NCGROWTH ECONOMIC IMPACT ANALYSIS



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FRENCH BROAD RIVER ACCESS STUDY

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ABSTRACT

The Outdoor Economy is a significant economic sector that is rapidly growing. While Outdoor Recreation opportunities can help diversify rural economies, it can be difficult to effectively leverage these assets. In Transylvania County, the French Broad River is one such asset. By focusing on the upper section of the French Broad River Paddle Trail, Transylvania County can attract more river tourism and build local support through creating a sense of community.

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EXECUTIVE SUMMARY

PURPOSE

The purpose of the Transylvania County French Broad River Access Study is to help Transylvania County, other government agencies, funders, and other community stakeholders to:

- understand the assets, opportunities, and challenges associated with increased development of the French Broad River;
- identify properties and other opportunities to increase usage and stewardship of the river, and
- create a recommendation to implement these projects and bolster usage of the French Broad River in Transylvania County.

ACTIVITIES

This project conducted the following activities:

- Mapped and analyzed the existing access points and potential future access points on the French Broad River.
- Conducted a literature review and case study analysis to assess best practices and guidelines for access point infrastructure.
- Created a survey for future assessment of river users.

ACTION PLAN

This French Broad River Access Study provides the following information:

- An overview of the opportunities, assets, and challenges identified with usage of the French Broad River
- Project recommendations for infrastructure and marketing initiatives
- Funding opportunities for advancing river usage as an economic driver in Transylvania
 County
- · Suggestions for survey administration

FINDINGS

The findings reflect ideas generated from existing literature on best practices regarding the outdoor economy, and case studies from other communities facing similar challenges. Overall, the research suggests a focus on projects that strengthen the entire French Broad River Paddle Trail system, with an emphasis on enhancing existing infrastructure, marketing, and branding components, and sustainability efforts of the paddle trail system.

PROJECT RECOMMENDATIONS INCLUDE:

- Support existing river access points and consider additional camping infrastructure
- Expand trip planning resources and marketing efforts
- Improve wayfinding along the river and in town
- Explore partnerships and opportunities to facilitate communication and outreach
- Collaborate with other organizations to improve information sharing and planning needs

TRANSYLVANIA COUNTY OVERVIEW: ASSETS, OPPORTUNITIES, CHALLENGES

Transylvania County is a land rich in history, culture, and natural resources. Transylvania County is known as the Land of Waterfalls and it is home to Pisgah National Forest, DuPont State Forest, Gorges State Park, Headwaters State Park, and a portion of Nantahala National Forest, which help to preserve the natural beauty of the region while offering access to rock climbing, hundreds of miles of hiking and biking trails as well as hundreds of miles of fishable streams. The Blue Ridge Parkway also runs through the western edge of the county. The county is located in Western North Carolina in the Appalachian Mountains. It is a short drive from Interstate-26, Interstate-40, and the Asheville Regional Airport. It is within a day's drive of several metro areas including Greenville, Spartanburg, Atlanta, and Charlotte. The county includes the incorporated municipalities of The City of Brevard and the Town of Rosman.

The French Broad River, one of the oldest rivers in the world, begins near the Town of Rosman and flows north through the county past the City of Brevard. While it is currently an underutilized asset, examples from other communities show that paddle trails – both rural and urban – help to foster a sense of community while contributing to the economic diversity of a community. The availability and access to these natural resources provide Transylvania County with many opportunities to leverage these resources to serve as economic drivers for the county.

For over five years, Transylvania County has contributed \$25,000 to debris removal and collaborates with the Soil and Water Department. In 2018, the Transylvania Tourism Development Authority and the North Carolina State Legislature granted an additional \$10,000 and \$20,000 respectively for debris removal efforts. There are many passionate non-profits, private businesses, and volunteer organizations that are dedicated to maintaining and developing the paddle trail. The upper section of the French Broad has seven official access points and one unofficial access point in addition two riverside camping options. The river flows by two hub towns in the county: Rosman and Brevard. River activities are within a day's drive of major population centers such as the Charlotte metro area within an hour's drive from the Greenville-Spartanburg metro area.

The county and its partners have the opportunity to develop more camping options along or near the river. Access points with more developed infrastructure around the town of Brevard will help build Brevard as a river hub town. Rosman has been able to leverage the use of Champion Park, community events such as the Upper French Broad River Festival, and private outfitters to attract river users. Significant improvements to the Lyon's Mountain Road access site will facilitate shorter trips near Rosman.

The promotion of existing community events such as the Upper French Broad River Festival and the potential to add more events will help bring the community and tourists together around the river. The extensions of the shoulder seasons can bring in more fishing opportunities with additional marketing. The narrower section and the rural setting attract river users looking to get away from the city and spend time in nature. This section provides ample opportunity for families, novice and recreational river users looking for a calm river experience. The proximity to Rosman and Brevard provides families and other river users the opportunity to patron local restaurants, breweries, art galleries, outfitters, and other shopping and entertainment opportunities.

The Outdoor Recreation Economy in North Carolina generates \$28 billion in consumer spending annually - more than financial services and insurance. It contributes to 260,000 direct jobs, \$8.3 billion in wages and salaries, and \$1.3 billion in state and local tax revenue.

LITERATURE REVIEW AND CASE STUDIES: KEY FINDINGS OVERVIEW

This French Broad River Access Study used a traditional literature review approach to research best practices in leveraging, building, and maintaining outdoor resources such as the access points on the French Broad River. This report also conducted a review of case studies to draw out the experience and knowledge of existing communities that have developed their rivers and leveraged them for community and economic development. The purpose of this research was to better understand (1) what is and what is not working to draw in users on the river, and (2) new ideas to increase the usage of the river, further develop existing access points, and capture more market opportunities locally and regionally.

Today, the Outdoor Recreation Economy is an important and fast-growing sector in the U.S. Economy. In North Carolina, over half of all residents participate in outdoor recreation each year; this contributes to a high quality of life, and it attracts families and employers. The Outdoor Recreation Economy in North Carolina generates \$28 billion in consumer spending annually, which is more than financial services and insurance. This consumer spending includes dollars spent on outdoor recreation products including gear, apparel, and equipment as well as trip and travel spending, which includes food, lodging, and guide services. It also contributes to 260,000 direct jobs, \$8.3 billion in wages and salaries, and \$1.3 billion in state and local tax revenue. In addition to its direct economic impact, the outdoor economy helps to diversify the local economy and improve quality of life, attracting entrepreneurs and employers from other sectors ("Outdoor Recreation Economy Report," 2017).

Many communities choose to leverage rivers as regional paddle trails otherwise known as "blueways." While the French Broad River as a whole is an ideal candidate for this type of paddle trail and many different parties are interested in building on the existing blueway, this report focuses solely on the portion of the French Broad that flows through Transylvania County. As the origin of the French Broad River, Transylvania County has the unique opportunity to help shape and influence the larger project of enhancing the regional river paddle trail. Through enhancing existing infrastructure and conditions along the river, Transylvania County can increase river usage and solidify the connection between the river and the "hub towns" of Rosman and Brevard.

LESSONS FROM CASE STUDIES

This report surveys case studies from other communities that engaged in paddle trail development such as Chattanooga, TN, the Roanoke River Trail in North Carolina, the Upper Delaware River in New York, the Suwannee River Wilderness Trail in Florida, and the Three Rivers and Juniata river trails in Pennsylvania. These cases and others highlight a mix of rural and urban settings through which the paddle trails run. They highlight the distinct opportunities that each setting offers and ways in which other communities can better leverage their resources.

BLUEWAYS PROVIDE RIVER ACCESS FOR FAMILIES AND BOATERS AND THEY CONNECT RIVER USERS TO TOWNS.

