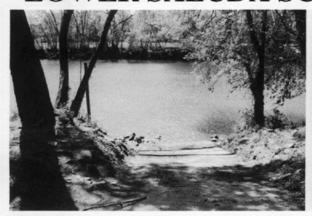
LOWER SALUDA SCENIC RIVER CORRIDOR PLAN UPDATE







SOUTH CAROLINA DESIGN ARTS PARTNERSHIP

Clemson, South Carolina

For the
LOWER SALUDA SCENIC RIVER ADVISORY COUNCIL
and the
SOUTH CAROLINA DEPARTMENT OF NATURAL RESOURCES

December 2000

Forward

The Lower Saluda Scenic River Corridor Plan Update summarizes the findings and recommendations resulting from a community workshop held April 4-6, 2000 to address recreational access issues for the Lower Saluda Scenic River.

This plan serves as an update and addition to the original 1990 Lower Saluda River Corridor Plan. Both documents will be used to guide activities of the Lower Saluda Scenic River Advisory Council and the Department of Natural Resources in advocating conservation and management of the Lower Saluda State Scenic River. The goals and ideas contained in this plan are a reflection the public's interests and are relevant to all public actions affecting the Lower Saluda River corridor.

The April 2000 community workshop was initiated by the Lower Saluda Scenic River Advisory Council and sponsored by 16 organizations (see report, page 2) with an interest in the river. The workshop was conducted at the River Banks Botanical Gardens and attended by over 100 people including property owners, recreational users, and public officials.

A range of ideas and opinions were received during the three days of the workshop including concerns about conserving the natural resources of the river corridor, respecting property rights, fixing problems at existing access sites, and managing public safety. We also received a range of responses to the new greenway trail concept that was proposed, that is, the idea of creating a trail system on the north bank that would connect Lake Murray, Saluda Shoals Park, Gardendale landing, and Riverbanks Zoo.

The plan update incorporates many of the values, interests, and concerns people expressed during the April 2000 workshop. The plan proposes a phased approached to the greeway trail, an approach that allows the trail concept to be tested and proven workable. The plan highlights river-corridor management issues that need to be addressed: issues affecting wildlife habitat, water quality, private property, safety, visual qualities, noise and other concerns that were expressed at the workshop.

Regarding private landowners, the South Carolina Scenic Rivers Act specifically prohibits the State from using powers of eminent domain for acquisition of property for programs related to State Scenic Rivers; therefore, the State cannot force landowners to sell property to implement this plan.

While it captures a community vision for the river and provides a framework for future action, the plan also describes the great amount of work yet to be done, the many questions to be resolved, and the additional partners needed to move forward.

If you would like more information about this plan and the Lower Saluda Scenic River Project please contact us.

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Preface

The beauty and assets of the lower Saluda River are rapidly becoming known in the midlands of South Carolina. We all appreciate the incredible resources of this impressive and powerful river: a trout fishery below the silvery Spanish moss, outstanding whitewater boating, a trophy striped bass fishery, and a quiet refuge from the hectic urban world.

Maintaining these natural resource values is becoming increasingly difficult. Our issues are growing more complex and making natural resources planning and decision making a greater challenge. Preserving the critical natural and recreational values of an urban river like the lower Saluda is particularly demanding and requires constant attention.

In the late 1980's, a group of citizens, elected officials, representatives from environmental organizations, local and state governments, landowners, and others studied the lower Saluda River. The result was the Lower Saluda River Corridor Plan. This plan established a comprehensive, long-term vision for managing the river. It led to the State Scenic River designation and has helped advance goals for water quality improvement, land conservation, improved river access, and river safety.



The shoals of the Lower Saluda Scenic River

In the ten years since the original plan was created, much has changed. We are reminded by the visionary planner Ian McHarg that our management plans must also change over time; plans must be dynamic to meet the challenge of changes in our values and impacts on our resources.

This new plan for the lower Saluda River builds on the strengths of the original plan but focuses primarily on recreational issues. Recreational use of the Saluda River has risen significantly in recent years, and with the creation of the River Alliance there is an emphasis on greenways and better access to our rivers.

Under the leadership of the Lower Saluda Scenic River Advisory Council, this new plan offers a vision for the utilization of the significant recreational resources of the Saluda while maintaining the critical natural resources of the river.

The lower Saluda is one of the most valuable natural assets of the midlands. To preserve this magnificent green ribbon in our rapidly growing community we will have to continue our efforts to broaden our understanding of the resource and strengthen the stewardship ethic among citizens. We need to constantly revisit and revise our plans but never lose sight of the goal of conservation of the lower Saluda - to keep this river healthy and vibrant for years and generations to come.

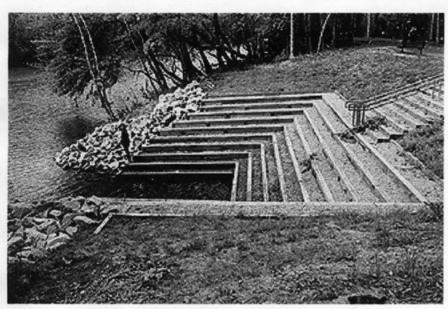
Barry Beasley South Carolina Department of Natural Resources



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Canoe put-in at Saluda Shoals Park



Charette team at Gardendale

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The Lower Saluda River Corridor Plan

The award-winning 1990 plan.

Introduction

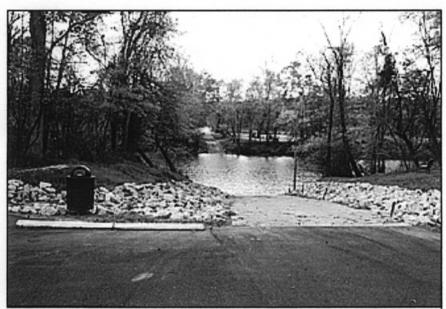
Ten years ago (1989-90), the Lower Saluda River Corridor Plan was created by a task force of local citizens to provide a vision for conservation and enhancement of the river. As a result, the State Legislature designated approximately 10 miles of the Lower Saluda as a State Scenic River in 1991.

During the following decade, some of the plan's recommendations were implemented. Saluda Shoals Park opened on the north side of the river, with ambitious plans for the future. The Riverbanks Botanical Gardens were developed and drew increasing visitors. Easements were acquired along several stretches of the north and south banks of the river. The Lower Saluda Scenic River Advisory Council worked to implement the plan.

But external factors changed as well. The Water Resources Commission merged into the SC Department of Natural Resources as part of a state restructuring plan. The River Alliance was formed in Columbia in 1995 with the mission of providing community benefit from local rivers. It proposed the Three Rivers Greenway, a 12-mile linear park system along the Broad, Congaree and Saluda rivers, and a regional public funding mechanism. The project is now fully funded. Cayce, Columbia and West Columbia will own the greenway. The cities' capital program for the Three Rivers Greenway project is approximately \$18 million.

Ten years after the original Lower Saluda River Corridor Plan was conceived, the Advisory Council and its partners, including the SC Department of Natural Resources, decided it was time to revisit it. They called on the South Carolina Design Arts Partnership, based at Clemson University, to assist in conducting a three-day public input design process, or "charette," to look at new ideas, including the vision of a continuous greenway system along the north side of the river.

The sessions were held on April 4, 5, and 6, 2000 at the Riverbanks Botanical Garden with more than one hundred citizens and leaders participating in the process.



Boat Ramp at Saluda Shoals Park: the Hope Ferry Landing is on the far side of the river.

Participants and Sponsors

The charette or workshop was initiated by the Lower Saluda Scenic River Advisory Council. The advisory council is a group of river-bordering land owners and river users established according to the SC Scenic Rivers Act to assist and advise the SC Department of Natural Resources concerning protection and management of the river.

Sponsors included the SC Department of Natural Resources; SCANA Corporation; SC Department of Parks, Recreation and Tourism; Riverbanks Zoo and Garden; Irmo-Chapin Recreation Commission; Saluda Shoals Foundation; SC Wildlife Federation; Barron's Outfitters; Congaree Land Trust; Adventure Carolina; The Backpacker; The Cycle Center; Outspokin' Bicycles; River Runner Outdoor Center; Trout Unlimited; and Palmetto Paddlers.

While many charette sessions were open to the general public, specific focus workshops were held throughout the three-day process. Groups involved included property owners along the river, local government officials, recreation venue / facility providers, and the Riverbanks Zoo and Botanical Gardens. The River Alliance provided an overview slide presentation of the future Three Rivers Greenway project. Barry R. Beasley and Alfred H. Vang from SCDNR and Tony Bebber from SCPRT shared experiences from the 1990 planning effort.

Irene Dumas Tyson and Bob Bainbridge of the Design Arts Partnership conducted the sessions, prepared the plan drawings, and summarized the results. Bill Marshall of the Department of Natural Resources scheduled and planned the charette. The final report was written and edited by Bob Bainbridge with significant contributions

The Lower Saluda Scenic River

The lower Saluda River extends eleven miles from the outflow of Lake Murray at the Saluda hydroelectric plant to its confluence with the Broad River to form the Congaree River near downtown Columbia. Charette participants described the area as a beautiful and quiet "oasis in the city."

While the Saluda serves a large drainage basin above Lake Murray to the North Carolina state line, the lower Saluda basin is quite narrow except for tributaries such as Twelve Mile Creek, Rawls Creek and Kinley Creek which extend to urban or urbanizing areas including

the City of Lexington and the Harbison area.

The lower Saluda is particularly distinctive because it is a cold water river in a hot climate. A participant in the process summarized the distinction by saying that "the Lower Saluda River is the only place in the world where you can go trout fishing with Spanish Moss hanging over your head." It is a distinctive fishery that includes striped bass (rockfish) as well as stocked rainbow and brown trout.

The upper part of the lower Saluda slopes gently; it normally has the appearance of a wide, slow-moving pool. Most of its banks are steep and have overhanging trees and branches that make access difficult. It is frequented by some canoers and by fisherman who cast

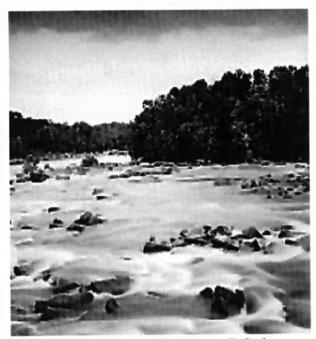
from the banks or from motor boats.

