Ashley Scenic River Management Plan

Ashley Scenic River Management Plan

Prepared by The Ashley Scenic River Advisory Council

In partnership with
The South Carolina Department of Natural Resources

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Summary

he Ashley River was designated a State Scenic River by the South Carolina General Assembly in 1998 and 1999. The scenic designation extends 22 river-miles from Highway 17-A at Sland's Bridge near the Town of Summerville to the crossing of Interstate-526, the Mark Clark Expressway. With this designation the Ashley River became part of a program established by the South Carolina Scenic Rivers Act of 1989, the purpose of which is to protect unique and outstanding river resources throughout South Carolina. To accomplish this purpose, the act provides for a voluntary, cooperative river management program to be administered by the South Carolina Department of Natural Resources (SCDNR), a program that enables landowners, community interests, and the SCDNR to work together toward common river conservation goals.

Following procedures of the Scenic Rivers Act, an advisory council for the Ashley Scenic River was formed in 1999 with members representing river-bordering landowners, river users, and community interests. The purpose of an advisory council is to assist and advise the SCDNR in the protection and management of the scenic river. Creating a management plan for the river is the first major task of an advisory council.

The Ashley Scenic River Advisory Council, in partnership with the SCDNR, conducted an open public-planning process spanning 2.5 years to create the Ashley Scenic River Management Plan. The plan serves as a guide for ongoing program activities of the advisory council and the SCDNR for the Ashley Scenic River. The plan does not impose new regulations.

The plan reflects public values, concerns, and desires for the river; it defines problems and opportunities and advocates goals and recommendations. The ideas of the plan come from the local community, from landowners, river users, and community leaders who wish to promote ongoing good stewardship of the Ashley River to protect and enhance the highly valued natural, cultural, and scenic qualities of the river for the benefit and enjoyment of present and future generations. The plan acknowledges the legacy of good stewardship among many generations of landowners along the Ashley, and it offers ideas to support the continuation of good stewardship. No new regulatory restrictions are mandated by the plan.

The first chapter of this document introduces the Ashley Scenic River Project and describes the history and processes of scenic river designation, creation of the advisory council, development of the plan, and public participation. The second chapter forms the core of the document. The significant resources and management issues of the Ashley Scenic River are described and a plan is provided.

The plan specifies four management goals and 26 recommendations that address (1) water quality, (2) recreational use and access, (3) preservation and conservation, and (4) land management and development. Four additional recommendations address plan implementation. At the end of the document three appendices supplement the plan, providing information and drawings that support recommendations and public input notes that form the basis of the plan.

Goals and recommendations of the plan include the following themes:

- Maintain and improve water quality in the Ashley River to meet state water quality standards for the river and provide safe and healthy conditions for desired river uses.
- Initiate cooperative efforts with agencies and community groups to educate citizens in the watershed about water quality issues, sources of water pollution, and practices to prevent water pollution.

Recreational Use and Access

- Allow the Ashley, as a State Scenic River, to be reasonably accessible and navigable along its entire course for responsible recreational use and enjoyment by landowners and the public.
- Balance recreational use and access with care, respect, and conservation of the river. Manage use and access to prevent overcrowding, trespassing, abuse of private property, and negative impacts on the river's outstanding resources.
- Encourage compatible low-impact uses of the river corridor and develop improved low-impact access facilities. (A conceptual design for a park at Bacon's Bridge is provided.)

Preservation and Conservationa

- Preserve in perpetuity the unique cultural resources and conserve the outstanding natural and scenic resources of the Ashley Scenic River.
- Encourage municipalities and counties bordering the scenic river to develop meaningful and coordinated standards for new construction that will preserve and enhance the appearance and resources of the scenic river. In particular, standards for use of vegetative buffers are encouraged. (Standards for voluntary buffers with illustrations are provided.)
- Enact legislation and provide funding sources that will create incentives for voluntary actions among landowners to protect important scenic and cultural resources.

Land Management and Development

- Preserve and enhance the scenic and water quality characteristics of the river corridor and encourage landowners to continue voluntary good stewardship of their land.
- Develop a communications network to inform and educate river landowners, river users, and elected officials of success stories, activities, and issues related to the river.
- Create landscape guidelines for future developments to reduce and eliminate visual and water runoff impacts to the river and promote a seamless visual quality to the river corridor.
- Conduct land stewardship workshops that inform the property owners of alternative land use planning, illustrate good design, and identify financial incentives for various alternatives. (Drawings are provided.)

Implementation

- Use the plan to inform and encourage citizens, landowners, developers, and leaders of the community to take specific actions for better stewardship of the natural and cultural resources of the river corridor.
- Pursue specific objectives for governmental coordination, funding, and education to accomplish the goals of the plan.

Acknowledgements

hanks and appreciations are extended to the many people and organizations whose support and involvement led to the creation of this management plan for the Ashley Scenic River. In particular, the members of the Ashley Scenic River Advisory Council (listed in Table 1) are to be commended for their commitment of time and service to bring this effort to a successful completion.

Specific staff members at the South Carolina Department of Natural Resources (SCDNR) have made the plan possible. Alfred H. (Freddy) Vang, Deputy Director of the Land, Water, and Conservation Division provided consistent positive support for the project. Barry Beasley, Director of the Scenic Rivers Program, provided ongoing encouragement, direction, insight, and assistance for the project managers and the advisory council through the various challenges encountered in the course of the project.

Former SCNDR Board Member, Mary Pope Hutson, and the Ashley River Conservation Coalition, in particular, George McDaniel (chairman), George Neil and Katherine Campbell Powers, provided leadership and advocacy that was key to the Ashley River being designated a State Scenic River in 1998. Mikel Shakarjian, former SCDNR staff member from 1997-98, conducted the scenic river eligibility study for the Ashley, managed the designation process, and organized initial steps to create the advisory council.

The Town of Summerville, City of North Charleston, MeadWestvaco Corporation, and Ashborough Homeowners Association provided facilities for regular meetings of the advisory council. The South Carolina Department of Parks, Recreation, and Tourism provided canoes for a river outing of the council.

Bob Bainbridge and Irene Dumas Tyson of the South Carolina Design Arts Partnership facilitated public meetings, prepared plan drawings, and summarized results of the Ashley Scenic River Community Vision Workshop of July 2000, which provided significant public input to this plan. Other contributing team members of the workshop included John Tarkany, Bill Eubanks, and Morgan Bultman. Middleton Inn, River Club on the Ashley, and Bethany United Methodist Church provided facilities for the public meetings of the three-day workshop.

Diane Kennedy of the SCDNR Graphics Section designed this publication, converting an array of text, photos, maps and drawings into an attractive presentation of information.

SCDNR staff, Malynn Fields, John Foster, George Sullivan, and Suzanne White were involved in the creation of maps for public meetings and publications. Harunur Rashid of the Berkeley-Charleston-Dorchester Council of Governments provided map data for land parcels. Ann Nolte of the SCDNR assisted with editing the document. Nancy Brock of the S.C. Department of Archives and History reviewed the document and provided comments.



Section services.

Photographs presented in the plan come from several sources including SCDNR, Drayton Hall, and Middleton Place. The cover photograph is by Tom Blagden, Jr. as are photographs on pages 2, 14, 20 (top), 32vi, 47, 48, 49 (left), and 51. Other photographs are by Bill Marshall, Barry Beasley, Phillip Jones, Rick Rhodes, Mikel Shakarjiam, Ted Borg, Art Carter, Robert Clark, and Ron Rocz.

Finally, many individuals participated in the work of the committees of the advisory council and contributed knowledge, expertise, time, and creative input into developing recommendations for the management plan and in editing the text. To give these people special recognition they are listed below under the subject areas where they made contributions. The first names listed recognize those who chaired the respective committees.

Water Quality

- James Hackett, South Carolina Department of Health and Environmental Control, Office of Coastal Resource Management
- Meta Carter, Ashley River landowner
- Charlie Cuzzell, Summerville Commission of Public Works
- Fred Holland, South Carolina Department of Natural Resources
- Bill Marshall, South Carolina Department of Natural Resources
- Dorothy McFalls, Berkeley-Charleston-Dorchester Council of Governments
- # Andy Miller, South Carolina Department of Health and Environmental Control, Bureau of Water

Recreational Use and Access

- If Y Houck, South Carolina Department of Parks, Recreation, and Tourism
- # Howard Bridgman, Dorchester Boat Club
- Robert H. Knight (CDR USN Ret), Drayton Athletic Association
- Bill Marshall, South Carolina Department of Natural Resources
- Brian Wilson, Middleton Inn

Preservation and Conservation

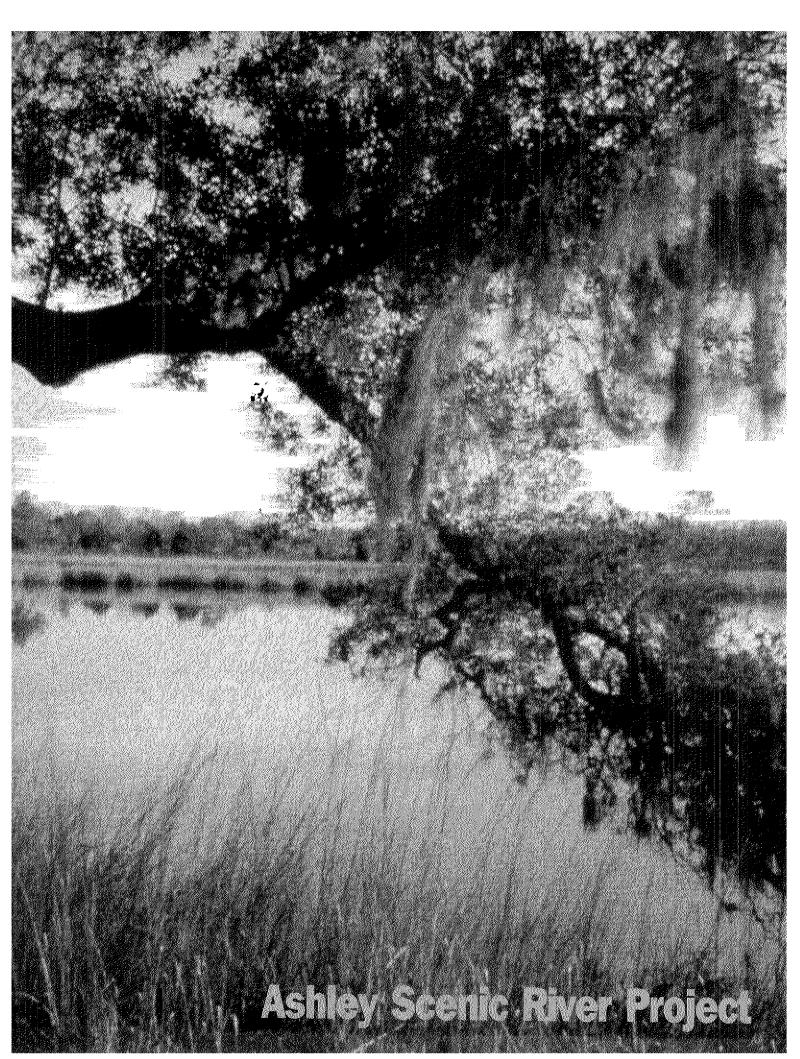
- George Neil, retired consultant National Trust for Historic Preservation
- Cornelia Carrier, Charleston Natural History Society
- Jane Hanahan, Historic Charleston Foundation
- Jack Keeter, Archdale Homeowners Association

Land Management and Development

- John Tarkany, Design Works
- Roger Sparwasser, MeadWestvaco Corporation
- Patrick Ford, Ashley River landowner, builder/developer
- Nat Malcolm, Lowcountry Open Land Trust

Implementation

- Helmut and Ellen Fiedler, Ashley River landowners
- Ercie Leach, Ashley River landowner
- Bill Marshall, South Carolina Department of Natural Resources
- George McDaniel, Ashley River Conservation Coalition
- April Turner, South Carolina Sea Grant Consortium





SOUTH CAROLINA'S RIVERS are an invaluable resource, forming a central part of our rich natural and cultural heritage. Rivers provide numerous benefits to people such as water for drinking, manufacturing and irrigation, electricity from hydropower production, transportation, and various recreational opportunities. They also provide essential fish and wildlife habitat, channel floods, and assimilate wastes. In many places rivers harbor rare plants and animals as well as relics of our past. As the population and economy of South Carolina continue to expand, our demands on rivers will increase, along with our dependency upon these resources.

Rivers are ever changing, their physical, chemical, and biological characteristics are directly affected by activities on the lands that they drain. Human development that proceeds without regard to conservation of riverine resources threatens the ecological goods and services provided by our rivers as well as the natural and cultural heritage associated with them.

Within South Carolina there are over 30,000 miles of flowing rivers and streams. In recognition of our dependence on riverine resources and the need to protect outstanding river values, the Scenic Rivers Act of 1989 provides a process to recognize and conserve South Carolina's most unique rivers for the benefit of present and future generations. The South Carolina Department of Natural Resources (SCDNR) is charged to administer the provisions of the act.