Paddle trails are more than merely waterways; these trails offer facilities and access for boaters who primarily operate from non-motor-powered crafts such as canoes, kayaks, stand-up-paddle boards and more. According to the National Park Service, a blueway is a waterway that is mapped to highlight the scenic, educational, and outdoor recreation experience for users (National Water Trails System). These water trails serve as more than recreational opportunities; they also provide communities the opportunity to educate the public on the importance of watersheds and river ecosystems. These water trails provide diverse economic benefits for local communities as well. Businesses related to food, lodging, and transportation benefit from the outdoor recreation economy as well as businesses directly related to outdoor recreation such as guiding services, outdoor recreational gear and apparel, and outdoor equipment sales and rentals. By increasing the connectivity between outdoor recreational opportunities and hub towns gives paddlers the opportunity to extend their stay and frequent other businesses and events within the community such as art galleries, markets, and musical events.

BLUEWAYS CREATE COMMUNITY SPACES AND OFFER VALUABLE EDUCATIONAL AND VOLUNTEER OPPORTUNITIES.

Through the creation and enhancement of water trails, communities can strengthen the connection between rivers and the local community. When users and community members are more connected and engaged with the river, they will have the opportunity to learn about and assist with efforts to improve water quality and clean-up efforts on the river. While there are many different paddle trails across the country to which we can look for guidance, it is essential

Paddle trails are more than merely waterways; these trails offer facilities and access for boaters. to remember that each community and river is distinct, and the most successful strategies will be tailored to local conditions.

BLUEWAYS BRING TOGETHER ORGANIZATIONS FROM THE PUBLIC, PRIVATE, AND NON-PROFIT SECTORS.

The development of blueways has not only an economic impact but also a social impact on local communities. As the community grows its reputation as a paddling destination, the number of retailers and outfitters will begin to increase (Johnson, 2002). Paddle destination communities can capture economic impact from river users through providing overnight stay options, whether in-town or through camping opportunities and access to downtown areas that offer different activities for river users. As paddlers are connected with more local retailers and campground options, they will spend more of their money locally ("Ecotourism in the Roanoke River Region," 2016). Some communities have usage fees and equipment rental programs to help offset the cost of maintenance (Kline, 2012). Because management and upkeep of a blueway involves many different stakeholders and other challenges, communities looking to capitalize on river trails should work toward a shared goal for the river with other community partners including other local governments and regional coalitions, volunteer groups, non-profits, and private businesses involved in paddle trail efforts.

There is a critical need to engage residents and landowners to generate buy-in with this project.

FOR SUCCESSFUL BLUEWAYS, IT IS CRITICAL TO ENGAGE RESIDENTS AND LANDOWNERS.

Blueways can create a sense of community and river stewardship. To successfully attract more river users, communities, particularly rural communities, should focus on internal marketing in addition to other tourism efforts (Alderson, 2018). Because there is a strong sense of community in Transylvania County and residents and resources management organizations alike are concerned with overuse of other natural resources, there is a critical need to engage residents and landowners to generate buy-in with this project. In addition to internal marketing, concerns around land use along the river can be mitigated with clearly marked and readily available information regarding public access to the river and available camping areas.

USER PROFILE AND TRENDS IN PADDLE SPORTS

Paddle Sports include canoeing, kayaking, stand-up paddle boarding, rafting, and tubing, and it is one of the fastest-growing segments of outdoor recreation with 22.9 million participants nationwide according to the Outdoor Industry Association's 2019 Special Report on paddle sports and safety. With over 215 million annual outings, participants are going on an average of over seven outings per year. This correlates favorably with data from the 2018 North Carolina Region Visitor Profile which states that 63 percent of visitors to the Mountain Region have visited more than three times in the past five years. Paddlers also participate in "cross-over" activities many of which include other outdoor recreation activities such as hiking (42%), running (39%), road biking (37%), fishing (35%), and camping (34%). Of the paddle sports, kayaking is the most popular, with many kayakers averaging eight outings per year. The primary motivations

for paddlers include getting exercise and staying fit, being with friends and family, experience nature, experience adventure and excitement, and getting away from day-to-day demands. Paddlers can be placed into one of three experience categories; 27 percent rate themselves as avid paddlers, 56 percent rate themselves as recreational participants, and 17 percent rate themselves as novice paddlers (Beedle, 2008). Many novice and recreational paddlers who do not own their own boats prefer to rent from onsite rentals and of the paddler categories, users wishing to participate in stand-up paddle boarding used onsite rental providers more than any other category (Outdoor Industry Association, 2019).

Paddle Sports is one of the fastestgrowing segments of outdoor recreation with 22.9 million participants nationwide.

User Profile: Experience Level, Cross-Over Activities, and Motivations

Paddler Categories	Preferred Cross-Over Activities	Primary Motivations
26.8% Avid	42% Hiking	72% Getting Exercise
56% Recreational	39% Running	59% Being with friends and family
17.2% Novice	37% Road Biking	57% Experiencing Nature

Canoeing

Gender	Age	Hours Spent Planning	Hours Spent Paddling	Preferred Rental Options
47% Female	19.5% 25-34	2.5	4.6	59% Onsite Rental
53% Male	16.2% 35-44			21%Local Independent Outdoor Specialty Store
				19% Outdoor Specialty Chain

Kayaking

Gender	Age	Hours Spent Planning	Hours Spent Paddling	Preferred Rental Options
49% Female	21.2% 25-34	1.9	3.9	65% Onsite Rentals
51% Male	15.5% 35-44			21% Local Independent Outdoor Specialty Store
				9% Outdoor Specialty Chain

Stand-Up Paddle Boarding

Gender	Age	Hours Spent Planning	Hours Spent Paddling	Preferred Rental Options
51% Female	27.5% 25-34	2.2	3.9	76% Onsite Rentals
49% Male	22.3% 35-44			18% Local Independent Outdoor Specialty Store
				4% Outdoor Specialty Chain

According to the North Carolina State Trails Program Paddle Tourism Study, the average profile of a river user is one that is typically well-educated and has a significant level of discretionary income. The most typical users are white males between 25-44 years old. However, demographics for outdoor recreation have been changing in recent years with women and minority populations, comprising an increasing percentage of outdoor recreation participants. Users tend to travel up to 3.5 hours to a paddle destination, which is similar to the visitor data for the Pisgah National Forest and DuPont State Forest. This distance is within driving distance of many major metropolitan areas and millions of people.

Amongst river users, top concerns are the quality and safety of access sites.

The relatively short distances between access points and calm nature of this section are ideal for families, novice, and recreational users. Transylvania County has the opportunity market to these user categories by providing additional signage and trip planning information. Improved facilities and the potential to add access between the Lyon's Mountain Road, Island Ford, and Hap Simpson access points will also improve the experiences for families, novice, and recreational paddlers.

The 2008 North Carolina Paddle Tourism Study suggests that most paddlers (71%) spend less than a full day on the river during an average paddling trip. A quarter of paddlers report spending between one to two days paddling. Three-quarters of paddlers prefer to take day trips and do not stay in overnight facilities. Of the overnight visitors, camping remains one of the top three choices for visitors with over half preferring primitive camping. Amongst river users, top concerns are the quality and safety of access sites, which this report will address in subsequent sections.

PADDLING SAFETY

Primary causes for accidents in or along rivers relate to hazardous waters, inexperience, inattention, alcohol consumption, and weather. Paddlers can create safer trips through proper planning such as creating a float plan with specific detailed information about the trip. Personal floatation devices, also known as PFDs, can be a simple and effective way to prevent drownings. There is a need to encourage more paddlers to bring and wear PFDs while on the river. "Where cause of death was known, 79 percent of paddle-related fatalities from 2015 to 2017 involved drownings. Of those drowning victims, an astounding 74 percent were not wearing personal flotation devices" (Outdoor Industry Association, 2019). In addition to PFDs and trip planning, paddlers can ensure safer trip conditions by carrying additional safety gear such as knives, first aid kits, tow lines, paddle leashes, whistles, and lights. The county can help users create safe and effective float plans through readily available trip planning information such as suggested routes and items to consider bringing. "Know before you go" information can be a useful way of providing updates regarding water and weather conditions.