Below I-26, the river has dramatic shoals with rated canoe and kayaking rapids. This section of the river (Section 4) includes the Riverbanks Zoo and Gardens, and it experiences extremely heavy summer use. It is a favorite place for sun-bathing and parties. Because it is heavily used and dangerous, the area around Mill Race rapids accounts for most emergency calls and most of the fatalities on the river. The distinctive Rocky Shoal Spider Lily grows only near the confluence with the Broad River.

A distinctive and potentially dangerous characteristic of the river is its large and rapid variations in flow due to releases from the Lake Murray hydroelectric plant. The impact is particularly dramatic near Mill Race rapids, where water channels can vary from generally safe and quiet to hazardous high-volume flow in a matter of minutes. While there are a warning system and warning signs, the rapid and unpredictable releases are a constant cause for concern.

Management of water flow also results in seasonal depletion of dissolved oxygen in the water resulting in degraded aquatic habitat

and decline of the fish population.



Shoals in Section 4 of the Lower Saluda (Source: The Lower Saluda River Corridor Plan, 1990)

The area along the river banks is generally forested, though there are some agricultural fields and residential yards along the south bank. The low-lying terrain, forests, and river generally keep the temperature lower in the summer than surrounding areas. Mountain laurel grows on many north facing slopes, despite the hot Columbia climate.

While the Lower Saluda Scenic River Corridor is generally a self-contained environment, it is a vital resource -- an in-town oasis -- for the expanding Greater Columbia community. Population growth puts additional pressure on the river and its tributaries. Concerns include overuse of recreational resources and deterioration of water quality.

The Lower Saluda Corridor

The corridor area is generally bounded by Bush River Road, the CSX railroad, and I-126 on the north, and Corley Mill Road and residential neighborhoods on the south.

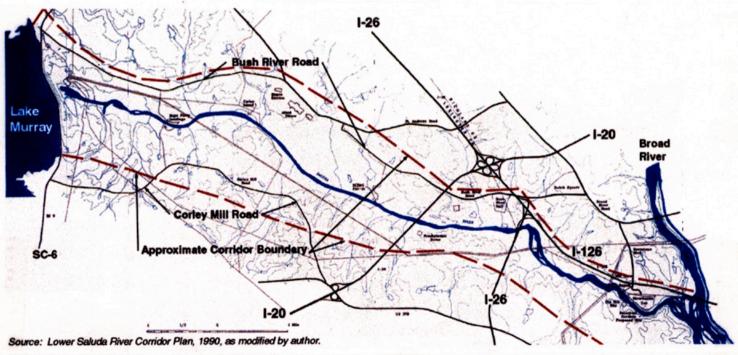
The river is crossed by only two highway bridges: I-26 and I-20. While the bridges are large concrete structures, they are raised well above the river, which limits their visual impact on the environment. An additional road connects Lexington with Irmo across the dam at Lake Murray. A pedestrian and shuttle bridge crosses between Riverbanks Zoo and the Botanical Garden.

Below I-20, most of the land south of the river consists of residential neighborhoods. West of I-20, the south shore is principally agricultural and forest land with scattered houses. Many properties extend to the bank of the river. Some participants expressed concern that there could be more intense future development along Corley Mill Road.

Most properties on the north shore are large and set well back from the river. They include industries such as BC Components, Honeywell, and SCE&G, as well as a few residential areas and Cornerstone Presbyterian Church. The differences in property ownership and types of uses have a direct impact on how the two shores of the river can be developed or protected.

Because of the low-lying terrain, the river provides a route for major sanitary sewer lines which ultimately lead to a large treatment plant east of Columbia near I-77. Two older sewer lagoons also edge the river. The area is also influenced by power line corridors radiating from power generation facilities at Lake Murray.

The corridor includes historic and archaeological resources including evidence of Native American habitation, ruins of the Saluda Canal below Riverbanks Zoo, the foundation of the Saluda Factory and remnants of its dam, and the memory of historic ferry crossings.



The Lower Saluda Scenic River Corridor

A Greenway Trail System

During public input sessions, a repeated vision was to park at Lake Murray and walk or ride a bicycle to downtown Columbia, possibly even for commuting. This dream provided the stimulus for consideration of a coherent and connected trail system along the lower Saluda River.

If a greenway were developed, it would become part of a dramatic regional system. The Three Rivers Greenway will provide a 12-mile linear park system along the Broad, Congaree and Saluda Rivers. On the lower Saluda River, it will extend north as far as the I-26 bridge. The Granby Park component, designed by Ozzie Nagler, and the Canal Park trail have already been completed.

The charette explored the feasibility of a greenway along the Saluda from I-26 to Lake Murray and commented on proposals for the lower part (Section 4) of the Saluda River corridor. The concensus was that a greenway system was feasible on the north side of the Saluda, based on existing improvements, a limited number of property owners, and the manageable topography and hydrology near the river. The design and management of the greenway, however, will need to address its impact on the river itself, and on security, access, and existing uses along the banks. The proposed plan looks at a four-phase process, with different lead players, financing, and timing. The map on page 14 shows river-corridor sections 1 through 4, which correspond to this four-phased plan.

Property ownership on the north side of the river is limited to ten owners, the largest of which are the Irmo-Chapin Recreation Commission (Saluda Shoals Park) and SCE&G, which has a facility at Gardendale as well as the Saluda Hydroelectric Plant.

In Section 1, between Saluda Shoals and Gardendale, there are two large properties - Honeywell and BC Components. Both companies indicated a willingness to discuss donating easements that would allow for construction of the greenway. Because of the support and the strength of completing a 3.5 mile segment of the greenway, this area was designated as a top priority. Two or three bridges would be needed to complete this segment of the trail, but existing and proposed facilities at Saluda Shoals and Gardendale would give a firm anchor to each end of the greenway.

In Section 2, there are two small privately owned properties between Saluda Shoals Park and the hydroelectric plant. While river front easements are preferred, there are alternate routes along Bush River Road that make a connection to the lake possible. Near the hydroelectric plant the greenway cannot follow the river but must be diverted to Bush River Road. The plan also recommends extending the trail system across the dam to provide eventual access to the Lexington area. This segment would complete the greenway from Lake Murray to Gardendale.

Section 3 between Gardendale and I-26 is more complicated because two sewer lagoons and an asphalt plant abut the river. While easements exist along much of the shore, phasing out the facilities would be desirable for development of the greenway. Both sewer lagoons are out-dated facilities, but complex issues have blocked their abandonment. The concensus was that these issues can ultimately be resolved, but that it would take time. Relocation of the asphalt plant or purchase of an adequate greenway easement is unresolved. The concensus was that Section 3 would be the last segment to be completed, but earlier completion of the upper sections could encourage positive patterns of trail use before connection to the Three Rivers Greenway. Section 3 would need one bridge at Stoop Creek.

Section 4 of the Saluda extends from I-26 to the confluence with the Broad River. This section is included in the Three Rivers Greenway, but the public input process raised some issues, particularly from the standpoint of river access, utilization and safety. Perhaps the most difficult issue is the crossing of the Broad River, a subject that was hotly debated but eventually left unresolved.

The south side of the river was not considered for any Greenway development. This side of the river has numerous residences where properties extend all the way to the bank, and homeowners expressed vocal concerns about any loss of privacy. Some opposed development on the north side as well due to worries about loud music or rowdy parties along the shore. The design of the trail, which sets the main trail back from the bank, addresses but does not wholly eliminate these concerns. The south side has fewer existing easements, and participants saw no possibilities of linking them together in a meaningful way, with the possible exception of limited hiking or fishing trails near the Hope Ferry landing.

Overall, the group agreed that a northside greenway trail was feasible. It is described in more detail in the plans that follow.

Access Points

The Lower Saluda Scenic River is beautiful and offers varied recreation opportunities, but it is not easy to get to, either for recreation users, law enforcement officials, or emergency rescues. There are currently four main access points. The Riverbanks Zoo area is the most heavily used, with extensive canoeing and kayaking, sun-bathing and swimming, fishing, and some partying. Emergency access is fair below the zoo on the north side, but is not available on the south, precluding West Columbia from assistance in emergencies.

Access areas at Hope Ferry and Gardendale are owned and managed by SCE&G. Both provide free access, with Hope Ferry being the principal ramp for powered fishing boats. Both areas have

modest gravel parking areas and limited improvements.

Saluda Shoals Park is the best developed recreational access point. The park features an excellent new canoe put-in, boat ramp, observation/fishing deck, picnic tables, and walking trails. The Irmo-Chapin Recreation Commission has a fee-based entry system.

Discussions during the charette included the number and location of access points, the level of improvement of access points, and controls on access to both the river and the proposed trail.

While early comments concerning access were diverse, a concensus emerged. There was general agreement that between I-26 and Lake Murray, the current access points at Hope Ferry, Gardendale and Saluda Shoals are sufficient. A parking area for trail access at

Lake Murray was the only new suggestion.

Section 4 was more complicated. Virtually all participants agreed on the critical need for a new take-out on the north side of the Saluda near Stacey's Ledge so that inexperienced canoers and kayakers could get out of the river before the dangerous Mill Race Rapids. There was also concensus that there needed to be consistent portage access around Mill Race Rapids, where the existing trail goes across the Botanical Gardens property and is sometimes locked for security. Because of the popularity of the Oh Brother Rapids / Ocean Boulevard area for paddling and fishing, an access point was desirable, but concern about over-use led to the suggestion that the put-in should be a limited access area, with remote parking. While it was agreed that a south side emergency access ramp was needed, no specific site was identified.

While there was broad support for canoe and kayak access, there was more difference of opinion concerning powered boats. There was sentiment that motor boats cause some problems with

wakes, bank erosion and water quality. Some felt that it would ultimately be desirable to restrict use to non-powered craft or limit the horsepower of boat motors used on the river. On the other hand, fisherman have had free access to the river for many years, and generally use small outboards and create few problems for other river users. A participant also pointed out that there was nothing to prevent a private property owner from opening up an access point, or even developing a "Waterworld" along the river.

The concensus was that improvements to access points should only develop new facilities for non-powered watercraft, though a take-out for powered boats at Gardendale would help motor-boaters stranded downriver in high flow conditions. This would leave Saluda Shoals Park and Hope Ferry as the remaining access points for power boats. Section 4 does not currently include power boat access and it should not be encouraged in the future. Emergency access in Section 4 is included in the Three Rivers Greenway plan.

The discussion of access controls began with widely divergent opinions, but gradually merged toward concensus. Gating for closure at night was generally accepted. Proponents of controlled access and entry fees noted the strong benefits for safety, security, and orderly behavior. Others wanted unrestricted free access.