Scattered throughout the state, approximately 265 miles of eight rivers are currently designated as South Carolina State Scenic Rivers. The largest designation includes a 75-mile stretch of the Black River. Other scenic rivers include: a 70-mile section of the Great Pee Dee, a 54-mile stretch of the Lynches, 10 miles of the lower Saluda, about five miles of the Middle Saluda River, a 15-mile segment of the Broad, and the lower 14 miles of the Little Pee Dee. On the Ashley River, the focus of this document, a 22-mile section was designated a scenic river in 1998 and 1999.

The Ashley River is a tidally influenced, Coastal Plain river that extends approximately 30 miles from Cypress Swamp in Dorchester County to its mouth at Charleston Harbor on the Atlantic Ocean. The entire drainage of the Ashley River system, including its headwaters in Cypress and Wassamassaw swamps, extends approximately 60 river miles. Along its winding course, the river passes through a varied natural and cultural landscape of forested swamps and uplands, tidal marshlands, residential and commercial developments, historic sites and structures, and major urban development at the City of Charleston.

In the past and in the present, the natural and cultural landscape of the Ashley River corridor has been shaped and influenced by the river as it carves the channels, floods the marshes and swamps, transports people and goods, and

Introduction

attracts settlements and development along its shores. Likewise the river is affected by the activities that occur on the land from the river's banks to the farthest reaches of the watershed. The Ashley Scenic River Project, as part of the South Carolina Scenic Rivers Program, has as its central focus this interaction between the land and the river, between man and nature. The project seeks to promote wise and responsible stewardship of the river and its surrounding lands by the entire community of riverbordering landowners, river users, and residents of the watershed.

This document, The Ashley Scenic River Management Plan, represents the culmination of the initial stage of the Ashley Scenic River Project and will be the guide for ongoing activities of the Ashley Scenic River Advisory Council. This plan describes the resources and conditions of the river and outlines a community vision for the river - defining riverrelated problems and opportunities and advocating goals and actions for addressing those problems and opportunities. The vision, values, goals, and recommendations presented in this plan represent the diversity of river-bordering landowners, local community leaders and citizens who participated in the numerous public meetings (approximately 35 public meetings) and forums hosted by the Ashley Scenic River Advisory Council from July 1999 through August 2001.

The advisory council acknowledges that this vision may change over time as contemporary issues are resolved and new ideas and issues move to the forefront. On a regular basis, the advisory council will re-visit and update the plan to reflect the current situation. With continuing input and support from the local community, this plan can be responsive to change.

Recommendations in this plan will be implemented on a priority basis in a voluntary, non-regulatory framework. In many cases, implementation will depend on independent decisions reached and actions taken by landowners, residents of the Ashley watershed, river users, local governments, state agencies, corporations, and/or environmental organizations. The Ashley River Advisory Council will work with each of these groups to provide information and support decision-making. Hopefully, this process will unite the Ashley River community in an effort to keep the river a viable and valuable natural resource for the enjoyment of present and future generations.



The Scenic Rivers Program

The purpose of the Scenic Rivers Program as determined by the South Carolina Scenic Rivers Act of 1989 is to protect unique and outstanding river resources throughout South Carolina. To accomplish this goal, a voluntary, cooperative management program was created which allows landowners, community interests, and the SCDNR to work together toward common river conservation goals.

Designating a State Scenic River requires legislative action by the South Carolina General Assembly. However, the designation process begins at the local level and requires the support of local citizens, landowners, and elected officials. The steps in the designation process are as follows:

Introduction



- First, a local request for scenic river designation is made, and then the SCDNR conducts a scenic river eligibility study.
- Second, all riparian landowners and the general public are notified of the proposal and invited to public meetings to ask questions or express opinions.
- Third, each county council of all river-bordering counties is notified of the scenic river proposal.
- Finally, the SCDNR Board approves the proposal and then a bill is introduced in the General Assembly. When the bill is passed, a new State Scenic River is officially designated.

After the designation is completed, the SCDNR establishes a local scenic river advisory council made up of six to ten members, the majority of whom are river-bordering landowners, with additional ex officio members representing a full range of river interests. The advisory council, which includes the membership and assistance of SCDNR staff, is responsible for developing a river management plan to address riverrelated issues of concern. The management plan identifies specific issues and suggests recommendations that can be implemented to guide management of the scenic river.

A State Scenic River designation signifies the commitment of the SCDNR in perpetuity to promote the conservation of the scenic river in partnership with the local community. The benefits

The Ashley River and the comider of land that surrounds it has magic that is difficult to describe in words. What is most remarkable is that this important part of Charleston's geography has withstood the test of time for over 200 years. If this area had been located in other North American cities it would have been developed several years ago.

J think that everyone would agree that there is a significant amount of historical and environmental value inherent in the present state of the river corridor. The problem is how will the next 25-50 years of change affect this quality. The threat from urban sprawl and the inherent

dependence on the automobile could adversely compromise this valuable natural water resource.

So far, we have been fortunate that the past and current landowners have been wise in their stewardship of these lands. However, as the land transfers to future generations and to development oriented interests the pressure to modify this land will increase.

Guidelines or standards for sustainable land use along the Ashley River are needed, guidelines that have a heavy emphasis on conservation and preservation and are supported by the community of landowners. If this can be achieved, the "magic" of the Ashley river will remain for generations to come.

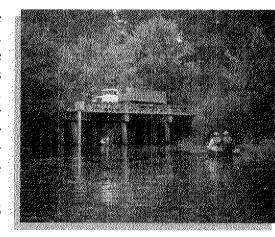
It has been a privilege to be a member of the Ashley Scenic River Advisory Council and we hope that this document will be beneficial to all.

- John A. Tarkany, RLA, ASLA

of the Scenic Rivers Program can be numerous and tailored to meet the needs of the community by addressing issues of local concern such as recreation, economic, or human health factors. When the Ashley was designated a State Scenic River this program and process was set into motion.

Project Beginnings

THE UNIQUE RESOURCES of the Ashley River and its role in the heritage and development of South Carolina have long been recognized. In November 1976, a portion of the Ashley River was declared eligible for the State Scenic River designation under the original South Carolina Scenic Rivers Act of 1974. Based on outstanding natural scenic beauty and historical significance, the Ashley River from Bacon's Bridge (SC Highway 165) near Summerville downstream to Bull's Creek was recommended for the scenic river designation. However, official designation under the 1974 Act did not occur because designation required substantial land acquisitions, making the designations nearly impossible. In 1989, the Scenic Rivers Act was amended, establishing the current process of a community-based approach to designating and managing State Scenic Rivers.



In the 25 plus years since a portion of the Ashley River was originally declared eligible for the scenic river designation, the river and its watershed have undergone significant change. The surrounding areas, including North Charleston, Ashley River Road, and Summerville have all experienced an influx of people and rapid development of the landscape. Charleston, a major metropolitan city, sits at the confluence of the Ashley and Cooper Rivers. It is one of the fastest growing cities in the United States and the most rapidly urbanizing area in South Carolina (Lacy 1997). Since 1973, the extent of the urban landscape across Berkeley, Charleston, and Dorchester counties has increased at least 5% annually, resulting in a total increase of 255% (Lacy 1997). Dorchester County has experienced the greatest amount of urbanization, an increase of 868% since 1973 (Lacy 1997).



In response to the rate of urbanization, population growth, and the desire to maintain the unique character of the Ashley River area, several planning efforts have been conducted over the last two decades. These involved state agencies, city and county governments, private organizations, and individual landowners in efforts to create

management plans for specific areas associated with the river. However, because of the rapid development of the area and the lack of enforceable, coordinated, regional planning and zoning to protect the river corridor, the National Trust for Historic Preservation named the Ashley River Historic District as one of the nation's 11 Most Endangered Sites in 1995. In response, the Ashley River Historic Preservation Coalition (now known as the Ashley River Conservation Coalition) was formed in October 1996 to address urban encroachment in the historic district and on the river corridor. One of many measures sought by the coalition

Project Beginnings

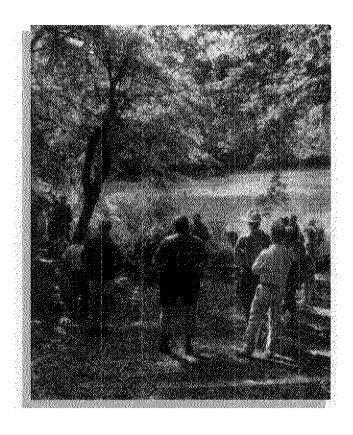
to advance conservation in the Ashley River corridor was to seek State Scenic River designation for the Ashley.

Scenic River Designation

In 1998 and 1999 a 22-mile section of the Ashley River from Highway 17-A at Sland's Bridge near the Town of Summerville to the crossing of Interstate-526, the Mark Clark Expressway, was designated a State Scenic River by the South Carolina General Assembly (see map in Figure 1). The request for the designation was received by the SCDNR in August 1997 from the Ashley River Conservation Coalition. Soon thereafter, the SCDNR conducted an eligibility study for the Ashley.

Although the Ashley River was determined to be eligible for scenic river designation in 1976, the designation process was not completed. SCDNR staff decided to conduct a study to reassess the eligibility of the Ashley River in August 1997. SCDNR gathered information on the present conditions and uses of the river and the surrounding lands to determine if the river exhibits unique or outstanding scenic, recreational, geologic, botanical, fish, wildlife, historic, or cultural values which merit protection. Based on the findings of the study, the Ashley was confirmed to be eligible for scenic river designation. The Ashley River Eligibility Study report (Shakarjian 1998) summarizes the findings on the Ashley as follows:

"Evidence of the first European settlers can be found throughout the proposed scenic segment within the confines of a relatively undisturbed tidal ecosystem. Wildlife finds sanctuary within the river corridor and its marshes. Due to its short length and diversity of habitats, proximity to a major city, and its role in the settling and development of South Carolina, the Ashley River is perhaps unparalleled in its unique combination of historical significance and natural value as a relatively undisturbed tidal ecosystem."



Once the river was found eligible for scenic river status, notification of the proposed scenic river designation was provided to river-bordering landowners by direct mail and to the general public by newspaper ads. Two public meetings were held in November 1997 to explain the Scenic Rivers Program. In addition, the affected local governments (two county and three city councils) were presented with the scenic river designation proposal and each gave approval to the action.

After state legislation was introduced and bills were signed by the Governor, a 22-mile segment of the Ashley was designated a scenic river in two parts in 1998 and 1999. Following recommendations from the eligibility study, the first portion from Highway 17-A to the CSX Railroad Trestle was designated a State Scenic River in June 1998. A second designation was made the following year when citizens from the Wando Woods community petitioned their state legislators to consider an additional two miles of the Ashley. After concurrence with the SCDNR, the legislation was passed and signed into law in June 1999 designating an additional scenic river segment from the CSX trestle down to Interstate 526, the Mark Clark Expressway.

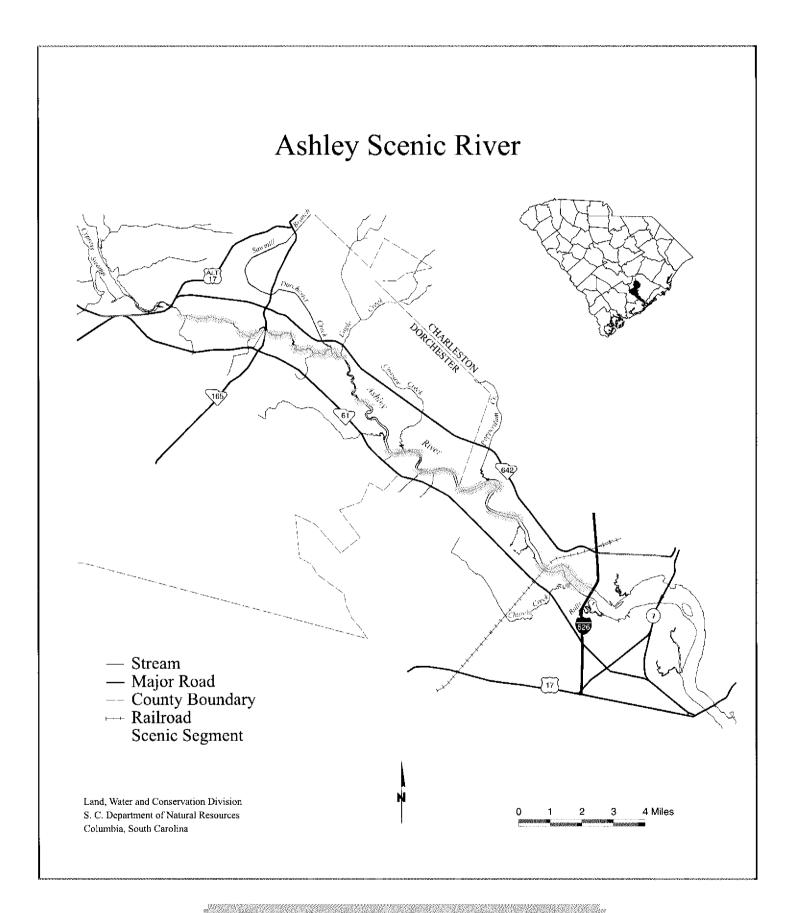
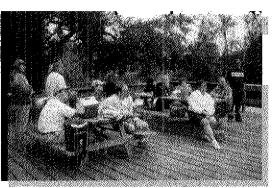


Figure 1. Ashley Scenic River Map

The Advisory Council





THE ASHLEY SCENIC RIVER Advisory Council was formed in the spring of 1999 and was created according to the Scenic Rivers Act to assist and advise the SCDNR in protection and management of the scenic river. The leadership for all South Carolina scenic river projects comes from a local advisory council. For the Ashley, letters soliciting advisory council participation were sent from the SCDNR in the fall of 1998 and spring of 1999 to river landowners and interested community members (about 500 people). The solicitation was sent twice because the Ashley Scenic River was designated in two parts. Those interested in participating on the advisory council were asked to complete and return a nomination form. Nominations were received by the SCDNR and 31 candidates were identified in May 1999. Twenty-two (22) individuals were selected and invited by SCDNR staff in June 1999 to be members of the advisory council; nineteen (19) people accepted the invitation and formed the original Ashley River Advisory Council (see Table 1 for members, past and present, of the Ashley Scenic River Advisory Council).