"Where cause of death was known, 79 percent of paddle-related fatalities from 2015 to 2017 involved drownings. Of those drowning victims, an astounding 74 percent were not wearing personal flotation devices."

ECONOMICS

Because of the high level of discretionary income and the willingness of river users to go on multiple trips per year, the local economy can benefit from these demographics by encouraging other activities in the community in conjunction with river use. Although increasing river use and river tourism can have a positive impact on the local economy, direct spending from river recreation is insufficient to support a hub town fully. However, the economic impact generated from river tourism can help diversify the economy, and it can be a significant aspect of businesses related to the river. By increasing the connection of the paddle trail to local communities and spending opportunities, paddlers will be able to enjoy and visit other assets of the community.

A group may spend between \$250 and \$500 per trip.

Spending typically relates to categories such as equipment and supplies, travel, and food. A group may spend between \$250 and \$500 per trip. Visitors traveling from farther than 50 miles will typically spend more than \$500 per trip. Visitors traveling within 50 miles of their home will spend \$144 per trip. The average paddler group will spend around \$215 per trip in categories such as lodging, restaurants, grocery stores, and gas stations. Non-local visitors will spend around \$46 per person per day. Of the most common expenses, lodging accounts for 54 percent of spending, 59 percent on restaurants, 56 percent on groceries, and 45 percent on transportation. About 9.4 percent of visitors use guide services or outfitters, and 31 percent of visitors reported other retail spending (Beedle, 2008). Many kayakers own their own boat, while canoers were less likely to own their own boat. This is an important note when encouraging the growth of outfitters and retail companies related to river travel. However, communities can provide boat rentals to expand opportunities for novice and recreational paddlers as well as the overnight tourist populations.

A report by Kline et al. (2012) on the options for funding sustainable paddle trail development suggests that the characteristics of paddle trails are similar to those of greenways, and communities can expect similar benefits such as providing direct health benefits to the user and increasing the livability of communities. They suggest that greenways can run alongside blueways to capitalize on recreational trail management.

This study also categorized spending based on paddler experience level. Across paddler levels, the most money was spent on lodging, equipment, guiding and entrance fees, and other activities. Transportation and food were the two highest spending categories with recreational paddlers spending an average of \$168 on transportation to trips outside of their local area, a distance greater than 50 miles. This study suggests that many paddlers (64%) support additional funding options for blueway development with much of this support (33%) being for user fees. More on the potential of user fees as a funding source will be discussed in the recommendations section.

In addition to paddle sports, freshwater fishing and fly fishing are two outdoor recreation sectors with much potential. Fishing as an activity has continued to grow over the past eleven years with freshwater fishing being the most predominant type of fishing activity. Freshwater anglers also tallied the most fishing days per year in 2019 with an average of 16.2 days on the river. The average profile of a French Broad River angler is white, male, with an income of \$50,000 or more. Ages of anglers are evenly distributed. The top three barriers to fishing were a lack of access to waterways, too far to travel, and a preference for other outdoor activities ("2019 Special Report on Fishing"). Transylvania County is closely located to many population centers, and it can effectively cross-promote outdoor activities with fishing. With improved river access sites, the top three barriers to increasing fishing can be easily addressed.

FRENCH BROAD RIVER ACCESS POINT ANALYSIS:

OVERVIEW

In Transylvania County, the upper section of the river provides an enjoyable experience for novice and recreational paddlers. The river also supports several different types of fishing opportunities, including trout, largemouth bass, catfish, and musky (N.C. Wildlife Resources Commission, 2011). The opportunities for fishing and conducting overnight paddle trips can help extend the shoulder seasons for tourism in the spring and fall.

The river has suffered many environmental and water quality setbacks throughout its history, but water quality has been steadily improving through recent decades. Though the quality and environmental integrity of the river is better than it once was, the river and local communities still face challenges related to riverbank erosion, loss of riparian ecosystems, agricultural and urban runoff and waste, and recently due to a combination of factors, the dramatic increase of E.coli in the river. All these aspects factor into the general perception of the river and participants' willingness to utilize the river.

The section of the French Broad River in Transylvania County is characterized as agricultural, which means that it has a broad flood plain it is also an incised channel which means that for the majority of the river, the banks are much higher than average water level (Ogletree, 2011).

ACCESS POINT DISTANCE

In general, the distances between the access points are short enough to facilitate trip lengths ranging from a few hours to full-day and even overnight outings. There are seven public access points to the French Broad River in Transylvania County; there is an eighth informal access point that is listed on the French Broad River Paddle Trail website. The access points are managed by several different entities, including NCDOT, Transylvania County, the City of Brevard, and the NC Wildlife Commission. Lyons Mountain Rd. and Island Ford are 8.75 miles apart, and Island Ford to Hap Simpson Park is 9.75 miles apart. This section represents the farthest distance between access points. The county should consider any properties along the river in this section to create additional access points to facilitate trips for families, novice, and recreational users seeking to enjoy shorter river trips that are located closer to town. The section between Lyon's Mountain Rd. and Hap Simpson and the section between Hap Simpson Park and the Pisgah Forest Wilson Road access are the closest points to the hub town of Brevard, and they pass by many lodging and spending opportunities. The distance between access points close to Brevard, the central hub town, limits tubing trip options and spending opportunities for all visitors.

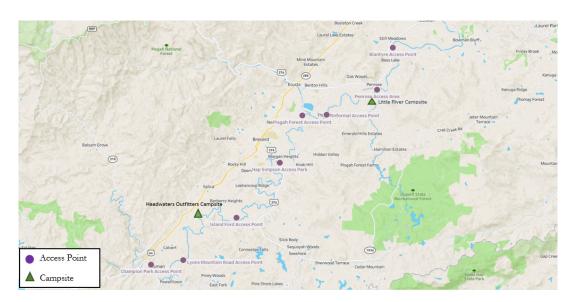


Figure 2 Existing Access Points in Transylvania County

ACCESS POINT AND CAMPSITE OWNERSHIP

Much of the land along the French Broad in Transylvania County is privately owned and agricultural. Existing access points are maintained by county and city departments and the NCDOT. While there are other camping options in the county, there are few camping options along the river. Currently, the only options for camping along the river are through Headwaters Outfitters at mile 8, and the Little River Campsite at mile 30 operated by MountainTrue.

RIVER HAZARDS

The upper section of the French Broad River is very calm and accessible for novice and recreational users as well as campers and families because the river is primarily Class I meaning there are no technical rapids or river features. The primary hazard in this section comes from fallen trees, branches, and other debris, also known as "strainers." Because this section of the river is more narrow than subsequent sections, strainers pose an increased safety risk compared with broader sections of the river. Heavy rains and flooding can also create unsafe conditions for river users particularly those with less experience. By providing information about water conditions such as water quality and water level the county can help river users plan effectively and enjoy safe trips on the river.

The advantage of this section is that there are no dams that obstruct river passage as there are in other sections of the river. There are consistent efforts and coordination between the county and other groups to address debris removal.

Primary challenges regarding access points include a lack of comprehensive information regarding trip planning, facilities, and river access information. There are few overnight options especially for those interested in camping, and land ownership limits options for paddlers wishing to have longer trips or those wishing to have shorter trips centered around hub towns.

PROJECT RECOMMENDATIONS:

Transylvania County should first seek to engage in strategic planning so that the vision and goals for this section of the French Broad River are clear and ensure a successful outcome of the project. There is the potential to overlap the vision of this project with other potential projects such as greenways and bike lanes.