Ultimately, participants agreed that pedestrian and bicycle access to the trail system and all related facilities should be free. On the other hand, access to parking spaces, restrooms, and other improvements involved on-going maintenance and operating costs that should be supported by users. As a result, modest fees for access to parking and improvements were supported at areas including Saluda Shoals, Gardendale in a few years as the site is improved, and possibly at Hope Ferry in the future. To reiterate: access to the river should be free to all, but users should expect to pay a reasonable fee for parking, restrooms, and other site improvements.

A heavily debated proposition was the suggestion of commercial river rafting in Section 4. Most charette participants were opposed, but a participant who had talked with a representative of the industry seemed to put the issue to rest. He stated confidently that because of the variations in river flow, the idea of river rafting was not commercially viable. People would not make plans to come if they did not know whether there would be a high flow period to make rafting possible. Continuous flow rivers such as the Nantahala would have an overwhelming competitive advantage.

Trail Design Characteristics

While there was wide agreement about the desire for a greenway trail, determining the exact type of trail was more difficult. The linear park designed by Ozzie Nagler along the Congaree provides a good starting point. The main trail is an eight foot wide concrete path designed by Kenneth B. Simmons and Associates.¹ The trail provides a good surface for street bicycles and pedestrians while also supporting golf carts or other maintenance vehicles. It is not a suitable surface for horses, eliminating the problems of equestrian use. The trail maintains a clean edge and is resistant to flooding. While it can become littered with leaves and debris as shown at right, the surface can easily be blown clean. The width allows two or three people to walk side-by-side, and for pedestrians and bicycles to pass in opposite directions without hazard. The width and surfaces result in full wheelchair accessibility and conform with the Americans with Disabilities Act.



Wood overlook at the Congaree River

The trail was located by Nagler in the field to avoid trees that should be preserved. As a result, it has irregular curves and a reasonably natural appearance. The lack of long straight stretches creates interesting views and vistas along the trail. The City of Columbia prohibits motorized traffic other than maintenance and public safety vehicles throughout the Greenway system.



Recently installed trail at Granby Park

¹ Mr. Nagler specified the same trail surface for the Harbison community. Some portions of the trail at Harbison are over 25 years old and are holding up very well with active use.

The main trail is generally set well back from the river edge, and the user has only occasional views of the water. Natural secondary trails are closer to the river bank and connected to the main trail by occasional perpendicular feeder trails. The small trails are cut through but unfinished except for natural soil and leaves.

Protection of wetlands was an important design requirement. Boardwalks span wetlands; wooden bridges are provided at creeks; and a wood observation deck provides a dramatic view of the Congaree River. Low railings keep wheelchairs on the bridge while allowing unobstructed views.



Typical wood bridge/boardwalk segment

While participants in the Lower Saluda charette generally appreciated the layout, dimensioning, and detailing of the trail, they felt that the concrete surface was inappropriate to the natural setting of the Saluda. Asphalt surfacing was also not favored for appearance, edge deterioration, and the need for regular maintenance and resurfacing. It was generally agreed that it made sense to experiment with stabilized earth for the main trails to determine if newly available materials would support anticipated levels of use with acceptable

maintenance requirements.² Grant funding for a demonstration project might also be available.

The general idea of a wider main trail with a natural river trail, feeders, and outlooks, as illustrated in the diagram below was generally approved. Lighting was not recommended except at entries, restrooms, and parking lots.

Interpretive signage is encouraged throughout. Litter receptacles should be located where they can be easily serviced. Benches and seating are most important at overlooks, access areas, and outstanding viewpoints. Water should be available at regular intervals of no more than three miles, a need which can be satisfied at access points alone.

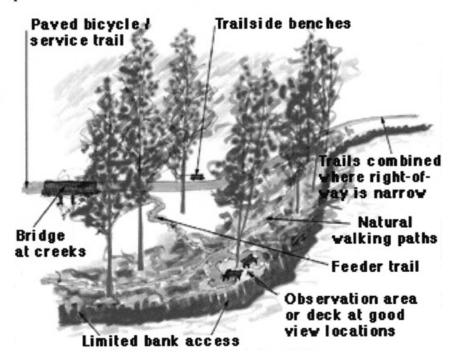


Diagram of basic trail concepts

² The Web site for Poly-pave, for example, touts excellent durability with costs well below the costs of concrete or asphalt paving.

Design of Access Points

The design of access is based on improvements already in place at Saluda Shoals Park. The following drawing summarizes the basic elements needed to ensure security while allowing all necessary

access and providing desirable improvements.

The gate provides for closing the park at night. While a continuously staffed gatehouse would be costly, a true gatehouse is illustrated as a base of operations for staff. Normal access would be by a permit system supplemented by an automated day use fee and pass system with regular vehicle checks throughout the day. Pedestrian and bicycle access should be free.

Entry Gatehouse Gate Bollards Restrooms Sign Overlook **Greenway Trail** Controlled Access Boat Ramp Parking

Access Point Design Concept

Parking should be set well back from the river so that cars are not visible to boaters.

The gatehouse and restrooms should be carefully designed to fit into the landscape, using natural materials such as stone and unpainted wood as much as possible. Signs, railings at the overlook, and other site fixtures should be compatible. While the boat ramp and overlook are shown side-by-side, they should be far enough apart to allow fishing from the overlook without interfering with boaters.

Access to the boat ramp is controlled but accessible to law enforcement and emergency crews. Locked but removable bollards similarly limit vehicular access to the trail system while allowing authorized emergency and maintenance vehicles to enter when necessary. Not illustrated is a canoe and kayak put-in, which should be a key part of each access point, though the boat ramp can be used if necessary.

An improved access point is already in place at Saluda Shoals. A similar facility is recommended at Gardendale as part of Section 1 of the Greenway Trail system. A modified version without water access is recommended at Lake Murray Dam and Bush River Road as part of Section 2. A similar approach may work in the future at Hope Ferry, but it would require the acquisition of additional land to set parking away from the river.

In Section 4, the limited access put-in near the I-26 bridge is included in the Three Rivers Greenway plan, but charette participants recommended that the parking area should be located at least 100

yards from the put-in.

Habitat and Landscape Design

Almost all of the Lower Saluda Scenic River Corridor has been disturbed by human use, beginning with the canal, mill, and ferries in the nineteenth century and continuing to this day. Yet the river corridor environment is resilient and offers widely varied habitats of great natural beauty. They range from stands of mountain laurel on the bluffs to pine forests, marshes, and trees draped with Spanish moss. In general, the corridor does not need to be re-invented, but encouraged, supported, and protected.

While limited habitat assessments and inventories have been completed, there is a continuing need for more thorough documentation. The Riverbanks Zoo and Botanical Gardens staff has volunteered to help with the effort, and work should begin as soon as possible. The study should focus on distinctive local flora and fauna, but should also identify inappropriate and invasive plants in the corridor. Existing wetlands should be identified during the design, engineering, and permitting process and protected as a function of the design approach. The greenway should create a connected habitat corridor from Lake Murray to the confluence of the Saluda and Broad Rivers, including the difficult section adjacent to the zoo parking lot. The greenway should include as much undisturbed land as possible.

Areas cleared for the trail system should be as narrow as possible, and the specific trail location should be laid out in the field, on-site, to avoid cutting major trees. Any bare areas resulting from construction should be revegetated as quickly as possible.

The river bank is both hazardous and very important to habitat. As a result, access to the bank should be limited, and modifications to the bank should be minimized. No 'armoring' -- rip-rap or retaining walls -- of the bank should be allowed.

The elimination of exotic and invasive species is a difficult task requiring consistent and determined efforts. Privet is particularly troublesome as it spreads easily and is difficult to kill. Wisteria is less extensive but can spread for long distances if not controlled and can climb and ultimately destroy major trees. Poison ivy, while native, needs to be controlled or eliminated, particularly along trail systems.

To maintain a natural appearance, designers of access points and trails should minimize introduction of ornamental trees or shrubs, particularly over-used landscaping materials such a red-tips, Bradford pears, junipers, and pampas grass. Appropriate native plants should be used throughout.

Parking lots should include a tree canopy and landscaped islands which should serve as drainage areas. Curbs and gutters should be avoided on all roads and parking areas. Trees at access points should be limbed up as needed for security.

Existing marshes and proposed created wetlands should be developed and protected carefully. Interpretive trails and signage can educate the public about the value of these essential habitats.

Lighting should be installed on a very limited basis to insure safety while avoiding light pollution. The experience of the river at dawn or dusk can easily be destroyed by excessive lighting.

Power line and sewer corridors interrupt the habitat and visual appeal of the river corridor but are essential to the region as a whole. Wherever possible, the main trail should be built on sewer lines, both to avoid cutting trees and to use bridges to hide exposed lines. The Advisory Council should work with SCE&G to explore alternative plantings below power lines,³ which minimize their visual impact, allow service access, protect lines, and decrease on-going maintenance costs.

The edge between cleared areas and forests is a very rich habitat that encourages diverse plant growth and provides concealed hiding places for a wide variety of animals.

Water Quality and Flow

Water quality and flow on the lower Saluda River is determined by releases from Lake Murray and tributaries flowing into the river from urbanizing areas of Richland and Lexington Counties. Because of the dam and the relatively small size of the tributaries, flood control is not an issue, but both sources need to be managed to protect the quality of the scenic river.

The main stem of the lower Saluda River is classified as "trout put, grow and take" waters under the State's water quality classification system, a system which defines desired uses and standards to protect those uses. "Trout put, grow and take" waters are freshwaters suitable for supporting the growth of stocked trout populations and a balanced indigenous aquatic community of flora and fauna.

Unfortunately, the water quality of the lower Saluda and several of its tributaries is impaired, as indicated by low dissolved oxygen levels and/or high levels of fecal coliform bacteria. The impaired streams are listed by the State for targeted water quality management action according to Section 303(d) of the Federal Clean Water Act. The 303(d) listings will eventually result in focused activities involving state and federal agencies, local governments, and the watershed community in fixing the water quality problems.

Lake Murray Dam rises 210 feet above the river, and the depth of the water in the lake accounts for the cold water flow that supports trout fisheries in the river. During late summer, however, the water in the lake separates into layers, resulting in flows with almost no dissolved oxygen, degrading fishery habitat significantly. Water flow rates are determined almost entirely by needs for power generation. When water is released, the level in the river may rise as much as four feet in an hour and ten feet or more over several hours. Releases do not follow an operating schedule and are unpredictable.

While the complexity of the issues involved raised technical questions beyond the scope of this study, there was a general concensus that the Advisory Council should work closely with SCE&G during the current relicensing process for the dam to try to make progress toward three goals: maintaining a somewhat higher minimum flow, providing water quality to support fishery habitat year round, and increasing the safety of dramatic releases of water. Operating policies should consider water flow and quality below the dam rather than simply maximizing generating efficiency.