The advisory council held its first meeting on July 1, 1999, at the Cuthbert Community Center in the Town of Summerville. Over the next two years, the council met regularly at locations near the project area with the primary objective of crafting a management plan for the Ashley Scenic River. An important step for unifying the council and communicating their purpose and intentions to the larger community was their creation of a statement of mission and goals adopted on March 1, 2000.

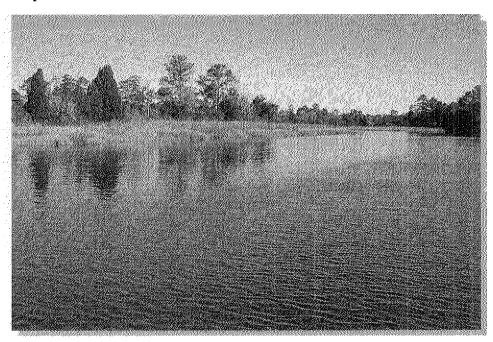


Table 1. Ashley Scenic River Advisory Council

Voting Members

Howard Bridgman: Dorchester Boat Club Meta Carter: residential landowner Helmut Fiedler: residential landowner Jane Hanahan: Historic Charleston Foundation

Jack Keeter: residential landowner

Robert H. Knight (CDR USN Ret): Drayton Athletic Association

Bill Marshall: SCDNR staff
George McDaniel: Drayton Hall

George Neil: at large community representative Roger Sparwasser: MeadWestvaco

Ex-officio Members

Ashley Chapman: Colonial Dorchester State Historic Site
Birdie Crosby: Clemson University Extension Service
Charlie Cuzzell: Summerville Commission of Public Works
James Hackett: Office of Coastal Resource Mgt, SCDHEC
Pat Hollifield: Kings Grant Homeowners Association
Christopher Morgan: City of Charleston Planning Department
John Tarkany: Design Works (landscape architects)
April Turner: SC Sea Grant Consortium
Michelle Wittorick: Lowcountry Open Land Trust

Former members

Patrick Ford: residential landowner, voting member, July 1999 to December 2002 Debbie Henson: residential landowner; voting member, July 1999 to August 2001 Ty Houck: Colonial Dorchester State Historic Site; voting member, July 1999 to August 2001

Ercie Leach: residential landowner; voting member, July 1999 to October 2000 Nat Malcolm: Lowcountry Open Land Trust, ex officio, August 2001 to July 2002 Taylor Nelson: Magnolia Gardens, ex officio member, July 1999 to September 2000

Valeric Perry: SCPRT, S.C. Heritage Corridor; ex officio member,

July 1999 to December 1999

Madelyn Robinson: Town of Summerville, Planner; ex officio member, July 1999 to November 1999

Carolyn Rogerson: Dicari Development Inc.; voting member, July 1999 to March 2000 John Sullivan: Kings Grant Homeowners Association; ex officio member, July 1999 to October 2000

The Advisory Council

I have enjoyed the beauty, culture and recreation on the Ashley River for many years, but was concerned for its future. I was happy when it was designated as a Scenic River because I want my grandchildren and others to be able to contine to enjoy it as I have. I volunteered to serve on the Council to help preserve it for this purpose and it has been a pleasure working with the other members. The hard part is yet to come: JMPLEMENTATION. J hope that we, and others after us, will work as hard to accomplish its goals.

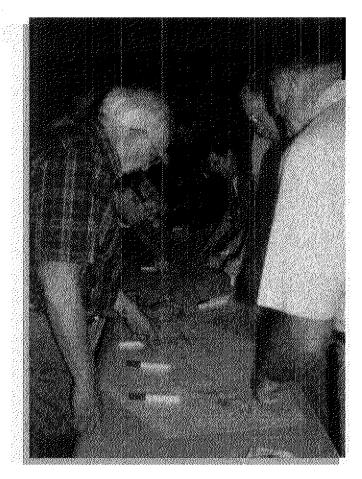
— Bob Knight

Mission Statement

The mission of the Ashley Scenic River Advisory Council is to promote ongoing stewardship of the Ashley River to protect and enhance its natural, cultural, and scenic qualities for the benefit and enjoyment of present and future generations.

The goals of the advisory council (presented in a sequential order):

- Promote mutual respect for public and private interests in the river among river users, property owners, and others.
- Increase public awareness and appreciation of the Ashley by continually educating ourselves and the community about the river's resources, and promote an ethic of stewardship for the river among property owners, river users, and the public.
- Encourage and facilitate public involvement in all our planning and decision-making, and build public support for the Ashley Scenic River Management Plan.

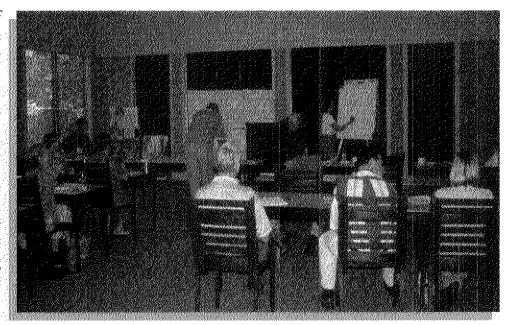


- Establish partnerships with other groups and agencies to accomplish our mission and goals for better management of the Ashley River.
- Create and implement a management plan, with full public involvement, that will focus the community on priority actions for improving protection and use of the river and its natural, cultural, and scenic qualities.
- Protect and improve the river's water quality conditions, fish and wildlife habitats, scenic views and aesthetic qualities, cultural resources, and recreational benefits.

Creating the Management Plan

THROUGH THE ASHLEY SCENIC RIVER PROJECT, the river community created a common vision for future management of the river and its resources. The Ashley Scenic River Management Plan outlines that vision within the context of the South Carolina Scenic Rivers Program. The management plan focuses on the 22-mile segment of the Ashley that was designated a State Scenic River. While the river and its floodplains and the adjacent uplands are the principal focus of this plan, issues concerning the entire watershed of the Ashley are also addressed.

The first step in the process of creating this management plan was to assemble the Ashley Scenic River Advisory Council with local landowners and community leaders. The charge to the council was to craft the plan though an open public-input process and then put the plan into action. Council membership was selected by the SCDNR to represent the many and diverse interests of the river community. Represented on the are river-bordering landowners (private and corporate owners, geographically dispersed, with various land uses and interests),



recreational users, conservation interests, local government, natural resource managers, and the general public.

From their first meeting in July 1999 through August 2001, the advisory council's primary objective was crafting the scenic river management plan. In the course of this two-year period the advisory council accomplished the following: they developed their own statement of mission and goals; sponsored a river canoe trip; hosted a three day workshop to gather public input and defined river management issues of community concern; hosted an issue forum on water quality; and held numerous meetings to define river management goals and recommendations to address each issue.

Early in the process the advisory council made a decision to delay pursuit of the management plan in order to allow a public controversy to pass. The council encountered the controversy at their second meeting (August 11, 1999) when about 30 disgruntled landowners attended and expressed anger at the Scenic Rivers Program for somehow being responsible for a proposed Dorchester County ordinance to increase development restrictions along the Ashley River. Two

Creating the Management Plan

meetings of the council and repeated distribution of information about the non-regulatory emphasis of the Scenic Rivers Program helped to correct some misunderstanding; however, a general mistrust of the program persists among some landowners. The general acrimony expressed among some Ashley River property owners in public meetings about the Dorchester County ordinance led the advisory council to delay its start-up of the scenic river management plan process for nearly

During the period of controversy (late 1999, early 2000) the advisory council developed their own statement of mission and goals. This was an important step for unifying the council and communicating their purpose and intentions to the larger community.

nine months.

Once the advisory council was formed and unified in their purpose, hearing from the public about the Ashley River was the second step in creating the management plan. Therefore, the advisory council and the SCDNR hosted a community workshop (or charrette) in July of 2000 for the purpose of gathering public input. This event was promoted as a "Community Vision Workshop: a series of public meetings to define common goals for better management of the Ashley River." The public was encouraged to participate in the workshop though advertisements in local newspapers, flyers circulated in neighborhoods adjacent to the river, and invitations mailed to the river-bordering landowners and others on the SCDNR mailing list. The workshop included six public meetings held over three days, July 18-20, at Middleton Place Pavilion, Middleton Inn Conference Center, River Club on the Ashley, and Bethany United Methodist Church.

Approximately 150 local citizens participated in the various meetings and provided nearly 400 comments and ideas regarding the Ashley River.

The South Carolina Design Arts Partnership supported the workshop by assembling a team of planners and designers who facilitated the public meetings and produced drawings, summaries, and recommendations that captured the public's values,

concerns, and desires for the river as

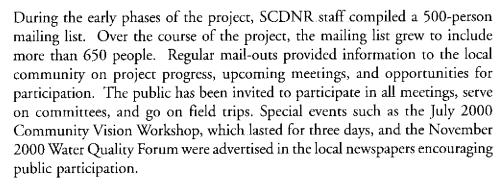
well as directions for creating the management plan. A range of topics emerged from the workshop regarding what issues need to be addressed in the management plan and how the plan can be accomplished. (See Appendix C for workshop notes regarding public values for the river; and the reference, SCDAP 2000).

The advisory council used the information from the workshop to focus on the third step in the process: the fact-finding, analysis, and development of management goals and recommendations. Ultimately the advisory council decided to address the topics of (1) water quality, (2) recreational use and access, (3) preservation and conservation, (4) land management and development, and (5) plan implementation. Committees of the advisory council were created to address each of the topics and draft recommendations. From November 2000 through August 2001, the committees met separately and then brought recommendations to meetings of the advisory council for public presentations, discussions, and council approvals. The water quality committee made an extra contribution to this process by organizing a public forum featuring water quality experts on the Ashley River.

Public Participation

SOUTH CAROLINA'S PROCESS of designating and managing State Scenic Rivers is grounded in local support and public participation. The development of a sound and workable management plan requires the involvement of those most familiar with the resource — the people of the river community. Through the citizen-based process, the local community takes the lead in producing and implementing the plan. The role of the SCDNR and other government agencies is to provide guidance and technical expertise.

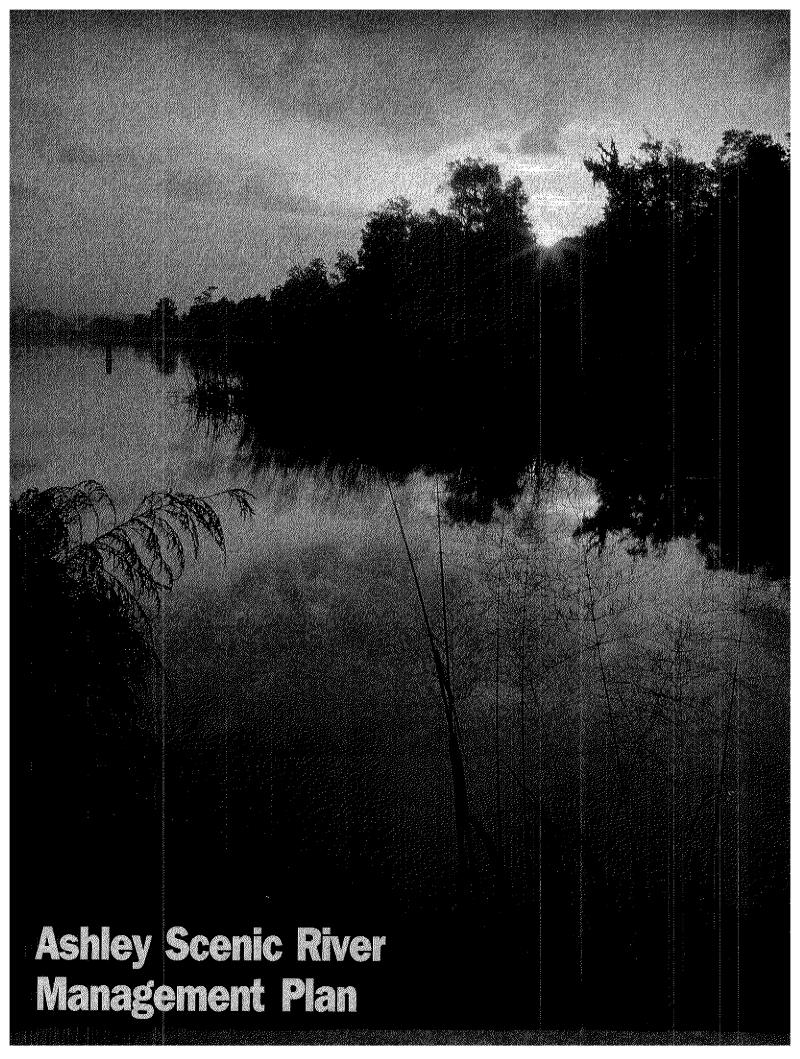
From the onset, the Ashley Scenic River Project encouraged the active involvement of the river-bordering landowners, local citizens, and their local governments. Efforts to inform the public and to encourage public participation in the project began with the scenic river designation process in 1998. These efforts continued with the establishment of the Ashley Scenic River Advisory Council in 1999, and into the management plan process of 2000-01. All landowners and other interested community members were invited by letter to participate in the public meetings about the proposed designation and share comments and concerns; the same people also were invited to apply for membership on the advisory council and participate in a community effort to create the management plan.