It is vital that there be clear leadership and goals for the paddle trail before starting a significant marketing push. The strategic leadership team should examine the potential impacts that the paddle trail will have on local issues such as land values, traffic, and sustainability. Options for funding and partnerships should be explored as well as grants and any offers of assistance. Partnerships should bring together responsive government agencies, citizen and community groups, nonprofit organizations, and local businesses. Finally, managing entities should host events to draw in more visitor and community support and interest. These events will help to

advertise the paddle trail, generate positive attention, present accurate information, and create a positive community narrative around the river. Some suggestions for community events include paddle festivals, float parades, and water trail grand openings (Ogletree, 2011).

Opportunities to enhance visitor experiences and the economic impact of the French Broad River include recommendations for organizational and planning needs. Because the use of the river crosses many different sections of the French Broad River and municipal and county boundaries, managing entities, stakeholders, and the public must be involved in creating a shared vision for the paddle trail. By creating a shared vision and goal for the paddle trail, Transylvania County can create buy-in and generate interest amongst the community, which will help ensure the continued success and use of the paddle trail. Local community partners are often the most helpful in maintaining sections of the river and generating sustained interest and investment in the river. Additionally, by working with the community on developing the trail, managing entities can address concerns of citizens and landowners.

Recommendations to increase the usage of the French Broad River, create a desirable visitor experience, and minimize visitor impact on the environment and local landowners include updates to infrastructure. These updates include standardizing signage along the paddle trail, improving access to trip and travel information, adding more opportunities to learn about local history, culture, and environment, and connecting paddlers with other activities such as access to downtown areas, lodging options, museums, and other cultural and outdoor recreational opportunities. Additional updates include improving parking access and promoting sustainable usage through "leave no trace" outdoor ethics.

MANAGEMENT

Management of paddle trails can be conducted by a variety of groups or governmental agencies. Many community groups are invested in the care and long-term maintenance of river sections and facilities. Non-profit entities and private outfitters often collaborate to clean-up, maintain, and recruit volunteers to take care of and promote the paddle trail. Governmental agencies can assist these organizations through information sharing and problem-solving networks.

Communities and regions which have created, implemented and maintained successful blueway trails have coordinated management of the trails among many different agencies to gain consensus around access point signage, access, funding, clean-up efforts, and other aspects of trail development and maintenance. Consensus and buy-in are vitally important in maintaining a positive working relationship between government agencies, landowners, the paddling community, and nonprofits ("Rivers, Trails, and Conservation Assistance Program").

River users are generally unaware of differences in local ordinances; therefore, it is essential to share and consolidate information. Cooperation and collaboration between managing entities and other invested stakeholders help to share resources and expertise. Stewardship

and maintenance of the paddle trail and access sites can be increased through "adoption" programs in which organizations adopt a section of the river or an access site to maintain. This type of sponsorship can help to build the connection between the river and local businesses and organizations.

STRATEGIC PLAN AND REGIONAL COLLABORATION

Much of the language in existing strategic plans highlights the need to increase usage of the French Broad River. In order to fully realize the potential of the river as an economic driver and part of the community identity, a specific strategic plan for the French Broad River Paddle Trail and subsequent development needs to be created and integrated into existing strategic plans. If the paddle trail can be combined with bike trails and greenway strategic plans, managing entities can capitalize on branding and cross-promotion of these trails.

RIVER INFORMATION SHARING NETWORK AND TASK FORCE

Having a clear vision and goals is vitally important for maintaining a successful paddle trail, it is crucial to have strong leadership and invested community partners. Currently, there are invested parties in the private and nonprofit sectors; However, more dedicated work on the paddle trail system would benefit from more formalized information-sharing networks to make sure that information, expectations, and the vision are shared amongst all members. Additionally, the paddle trail and subsequently, the communities would benefit from the creation of a French Broad River Paddle Trail task force which would be focused on bringing together relevant parties and leading the strategic planning efforts.

VOLUNTEER ORGANIZATIONS AND NONPROFITS

Paddle clubs such as the American Whitewater Association and the American Canoe Association serve an essential role in providing education, training, and outreach to river goers, and many members participate in river clean-up and trail maintenance events. Volunteer organizations such as the French Broad Riverkeepers, Friends of the French Broad, and the Transylvania French Broad River Stewards along with nonprofits like RiverLink, MountainTrue, and Conserving Carolina also provide much assistance with clean-up efforts, educational events, fundraising opportunities, and conservation efforts. RiverLink and MountainTrue collaborate on French Broad River Paddle Trail efforts and are important community partners in continuing to develop the paddle trail and standardize information.

DIGITAL INFORMATION

In today's society, much of the trip planning process occurs before the visitor reaches the destination. While the French Broad River Paddle Trail and Swimguide websites provide some information, visitors still have difficulty accessing accurate and updated information about the French Broad River in Transylvania County. Online material should place a greater emphasis on the French Broad River. Digital material should include information about trip planning such as suggested routes, maps, guides, safety items to consider bringing and other "know before you

go" information to update users on river and weather conditions. It should also offer information about access point directions and amenities, and distance to towns and other attractions. Web information can also provide links to educational material, training opportunities, river events, programs, and other promotional efforts. Links to partner organizations, management organizations, and volunteer opportunities should also be readily available.

WAYFINDING



Figure 3: Water Quality Report Card; Mad River, VT

Signage can pertain to six distinct categories: directions, identification, warning, regulatory, operational, and interpretive. Directions can inform visitors where to find access points and can help connect them to spending opportunities within the county such as breweries, restaurants, and outfitters. Identification will help visitors understand the name and amenities of each area, such as camping, parking, and restrooms. Warning signs help visitors safely plan their trip around hazards. Because the county does not have significant hazards along the French Broad, temporary warning signs can be used in the event of log jams due to heavy rains. Regulatory signs can help with compliances issues such as the notification of private land, public camping areas, and hours of operation. They can also help with clean-up and education efforts by advocating "leave no trace" principals. Operational signs can alert visitors to river safety issues such as strainers, water quality, and water levels. Interpretive signs help educate visitors on significant historical, cultural, and ecological sites along the river and in the parks. Signage should be standardized throughout the county to help visitors more readily identify and understand their meaning (Ogletree, 2011).

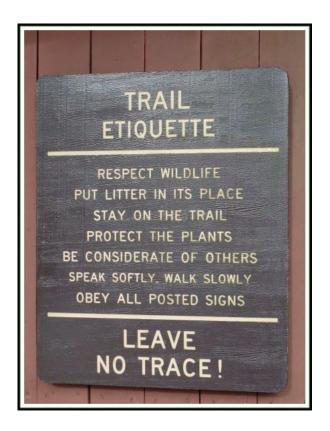


Figure 4: Leave No Trace Sign

Increased visibility of access points, as well as streamlined design and information sharing, will allow river users to identify access points and plan their trips easily. There is a significant lack of signage throughout the county to guide potential river users to the access points. By adding to the existing wayfinding system, public users will be able to identify access points, cultural opportunities, and camping options along the river. A crucial aspect of wayfinding includes providing information along roadways and along the river to aid in decision-making opportunities. By providing information about current location, what lies ahead, and safety information river users can feel more confident in planning their trip and traveling farther from the main tourism hubs of the county. Information along the river can help paddlers and anglers with safety concerns by informing them of their location, but it can also help build goodwill among landowners by clearly marking private property and public use areas.

ACCESS POINT IDENTIFIER

Visitors would also benefit from durable and straightforward identifiers to convey that they are in the correct place. Ogletree suggests that signs made from Corten steel with a canoeing icon could be a very simple, yet durable option. By more clearly identifying river access sites, visitors will be less inclined to use informal access points or private property.

ACCESS POINT INFRASTRUCTURE

Access points allow visitors to take full advantage of the French Broad River; they allow users to tailor their trips around the type of activity and trip length. Access points in Transylvania County range between highly developed and nonexistent. Due to the incised nature of the French Broad in Transylvania County, management and development of access points are challenging as is preventing erosion throughout this section of the river. Access point improvements should consider the durability of materials used when improving access sites to increase the lifespan of the site and minimize maintenance and updates.