While not discussed in detail at the charette, the Design Arts Partnership recommends that the Advisory Council and its partners, particularly the SCDNR, conduct studies of water management options at Lake Murray Dam, and to help represent the Council in the relicensing process. Managing water flow and quality in the local tributaries is an entirely different question. Rawls Creek, Stoop Creek and Kinley Creek serve urbanized areas north of the river. The area is served by four different jurisdictions: Lexington and Richland Counties, the City of Columbia, and the Town of Irmo. On the south side of the river, the extensive Twelve-Mile / Fourteen-Mile Creek basin is all in Lexington County and includes part of the City of Lexington as well.

Key ordinances affecting siltation, detention ponds, and other water quality issues vary widely in both ordinance language and enforcement. Wastewater treatment facilities and stormwater improvements, including channelization, also affect the quantity and quality of runoff reaching the lower Saluda. Comprehensive river basin management plans are becoming more common as a way to address these issues and could provide a workable model for the lower Saluda basin. A consistent priority in management plans is to establish natural vegetative buffers along all tributary streams.

The other approach that was identified was to use low-lying areas closer to the river to filter and clean the tributaries before they enter the river. A particularly promising location is the old mill pond on Twelve-Mile Creek at Corley Mill Road. Properly restored, expanded, and managed as a created wetland, the mill pond area could play a major role in intercepting and removing sediment, nutrients and other impurities resulting from rapid development near Lexington. Smaller areas suitable for similar actions were tentatively identified on Rawls Creek and Kinley Creek to the north.

Smaller areas are affected by ephemeral streams and sheet flow directly to the river. The Advisory Council should continue to pursue easements along the river and explore all avenues for ensuring at least a one-hundred foot natural buffer along the river to protect water quality.⁴ Provisions for natural buffers should be included as part of any new development along the river corridor.

The SC Scenic Rivers Program advocates a minimum buffer of at least 100 feet on both sides of the river to protect water quality, scenic values and wildlife habitat.

Management and Operations

It is important for the proposed greenway trail to have a central management agency and consistent policies. Of the three major land-owners / service providers along the lower Saluda, only the Irmo-Chapin Recreation Commission has a central focus on providing broad-based recreation services to the public. The Riverbanks Zoo and Gardens offers more specialized services which do not have a good fit, and SCE&G is a power company which provides limited recreation services on its properties. As a result, the study team recommends that the Recreation Commission serve as the overall management organization for the trail and access points on the north side of the river, at least in Sections 1, 2, and 3. Section 4 will be operated as part of the Three Rivers Greenway. Representatives of the Commission indicated interest in serving as the lead group but could not commit to that role without formal approval by the full commission.

Designation of a management group can play a positive role in negotiating easements with other property owners since the owners will have the reassurance of knowing who will ultimately be responsible for the trail and activities that take place along the trail.

If the Recreation Commission becomes the overall trail manager, the study team recommends discussions with SCE&G about transferring management of all recreational facilities on the north side of the Saluda including Gardendale and the proposed trailhead at Lake Murray. Because this transfer would result in some reduction in SCE&G obligations, some form of financial renumeration to the Commission could be considered.

Management considerations would include:

- * Establishing policies for trail and facility use, including hours of operation, permitted and prohibited uses, and any scheduled fees.
- * Trail maintenance and repairs, including trash and litter removal.
- * Inspection and repair of security fencing and facilities.
- * Paying utility bills for water, sewer, and electricity.
- Regular cleaning of bathrooms, fish-cleaning areas, and other facilities.
- * Coordination with law enforcement officials on determining emergency access locations, policing the trail, and dealing with illegal activities including trespassing.

Based on input from charette participants, there was general concensus on the following policy issues.

- * Trail use should be unlimited and free for pedestrians and bicycles.
- Horses and motorized vehicles should be discouraged or prohibited.
- * The trail and access points should be closed at night, and camping should be discouraged or prohibited.
- * Facilities should emphasize canoes, kayaks, and other nonmotorized craft. Power boat access should be limited to Saluda Shoals Park and Hope Ferry.
- * Reasonable access fees should be charged for vehicles in order to cover costs associated with parking, restrooms, and other active use facilities.
- * The trail and all major facilities should be ADA accessible.
- * Use of alcoholic beverages should be discouraged or prohibited.
- * Possession of firearms should be prohibited.

The following policy issues were mentioned but no firm guidance was provided.

- * Use of the trail by in-line skaters, roller skates, or skate boards.
- * Specific policies on littering and noise.
- * Strategies to control trespassing.
- * Fishing policies and limits.

Public Awareness and Input

The charette process indicated that many people understand and feel passionately about the values of the Lower Saluda Scenic River. Citizen support was critical to the designation of the Scenic River and will be equally as critical in implementing a greenway trail.

As soon as fundamentals of the proposed Greenway Plan are agreed to, the Advisory Council should take the lead in developing a public awareness and public education campaign. It should include a widely distributed brochure, a slide presentation or PowerPoint presentation, and a speakers list. The brochure could be developed as an insert in The State newspaper.

The Advisory Council and charette participants are a good starting point for developing a contact list, including local governments, state agencies, corporations, civic organizations, and schools. Because the list of potential presentations is large, the task should be divided among a number of people, but they must convey a consistent message. Because most of the corridor is in Lexington County and the Lexington County Recreation Commission is the lead agency south of the river, a presentation should be arranged there at the earliest possible date.

While the charette provided extensive public input, public meetings should be held to seek input on each segment of the trail as it is developed. Uncertainty and lack of knowledge almost always provoke opposition to a plan.

The charette ended with enthusiastic support of a Greenway Trail. Now is the time to build on that momentum.

Funding Sources

The following list is a starting point for pursuing funding for the Greenway Trail and related improvements.

- * The watercraft tax
- * Accommodation tax funds (tourism)
- * TEA-21 Enhancement funds available from SCDOT
- * Private contributions and endowments
- * Facility revenues
- * Existing tax revenues for recreation programs
- * Urban Forestry grants
- * Trail development grants through SCPRT
- * Parks and Recreation Development Fund
- * Land and Water Conservation Fund
- * Local and National Foundations
- * Grants from SCDNR for inventories, assessments, monitoring
- State or local bond issues
- * A river-related festival as a fund-raising event.



View of the river below Hope Ferry

The Corridor Plan Update

The 1990 Lower Saluda River Corridor Plan was the starting point for the plan developed by the charette, and the update simply supplements the earlier document. Some ideas from the 1990 plan, such as a possible park at Twelve-Mile Creek, were not feasible and have been deleted from the update. Several issues, such as unobstructed portage at Mill Race Rapids, were identified in 1990 but are emphasized in the update because the need still exists. Other items, such as "the creation of linear trails where appropriate," were quite vague and general in the 1990 plan and are given much more focus in the update.

The plan drawing resulting from the charette is not a detailed blue-print for construction but a physical diagram of the general arrangement of the greenway, access points, and other elements described in the text. Based on feasibility, timing, and implementation responsibilities, the plan is divided into four sections.

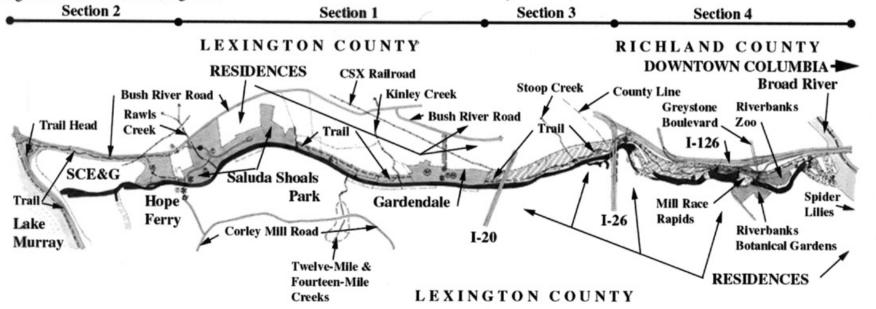
Section 1 extends from Saluda Shoals Park to the eastern end of the Gardendale property of SCE&G and has the highest priority for immediate implementation. It includes improvements already planned by the Irmo-Chapin Recreation Commission. Section 2 extends from the park to Lake Murray and includes the dam area. Discussions, negotiations, and detailed planning for this section can begin while Section 1 is being built.

Section 3 is a shorter segment reaching from I-26 to just west of I-20. It includes two sewer lagoons and the asphalt plant which may take some time to resolve. It may be the final connecting link in the greenway system.

Section 4 extends from I-26 to the confluence of the Broad River. It is the most exciting and most heavily used segment but also has a high concentration of natural resources (including the spider lilies). Plans are being pursued by the City of Columbia and the River Alliance as part of the Three Rivers Greenway. Comments in this plan supplement elements of the proposed plan in order to ensure continuity and compatibility with the overall goals and objectives for the whole corridor. Work in this segment can begin at any time.

While most property owners affected by the plan participated in the charette, any improvements suggested on privately owned properties are only illustrative and do not imply approval by the affected owners. Approvals must be worked out on a case-by-case basis and cannot be confirmed until easements are signed or properties are purchased.

The plan as shown was based on existing maps and limited site observation rather than on a detailed topographic survey. Any work on implementation should be based on more detailed site studies and adjusted as needed in the field.



Corridor Plan: Section 1

The core properties in Section 1 are Saluda Shoals Park and the SCE&G property at Gardendale. Connecting the two will require negotiation of easements with Honeywell and BC Components, both manufacturing companies that own large tracts of land on the Saluda River. Both facilities rely on the river for water to run their operations, but the majority of their facilities are located away from the river. Honeywell has established a recreation and wildlife area that is available for use by their employees and guests.

Past easements along the river have been 100 feet wide, but in Section 1 the greenway corridor should be designed to include utility rights-of-way parallel to the river and all other land down to the water.

Both Honeywell and BC Components have concerns regarding security and liability, but they are open to discussing how these issues could be addressed. If fencing is used to prevent access onto these properties, it should be set back at least 20 feet from the trail.

As with the rest of the system, the main trail is located away from the river above the flood plain. It should be at least eight feet wide with a hard-surface suitable for street bicycles and limited access by maintenance and law-enforcement vehicles. It is shown with a wider dashed line. Smaller natural trails may be located closer to the river with cross-trails to access overlooks or fishing areas. A particularly promising site for an overlook is the bend in the river across from Twelve-Mile Creek.