The advisory council, which represents the Ashley River community, and the SCDNR will continue public invite participation in efforts to pursue their mission of stewardship to protect and enhance the resources of the Ashley River for present and future generations.







The Ashley River Management Plan

MANY LANDOWNERS and community leaders have passed down a legacy of conservation and wise use of the river and its surrounding lands, and thanks to many generations of good stewards, we can enjoy the Ashley River corridor for what it is, an area rich in natural beauty and historic treasures.

There are, however, many factors that threaten to spoil the special character and resources of the area; factors ranging from poorly designed development on the land to unsafe boating on the river. The Ashley Scenic River Management Plan offers ideas and information that address river issues of public concern and encourage ongoing stewardship that will conserve the Ashley River. The ideas presented in this plan were generated from the local community, from landowners, river users, and community leaders who desire to protect and enhance the highly valued natural, cultural, and scenic qualities of the river for the benefit and enjoyment of present and future generations.



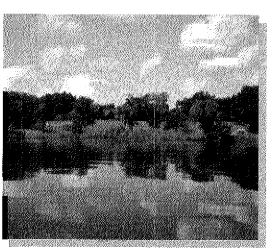
The plan does not impose new regulations, nor does it mandate new regulatory restrictions. The plan provides a guide for ongoing activities of the Ashley Scenic River Advisory Council and informs individuals and organizations of ways to improve their stewardship of the river.

In this chapter, the significant resources and management issues of the Ashley Scenic River are described and a plan specifying management goals and recommendations is provided. Following a description of the project area, the chapter addresses four Ashley River management topics:

- Water Quality
- Recreational Use and Access
- Preservation and Conservation
- Land Management and Development.

Under each of these topics is presented a set of findings, a management goal, and a list of recommendations. "Findings" describe river resources, their conditions, and/or related problems and opportunities of public interest. "Management Goals" and "Recommendations" define the plan objectives. The chapter closes with recommendations for implementation, which are guidelines for moving forward to accomplish the goals and recommendations of the plan.





THE GEOGRAPHIC AREA targeted by this management plan is the 22-mile long corridor of the Ashley Scenic River (Figure 1). Generally, the surrounding roads define the extent of the river corridor, U.S. Highway 17-A and Interstate 526 cross the river and define the northwestern (upstream) and southeastern (downstream) ends of the scenic river, respectively. S.C. Highway 642 (Dorchester Road) provides a boundary on the north/east side and S.C. Highway 61 (Ashley River Road) defines a general boundary on the south/west side of the river. While the interests and concerns addressed by this management plan are focused on the river corridor, they are not restricted to the corridor. Water quality concerns for the river require attention to the entire watershed, particularly the areas drained by tributaries to the scenic river. Interests in conservation and managing development in the river corridor also extend to the special character of Ashley River Road, which is a National Scenic Byway. Recreational use and access interests extend to potential connections with land and water trails or greenways that could link the river to parks and recreation facilities beyond the defined corridor, such as Charles Towne Landing State Historic Site.

The watershed of the Ashley River is approximately 215,000 acres in size (SCDHEC 1999) and includes portions of Berkeley, Dorchester, and Charleston counties and the major populations centers of Summerville, North Charleston, and Charleston (see Figure 2). There are approximately 394 miles of streams in the watershed of the Ashley, which includes the tributaries of Wassamassaw and Cypress Swamps, Dorchester Creek, Eagle Creek, Coosaw Creek, Olive Branch, Popperdam Creek, Macbeth Creek, Keivling Creek, Church Creek, and Bulls Creek.

The headwaters of the Ashley River begin in Cypress and Wassamassaw Swamps at an elevation of less than 80 feet above mean sea level. The river system flows for approximately 60 miles in a southeastern direction from its headwaters towards the City of Charleston. The swamps meander for about 30 miles until they form the channel given the name "Ashley River," which flows for another 30 miles where it meets the Cooper River at Charleston Harbor (and as the locals say, the Ashley and Cooper rivers "form the Atlantic Ocean").

Along its course, the stream environments of the Ashley transition from the freshwaters of a swamp and blackwater river to a freshwater tidal river, and to a saltwater tidal river. Much of the upland forest adjacent to the river remains intact and human development is visible for approximately 30 percent of the 22-mile scenic river segment.



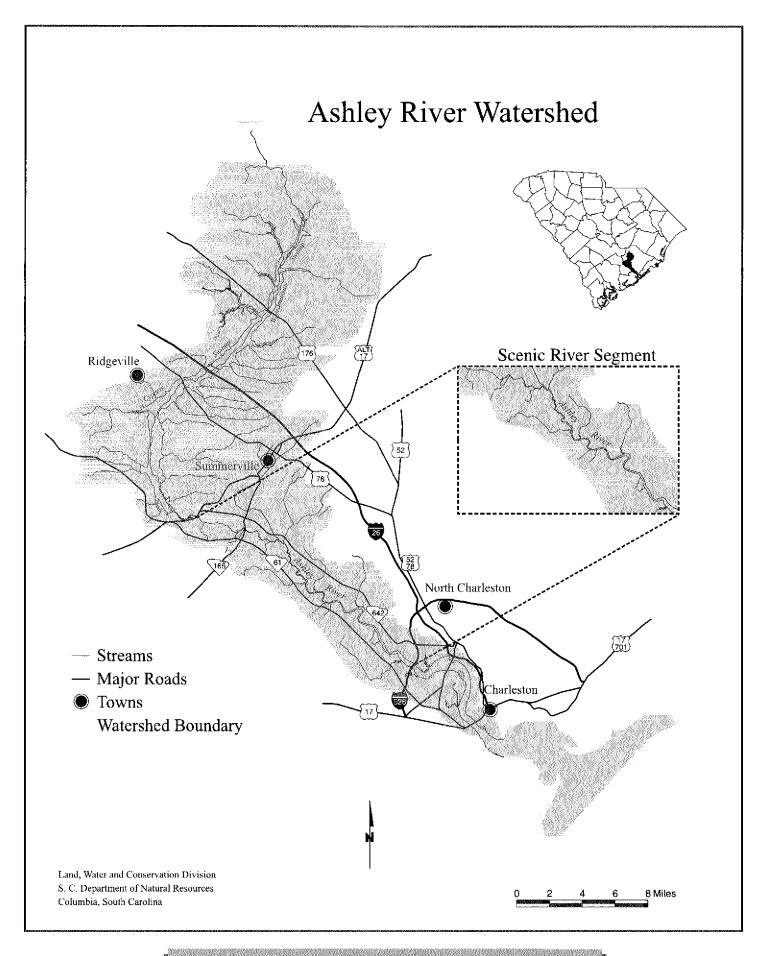
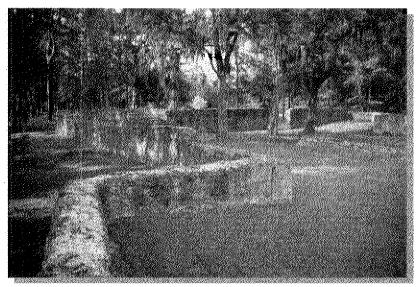


Figure 2. Ashley River Watershed Map

Animal species commonly seen in and along the river include: kingfishers, wood ducks, red-winged blackbirds, ospreys, anhingas, herons and other wading birds, turtles, snakes, alligators, and crabs.

The Ashley River takes its name from Lord Anthony Ashley Cooper who was originally granted a King's charter to the Carolina colony. Europeans first settled on the Ashley in 1670 and eventually created Charles Towne between the Ashley and Cooper Rivers in 1680. Over the century that followed, the Ashley provided transportation inland and access to natural resources to support early European settlement of South Carolina. Today many features of those early settlements can be seen and experienced. The Ashley River corridor contains 26 separate sites listed in the National Register of Historic Places. Visitors can readily observe a variety of historic structures such as antebellum plantations, gardens, rice fields, outbuildings, and fortifications.

The natural conditions and scenic transitions of the tidal river ecosystem, the presence of significant historic properties dispersed along its length, and its accessibility to a major urban population – these are characteristics that make the Ashley River a special place worthy of ongoing community support for conservation.



Characteristics of the Ashley Scenic River Corridor

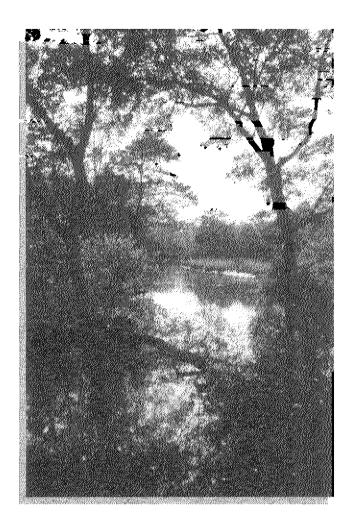
As mentioned above, the Ashley is not just one river, but has four or more distinct sections with different characteristics; and different people may choose various ways to divide the sections. Below, several sections are described including three sections within the 22-mile Ashley Scenic River plus one upstream and one downstream of the scenic river.

Figures 3, 4, 5, and 6 provide an aerial view of land use characteristics in the corridor, the location of landmarks, and property lines that show land ownership patterns. (The images in Figures 3 to 6 are derived from 1999 color-infrared aerial photography and the property (parcel) lines depict ownership at about 1999 or 2000.)

Upstream section (to Cypress Swamp) - Above the designated Ashley Scenic River from Sland's Bridge up to Cypress Swamp, the Ashley is very narrow except for two lakes in the channel. This section currently has a low level of use due to inaccessibility but is attractive to local anglers.

Section I - From Sland's Bridge to Colonial

Dorchester State Historic Site, the Ashley is a narrow blackwater stream with overhanging trees at the banks including bald cypress, tupelo, sweet gum, red maple, and willows. About half of this seven-mile section is tidal, with Bacon's Bridge (SC Highway 165) marking the approximate upstream limit of the tides. Just above the bridge is the former site of a dam once used to impound freshwater on the river. Downstream of Bacon's Bridge, the Ashley gradually makes the transition from a freshwater tidal to a saltwater tidal river. Species associated with the freshwater environment become less common downstream, dropping out of the community as the river becomes more brackish.

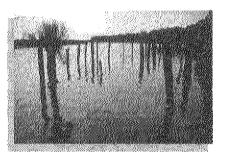


Much of the land adjacent to this section of the corridor is undeveloped, forested wetlands or uplands; exceptions include the sand mines and Teal on the Ashley subdivision, which are located near Sland's Bridge, and two larger subdivisions downriver. Development at Walnut Farms subdivision, sited on

the north bank two miles above Bacon's Bridge, is set back and not visible from the river. Ashborough subdivision, below Bacon's Bridge, occupies about one-half mile along the north bank with houses and docks. Thereafter, the house and property known as The Laurels appears on the south bank followed by the fort

and wharf structures at Colonial Dorchester State Historic Site, visible from the river on the north bank. Also sited on the north bank, below Colonial Dorchester, are the building and dock of the Dorchester Boat Club. Section II – Extending from below Colonial Dorchester to just above the CSX railroad trestle, this 13-mile segment of the Ashley opens up to a wide tidal river with broad vistas framed by the marsh edge and distant trees. The floodplain forest transitions to riparian marshland, dominated by pickerelweed, bull rushes, and cattails. Further downstream the brackish water turns saline and the

marsh vegetation changes from pickerelweed and cattails to black needlerush, and finally, smooth cordgrass. The old plantations, marl bluffs, and



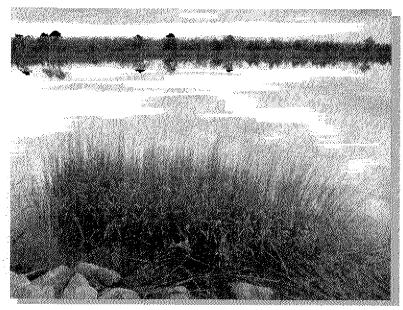
pilings from the old phosphate docks are located here. Views to and from the plantations, especially Drayton Hall and Middleton Place, help define the special character of this section.