By investing in access points around the towns of Rosman and Brevard and creating more access points near these locations when possible, managing entities can focus on creating a consistent and recognizable river access point system and focus visitor impact to these areas as well as increase use and spending opportunities near hub towns. According to Ogletree's 2011 French Broad River study, access points near hub towns, in this case, Rosman and Brevard, should ideally have developed parking and river access, picnic options such as tables and grills, and restroom facilities. Kiosks at these sites and all access points should be consistent throughout the paddle trail to aid visitors in planning their trips and quickly locating important information. Kiosks and signs at hub town access points can provide additional information about the history, culture, and environment of the area (Ogletree, 2011).

Existing access points can fall into one of three categories. Semi-primitive access points have some parking and only minimally improved facilities to allow safe access to the river. Few signs exist, but those that do indicate the trail and the location. Developed I sites have parking for more than four vehicles and improved river access. Signs here indicate the trail and the location. Developed II sites have parking for more than ten vehicles, restroom facilities, and improved river access (Ogletree, 2011). Signs here indicate the trail, location, and area information. Most of the access points in Transylvania County do not fit perfectly into a specific category, but these categories can help guide the strategic planning process and assess the needs of each site. Below you will find a table of the existing access points in Transylvania County with their condition, their river location, the type of river access, parking facilities, signage, the managing entity, and float time to next access point.

Access points near Rosman and Brevard, should have developed parking and river access, picnic options and restroom facilities.

Kiosks should be consistent to aid visitors in quickly locating important information. Kiosks and signs can provide additional information about the history, culture, and environment of the area.

Access Site	Access	River	Access	Public	Managing	River
	Condition	Access	Parking		Entity	Location
Champion Park	Developed II	Gradient Ramp	Paved	Kiosk	Town of Rosman	Mile .75
Lyon's Mountain	Semi- Primitive	Steps	Pull-off	None	NC DOT	Mile 1.75
Island Ford	Developed I	Steep Steps	Gravel	Kiosk	Transylvania County	Mile 10.5
Hap Simpson Park	Developed II	Gradient Ramp	Paved	Kiosk	City of Brevard	Mile 20.25
Pisgah Forest	Developed I	Gradient Ramp	Gravel	Kiosk	Transylvania County	Mile 25.25
Everett	Primitive	Steep Bank		None	None	Mile 26.75
Penrose	Developed I	Floating Dock/ Ramp	Gravel	Kiosk	NC Wildlife Commission	Mile 30.75
Blantyre	Developed I	Boat Slide	Gravel	Kiosk	NC Wildlife Commission	Mile 34

Table 1 Current Access Point Assessment

According to the National Parks Service River Management Society, launch sites should be assessed based on location and river characteristics, type of use, skills, and expectations of river users. Ideal launch sites will be placed in areas that are not exposed to strong currents, physical barriers, and areas that have adequate water level, water quality, and minimal bank erosion. Access points should be visible from both the shore and the river. When considering building new launch sites, it is important to consider use. If trailers are likely to be used, parking areas and boat ramps will need an average turning radius of about 45 feet (American Planning Society) and an average parking area of 180 square feet. However, an unloading and drop-off area can consist of a ten by 45-foot space.

Parking for access points varies from point to point, but by combining American Planning Society information from picnic and hiking trailheads, we can find a comparable number of parking spaces. For picnic areas, it is suggested that no fewer than eight parking spaces be made available for more rural areas and up to 50 spaces for high-density urban areas that see heavy group use. For hiking trailhead parking areas, it is suggested that minimum parking of 25 spaces for busier trailheads and a minimum of 10 parking spaces for less frequented trails and overnight trails.

Access points can be enhanced by improving the local environment. By planting native riparian plants and removing invasive species, streambanks, and river habitats can be stabilized, which will increase visitor experience and enhance environmental integrity.

PROPOSED IMPROVEMENTS FOR EACH ACCESS POINT:

CHAMPION PARK

Information: Streamline paddle trail information and standardize paddle trail sign

LYON'S MOUNTAIN ROAD

- Launch Point: Add wide, hardened stairs and boat ramp
- Environment: Enhance native plant materials to prevent bank erosion
- Facilities: Improve visibility from road and river
- Parking: Create and increase the parking area
- Information: Add covered kiosk. Streamline paddle trail information and standardize paddle trail signs.

ISLAND FORD

- Launch Point: Consider widening stairs to facilitate access. Add the boat ramp.
- Environment: Enhance native plant materials to prevent bank erosion
- Facilities: Add restroom facilities and picnic facilities.
- Parking: Increase parking area
- Information: Streamline paddle trail information and standardize paddle trail signs.
 Update kiosk.

HAP SIMPSON PARK

- Environment: Enhance native plant materials to prevent bank erosion
- Facilities: Add restroom facilities and improve picnic facilities.
- Information: Streamline paddle trail information and standardize paddle trail signs update information.

PISGAH FOREST (WILSON ROAD)

- Launch Point: Improve and update boat ramp
- Environment: Enhance native plant materials to prevent bank erosion
- · Facilities: Improve visibility from road and river
- · Parking: Increase parking area
- Information: Add covered kiosk. Streamline paddle trail information and standardize paddle trail signs. Update kiosk.

EVERETT (UNOFFICIAL)

- Launch Point: Add wide, stairs to facilitate access
- Environment: Enhance native plant materials to prevent bank erosion
- Parking: Increase parking area
- Information: Managing entity should acquire this access point or coordinate with RiverLink/MountainTrue to remove from paddle trail website

PENROSE

- Environment: Enhance native plant materials to prevent bank erosion
- Facilities: Add restroom facilities
- Information: Streamline paddle trail information and standardize paddle trail signs.
 Clarify information about Little River Campsite

BLANTYRE

- Environment: Enhance native plant materials to prevent bank erosion
- Information: Add covered kiosk. Streamline paddle trail information and standardize paddle trail signs.

ADDITIONAL ACCESS POINTS



Figure 5: Suggestions for Additional Access Points

In general, there are a sufficient number of access points, and the distance between them does not pose a significant hindrance to potential river users. However, management entities should strive to create more access points near towns such as the Town of Rosman and the City of Brevard and increase the connections to existing access points close these areas such as greenway trails, roadway signage, signage on the river indicating nearby restaurants, places to stay, and other local business to increase the usage and economic impact of river visitors. By adding access points near these locations, visitors will have the option of taking trips of various lengths on the river near lodging, dining, and shopping facilities as well. The county should consider acquiring additional property near the Lyon's Mountain Road Access Point to accommodate additional parking. The Headwaters Outfitters camping option is located near river mile 8, and the Little River camping option managed by MountainTrue can be found near river mile 30. Therefore, managing entities should look for potential campsite properties near river mile 20 to maintain roughly ten river miles between camping options.

CAMPING

In general, river users indicated that when taking an overnight paddle trip, most chose camping as their primary lodging option (Beedle, 2008). The Outdoor Industry Association 2015 Paddle Tourism Study also suggests that camping is the primary lodging choice for paddlers. This suggests that an effort be made to acquire more land for camping areas along the river. It also suggests that cross-promotion of existing camping and paddle trip options would be a mutually beneficial marketing option through websites and printed material.

Currently, there are only two camping options along the French Broad River in Transylvania County, and both are privately owned. Information to reserve camping for the Headwaters Outfitters site can be found on their website. The kiosk at Champion Park indicates that there is one current campsite on the Little River operated by MountainTrue and another "future" site at Crab Creek Access Point. Through increasing the number of camping options on or near the river and increasing cross-promotion of camping facilities, overnight trip options, and spending opportunities can be increased.

