,000.00	\$ 800,000.00
6.18	RETAINING WALLS (MODULAR BLOCK, BUDGET)	2,000	SFF	\$ 30.00	\$ 60,000.00
6.19	SEA WALL (BUDGET)	1	LS	\$ 75,000.00	\$ 75,000.00
6.20	SITE LIGHTING (BUDGET)	12	EA	\$ 6,000.00	\$ 72,000.00
6.21	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
6.22	SITE FURNISHINGS (BUDGET)	1	LS	\$ 150,000.00	\$ 150,000.00
6.23	FIRE SERVICE (8" DIP, BUDGET)	500	LF	\$ 35.00	\$ 17,500.00
6.24	FIRE HYDRANTS (BUDGET)	2	EA	\$ 6,000.00	\$ 12,000.00
6.25	WATER SERVICE (2" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 40,000.00	\$ 40,000.00
6.26	SEPTIC SYSTEM (BUDGET)	1	LS	\$ 75,000.00	\$ 75,000.00
6.27	STORMWATER INFRASTRUCTURE (BUDGET)	11.5	AC	\$ 10,000.00	\$ 115,000.00
6.28	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00
6.29	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 120,000.00	\$ 120,000.00



**MOUNTAIN BIKE TRAILHEAD**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 2,891,100.00</b>
7.01	MASS GRADING (BUDGET)	40,000	CY	\$ 8.00	\$ 320,000.00
7.02	EXPORT MATERIAL (BUDGET)	3,500	CY	\$ 25.00	\$ 87,500.00
7.03	ROCK REMOVAL (BUDGET)	5,000	CY	\$ 165.00	\$ 825,000.00
7.04	CLEARING & GRUBBING (BUDGET)	5.3	AC	\$ 12,000.00	\$ 63,600.00
7.05	EROSION CONTROL (BUDGET)	1	LS	\$ 250,000.00	\$ 250,000.00
7.06	GRAVEL PARKING & DRIVEWAYS (INCLUDES WHEELSTOPS, BUDGET)	1	LS	\$ 300,000.00	\$ 300,000.00
7.07	SIDEWALKS & PLAZA AREAS (PERVIOUS, BUDGET)	1	LS	\$ 45,000.00	\$ 45,000.00
7.08	TRAILHEAD (INCLUDES RESTROOMS, SIGNAGE, BIKE REPAIR, KIOSK, BUDGET)	1	LS	\$ 375,000.00	\$ 375,000.00
7.09	RETAINING WALLS (MODULAR BLOCK, BUDGET)	3,750	SFF	\$ 30.00	\$ 112,500.00
7.10	SITE LIGHTING (BUDGET)	14	EA	\$ 6,000.00	\$ 84,000.00
7.11	SITE SIGNS (VEHICULAR, BUDGET)	1	LS	\$ 7,000.00	\$ 7,000.00
7.12	SITE FURNISHINGS (BUDGET)	1	LS	\$ 20,000.00	\$ 20,000.00
7.13	FIRE SERVICE (8" DIP, BUDGET)	1,500	LF	\$ 35.00	\$ 52,500.00
7.14	FIRE HYDRANTS (BUDGET)	3	EA	\$ 6,000.00	\$ 18,000.00
7.15	WATER SERVICE (4" PVC, INCLUDES METER FEE, BUDGET)	1	LS	\$ 103,000.00	\$ 103,000.00
7.16	SEPTIC SYSTEM (BUDGET)	1	LS	\$ 50,000.00	\$ 50,000.00
7.17	STORMWATER INFRASTRUCTURE (BUDGET)	5.3	AC	\$ 10,000.00	\$ 53,000.00
7.18	ELEC. SERVICE (CONNECTION, BUDGET)	1	LS	\$ 100,000.00	\$ 100,000.00
7.19	LANDSCAPE & IRRIGATION (BUDGET)	1	LS	\$ 25,000.00	\$ 25,000.00

**TRAILS**

ITEM	COMPONENTS	QTY.	UNIT	UNIT PRICE	SUBTOTAL
<b>TOTAL</b>					<b>\$ 895,000.00</b>
8.01	PRIMARY LOOP TRAIL, WIDTH VARIES (+/- 2 MILES, SELECTIVE CLEARING & GRUBBING, NATURAL SURFACE, BUDGET)	1	LS	\$ 75,000.00	\$ 75,000.00
8.02	SPUR TRAILS (SELECTIVE CLEARING & GRUBBING, NATURAL SURFACE, BUDGET, UP TO 9 MILES)	1	LS	\$ 220,000.00	\$ 220,000.00
8.03	MOUNTAIN BIKE TRAILS (SELECTIVE CLEARING & GRUBBING, NATURAL SURFACE, BUDGET, UP TO 7 MILES)	1	LS	\$ 200,000.00	\$ 200,000.00
8.04	SMALL BRIDGE (BUDGET)	5	EA	\$ 50,000.00	\$ 250,000.00
8.05	LARGE BRIDGE (BUDGET)	2	EA	\$ 75,000.00	\$ 150,000.00

Prepared for  
Lumpkin County, Georgia

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