The upland areas on the north/east side of the river corridor adjacent to Dorchester Road are mostly developed in this section. Approximately 16 large residential and/or commercial developments extend from Kings Grant to Evanston Estates and the land

is divided into thousands of parcels, mostly residential home lots. In contrast, on the south/west side of the river adjacent to Ashley River Road the upland areas are mostly forested and much of the land is held in large tracts. A few residential developments are located southeast of Drayton Hall.



Along the river, beginning just downstream of Colonial Dorchester is a complex of public structures all sited on the north/east bank for one-quarter mile; these include the Summerville Wastewater Treatment



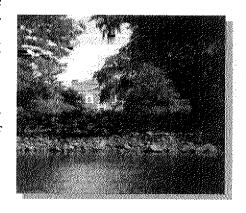
tations were visually affected by development (Townsend and Brock 1992).

From Drayton Hall to the railroad bridge, residential developments and docks (Covington, Evanston Estates, Drayton on the Ashley) occupy about one mile of the north/east bank and one-half mile on the south/west bank.

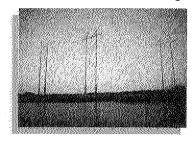
Plant and discharge pipe and the Jessen's Landing ramp, parking area, community dock, and boardwalk. Soon thereafter, the Kings Grant subdivision occupies about two miles of the north/east bank with houses and docks and a golf course. Below and opposite the golf course are several houses with docks on the south/west bank of the river at Mateeba. Downstream from the golf course, a set of powerlines supported by towers crosses the river, visible approximately one-quarter mile in either direction. Along the next few miles of the river an old plantation site, Cedar Grove, is located on the north/east bank followed by the gardens, buildings, and rice field structures at Middleton Place on the south/west.

Downstream of Middleton Place, two separate areas of clustered residential development (Archdale/Ashley Point and Riverbend/Lambs Road) occupy about one and one-half (1.5) miles along the north/east bank with docks and houses. Several other developments are located in this section and do not extend to the river's edge. Historic properties, Runnymede Plantation, Magnolia Gardens, and Drayton Hall

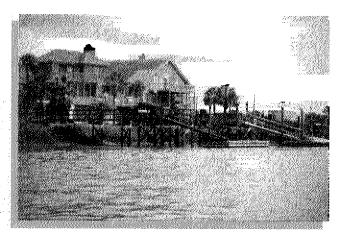
visible are from the river channel on south/ the west bank. 1989. Ιn approximately 17 percent of the viewsheds from the historic plan-



Section III - The final segment of the designated

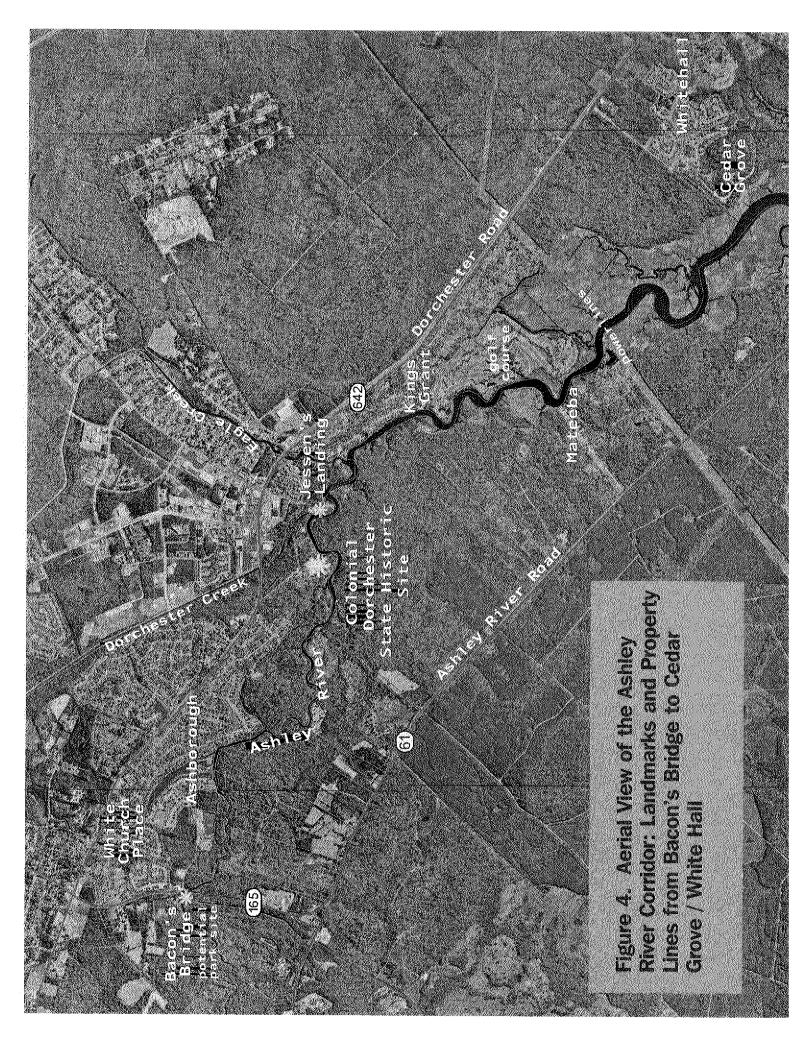


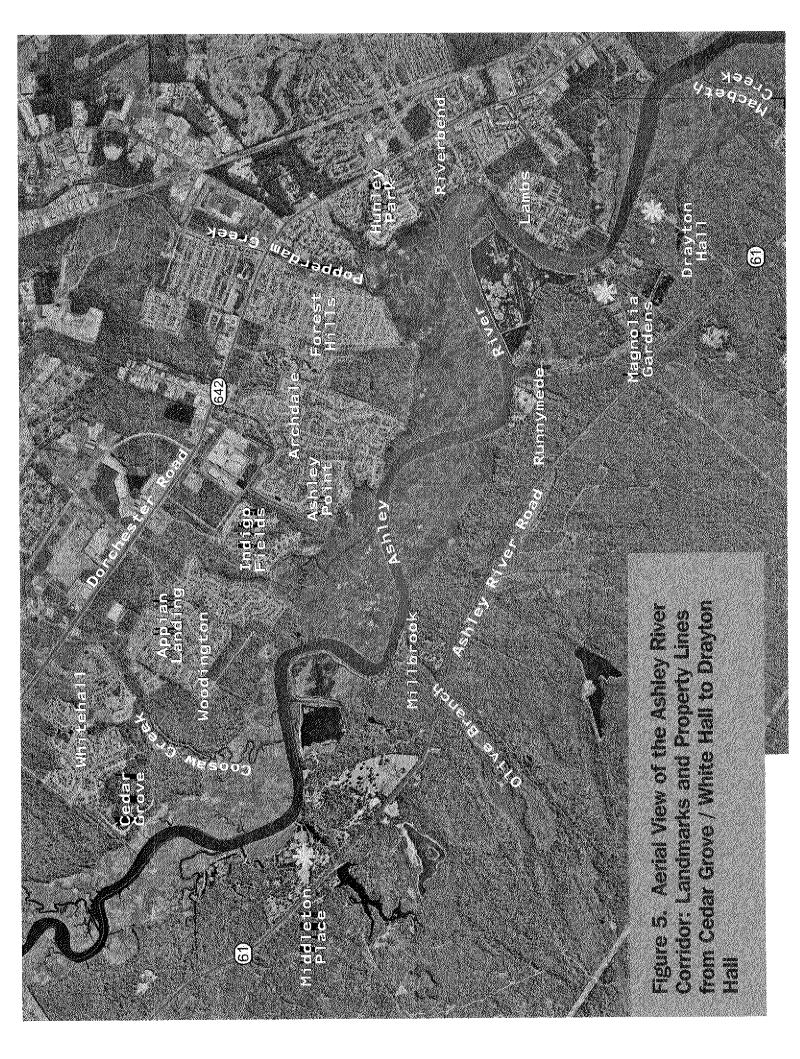
Ashley Scenic River extends from just above the railroad bridge to the Mark Clark Expressway (I-526). In this two-mile section the river

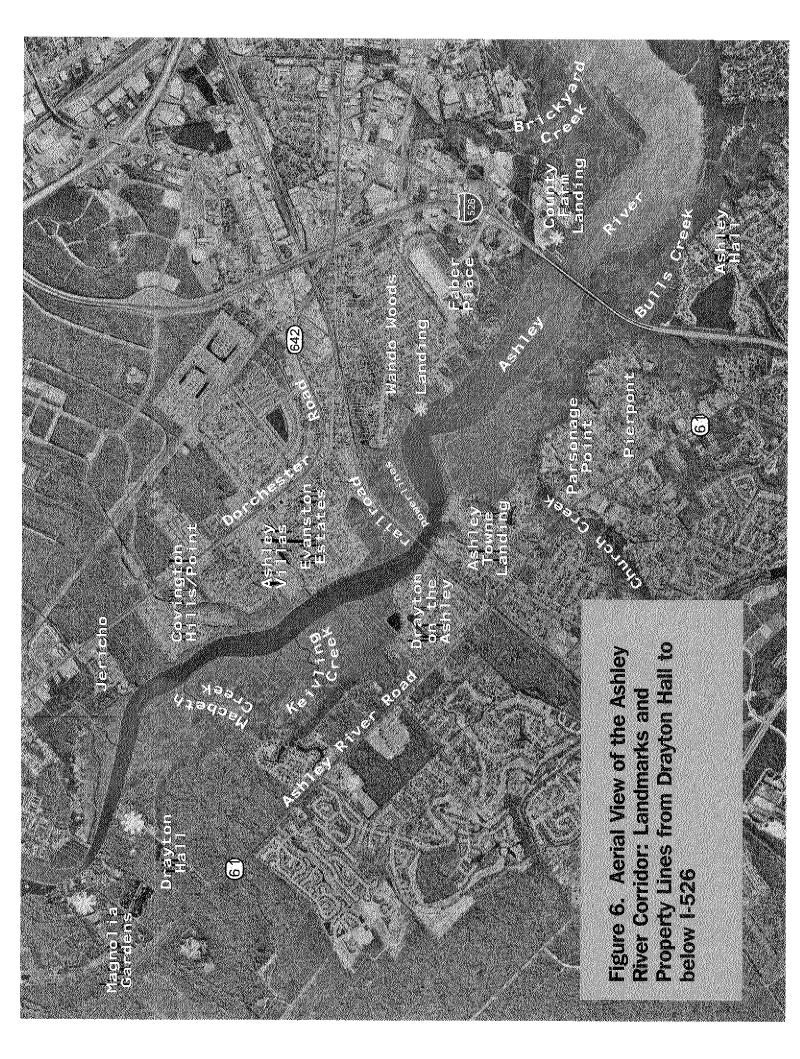


corridor is more heavily urbanized including subdivisions (Ashley Town Landing, Pierpont, Wando Woods, Faber Place), utility lines, and the two bridges. Nearly all the upland areas in this section are developed.

Downstream section (below I-526) – From the Mark Clark Expressway (I-526) to the confluence with the Cooper River at Charleston the Ashley River is much broader, heavily urbanized, and accessible to everlarger watercraft. This section includes Charles Towne Landing State Historic Site that has strong ties to the story of the upper Ashley.





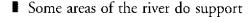


FINDINGS ON WATER QUALITY

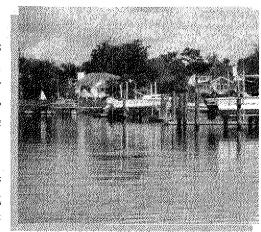
Among the various issues of public concern for the Ashley River, water quality is mentioned most frequently. This is true among the river users, river landowners, and interested citizens who participated in the Ashley Scenic River Community Vision Workshop of July 2000 (SCDAP 2000). Local citizens want to be able to swim the river and eat its fish without health hazards, and they want to see the river without floating litter drifting back and forth with the tide.

Water quality in the Ashley River is impaired; State water quality standards are not being met in many areas of the river system. Based on stream-monitoring data, significant water quality problems exist in the Ashley River throughout its watershed, from its headwaters in Wassamassaw Swamp to Charleston Harbor, and on many of its tributaries.