However, creating and developing more campsites will require cooperation from local landowners and private businesses if the sites will be privately owned. "Primitive" campsites are a low-impact option that requires less maintenance and are sufficient for the majority of paddlers wishing to take overnight trips. These types of campsites usually include facilities such as a picnic table, a squared-off tent pad, and a fire ring. Campsites would ideally be placed every 10 to 12 miles (Olgetree, 2011); they would also allow for group camping to encourage larger groups such as camp and school groups. Campsites should be marked with appropriate signage to allow for ease of access and assist in wayfinding and safety efforts. Warning and informational signs should also be used to convey fire limitations and distances to the next campsite or access point.

HUB TOWNS

Hub towns offer access and services for river users by connecting them with communities near the river. By creating this connection, towns can benefit economically from increased river use. Because Transylvania County already enjoys tourism from other outdoor recreation options and it has a robust outdoor economy, the addition of a developed paddle trail system will enhance those connections. The river and the paddle trail facilities should be more prominent and visible within local communities, and a greater awareness of the river an asset can be introduced to residents and visitors. Champion Park serves as an enhanced access point for the town of Rosman. Some river assets in Rosman are privately held; the efforts of community organizations, outfitters, and the town have helped to build Rosman as a hub town for the river.

The city of Brevard could benefit more from an enhanced central access point. While Hap Simpson is the most developed access point close to Brevard, it could be improved and include more wayfinding signs to connect the park to the community better. By having a focal access

point near Brevard, the river will become more of a destination for locals and visitors alike. Ideally, the access site(s) would be connected to a greenway system to improve connectivity and awareness, and this site can serve as a place to celebrate the river and grow interactions between people and the water.

MARKETING AND BRANDING

While many outdoor recreation opportunities are available in Transylvania County, the recreational opportunities of the French Broad River could be emphasized more. More importantly, trip planning information should be more readily available, and the connection between communities and the river should be emphasized.

The French Broad Paddle Trail should be standard across the county and throughout informative and promotional material. Efforts to collaborate with MountainTrue and RiverLink on this will help standardize logos and signs. Wayfinding signs can help connect visitors from town and other recreational opportunities to the river and vice versa. This will help increase awareness and spending opportunities for river users.

While there is some information about river access points, information is not consolidated nor is it readily available for a novice river user. Managing entities should include detailed information about suggested trips, directions, overnight stay options, and related activities. Cross-promotion of river trips should exist with recreational activities such as hiking, mountain biking, and camping. Websites should include information such as maps, guides, camping options, information for novice paddlers, links to outfitters and other services, and river-related events. Maps and other important trip information should be formatted so that visitors can download and print the material. It can also be made available through mobile apps. Managing entities should collaborate with existing French Broad Paddle Trail sites to share information and create a better experience for the user. These websites should also link to partner organizations and environmental information.

INTERNAL MARKETING

Internal marketing of the French Broad River is key to the overall success of a more developed paddle trail in Transylvania County. Through internal marketing, residents will value the river as a community and economic asset, which will lead to increased use among locals, less resistance to tourists, and increased stewardship of the river. The local community can be one of the county's most significant assets for promoting the use and development of a Transylvania County paddle trail. While many visitors learn about recreational opportunities online, much of the information is still spread through word-of-mouth. Therefore, the local community plays a significant role in the promotion of the river (Kline, 2012).

Internal marketing can be implemented through a variety of methods, but a strategic plan and team need to lead these efforts. The Upper French Broad River Festival is an excellent example

of existing efforts to increase internal marketing and positive media coverage of the French Broad River. By creating community events around the river that cater to families, novice, and recreational river users, the community's relationship toward the river grows, and it is more valued. Additional community events could include more programming on the river for youth and adults such as paddle clinics, environmental/nature trips, float parades, and additional clean up events perhaps in partnership with local businesses such as breweries. There is potential to merge internal marketing efforts such as clean-up efforts and programming with the user fee mechanisms mentioned below.

FUNDING

Funding for improvements to river access, trail development, and maintenance of the French Broad Paddle Trail can be found through several methods. Many paddlers (64%) support additional funding for paddle trails, and of these, the most supported funding method (33%) is user fees (Kline, 2012). Managing entities should consider the potential willingness of river users to support the development and maintenance of the paddle trail and river access.

Revenue can also be generated from paddlers and river users through equipment rental programs. An initial pilot rental program can be initiated at various access sites, and paddler reactions can be monitored (Kline, 2012). By providing equipment rentals the county can leverage paddler categories less inclined to own their own boats such as novice and recreational paddlers, families, stand-up paddle boarders, and overnight tourists wishing to expand their vacation activities. Primitive campsite managed by the county could be an additional revenue stream. There are grants available through sources such as the Clean Water Management Trust Fund, the EPA grants for recreation economy in rural communities, and the NC Trails grant among others. The cost of maintenance can be reduced by partnering with community organizations and other interested partners to sponsor the adoption of parks or river sections as well as general debris removal. Additionally, Tourism Development and Sustainability initiatives such as "Transylvania Always" are good models for cross-promotion of tourism for internal and external markets, funding for specific projects, and sustainability.

USER SURVEY

For this project, we have developed a river user survey which will help assess demographics of river users in Transylvania County, most used access points, user views on access points, and areas for consideration. The user survey can be made available digitally to send to users via email. This digital version would help survey users who make online reservations of campsites, and with coordination, with other organizations, it can be emailed to those users who have used a guide service or reserved camping through the paddle trail website. Hard copies can be made available to place at access points and outfitters, or for volunteers to administer during community events.

CONCLUSION

Transylvania County has an excellent opportunity to further develop access sites along the French Broad River to truly transform it into an organized paddle trail that could be of great economic and cultural value to the county. Strategic leadership and planning is a vital aspect of creating a paddle trail that will provide health, economic, and environmental benefits to the county for years to come. Collaboration and coordination will be crucial to creating an inclusive vision and maintaining the trail. The sections of the French Broad River near Rosman and Brevard already provide some economic impact, but that impact could be increased with improvements to access sites, signage, camping and trip planning information. By increasing the trip planning options, the availability of equipment rentals, and river access families will be able to participate safely in a range of activities along the river. Increased availability and ease of access to river conditions and trip information will help visitors to plan safe and responsible trips, access information about water quality, and build trust with local landowners. Through increasing local support and use of the river from locals and visitors, the connections between the economic, environmental, and cultural impacts of the river will inspire greater stewardship of this resource and more willingness to maintain the paddle trail.

RESOURCES

CLEAN WATER MANAGEMENT TRUST FUND

- Grant opportunities related to the protection of land for the natural, historical, and cultural benefit and restoration of streams, and improvement of stormwater treatment technology
- https://cwmtf.nc.gov/#appmain.htm

EPA GRANTS FOR RECREATION ECONOMY FOR RURAL COMMUNITIES

- Assistance program to help rural communities revitalize Main Streets through outdoor recreation
- https://www.epa.gov/smartgrowth/recreation-economy-rural-communities

LAND AND WATER CONSERVATION FUND

- Grant opportunities related to conservation and outdoor recreations
- https://rrs.cnr.ncsu.edu/lwcf/

NC TRAILS GRANT

- Grants opportunities related to trail construction, maintenance, land acquisition, planning, and education
- https://trails.nc.gov/trail-grants

PARKS AND RECREATION TRUST FUND

- Grant opportunities related to land acquisition and park development
- https://rrs.cnr.ncsu.edu/partf/

AMERICAN CANOE ASSOCIATION

- Registry of water trails in all 50 states; National Paddlesports Instruction Programs
- www.americancanoe.org

AMERICAN TRAILS

- Resources and library for water and boating trails; National Recreation Trails database with water trail profiles.
- www.americantrail.org

LEAVE NO TRACE CENTER FOR OUTDOOR ETHICS

- Widely adopted Leave No Trace Principles (also see the river corridors version)
- www.lnt.org