Saluda Shoals Park, Phase 2, will provide a bridge at Rawls Creek. Two additional bridges will be required at Kinley Creek and a smaller creek between BC Components and the park. Low boardwalk/bridges or culverts should be sufficient for other drainageways along the route.

Because of numerous concerns about security, Section 1 has a high priority for early development because it would have the benefits of controlled access at both ends of the 3 1/2 mile route. At the same time, it is almost half of the total route and offers significant recreational and natural attractions. As a result, it seems likely that the segment can establish desirable use patterns and management policies that can ensure responsible use of the greenway after it is connected to a larger system.

A fee access system is already in place at Saluda Shoals Park to support the operation and maintenance of parking, restrooms, and other improvements. It is closed at night. Similar controls and improvements should be initiated at Gardendale. Free access should be provided for pedestrians and bicyclists, with fees paid only by those who arrive by automobile. This fee structure would support parking improvements, a canoe put-in, and restrooms at Gardendale, while preserving open access to residential neighborhoods adjacent to Garden Valley Road. Employees from Honeywell and the BC Components property should also have unrestricted pedestrian and bicycle access to the greenway. Improvements at Gardendale will be needed to provide unrestricted access to the radio facility.

Access for emergency / law enforcement personnel and vehicles should be provided at Saluda Shoals, Honeywell, and Gardendale.

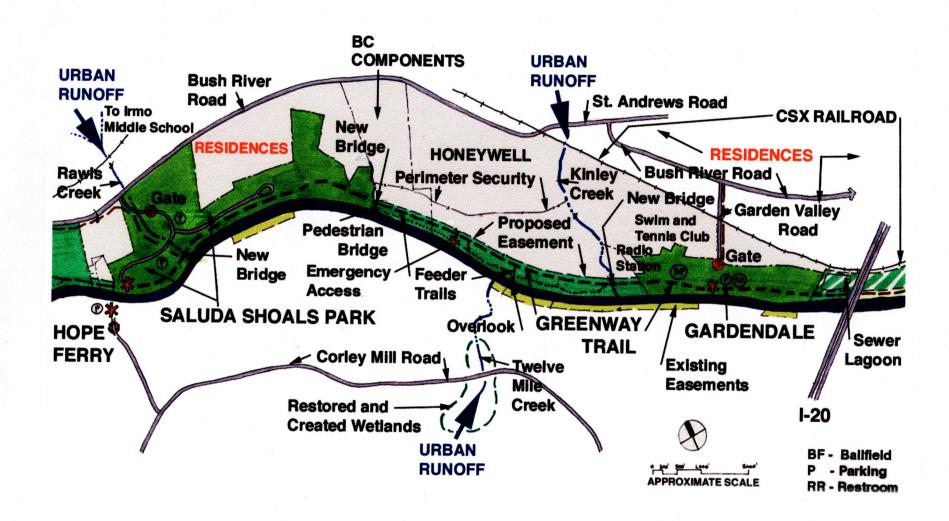
Interpretive signage should be provided throughout the section. Lighting is not recommended except in the immediate vicinity of the entry and restroom facilities.

While no recreation improvements are shown on the south side of the river, significant areas are already under easements which can help preserve the natural character of the south bank. Additional easements should be pursued as feasible, especially directly across from the Gardendale area.

Section 1 includes three river tributaries that impact water quality: Rawls Creek to Irmo, Kinley Creek going north to Harbison, and Twelve-Mile and Fourteen-Mile Creeks extending to Lexington. Opportunities exist to create or restore wetlands along the creeks to treat urban runoff before it is released into the river. The old mill pond by Corley Mill Road could be particularly suitable for this purpose.

During the charette, the Irmo-Chapin Recreation Commission indicated tentative interest in taking development and management responsibility for Section 1 of the greenway. Formal approval will require more detailed plans, financing studies, and an agreement with SCE&G concerning the Gardendale area. Grant funding and private contributions may be required to support recommended improvements.

The plan for Section 1 is illustrated on the following page.



Corridor Plan: Section 2

The dominant influence on Section 2 of the river is the SCE&G hydroelectric plant and adjacent coal-fired plant. From the point above Hope Ferry and Saluda Shoals Park where the emergency spillway rejoins the river, to the back side of the dam itself, SCE&G has safety and security concerns and discourages any type of public access. These factors require the greenway trail to be diverted away from the river in this section and routed along Bush River Road to Lake Murray. However, it is feasible, with appropriate perimeter security, to safely extend the main trail or a more rustic spur trail along the river to a point approximately one mile above Saluda Shoals Park.

While the trail could be developed as a wide sidewalk along Bush River Road, a more natural trail set in the trees is preferred. SCE&G would need to donate an easement to make the more attractive trail possible. It is shown as a winding route along the forest edge with underbrush cleared for security. The perimeter fence would

be located twenty to thirty feet behind the trail.

Highway planning will affect the upper part of the trail and trail head. Due to heavy traffic, SC-6 across the dam needs to be widened to four lanes, in turn requiring modifications to the profile of the dam itself. As part of the widening, or even earlier, changes are proposed to the intersection of SC-6, SC-60, and Bush River Road at the Irmo end of the dam. A large open area at the corner could be developed as a trail head. Again, the land is owned by SCE&G and would require an easement, sale of the land, or direct development of the facility by the company. The trail head should include parking, restrooms, bike racks, and water.

To provide connection to Lexington, charette participants strongly encouraged extension of the trail across the dam to an existing SCE&G recreational facility. If possible the trail should be on the lake side of the dam, which will require detailed study as part of

the road widening project.

Below the power plant, the trail should follow Bush River Road to the point where the railroad siding crosses the road. At this point the trail should angle over to the riverbank with more rustic trails connecting upstream approximately one mile above Saluda Shoals Park to where the State Scenic River designation begins.

A possible alternative that could cut in half the length of trail along Bush River Road from the dam would be to turn towards the river at an earlier point and route the trail (from the road to the river) along the edge of an existing power line right-of-way, merging with the river about a half mile below the dam.

Between the lower end of the SCE&G property and Saluda Shoals Park there are two privately owned properties: Cornerstone Presbyterian Church and the Walker Property. Cornerstone Church currently provides access to the river for its members and has substantial concerns about access and security. There is currently a

fence between the church and the park.

The fence, however, is only partly successful. Because of the desirability of upstream fishing sites, trespassers still find ways around the fence. The study team recommends opening the trail on a fifty-foot corridor on the bank with a fence and gate that would provide security to the church while still allowing access. We recommend a similar approach for the Walker property, but we understand that outright purchase of the property may be required.

If satisfactory agreements cannot be negotiated with the property owners, an interim alternative route can be developed by building a sidewalk along Bush River Road to the entrance to Saluda

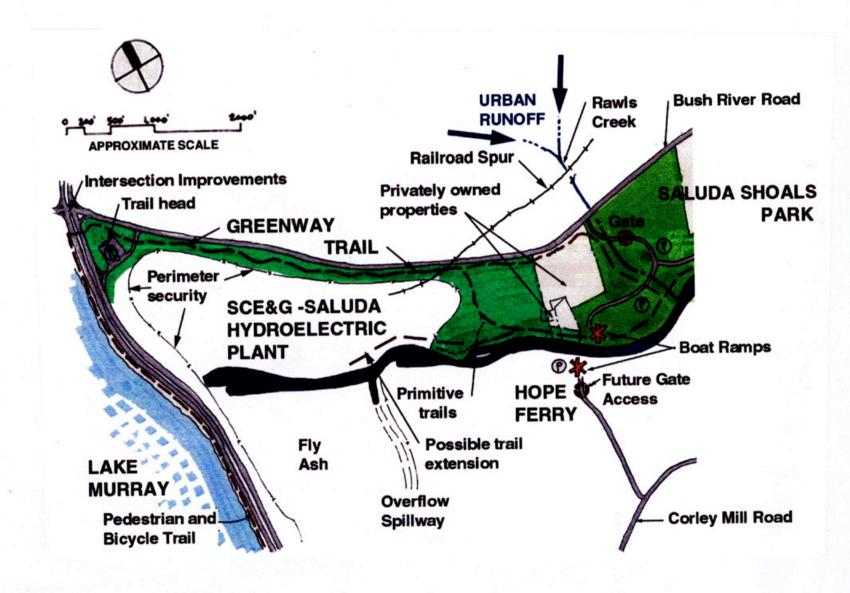
Shoals Park.

No bridges will be required for Section 2 of the greenway trail. While the lower part of the section should have a stabilized earth surface, the section along Bush River Road could be concrete. No facilities or access points should be built between the trail head and the park.

Completion of Section 2 would result in a trail of approximately five miles from Lake Murray to Gardendale.

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Illustrative Development Plan:



Corridor Plan: Section 3

Section 3 of the greenway trail is the shortest segment, but it has several complications, including two sewer lagoons and an asphalt plant. With the CSX railroad as a firm boundary on the north, the river corridor is quite narrow, and there is no way around the three key properties. Most of the rest of the segment is SCE&G property, and the company has already granted 100 foot easements along the river.

The sewer lagoons and asphalt plant have narrow strips of land along the river that could be donated as easements for the trail, but extensive fencing could be needed to insure security. The resulting trail would be of significantly lower quality than the remainder of the trail, and the trail could be subject to periodic flooding.

Comments during the charette indicated that one of the sewer lagoons serves a nearby residential and commercial development. The developers considered connecting to the City of Columbia sewer system and found it to be technically feasible but too costly. At least for the present, they have decided to keep the sewer lagoon in operation.

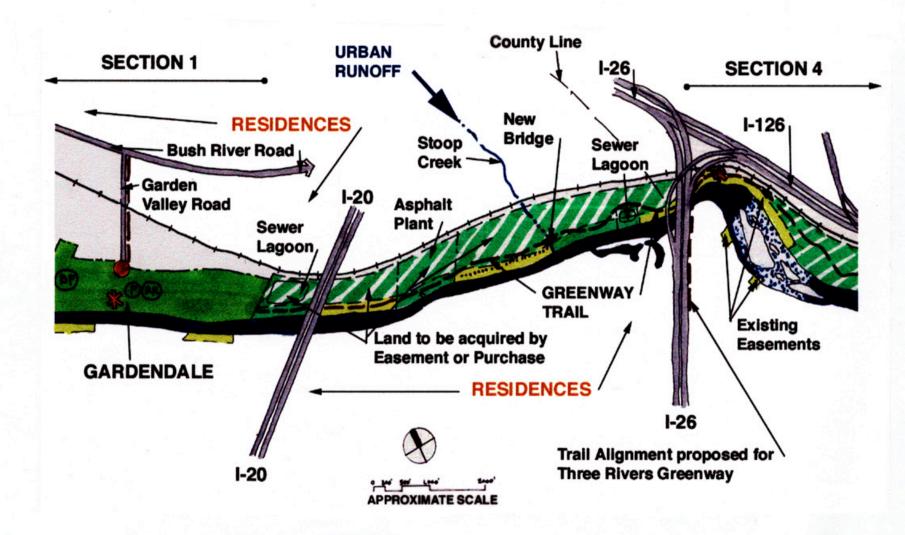
The concensus emerging from the charette suggested that it made sense to wait until the three active properties, or portions of the properties, could be acquired, and the active sewer lagoons transferred to sewer lines, even if this would take several years or involve significant expense. Public support developed from the opening of Sections 1 and 2 should ultimately encourage completion of the last section.