- Water quality in the Ashley regularly falls short of the state standards set for the river. The common problems identified are elevated levels of fecal coliform bacteria and depressed dissolved oxygen (DO) concentrations (SCDHEC 1999; Artuso and McKellar 1996).
- Consistent failure to meet water quality standards has resulted in the state's determination that many areas (9 of 10 monitoring stations) in the Ashley River watershed are not supporting, or only partially supporting, aquatic life and recreational uses (SCDHEC 1999).
- Phosphorus and nitrogen in the Ashley River were found to be significantly higher than in the rest of the Charleston Harbor estuary, with especially elevated levels (5-10 times) near Dorchester Creek (Van Dolah et al. 1990). A USEPA study revealed that conditions on the mainstem were grossly enriched exhibiting high levels of chlorophyll *a* (measurement used to determine algal content) and the potential for very high levels of algal growth (SCDHEC 1996).
- High levels of copper contribute to non-supporting conditions for aquatic life in the Ashley near Magnolia Gardens (SCDHEC 1999). Very high levels of zinc appear localized, in association with the swamps. Even though industrial metals, such as chromium and copper are widespread throughout the Charleston Harbor Project study area, levels in the water or sediments did
 - not exceed published USEPA or USFDA standards. Because these metals have the potential to bioaccumulate and data indicates this is occurring, metal levels in the Ashley River may be of concern due to their sublethal effect on estuarine organisms (Van Dolah et al. 1990).







water quality standards and others are improving: Four stations fully support aquatic life uses (Wassamassaw Swamp, Cypress Swamp, Eagle Creek, SC 7 Bridge) and two stations fully support recreational uses (SC 7 Bridge, Charles Towne Landing) (SCDHEC 1999). Improvements in bacterial pollution and/or dissolved oxygen (from 1994 to 1998) occurred at three Ashley River monitoring stations (Bacon's Bridge, SC 7 Bridge, Charles Towne Landing). Improvements are indicated in other areas of the watershed (Dorchester and Eagle Creeks) with declining levels of BOD, bacteria, and nutrient concentrations.

Natural conditions of the Ashley River system contribute to some water quality problems.

- The swamps in the upper Ashley watershed can have naturally low dissolved oxygen levels caused by high input of organic material from the trees.
- The Ashley has a very low freshwater flow rate and experiences strong tidal flood and ebb currents from Charleston Harbor extending upstream as far as Bacon's Bridge (SC Highway 165). These flow conditions can cause the waters of the Ashley to be retained, and not flushed, for many days.

State water quality standards for the Ashley call for fishable, swimmable waters. Water classifications (defined in S.C. Regulations 61.68 and 61.69) determine specific water quality standards and desired uses of the river that govern discharge-permitting requirements regulated by SCDHEC.

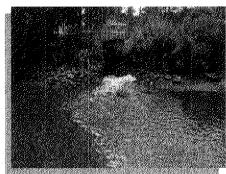
- Upstream of Bacon's Bridge, the river is classified as freshwater (FW). Class FW sets water quality standards intended to protect multiple uses such as swimming, boating, fishing, drinking water supply, survival and propagation of aquatic organisms, and industrial and agricultural uses (SCDHEC 1999).
- Downstream of Bacon's Bridge, the river is classified as tidal saltwater (SA). Class SA sets water quality standards intended to protect many of the

same uses as FW with the exception of drinking water, irrigation, or industrial uses. In addition, the SA classification is not intended to protect these waters for shellfish (clams, mussels, oysters) harvesting for market purposes or human consumption (SCDHEC 1999).

Permitted wastewater discharges to the Ashley. There are 10 active point-source discharges in the Ashley River watershed (see Figure 7) (discharges

Ashley River watershed (see Figure /) (discharges permitted by SCDHEC under the NPDES (National

Pollution Discharge Elimination System) program of the Federal Clean Water Act).



■ Within the scenic

river section there are four permitted discharges directly to the Ashley. Three of these are domestic wastewater and one is industrial wastewater. There are also two domestic discharges on tributaries to the scenic section, one at Church Creek and one at Coosaw Swamp.

- Upstream of the scenic section, there are two industrial discharges, one located on Mill Branch of Wassamasaw Swamp and one on Platt Branch of Cypress Swamp.
- Two permitted industrial discharges are located downstream of the Ashley's scenic section between the I-526 and US 17 bridges, one site is at Brickyard Creek and one at the Ashley.
- The Berkeley-Charleston-Dorchester Council of Governments (BCD-COG) is designated the Water Quality Management Agency for the region by the South Carolina Department of Health and Environmental Control (SCDHEC). The BCD-COG reviews all point-source wastewater discharges for conformance with the Regional Water Quality Management Plan (a.k.a. the 208

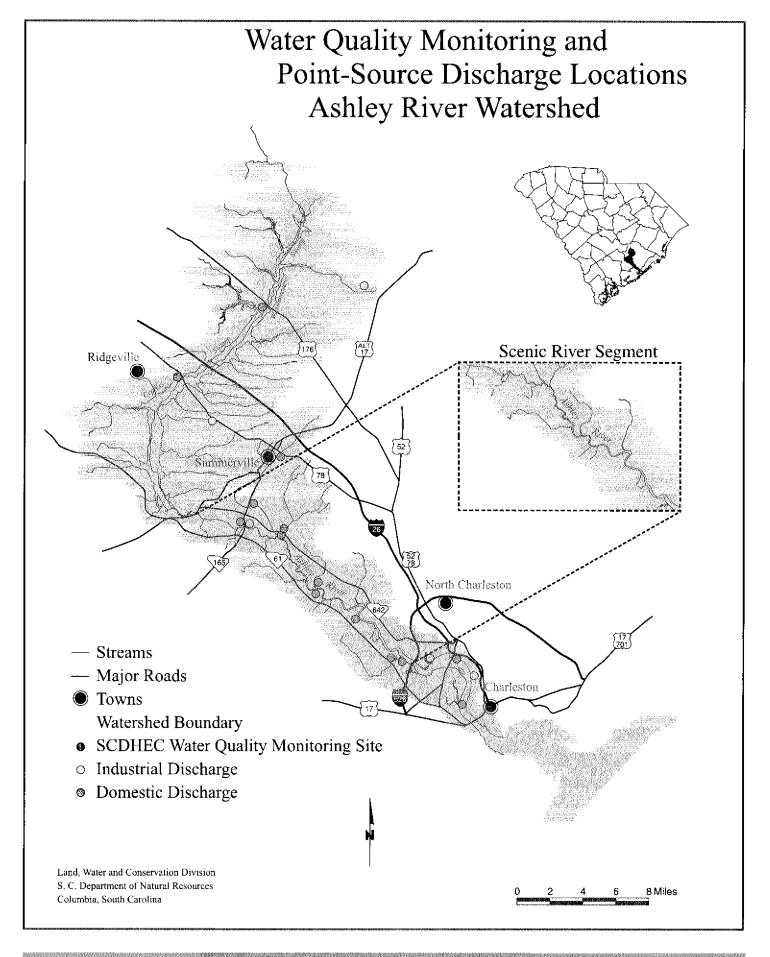


Figure 7. Water Quality Monitoring and Point Source Discharge Locations

Plan); however, SCDHEC remains the regulatory agency that issues all the permits and oversees the BCD-COG. The 208 plan defines a regional plan with policies to guide the permitting of all wastewater discharges requiring NPDES permits. Goal #1 of the 208 plan is: "All surface water should meet state standards" (BCD-COG 1996).

Polluted runoff and other non-point source pollution impact the Ashley. When it rains, pollutants are washed off the land into surrounding waters. Land use activities throughout the watershed can have an impact on the river. The land next to the river and its tributaries will have a direct and immediate impact on river water quality.

■ Land use becomes increasingly urbanized moving from the upper watershed to the lower watershed of the Ashley. The upper Ashley River watershed (areas drained by Wassamassaw and Cypress swamps) is over 75 percent forestland, 8 percent agricultural land, and 5 percent urban land. In contrast, the lower watershed (area of Dorchester/ Eagle Creek and Ashley River) is 41 percent forestland, 2 percent agricultural, and 45 percent urbanized (SCDHEC 1999). Figure 8 illustrates the pattern of developed land in the lower watershed of the Ashley River.



Urban areas likely produce the most serious polluted-runoff problems affecting the Ashley. Major pollutants found in urban runoff include

- sediment, nutrients, heavy metals, oils and grease, and disease-causing bacteria. Pollution sources include sediment from construction sites, fertilizer and pesticides from lawns and gardens, leaking automobiles on pavements, improper disposal of household and other chemicals, leaking septic systems, and improper disposal of pet wastes. Most people in urban areas are unaware that they contribute to non-point source pollution.
- Mining in the Ashley River watershed includes 21 permitted mines for sand and/or clay extraction. The mines are dispersed: nine mines are in the upper Ashley watershed in Cypress and Wassamassaw swamps, six are located in the vicinity of Slands Bridge, one is near Bacon's Bridge, two are adjacent to Sawmill Branch, two are near Popperdam Creek, and one is west of Ashley River Road near Middleton Place. Water quality impacts from mining can include alteration of hydrology and sedimentation to surrounding streams during mine development, extraction and processing, product storage and transportation, and reclamation.
- Forest land uses may involve timber harvesting. Potential pollutants associated with this land use include sediment from erosion, nutrients, organics, and pesticides. Water quality impacts can result from harvesting during wet soil conditions, removal of riparian (stream-side) vegetation, improper road construction, and disposal of woody debris in streams.
- Agricultural land uses may involve row crops or livestock. Potential pollutants associated with crop production include soil, nutrients, and pesticides. Potential pollutants associated with livestock production include nutrients, oxygen-demanding substances, and disease-causing bacteria.
- Marinas and concentrated areas of recreational boating have the potential of polluting the river with fuel spills and illegal dumping of on-board wastewater, which can result in depletion of dissolved oxygen, high concentrations of toxic metals in aquatic animals, and increased levels of

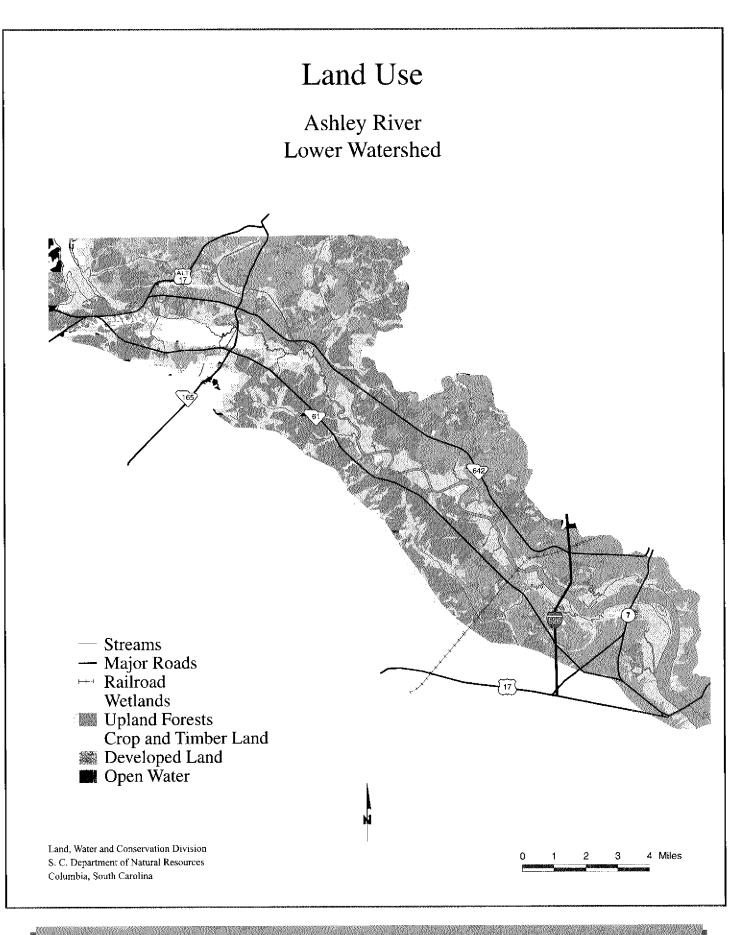
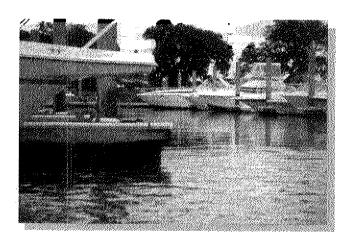


Figure 8. Land Use in the Lower Watershed of the Ashley River

Water Quality



disease-causing bacteria. One marina is located just outside the Ashley Scenic River segment below the I-526 bridge; others are located downriver in Charleston.

Land development has a negative impact on aquatic life of coastal streams. Research conducted by the Marine Resources Research Institute of the SCDNR on tidal streams in South Carolina (including several tributaries to the Ashley) shows direct

relationships between impervious surfaces (rooftops, parking lots, and roads) and the degradation of streams.

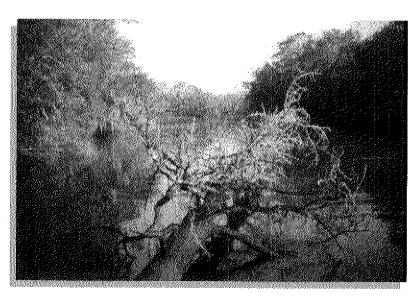
- Impervious surfaces in developed areas result in rapid rain runoff (large flushes) to streams causing major changes in hydrology, salinity, dissolved oxygen, as well as a direct inflow of toxic pollutants from those surfaces (Holland 2000).
- When development of a watershed exceeds 30 percent impervious surface (rooftops, parking lots, and roads), the health of a tidal stream's aquatic life becomes irreparably degraded. At

lower levels of land development the food chain supporting juvenile fish is seriously altered (Holland 2000).

Additional water-quality monitoring is needed. The routine sampling frequency utilized by SCDHEC is

not adequate to accurately discern the various sources of pollutants (point and non-point) to the Ashley.