OUTDOOR INDUSTRY ASSOCIATION

- Resources for outdoor recreation trends and best practices
- https://outdoorindustry.org/

AMERICAN TRAILS RESOURCE DIRECTORY

- Information and resources on all aspects of trail development, education, and outreach
- https://www.americantrails.org/resource-library/directory

IOWA DEPARTMENT OF NATURAL RESOURCES

 Water Trail Development: https://www.iowadnr.gov/Things-to-Do/Canoeing-Kayaking/ Water-Trail-Development

NATIONAL PARK SERVICE RIVERS, TRAILS AND CONSERVATION ASSISTANCE

- Success stories and trail resources; Planning Assistance.
- http://www.nps.gov/ncrc/portals/rivers/projpg/watertrails.htm
- https://www.nps.gov/WaterTrails/Toolbox

NATIONAL WATER TRAILS SYSTEM

Planning: https://www.nps.gov/WaterTrails/Toolboxes/Planning

NATIONAL WATER TRAILS SYSTEM

Community Support: https://www.nps.gov/WaterTrails/Toolboxes/Community%20
 Support

RIVER MANAGEMENT SOCIETY

 Prepare to Launch, Guidelines For Assessing, Designing & Building Access Sites For Carry-In Watercraft https://www.river-management.org/prepare-to-launch

USDA RURAL DEVELOPMENT

- USDA has several grants and loans available for rural communities as well as technical assistance for economic development
- Rural Development Assistance Grant
 - Program assistance is provided in many ways, including direct or guaranteed loans, grants, technical assistance, research and educational materials. Visit the following sites for information and assistance
- https://www.rd.usda.gov/programs-services

US FISH AND WILDLIFE SERVICE

- The Fish and Wildlife Service administers a variety of programs that award grants and cooperative agreements to commercial organizations, foreign entities, Indian tribal governments, individuals, institutions of higher education, non-profit organizations and state and local governments. Programs included in the following: Fish and Wildlife Service financial assistance program websites: Coastal Wetlands Conservation Grant Program
- https://www.fws.gov/grants/programs.html

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APPENDIX

CHATTANOOGA, TENNESSEE CASE STUDY HIGHLIGHTS

Chattanooga, Tennessee leveraged its proximity to outdoor opportunities, particularly the Tennessee River, by highlighting and emphasizing the recreational opportunities along the river. The Tennessee Riverwalk is a thirteen-mile path that follows the river. The pathway has artful mile markers, plentiful parking and restroom facilities, and water fountains at some of the facilities. Chattanooga can leverage its position along the river as a hub town since the setting is primarily urban.

Additionally, the City of Chattanooga partnered with the Trust for Public Lands to assess recreational opportunities and access to physical activity opportunities. The project assessed the proximity and distribution of parks to bring physical and recreational opportunities closer to communities. Enhanced facilities such as restrooms and fitness equipment encouraged use. The Tennessee Riverwalk project utilized an online tool to share potential project information and prioritize funding requests; this tool was shared with community organizations and governmental agencies to improve coordination and information sharing, decision-making, investment and fundraising, and advocacy.

There is an opportunity for Transylvania County to combine greenway and health initiatives to create a riverside trail that provides access to the river while encouraging healthy cross-over activities. This riverside trail also increases the exposure and connectivity between the French Broad River and the towns of Rosman and Brevard.

The Tennessee River Blueway is a fifty-mile water trail that extends from Chickamauga Dam, near Chattanooga, Tennessee to the Nickajack Dam in Jasper, Tennessee. The Tennessee River Blueway offers both an urban and rural experience as it passes through the City of Chattanooga and a twenty-six-mile rural section through the Tennessee River Gorge. The trail offers camping and some cabin options for overnight stays along the river. Trail information can be found on a google map overlay which provides information on camping, river access, river hazards and conditions, and nearby parks, bike stations, grocery stores, pedestrian bridges, forests, and points of interest. Each point along the google map overlay provides an additional description such as the managing entity and contact information.

Transylvania County would benefit from this type of online information access which would enhance the information currently provided by the French Broad Paddle Trail website. By providing access to information and helping river users plan their trips appropriately, the county can improve user safety and the experience even as it seeks to build on existing infrastructure.

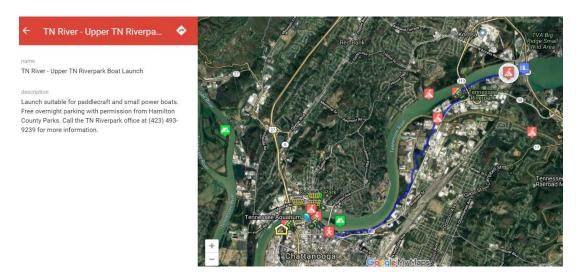


Figure 3 Google Map Overlay of Tennessee River Blueway; Detailed River Access Description

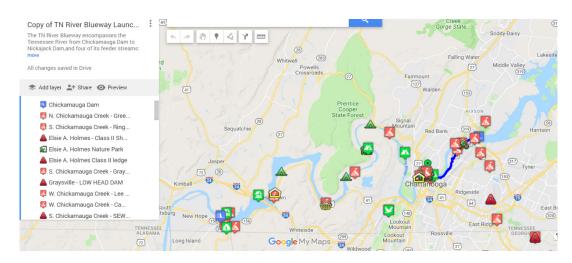


Figure 4 Google Map Overlay of Tennessee River Blueway

ROANOKE RIVER TRAIL, NORTH CAROLINA CASE STUDY HIGHLIGHTS

The Roanoke River Trail spans five counties and in Eastern North Carolina. The 137-mile river trail is the result of a private effort spearheaded by the non-profit Roanoke River Partners. The trail passes through eleven towns, and the river varies from Class II and III water in the upper sections to tranquil Class I for the remaining section. The trail provides overnight accommodations with sixteen campsites along the river at a rate of twenty dollars per night for a single occupant and a rate of ten dollars per night for two to six occupants. The sixteen campsites vary between covered and uncovered platforms, single and group camping sites, and riverside and inland sites. The Roanoke River Trail directly contributes to seven jobs and \$175,680 in personal income; it also contributes \$553,270 to the economic growth of the regional economy and for every dollar spent with regards to the paddle trail \$1.64 is generated in the regional economy.

This trail is primarily rural and attracts visitors wishing to experience nature and wildlife viewing. The economic benefits from the Roanoke River Trail are generated by tourist spending on lodging, food, transportation, and equipment as well as by the operational spending of the Roanoke River Partners. While this trail is generally more rural compared with the French Broad River in Transylvania County, the county can utilize a similar appeal of a quiet experience in nature to attract tourists interested in wildlife and ecology. Additionally, Transylvania County has the opportunity to market to paddlers wishing to experience a rural or urban setting by marketing the more rural sections as a wilderness experience with primitive camping options and the sections near Rosman and Brevard as more accessible and family friendly. Primitive camping options from the Roanoke River Trail are minimal but provide excellent options for overnight paddlers.



Figure 5 Tusca Landing Cover Platform Campsite



Figure 6 Tusca Landing Informational Sign



Figure 7 Conine Access Point Covered and Open Platform Campsite

UPPER DELAWARE RIVER, NEW YORK CASE STUDY HIGHLIGHTS

The Upper Delaware River is a seventy-three-mile section of river that winds its way from Hancock to Sparrowsbush, New York and is designated as a scenic and recreational river with the National Parks Service. The Upper Delaware Scenic Byway is a scenic road that runs alongside the river throughout this section. Access points along the Upper Delaware River range from three miles to twenty miles apart. The river is calm with several sections of Class I and II rapids. Activities on the river include tubing, rafting, kayaking, and fishing. The National Parks Service website provides updated information about safety, river conditions, things to do, such as visiting museums and historical sites, and lodging information. The only lodging available is offered through privately owned facilities. Similarly, rentals and guide services are provided by nearly thirty individual private outfitters. The national park service offers commercial permits for outfitters and guiding services.