Because the width of the corridor to the railroad is no greater than the existing width of the Gardendale property, the study team recommends the acquisition by donation or purchase of all of the property between the river and the railroad, rather than just a linear easement. Ownership of the property would allow careful planning to maximize the beneficial development of the section as a key part of the corridor, with law-enforcement and service access extending all the way from Gardendale to the Riverbanks Zoo without crossing the railroad. A bridge will be needed at Stoop Creek.

The 1990 Plan illustrated a Conceptual Park Opportunity Analysis for the SCE&G property just below I-20. The plan indicates the possibilities for a marsh habitat and a distinctive American Holly grove ecosystem at the site. Also illustrated is a fishing pier that would take advantage of long deep river runs in this area. Access is illustrated along a small road connecting to Bush River road across the railroad tracks. As shown, this would be an isolated segment which would be difficult to control and secure, and the idea has not been pursued.

Sewer lagoons have been successfully converted to recreation facilities at many locations around the state, and the areas could be a significant asset to the overall corridor. In Ware Shoals, for example, old lagoons were donated for development of a major park. In addition to providing recreation space, closing the lagoons eliminates a potential risk to water quality in the river. The same is true for the asphalt plant property.

While not studied in detail, it would be possible to connect the trail across the river beneath the bridge at Interstate 20.



Corridor Plan: Section 4

The area from the I-26 bridge to the confluence is already included in plans for the Three Rivers Greenway. Partnering with the River Alliance, the City of Columbia will continue to take the lead in crossing the Broad River and building the Three Rivers Greenway up to its Saluda River crossing at the I-26 fly-over to West Columbia, where the greenway will terminate. As a result, the charette did not try to re-plan the area but instead offered comments which address connections with the upper portion of the proposed Greenway Trail and issues specifically related to water quality, user safety, and recreational access.

Section 4 contains a fabulous wealth of river resources including whitewater rapids, fishing, Spanish moss draped trees, and the Spider lilies in the shoals near the confluence. The Riverbanks Zoo and Botanical Gardens anchor the area, but do not manage use of adjoining properties, though the garden property does protect the ruins of the Saluda canal and mill. A perimeter fence constructed to secure the property does create one conflict with river users: at times the gate is locked and denies access to the vital portage around Mill Race Rapids. River users also often use the zoo parking lot, causing some parking problems as well as littering and other maintenance problems.

The north boundary of the section is the double barrier of the CSX railroad and I-126 with access to the site only at Greystone Boulevard and Candi Lane. The result is high levels of recreation demand and a very limited area to accommodate and support the use.

Several privately-owned properties, such as the Police Hut property, complicate the equation. Proposed uses have included midrise residential development which could significantly impact the appearance of the area. Some property near I-26 and near Stacey's Ledge are owned by SCE&G with easements already in place along the river.

Charette participants did not have a detailed copy of the Three Rivers Greenway Plan because it is not yet ready for public release. In general, the plan calls for a trail to cross the Broad River below the zoo, connecting the existing trail at Columbia's Canal Park to the Saluda Corridor. The trail would proceed past the zoo to the I-26 bridge, where a pedestrian crossing is proposed to be suspended from the fly-over to connect with residential areas in West Columbia.

Charette participants indicated numerous concerns that they felt should be addressed by the plan.

Canoers and kayakers expressed concerns about a possible low-level crossing of the Broad River. They argued that the low-level bridge could create boater entrapment hazards and dangerous hydraulics that could increase risks, emergency calls, and, potentially, loss of life. To others, the necessary height and length of a high-level bridge also caused concern. Because of flood levels, the bridge would be almost as high as the railroad trestle, resulting in a bridge over half-a-mile long, with no place to get on or off in the middle. Two participants even suggested recreating a ferry to cross the river. No concensus was reached regarding the crossing except that it was going to be a difficult issue to solve. Some participants felt that the Broad River crossing may be the last segment of the greenway trail to be completed.

A key recommendation of the 1990 corridor plan was to control access so that the zoo parking lot would be for zoo visitors only. The Three Rivers Greenway concept plans do show alternative parking lots to be located under the power lines below Stacey's Ledge. These lots will serve river / greenway users; however, it is unclear how access might be controlled and how adequate the lots are to handle future parking demands in this area.

The Three Rivers concept plans also mention commercial river rafting or canoeing and kayaking in Section 4. Charette participants were almost unanimously opposed to commercial boating on the Saluda.

Knowledgeable participants agreed on four critical needs. The first was for a new take-out on the north side of the river either above or below Stacey's ledge, or both. This is the best place for inexperienced paddlers to exit the river above Mill Race Rapids at times of high water flow. The take-out could also provide improved emergency access to this segment of the river.

The second need was to ensure access to a portage on the south side of the river at Mill Race. Portage can either be done through the Botanical Garden property if security issues can be resolved, or by constructing a new portage across the island in the the river. Implementation of one approach or the other is essential.

The third need was for an emergency put-in on the south side of the river. Currently, crews from West Columbia must cross the I-26 bridge to the zoo area to assist, resulting in poor response times.

One possibility discussed was at the power line and sewer line crossing near the end of Seminole Road. Residents of the area, however, were concerned about any access improvements in this location, and access at this location only reaches the area above Mill Race rapids. An access below Mill Race is preferred, but the area is densely developed as residences, and no workable locations for an access point were identified. One possibility is the acquisition of a deteriorated residential property to specifically create an access point, but this would still require emergency vehicles to use residential streets.

A fourth issue was more an opportunity than a problem. Because of the popularity of the Oh Brother Rapids and Ocean Boulevard, paddlers endorsed a canoe put-in with walk-in access from Candi Lane similar to that proposed in the Three Rivers Greenway concept plans. To discourage heavy use, the charette participants suggested that all unloading / parking areas be sited as far from the river as possible, and that connecting trails to put-ins be at least 100 yards long to discourage casual and inexperienced users.

Charette participants almost unanimously recommended restoring the area between the zoo and the I-26 bridge to a natural condition to buffer the river from the noise and pollution of I-126 and the railroad. Some suggested acquiring the entire area for public use to be managed as a passive natural park and recreation area.

Many management issues in Section 4 were raised but were generally left unresolved. While access fees for vehicles were endorsed at facilities up the river, the implementation of access fees and controls in Section 4 would face greater opposition. Yet access controls may be vital in dealing with usage, maintenance, and behavioral issues. Under current ownership, free access must be maintained to privately owned properties, though the owners gate off the properties themselves. Trespassing, as a result, is extensive. Full resolution will be difficult until the properties are either developed or acquired for public use.

While the zoo and botanical garden are central to the area, they need to focus on their primary mission, and they do not want to assume management responsibilities for activities on or near the river. As a result, both sites are surrounded by perimeter fences.

Controls on the zoo parking lot include a proposal to fence in the parking and charge admission at a parking gate rather than at the pedestrian entrance to the zoo. Complex design issues at the entry bridge and problems with traffic back-ups will be difficult to resolve, but the idea of controlling the parking will not go away. Control of the zoo parking would limit public access to the fishing areas near the confluence but could easily allow for emergency access. Parking expansion could ultimately require a one-level parking deck.

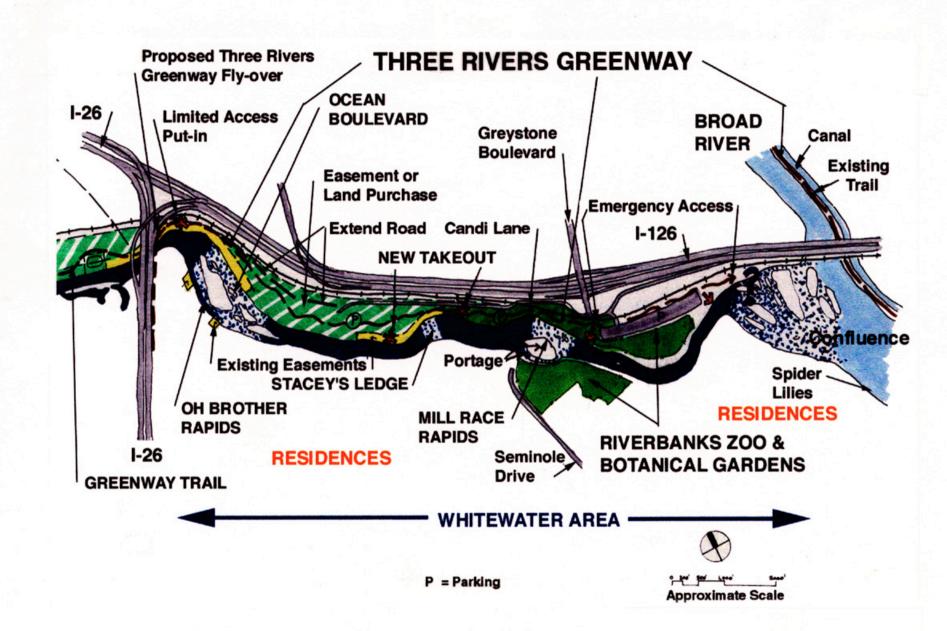
Because Section 4 will be part of both the Three Rivers Greenway and the Saluda River Greenway Trail it will be important for the various organizations to communicate well and to co-ordinate actions and policies. The transition between the two greenways will be near the planned pedestrian bridge at the I-26 fly-over. It is understood that the City of Columbia will own and manage the Three Rivers Greenway and related facilities up to I-26. Because the Saluda River Greenway trail will have controlled access at Gardendale, Saluda Shoals Park, and the dam, similar access controls will need to be instituted at the I-26 transition area.

Responsibilities for construction and management of the proposed put-in above Ocean Boulevard, the take-out(s) at Stacey's ledge, and the Mill Race portage will need to be negotiated to ensure consistency. How to protect the Spider lilies, which are sometimes picked by visitors, was also unclear.