- SCDHEC has ten (10) water-quality monitoring stations in the Ashley River watershed (see Figure 7). Seven of these are "primary stations," which are routinely sampled once per month all year round. Primary stations are located as follows: three are on the Ashley River at Bacon's Bridge, Magnolia Gardens, and Charles Towne Landing; three are on tributaries of the Ashley at Dorchester Creek, Eagle Creek, and Church Creek; and one is on Wassamassaw Swamp at U.S. Highway 176.
- Two of the monitoring stations are "secondary stations," sampled once per month from May through October. One secondary station is located on the Ashley River at S.C. Highway 7 (North Bridge), the other is on Sawmill Branch at U.S. Highway 78. One monitoring station, located in Cypress Swamp at U.S. Highway 78, is a "watershed station" sampled by SCDHEC during their watershed assessment studies.



■ The routine sampling may not detect acute water quality problems caused by pollution pulses to the river such as rainfall runoff from urban development or farm fields, a sewage treatment plant malfunction, or an industrial discharge that is temporarily out of compliance.

More detailed monitoring data (more sample sites, more frequent sampling) can help to better define sources



of water quality problems and support more effective targeting of future actions and investments in water quality improvement, such as further restrictions at wastewater treatment plants or better management of polluted runoff. Choices for new sampling locations will be an important consideration for all monitoring efforts.

Management Goal for Water Quality

Maintain and improve water quality in the Ashley River to provide safe, healthy conditions for desired river uses, which include swimming, fishing, shrimping, crabbing, and aquatic life support; and consistently meet or exceed established biological, chemical, and physical standards for Freshwaters (Class FW) and Tidal Salt Waters (Class SA) of South Carolina.

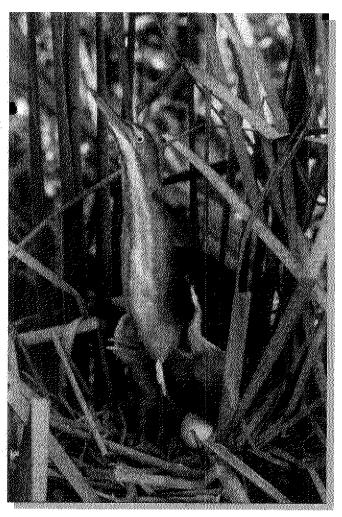
Recommendations

- 1. The advisory council should track water quality issues affecting the Ashley River watershed over time in the following ways:
 - a. Track changes in water quality conditions and watershed-related conditions over time. On a continuing basis, acquire data from SCDHEC's monitoring network, special studies, land use inventories, and other water quality and watershed information. The information should be used to assess progress and problems in maintaining and improving water quality over time and to inform the public on these issues.
 - b. Track public permitting and planning activities affecting water quality and provide input to

- public decisions as appropriate to pursue water quality protection and improvement in the Ashley River watershed. Examples of activities to track include wastewater permits, Regional Water Quality Management Plan amendments, development of Total Maximum Daily Load requirements, stormwater management plans and permits, funding sources to support water quality improvement projects.
- c. Track and advocate enforcement of existing laws designed to protect water quality. Become informed of the laws and regulations; get acquainted with the related staff and decision-making boards which affect implementation and enforcement of the laws; advocate enforcement; and keep records on the cases of non-compliance and their related enforcement actions.
- 2. The advisory council should form a standing committee to address water quality issues and spearhead related implementation efforts.
- 3. The advisory council should initiate cooperative efforts with agencies and community groups to educate citizens in the Ashley River watershed about water quality issues, sources of water pollution, and practices to prevent water pollution in the following ways:
 - a. Initiate an education campaign through cooperation with schools, local governments, and the media.
 - b. Emphasize the role of individual citizens, landowners, associations, and businesses in causing and preventing pollution, recognizing that activities on all lands of the watershed, especially those bordering streams, have a direct impact on the river.
 - c. Work with landowners and property managers in the watershed to control non-point source pollution: inform them of best management practices, the Scenic Rivers Stewardship Program, and available assistance / incentives

to address land management needs.

- d. Identify and recruit local citizen groups to "adopt" segments of the river for water quality monitoring (from simple observations to the actual collection of samples) and litter control.
- e. Promote cooperation among all groups and organizations working to keep the Ashley River clean.
- 4. The advisory council should encourage state and local governments to restore degraded habitats and water quality in the tributaries to the Ashley especially where the tributary is a major source of polluted runoff.
- 5. The advisory council should encourage the application of land management and development practices that will limit impacts to water quality in the Ashley River. Towards this end, the following is recommended:
 - a. Future development in watersheds of the Ashley River must be planned in ways that control stormwater runoff and limit impacts to water quality; therefore, local governments, landowners, and developers should plan and design developments in ways that:
 - Limit the degree of alteration to normal freshwater inflows.
 - Minimize the amount of impervious surface created.
 - Establish and/or restore vegetative buffers along all river, creek, and marsh boundaries to trap pollutants.
 - Maintain vegetated open spaces within developments to decrease runoff and allow the recharge of shallow aquifers.
 - b. Scientifically sound guidance for environmentally friendly development (development that reduces impact to water quality and aquatic resources) of coastal watersheds is needed. State and local governments and the advisory council should



promote and support development of such guidance and provide it to developers, local governments, and landowners.

- c. Land conservation should be encouraged in the Ashley River watershed for the purpose of protecting water quality. Protecting natural areas and traditional forestry and agricultural land from being over developed (covered with impervious surfaces) will protect the Ashley from polluted runoff. Landowners, land trusts, and state and local governments should be encouraged to support this objective and utilize conservation easements to establish permanent protections.
- 6. The advisory council should encourage additional, more detailed, water quality monitoring in the Ashley River watershed by agencies and research scientists to more accurately determine the various sources of water pollution and to detect acute water quality problems. Wet weather sampling in the tributaries of the Ashley is recommended to better understand the pollution contributions from non-point sources.

FINDINGS ON RECREATIONAL USE AND ACCESS

Many recreational opportunities are available in the Ashley River corridor. Recreation activities include the following:

FISHING. Anglers on the Ashley seek a variety of fish species throughout the length of the river in a mix of salt and fresh water environments from public and private docks, landings, boats, or marinas. Freshwater species include catfish, bream, bass, eels, and crappie. Saltwater species include sea trout, red drum, black drum, striped bass, mullet, and flounder. A limited amount of shellfishing for shrimp and blue crab occurs.

CANOEING AND KAYAKING. The public has opportunities to paddle and explore the river from various public landings. Access at other locations requires permission from the property owners. Upper reaches of the river are suited to canoeing and kayaking. The lower reaches can be wide-open waters with winds and waves making them better suited to the kayakers and more experienced canoers. Middleton Inn offers boat rentals and guided paddling programs.

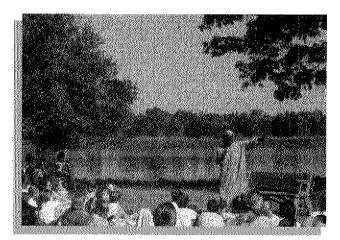
CAMPING. No public camping is available in the Ashley Scenic River corridor.

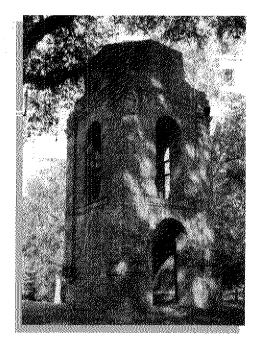
Use of property for camping requires permission from the affected property owners, otherwise the activity is considered trespassing.

SWIMMING AND SCUBA DIVING. There are no designated public swimming areas on the Ashley Scenic River; however, swimming may occur where access is available or from watercraft. Impaired water quality conditions in some areas of the river impose health risks to swimmers. Most scuba diving done in the Ashley is related to artifact and fossil hunting.

NATURE STUDY, BIRD WATCHING, PHOTOGRAPHY. The mixture of freshwater and saltwater environments supports a diversity of flora and fauna and provides many opportunities to study and observe nature.

Natural and historical settings provide ample photographic opportunities. Spanish moss hanging from oaks, wild rice, bald eagles and osprey, songbirds, wading birds, redwing blackbirds, shipwrecks, plantations, tidal marshes, otters, dolphins, and alligators — all these and more are part of the beauty and diversity of the Ashley River. Magnolia Plantation, Drayton Hall and Middleton Place provide opportunities for structured nature programs and each of these historic sites offers birding guides.





EXPERIENCING HISTORIC AND

ARCHAEOLOGICAL RESOURCES. The Ashley River corridor provides public access to significant historical resources. Private facilities open to the public (for a fee) include Drayton Hall, Magnolia Gardens, and Middleton Place, Colonial Dorchester State Historic Site, a state-owned facility, is open to the public (for a fee). These sites provide open grounds and historic structures for viewing and offer guided tours. The public can witness and sometimes participate as volunteers in archaeology at these sites. Many sites and structures can be observed from a boat in the river including plantation buildings, fortifications, rice field watercontrol structures, shipwrecks, and remains of wharfs, all relics of the river's history from the colonial period up to the present.

MOTOR BOATING, SAILING, AND WATER-

SKIING. Everything from sneak boats to sailboats to 40-foot cabin cruisers can be seen plying the waters of the Ashley, which transitions from a narrow, tree-canopied freshwater stream to a wide and open tidal river. Most water-skiing occurs in the area between the I-526 Bridge and Drayton Hall; and outside the no-wake zones at Drayton Hall, Magnolia Gardens, Middleton Place, and Colonial Dorchester.

HUNTING. On the large tracts of private land around the Ashley River, people hunt deer, waterfowl, doves, feral pigs, turkey, raccoon, and fox. Some land is leased by hunting clubs. Hunting activity has been on the decline with increased development and use in the area (BCD-COG 1980).

NATURE TRAILS. The public can find access to walking trails located at Middleton Place, Drayton Hall, Magnolia Gardens, Jessen's Boat Landing, and Colonial Dorchester State Historic Site. Colonial Dorchester has an interpretive trail withat has a nature



component. Each trail has various forms of information available to the public.

GOLF. An 18-hole golf course is available (for a fee) at River Club on the Ashley in the King's Grant subdivision.

PICNICKING. Public picnic opportunities are available at Colonial Dorchester State Historic Site, Magnolia Gardens, Drayton Hall, Jessen's Landing, and County Farm Landing.

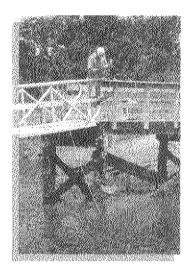
Desire for recreational use and access in the Ashley River area is increasing. The combination of natural and cultural resources in close proximity to a major metropolitan area place the Ashley River corridor in high demand for recreational use and access.

The Ashley River is in close proximity to major urban areas, including Summerville, North Charleston, and Charleston. Population statistics suggest that this area will continue to experience rapid growth, reaching numbers close to one million in the first half of the 21st century. As people move into this area the demand for recreational opportunities of increased variety will continue to grow.

Many people seek water-based recreational activity and the numbers are expected to increase. Yet, while the demand is great, a phone survey conducted as part of the Charleston Harbor Project in 1995 revealed a desire among many respondents

that facilities and access to water resources be established without compromising natural resource values (Cunningham 1996).

Participating in outdoor recreation or visiting museums or historic sites is a leading use of vacation time



among tourists in South Carolina (SCPRT 1997). One of the most popular activities of visitors to Dorchester and Charleston counties is visiting a historic site or museum; and in 1996, tourism in the Historic Charleston area generated 1.8 billion dollars in revenue (SCPRT 1997).

A variety of recreational access facilities are available to the public. Both private and public access facilities are available to those who are interested in seeing and experiencing the resources of the Ashley Scenic River (see Figure 9).

- Private facilities that are open to the public (fees required) include Drayton Hall, Magnolia Gardens, and Middleton Place.
- Public facilities include Colonial Dorchester State Historic Site (fee required) and four public boat landings (free access) that include Jessen's Landing, Wando Woods Landing, County Farm Landing, and Pierpont Landing.
- The public boat landings vary in terms of the facilities provided. Jessen's Landing, which is managed by the Town of Summerville, has parklike facilities including a boat ramp, boat dock, parking lot, fishing pier, picnic shelter, nature trail and a boardwalk along the river. The County Farm Landing, managed by Charleston County, has a large ramp, large parking lot, boat dock, and picnic shelter (and a private marina is located next to this

landing). The landings at Wando Woods and at Pierpont simply provide a ramp for boat launches. Several subdivisions including Ashborough, Kings Grant, and Drayton on the Ashley have private boat landings on the river.

Historic sites of the Ashley River (Colonial Dorchester, Drayton Hall, Magnolia Gardens, and Middleton Place) each have their own special features of interest to recreational users. Each site offers trails with access to their respective grounds and vistas along the river.

Additional public access sites are desired. Concepts for additional public recreational access supported by participants in the Ashley Scenic River Community Vision Workshop of July 2000 (SCDAP 2000), included the following:

- The need for a safe boat (canoe/kayak) launch site on the upper river, possibly at Sland's Bridge and/ or Bacon's Bridge.
 - The opportunity for creating a public park at Bacon's Bridge.