Sullivan County which encompasses a large portion of the Upper Delaware River engaged in an access point assessment to determine site designs for six access points on the Upper Delaware River as well as collaborative efforts and funding options. The county provided opportunities for engagement in the project to improve communication and increase the chances of success for the project. These opportunities included many public meetings and brainstorming sessions to determine goals and plans for the site designs. The project highlighted eight specific planning and design goals which included improving visitor experience, promoting safety, and providing accessibility. Proposed improvements included bike racks, garbage receptacles, canoe racks, restroom facilities, and picnic pavilions.

The Upper Delaware River provides another example of a rural river destination but within the context of the National Park Service Scenic and Recreational River designation. This case study provides an example of using an umbrella designation to bring different elements together, such as the river, the museums, and the scenic byway. A similar initiative could be implemented in Transylvania County to increase the connection and the cross-over tourism potential between other destinations in the county such as the Blue Ridge Parkway and the National and State Parks. The National Park Service offers many trail and community development "tool-kits" to help facilitate networking and other community conversations regarding water trails. The Sullivan County example highlights the need for strategic planning and community engagement in order to facilitate the success of the entire project.



Figure 8 NPS Virtual Tour of the Upper Delaware River



Figure 9 Log Eddy Access Point Identifier

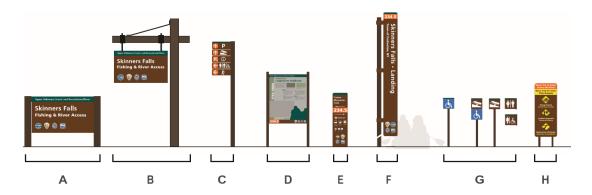


Figure 10 Examples of Various Signage Options

SUWANNEE RIVER WILDERNESS TRAIL, FLORIDA CASE STUDY HIGHLIGHTS

The Suwannee River is a 206-mile long river, and of that, 130 miles are publicly owned and maintained for conservation and recreation. The project to create a Suwannee River Wilderness Trail brought together many different managing entities which included public organizations, private businesses, community organizations, and citizens. The project, which aimed to promote conservation as well as provide "green" economic opportunities to rural and underdeveloped communities received support and some funding from the state of Florida. A network of private businesses was created in collaboration from Florida's Tourism Development Agency and other local tourism development organizations to provide better services and increase awareness of these services for tourists.

The length and the remote nature of the river provide opportunities for single and multi-day trips conducted privately or through guide services. The Suwannee River Wilderness Trail uses the concept of recreational hubs to increase connectivity between the towns and remote recreational or interpretive sites and points of interest. These hubs provide tourists with lodging and dining options, spending opportunities, and options for varied outdoor recreational opportunities. The project also pursued private sector partnerships to provide support to existing businesses and encourage the creation of new businesses in hub towns. Private businesses were also encouraged to participate in the Suwannee River Wilderness Trail initiative.

In addition to these efforts, the Florida Department of Environmental Protection Greenways and Trails initiative created a guide to creating and promoting blueways and paddle trails. Suggestions include building groundwork for the initiative by raising awareness, creating a sense of place, and building enthusiasm for eco-tourism. This guide suggests that creating a vision for the paddle trail along with a list of assets and challenges will help shape the budget and the necessary steps to complete the project. It is also important to create detailed maps and trip guides with information regarding local amenities, safety reminders, and cultural and environmental information. Awareness of the river as a paddle trail can be increased through official designation as a paddle trail on a state and national level. Trail management was

encouraged through coordinated efforts between public, private, and nonprofit organizations. The guide encouraged branding and advertising efforts, media outreach, events such as paddling festivals and multi-day group trips, and supporting economic facts and trends. Finally, long-term support is encouraged through securing funding through grants or fund matching for capital projects as well as long-term assessment of trail usage. Additional support can be provided to the community early on in the project by providing a series of free "learn to paddle" sessions to encourage use, connect paddlers with local outfitters, and promote safe use of the river. This opportunity also provides managing entities the chance to promote the blueway.

Transylvania County has the advantage of its other well-known natural resources to encourage eco-tourism, and the French Broad River is designated as an official river trail with the State of North Carolina. Transylvania County can build on this awareness by implementing additional lessons from the Suwannee River Wilderness Trail such as marketing and branding, long-term support, and continued collaborative efforts.

PENNSYLVANIA RIVER TRAILS CASE STUDY HIGHLIGHTS

The Juniata River Trail, the Three Rivers trails, the Schuyllkill and Susquehanna Rivers in Pennsylvnia provide a case study with both urban and rural settings which covered 489 river miles. The estimated economic impact of the trails was \$731,000, and the estimated number of paddlers was 3,530. The trails supported eleven jobs, and the study spanned six weeks throughout the summer months. Lodging, dining, and outfitters accounted for a significant portion of visitor spending. Retail provided an important role in supporting the paddle sports economy but did not contribute significantly to the economic impact.

This study found that water trails contributed to the social enjoyment of tourist and community members as well as providing substantial environmental and economic benefits. The study found that communities with water trails have higher education and health rates and lower poverty rates than those without recreational opportunities. Water trails and recreational opportunities also contributed to social capital and community pride.

Economic impacts from water trails can be from direct or indirect spending. Direct spending for paddle trails occurs in spending on outfitters, lodging, grocery stores, and restaurants, retail, services, activities, and transportation. In one community, a push to revitalize a polluted river helped to clean the river and encourage recreational use. Nearly a decade after revitalization efforts were initiated, boat rentals averaged nearly 40,000 annually which resulted in the average annual revenue of \$900,000. Lodging, including hotels, camping, and cabin rentals, accounted for twenty-eight percent of all direct spending. Communities that offered a range of amenities attracted more users compared to communities with fewer amenities. Two-thirds of visitors reported a water-based activity as their primary motivation for visiting the river. One-third of visitors reported other activities such as picnicking, relaxing, and enjoying the scenery as their primary motivation for visiting the river.

The indirect economic impact was generated through real estate, immigration, employment, household income, and tax revenue. Outdoor recreation was noted as the second most important factor for those moving to the area. Throughout the study, a six-week period, it was noted that \$82,000 was generated in state and local taxes and \$89,000 in federal taxes. An increase in tourism can create an increased demand for services and a greater flow of revenue into the community. The study found that for every \$1,000 in paddler spending \$338 was generated in personal income and .027 jobs. The study estimates that with eighty-five additional non-local paddlers who spend approximately \$37,000 in local community will support the equivalent of one new job.

The study found that increasing access to water trails does not automatically increase river tourism. The study emphasized the importance of bringing awareness of the amenities and opportunities available to paddlesports tourists. Marketing the paddle trail to non-local tourists is vital to bringing in additional revenue to the community. Community with existing amenities will experience an increase in river tourism when the paddle trail is advertised and promoted as opposed to communities that lack standard amenities. Key amenities for river communities include: river access, outfitters providing rental and shuttle services, lodging including camping, hotels, and bed and breakfasts, dining including grocery stores, breweries, and restaurants, cross-over recreational opportunities such as hiking trails and bike paths, cultural activities such as museums and interpretive centers, and proximity to neighboring communities with similar amenities.

NCGrowth is an EDA University Center housed at UNC Chapel Hill's Kenan Institute for Private Enterprise that helps businesses and communities create good jobs and equitable opportunities through applied research and technical assistance. With a passionate staff and a dynamic pool of graduate student analysts, we partner with businesses, communities, governments and other organizations to tackle outcome-based economic development and entrepreneurship projects. NCGrowth is funded by the Frank Hawkins Kenan Institute of Private Enterprise, US Economic Development Administration, GoldenLEAF Foundation, US Department of Agriculture, and the Z Smith Reynolds Foundation.



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