Except for locating an emergency access point, the plan for Section 4 includes no proposals south of the river. Residents from the neighborhoods made it very clear that they did not want any increased access or incursions on their riverfront properties. Many are already disturbed by excessive noise from activities on the north side. A few of the south side residents also had strong reservations about the proposed trail connection on the I-26 fly-over and generally preferred that the trail stay on the north side entirely. They exhibited little interest in being able to access or use the trail system.

Recommendations for Section 4 are illustrated on the following page.

Behavioral issues cited included drunkenness, drug use, outdoor fires, littering, nudity, and urinating in public.





New facilities at Saluda Shoals Park

Implementation

Implementation of the recommendations will take two forms: processes and projects. The process steps outline a series of on-going actions that continue into the future, for example, monitoring water quality in the river. Projects are elements that have specific beginning and completion dates, a fixed scope of work, and a budget, such as a segment of the Greenway Trail.

The first step is to finalize administrative responsibility for implementation and management of the Greenway Trail. The Irmo-Chapin Recreation Commission has indicated an interest in Sections 1-3, but it is essential to secure formal approval of the concept by the Recreation Commission Board. At the same time, the River Alliance and the City of Columbia are taking the lead on the Three Rivers Greenway segment in Section 4.

The lead organization for the Saluda Greenway, whoever it may be, will not be expected to supply all the money. Financing construction of the trail and acquisition of land and easements will require grants and the support of many partners.

While the Advisory Council is not properly organized to undertake construction projects, it is still the group that best represents the river corridor as a whole, including the area below the I-26 bridge, because the group includes a range of river-bordering landowners and river users. Therefore, the Advisory Council should have a major voice in the implementation process, seeking to be a principal facilitator of the process and a partner in all related projects. It should be heavily involved in securing partner commitments, publicizing the project, and negotiating easements or purchase agreements. It should assist in coordinating the efforts of local government agencies and organizations that are involved with Saluda River projects. The Advisory Council should partner with these agencies and organizations to negotiate the details of the plan, decide who is going to do each part, and establish a time-line for implementation.

Citizens can also do their part, keeping up to date on the progress of the plan, providing input, serving as volunteers, and supporting the plan in public and private meetings. In the end, if the Greenway Trail and related improvements are to happen, they must have the support and encouragement of the residents of the corridor.

Implementation Proposals

Implementation processes are on-going activities that involve monthly, quarterly, or annual meetings, reviews or assessments of progress, public education and publicity, coalition building, and coordination of project activities.

IM-1: Establish a Greenway Trail Task Force including Advisory Council Members and local government agencies and organizations involved with Saluda River projects with the responsibility for keeping the projects moving and coordinating activities between agencies.

* Create or designate a trail management agency.

* Secure partner commitments.

* Negotiate easements or land acquisition.

* Monitor and have input into the dam relicensing process.

* Seek grants and private contributions.

* Conduct publicity and public education campaign.

IM-2: Create a Saluda River Management Committee to work specifically on Safety, Law Enforcement, Access, and Rules for Use of the River Corridor.

* Continue the search for an access point south of the river.

* Establish consistent policies on alcohol consumption, firearms, litter, fees, and hours of operation.

 Develop policies on trail use including specific policies for pedestrians, bicyclists, horses, motorized vehicles, in-

line skates, and emergency and maintenance vehicles.

* Develop and consistently review policies on fishing, camping, swimming, boating, and paddling.

* Investigate strategies for controlling trespassing.

* Implement an annual "River Sweep" clean-up campaign.

IM-3: The Advisory Council should meet regularly to hear Task Force and Committee reports, and to identify and take action on other needs.

* Work with counties and municipalities on all ordinances that affect water quality on the river.

* Work with SCE&G on flow issues.

Publicity and Public Education

If people don't know about the Greenway Trail, they will not support it. While the Greenway Trail Task Force will need to design and coordinate publicity and public education activities, partner organizations or volunteers may be enlisted to help with specific materials and presentations. Having more people involved will help spread the message, but all presenters need to share a consistent message or confusion and conflict can arise.

PPE-1: Prepare and print a brochure that summarizes the Greenway Trail plan with a readable text and strong graphics.

* The brochure may be designed and distributed as a

supplement to The State newspaper.

* The brochure should communicate enthusiasm without unnecessary details that could be controversial.

PPE-2: Schedule presentations to local governments, state agencies, schools, corporations, and civic organizations throughout the Columbia area. Prepare a "canned" slide show or PowerPoint presentation. Conduct training sessions for volunteer presenters as needed.

* Develop a list of speakers for civic clubs

PPE-3: Make sure that copies of the brochure and planning reports are available at local libraries and offices of Partner organizations.

PPE-4: Create a "River Map" to standardize place names and help users become more knowledgable about the river and its hazards.

PPE-5: Organize a clean, up-scale Saluda River festival to raise funds and build public support.

Core Projects

Projects in group 1 involve implementation of the core sections of the Greenway Trail on a phased basis.

Responsibility: Overall Trail Management Organization, SCE&G, Partner organizations.

1-1. Complete construction of improvements to Saluda Shoals Park. (2000-01)

* Construct roads, parking, trails, bridges, gatehouse and other facilities in the current plan.

1-2. Implement Section 1 of the Greenway Trail. (2000-04)

- * Negotiate easements with Honeywell and BC Components
- * Resolve whether SCE&G or another organization will improve and operate Gardendale
- * Hire consultants to prepare detailed plans for the trails, bridges, parking, security fences, gatehouse at Gardendale and other facilities.
- * Secure cost estimates and funding commitments.
- * Construct main trail.
- * Construct Gardendale access point and facilities.
- * Clear and improve bank trail, feeders, and overlooks.

1-3. Implement Section 2 of the Greenway Trail. (2001-04)

- * Negotiate trail alignment and trail extension alternatives with SCE&G.
- * Resolve concerns of Cornerstone Presbyterian Church and Walker and finalize easements for trail.
- * Secure final plans for intersection improvements at SC-6, SC-60, and Bush River Road.
- * Hire consultants to prepare detailed plans for the trails, trail-head, security fences, and other facilities.
- * Secure cost estimates and funding commitments.
- * Construct main trail and trail-head.
- * Clear and improve bank trail by fishing hole.
- * Work to make sure trail is included in widening of SC-6 across the dam.

1-4. Implement new take-out(s) at Stacey's Ledge. (2000-06)

- * Prepare more detailed concept plans
- * Work out arrangements with SCE&G for sites including expanded easements as needed.
- * Resolve vehicular access to the site.
- * Make final determination on portage route.
- * Prepare detailed plans and cost estimates.
- * Secure funding and build projects.

1-5. Implement Section 3 of Greenway Trail. (2004-2010)

- * Work with owners of sewer lagoons to connect developments to the sewer system.
- * Discuss acquisition of the asphalt plant with owners.
- * Raise funds to acquire properties or easements as needed.
- * Resolve expanded easements on SCE&G properties.
- * Prepare detailed plans and cost estimates.
- * Secure funding and construct trail, wetlands area, fishing pier, and other improvements.

Related Projects

The following projects fall outside the principal task of constructing and managing the Saluda River Greenway Trail. Implementation responsibility varies on a case-by-case basis.

Responsibility: City of Columbia, West Columbia. Review and Input: Advisory Council, Riverbanks Zoo

2-1: Implement the Three Rivers Greenway Trail including access point above the zoo, access below I-26 bridge, connection across the Broad River, and connection to West Columbia. (2000-2010)

* Finalize plans for trail and access above the Zoo.

* Finalize overall trail arrangement.

* Resolve crossing of Broad River.

* Redesign access below 1-26 bridge to increase the distance between parking and the put-in.

* Develop detailed plans and cost estimates.

* Construct improvements.

Responsibility: Advisory Council, Riverbanks Zoo and Botanical Gardens, others to be determined.

2-2: Construct improved portage trail at Mill Race Rapids. (2000-02)

* Thoroughly study the use of the existing portage and modifications to perimeter fencing required to ensure portage availability while maintaining security for the

Botanical Gardens and historic resources.

* Prepare plans and cost estimates for improvements to the existing portage or construction of a new portage across the island, or both.

* Agree on most feasible plan.

* Prepare final design and detailed cost estimates.

* Secure funding and construct improvements.

Responsibility: Advisory Council, Riverbanks Zoo and Botanical Gardens, SCDNR, others to be determined.

2-3: Conduct an Inventory of Flora and Fauna in the Corridor. (2000-2002)

* Outline scope and goals of study.

* Determine manpower needs and resources.

* Seek grant funding as needed or available.

* Conduct inventory on phased basis.

Responsibility: Advisory Council, SCE&G, SCDNR, and others to be determined.

2-4: Construct improvements at Hope Ferry. (2004-08)

- * Work out agreement for implementation and management between SCE&G and the Lexington County Recreation Commission.
- * Attempt to acquire additional land for parking and facilities, and easements along the river for bank fishermen.
- * Use traffic counters and observation to establish types of users and levels of use over time.
- * Make final decisions on access controls and level of improvements.
- * Prepare detailed design and cost estimates.
- * Secure funding and construct improvements.



Appendices:

Lower Saluda Scenic River Advisory Council Members

Credits

Charette Participants

Notes from Public Input Sessions

Lower Saluda Scenic River Advisory Council

Voting Members

Tommy Boozer: SC Electric and Gas Company (landowner)

Jim Brailsford: Residential landowner Guy Jones: River Runner Outdoor Center Malcolm Leaphart: Trout Unlimited

Mary Leverette: Riverbanks Zoo and Garden (landowner)

Tim Love: Honeywell Corporation (landowner)

Jerry Miller: Irmo-Chapin Recreation Commission (landowner)

Bill Marshall: Scenic Rivers Program, SCDNR Alvin Wright: Law Enforcement Division, SCDNR

Rick Wilson: Residential landowner

Ex-officio Members

Mandy Manuel: Palmetto Paddlers Ann Jennings: Congaree Land Trust

Tony Bebber: SC Department of Parks, Recreation and Tourism

Susan DeFoe: The River Alliance

Credits:

Robert W. Bainbridge, AIA

Maps: pages 14, 16, 18, 20, 23, 28

Drawing: page 8

Photos: Front cover, pages.i, 2, 7, 8, 13, 24

Irene Dumas Tyson

Drawing: page 9

The Lower Saluda River Corridor Plan, 1990.

Photos: pages i,1,3...

Map: page 4

Charette Participants

Bill Ackerman Jay Alley Jeff Barlow Tommy Boozer Boyd Brown Robin Carter Michael Craig Mary Crocket Joe Craven Fred Clas John Dickerson Tom Dodds Michael Flemming John Green III Ester Haymond Tom Howell Ann Jennings David James Satch Krantz Kathleen Lightsey Tim Love Jollene Marchant Robert McCloud Jerry Miller Morgan Maclachlan Gerry Manow Scott Pfaff Joyce Paul Jeff Rainwater Jean Rice Clarence Rogers Ronald Scarboro Paul Sandifer Brett Snyder Elizabeth Taylor William Thomas Jr. Freddy Vang

John Areheart Pete Bain Barry Beasley Jim Brailsford **Brett Bursey** Sandy Cogburn Mike Crapps Paul Cromer J. Donald Canady Jay Daniels Leslie Drucker Leigh Edwards Jim Gibbs Trey Harrell, III Joey Holleman Carl Hust Fred Johnston Karen Kustafik Malcolm Leaphart Mary Lindsay Jack Maguire Bill Marshall Andy Miller Tony Mixon Daucie Morrow Ozzie Nagler George Pickels Fred Park David Rhoten Yvonne Rogers George Reeves Wilson Smoak Jim Schmid Tom Stonecypher Charlene Thompson Beth Trump Freddy Walker Steve Wing

Bob Areheart Bob Bainbridge Tony Bebber **Beverly Brandes** Diane Burke Rosie Craig Mike Criss Mike Cummins Nancy Canady Mike Dawson Max Dent Jennifer Fitz **Everett Gourlay** Bob Hayden Gary Hogue Glen Hover Danny Johnson Marion Kemmerlin Harry Lightsey Mick Lindsay Mandy Manuel Joseph Melchers Anne Miller Greg Mundy Don Meetze Kent Parsons Shawn Putnam Lynn Quattro Spencer Rice Shan Rose Dermon Sox Sandra Schmid Dermon Sox Nina Shepherd Irene Dumas Tyson Nancy Lee Trehey Dawn Walker Alvin Wright

Rick Wilson

Comments from Public Input Sessions

What are the values of the Lower Saluda River Corridor?

- * accessibility for paddlers, canoeing and kayaking
- * water: cold water, white water, flat water
- quiet, private, peaceful: solitude, place for an escape
- scenic quality, unique beauty: shoals, spanish moss, trees
- * whitewater rapids
- * wildlife, flora, fauna, and habitat
- Spider lilies
- * water quality
- * multi-use resource
- * oasis in town, wilderness in a metropolitan area
- * cultural resources: historic, archaeologic, educational, tourism: ruins
- * fisheries: rockfish, striped bass, trout
- non-commercial
- uniqueness
- experiences for children, opportunity for family activities
- great place to live
- route for power lines and sewer lines
- power generation
- great setting for Zoo and gardens
- bird watching
- * swimming, fishing, multi-use of the river
- * viewscapes
- * exotic sounds from Riverbanks Zoo

What would be a Perfect Day on the River?

- * ride bike to/from Gervais Street Bridge to Saluda Shoals Park
- * wade or fish without being run down by rafts and motorboats
- picnic with family
- to walk to/from Saluda Shoals Park and Gardendale Lane
- * birdwatching
- * walk barefoot the whole length of the greenway, no asphalt
 * kayak around fishermen without hooks and lines
- * canoe down river without seeing trash
- * to learn more for the next trip a broadening experience * to take family to park, then ride bikes to/from another park
- * swimming

What is your vision for the river?

- park car at Lake Murray and bike into the city
- clean, cold water
- more public access
- less public access
- open portage at Mill Race Rapids
- limited new development and commercial activity
- protected natural areas
- maintain scenic quality
- * limit siltation
- * visual screen from development
- year-round flow, quality
- safety, life jackets
- monitor fish and game laws
- preserve and improve habitats
- new take-out above Mill Race
- no motorized access to trail
- no motor boats on river
- stable minimum flow to support different uses (keep trout alive!)
- multi-use trail for walkers, bikes
- accessible rest rooms
- uncertain about rollerblades?, horses?, ATV's?
- educational interpretive signs
- * leave it alone!
- courtesy between users
- * liability protection for owners
- * ADA accessible activities
- * keep river pristine
- controlled, safe access points
- * keep access free
- preserve private property rights no all-night activities (camping)
- charge for admission to encourage responsibility
- control picking of spider lilies
- * low-impact access
- regional trail system
- good signage system
- a complete Three Rivers Greenway from the dam to Congaree Swamp to the Appalachian Trail

- * an alternative transportation route from Lake Murray area to downtown
- * designated as awildlife preserve
- * improved water quality
- * sewer effluent eliminated
- * attain 100% conservation easements on both sides
- * maintain variety of public recreation opportunities
- * a master plan based on public need and natural resource enhancement, not development dollars
- * comprehensive law enforcement along the river corridor.
- comprehensive educational program safety, habitats, water,
- * ecosystems, expected behavior, rules
- * to remain as natural and as beautiful as it is
- potential for non-motorized transportation
- comprehensive docent, volunteer organization for the river
- * no motor vehicles along the greenway or in the river
- * increased fiscal resources for the management of the river corridor and greenway system
- maintain higher low flow of water
- define a schedule of water releases for safety
- Saluda River hosts the national Trouts Unlimited meeting
- * improved access for bank fishing
- * The Saluda River is a community resource, used and valued by all citizens
- * Safe and accessible links between parks, neighborhoods and neighborhoods along the greenway
- * access above and below Mill Race
- * accommodation of, but separation of variuos trail uses ie, horses, mountain bikes, hikers, etc.
- year-round fisheries
- * better portages around Mill Race and Shandon
- * visual screen from development/buffer

What are the Challenges for the future?

* restricting commercial development and activity

* balancing various users and uses

* overcoming apathy

- * cost of construction and maintenance of improvements
- * securing support of property owners and government
- * preventing sediment and pollution from tributaries
- * getting sewer lagoons closed and onto the sewer line

* protecting natural areas

- * safety and behavior at Mill Race / Zoo parking area
 * growth of Columbia and increased recreational users
- * encouraging appropriate behavior (no loud parties, littering...)

* different governmental jurisdictions * keeping fishermen off private property

* protecting environmental quality without excessive regulation

* connecting the trail across the Broad River (high-level vs. low-level)

* growth pressures from Harbison, Lexington county

* allowing access while providing safety and security

* finding a place for emergency access from West Columbia

* study where accidents happen and plan for this

- * funding for management, maintenance and increased law enforcement
- * balancing conflicting interests in water flow between SCE&G/Lake Murray and river users

* protecting natural habitats

 finding or establishing a coordinated public/private organization to manage

* dealing with the details

* resolving liability issues

* developing a risk management plan for all three river corridors

* controlling organic trash disposal in the river

* coordination with Three Rivers Greenway

- * answering the question "What will happen to property values?"
- * getting agreement on regulation of hours and activities and fees
- * ability of state and local governments to control activity on river

* avoiding urbanization of river

- * educating the public to behave responsibly
- * interagency/jurisdictional coordination

* keep public access in public areas

* preventing vandalism

* educating river users to understand and respect the water and the rapids

* possible increased demand on hydro facility

insuring public safety

* educating community and elected leaders

* lack of cooperation of groups involved

* truly involving people, particularly those who understand the river and its culture

* extending easements past 100'

* determining who will manage

- * securing commitments to improve sewage infrastructure
- striking a balance between increased public access and wildlife

* building grassroots awareness and support

* selling the community on the vision

* Insuring sustainable management of Greenway - funding construction and maintenance

What are your Fears about the Future?

- * commercialization
- polluted water
- * over-crowded
- * gated communities/golf courses/over-development

* loss of wildlife and forests

- * increased conflicts between user groups
- * ORVs
- * increased accidents and loss of life
- * mud washing down from construction sites
- * catastrophic failure of dam
- * limiting hours of access
- * increased development and sewage

* high rises ruining view sheds

- * inadequate resources and equipment for public safety
- * housing density increasing on private land

vandalism, lack of security

* inability to rescue and manage public safety

What do we need to do to move forward?

- * involve elected officials and build a coalition
- * agree on a development plan and management plan
- * organize citizen and corporate involvement
- * coordinate with the River Alliance
- * address landowner concerns
- * follow SCE&G relicensing
- * determine a lead group or champion
- * get more information
- * research habitats and determine environmental impacts
- * plan for regulation and enforcement to deal with litter, vandalism, trespassing, lewd behavior
- * negotiate easements with property owners
- * undertake a publicity campaign and public education
- * establish a concensus on what needs to be done
- * build partnerships
- * figure out how to deal with key properties (Police Hut area)
- * study successful models Itchuckee River, FL
- * develop better understanding of impact on the south side
- * plan for the entire river, not segmented pieces
- * create an education and safety plan for users

If a greenway is not built, What happens Then?

- * maintain and expand green buffer
- * provide specific areas for public access, fishing and picnics
- * do as much as possible
- * improve water quality
- * increase law enforcement
- * provide take out above Mill Race with low impact parking nearby
- * provide more access points at I-26 bridge, canoe/kayak put-in at Gardendale
- * make sure of portage around Mill Race
- * look into shared parking along the river: Riverbanks, Saluda Shoals, Gardendale

What should the Qualities of the Greenway Be?

- * very little removal of trees and natural habitats
- * trail to be of natural materials environmentally sensitive
- * no street lights, very few lights along trail
- * ADA accessible
- * control hours of access to trails, public restrooms and parking
- * used as buffer and a natural conservation area
- * interpretation of habitats along the trails
- * separation of bike and pedestrian paths when possible
- * limited tent camping
- * membership structure for usage of facilities: nominal fee? annual pass? voluntary?
- * high quality of information system kiosks, maps, markers, call boxes
- * keep access as simple and challenging as possible
- * focus on what's unique to the Saluda River
- * Access points should have restrooms, limited and secured parking, call boxes, rescue equipment, ranger hut, bike racks, picnic areas, put-ins
- * natural and sustainable construction materials, low impact on environment
- * greater connection to surrounding neighborhoods for pedestrians and bicyclists
- * define the rules: what's allowed, what's not
- * a well-controlled and managed environment
- * visible and comprehensive law enforcement
- * appropriate emergency access along trails and river
- * greenway as means to protect and enhance natural resources
- * greenway to be developed away from river's edge so that it is not seen from river, but with views to the river and wide enough for multi uses
- * resolution of liability, litter and trespassing concerns of landowners
- * safe haven for all citizens

"Get people who are responsible for planning the future of the rivers on the river so they can know and understand!"

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