The desire for more walking and bicycle trails, as there are few existing public opportunities along the Ashley. Two trail (or greenway) concepts, proposed by local governments, could enhance recreational opportunities in the Ashley Scenic River corridor: (1) Sawmill Branch Bike / Hike Trail, a greenway proposal to connect Colonial Dorchester State Historic Site with downtown Summerville and other points of interest, and (2) The Ashley River Road Path, a proposal to create a pedestrian/bikeway paralleling 11-miles of Highway 61 and connecting the area at Church Creek with Colonial Dorchester State Historic Site (CCPRC 1995).

Overuse and abuse of the river is a concern. Many participants in the Ashley Scenic River Community Vision Workshop of July 2000 (SCDAP 2000) expressed concerns that more access leads to more use and more use will threaten the river with increased noise, litter, vandalism, bank erosion, and reduced

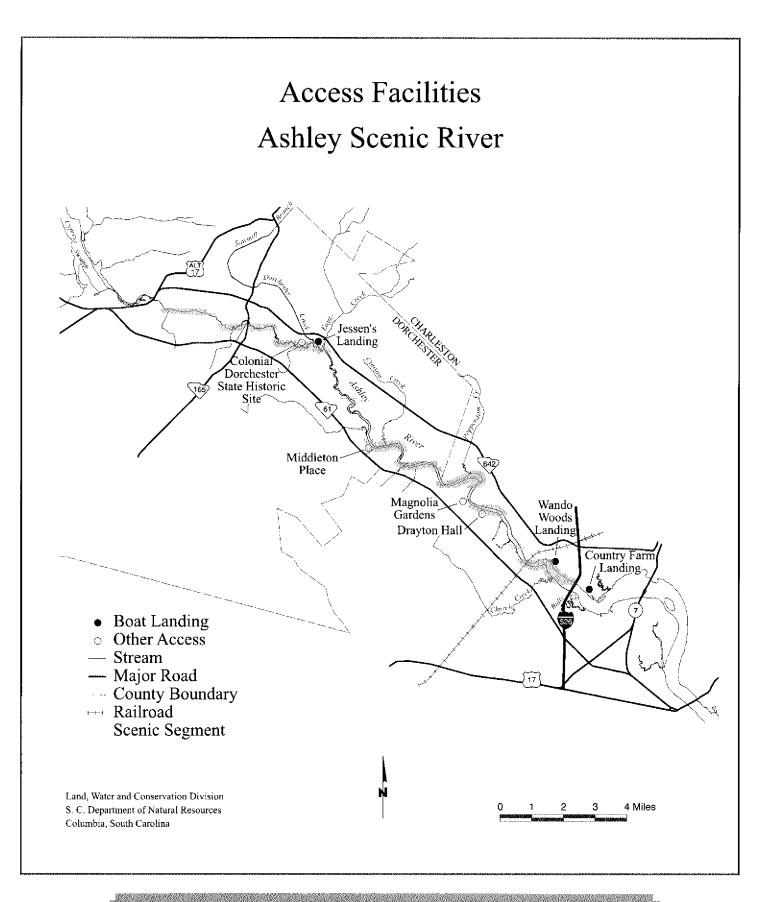


Figure 9. Access Facilities Available to the Public

safety and security. Suggestions from workshop participants include the following:

- No additional sites for public boat ramps are needed on the Ashley Scenic River and powerboat access to the upper river, above Colonial Dorchester, should not be encouraged.
- Visitor/user-impact studies should be conducted before new facilities are sited and designed.
- River education efforts should target recreational users to inform them of rules and values of the river.

Management Goal for Recreational Use and Access

Allow the Ashley, as a State Scenic River, a to be reasonably accessible and navigable along its entire course for responsible recreational use and enjoyment by landowners and the general public. Balance recreational use and access with care, respect, and conservation of the river. Manage use and access to prevent overcrowding, trespassing and abuse of private property, and negative impacts on the river's outstanding natural, scenic, and cultural resources. Encourage compatible low-impact uses of the river corridor and develop improved low-impact access facilities.

Recommendations

- 1. The advisory council advocates low-impact designs for any new public access facilities proposed for the Ashley Scenic River. Low-impact designs minimize the negative affects that access facilities and recreational users can have on the river corridor and its natural, cultural and scenic resources. The advisory council recommends the following:
 - a. Before recreation facilities are sited and designed, the needs, proposed uses, and potential impacts should be evaluated and documented for public review. Issues that should be addressed in the siting and design of access facilities include minimizing overuse,

- noise, and pollution, and protecting public safety, sensitive resources, and aesthetics.
- b. Facilities should be designed to encourage compatible recreational uses and discourage undesirable uses, both of which may vary depending on the purpose of the facility and its proposed location on the river.
- 2. The advisory council recognizes that areas at Bacon's Bridge (Hwy 165) and Sland's Bridge (Hwy 17-A) can provide desirable public access points to the Ashley Scenic River and recommends that Dorchester County pursue opportunities for establishing safe and appropriate access in these areas after obtaining consent of the affected landowners. The advisory council will assist in these efforts.

Recommended design features for low-impact access facilities at these sites are illustrated in the drawing of a conceptual plan for Bacon's Bridge (Figure 10) and include the following:

- a. Safe parking, limited to about 25 spaces to avoid over-use of the facilities.
- b. Carry-in access for small boats. A stepped canoe and kayak put-in allows easy access for small boats and discourages use by large ones (no boat ramps are recommended). Small boat access in these areas would allow people to float to Jessen's Landing or beyond and experience the transition of habitats from fresh to brackish to saltwater environments.
- c. Other features include picnic areas, a walking trail, and restroom facilities.
- d. The site is gated to control access at night, and to allow for the possibility of charging a modest fee to defray operating costs.
- 3. The advisory council supports greenway trail concepts such as the Sawmill Branch Bike / Hike Trail which improve walking and biking access to the Ashley River corridor and enhance recreational opportunities overall.
- 4. To address concerns of safety and wake damage/

The Ashley River is a special place to me in many ways. It was a great place to take my family for a peaceful outdoor experience or to fish alone. The blending of salt and fresh water habitats resulted in surprising catches and surprising sights with dolphins as far upstream as Bacons Bridge.

The Ashley is a great link with our collective past, having artifacts of the plantation times exposed along the banks. The remnants of a tabby fortification dating back to colonial days and historic rice plantations and gardens along the lower river evoke days gone by. The winding blackwater section of the upper river provides intimate contact with nature.

The river has a tremendous amount of history and scenic beauty in a relatively short distance. It lends itself very nicely to human powered craft and needs only improved access to make it an important tourist destination. Wildlife is both diverse and abundant allowing the viewer to forget the proximity of "civilization".

We have made many mistakes with the Ashley River but thankfully rivers can recover from most. Unplanned development and consequent loss of wildlife habitat will damage it irreparably. Educated people have told me that the river to them is only a conduit for waste water. We need to change that perception as well as the idea that riparian buffers detract from property values and owners rights.

In order for the Ashley River to remain a special place worthy of its scenic designation we must make the entire scenic length accessible to the public.

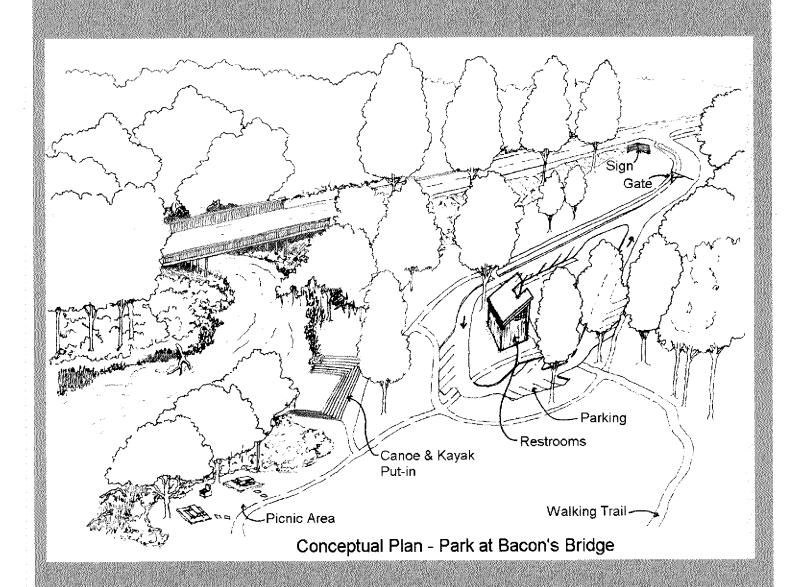
— Howard Bridgman

erosion related to increasing motorboat activity on the river, the advisory council advocates the following:

- a. Increased law enforcement on the Ashley of the "No-Wake" zones and other boating safety rules.
- b. No new public or community boat ramps and no new public or private marinas should be sited on the Ashley Scenic River (there is now ample access to launch motor boats; no new ramps or marinas are recommended).
- c. Increased public education on boating rules, especially "No-Wake" zones. Post signs at boat ramps discussing the effects of wakes and the fines involved for disobeying the law. Also through education efforts, encourage water skiers to limit skiing to wider, straighter areas of the river.
- d. Rather than prohibiting powerboats in the upper river, leave fallen trees and underwater obstructions in the river, clearing only as needed to allow for canoe passage. Keeping fallen trees and snags in the river, and not clearing them, is recommended to provide for fish habitat.
- e. Establish "No-Wake" zones on the entire river above the landing at King's Grant.
- 5. Managing the negative effects of recreational users

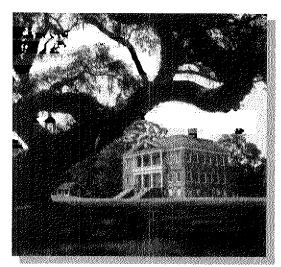
- on river resources will be an ongoing challenge. The advisory council, in partnership with other organizations, will target education efforts, law enforcement actions, and other remedies to address problems such as: littering, illegal camping / trespassing, illegal collection of underwater artifacts, as well as unsafe boating and wake erosion.
- 6. The protection and improvement of water quality and wildlife habitat are essential to ongoing recreational enjoyment of the Ashley River; therefore, the advisory council advocates the following:
 - a. Water quality in the Ashley River should consistently meet or exceed the established State water quality standard in order to provide for the desired recreational uses of fishing, shellfishing, swimming and related water-contact activities.
 - b. Wildlife habitats of the Ashley River corridor should be conserved in order to support healthy populations of native plants and animals and to provide for recreational uses such as bird watching, nature viewing and photography, hunting and fishing. (For specific actions, refer to recommendations on Water Quality and Preservation and Conservation.)

Figure 10. Conceptual Plan for Park at Bacon's Bridge (Drawing by Bob Bainbridge)



Clean water, a healthy habitat for fish and other river wildlife, a beautiful natural riverfront...it is essential to balance development and recreational use of the Ashley River with its' preservation. A healthy, beautiful river is a priceless natural resource that must be preserved for future generations.

--- Meta Carter



FINDINGS ON PRESERVATION AND CONSERVATION

The outstanding cultural, natural, and scenic resources of the upper Ashley River are the primary reasons for its designation as a State Scenic River, and so are central to this management plan.

Cultural resources of the Ashley Scenic River are nationally significant. These include historic sites that are of major economic importance to the region, fostering tourism (over 400,000 visitors per year), public education (17,000 students per year), and local pride (see Figure 11).

- Two National Historic Landmark sites, Drayton Hall and Middleton Place, with buildings, gardens and rice fields dating back to the 1700's.
- Three National Register-listed properties, Colonial Dorchester State Historic Site (ca. 1696), Magnolia Gardens (ca. 1840), and St. Andrew's Parish Church (ca. 1706).
- The State's oldest highway, Ashley River Road (ca. 1691), is listed in the National Register of Historic Places and is a National Scenic Byway.
- More than 40 significant archaeological sites are found here, including Native American sites, the ruins of former plantations, a colonial village, defensive fortifications, early industrial sites, ferry landings, bridges and wharves, and the wrecks of colonial and 19th century ships and workboats.
- Colonial Dorchester State Historic Site is one of the earliest settlements in South Carolina. This townsite (ca. 1696) includes the remains of two wharves, a shipyard, church, school, town square, and forty homes, in addition to perhaps the best preserved tabby wall fortification in the United States.
- Drayton Hall (ca. 1738) is the only plantation house left on the Ashley that survived the Revolutionary and Civil Wars intact. Drayton Hall is considered one of the finest examples of Georgian-Palladian architecture in America.
- Magnolia Gardens is a 300-year-old plantation that has been in the same family since the arrival of Thomas Drayton from Barbados in 1671. Magnolia includes one of the country's oldest gardens.
- Middleton Place is the location of America's oldest landscaped gardens, laid out in 1741. This property was the home of four distinguished South Carolinians, including: a President of the First Continental Congress, a signer of the Declaration of Independence, a Governor of South Carolina and Minister to Russia, and a signer of the Ordinances of Secession.
- Shipwrecks dating back to the eighteenth century lie along the river channel of the Ashley Scenic River. Some are visible in the mud banks at low tide. At least thirteen underwater archaeological sites are known to exist between Bacon's Bridge and Magnolia Gardens.

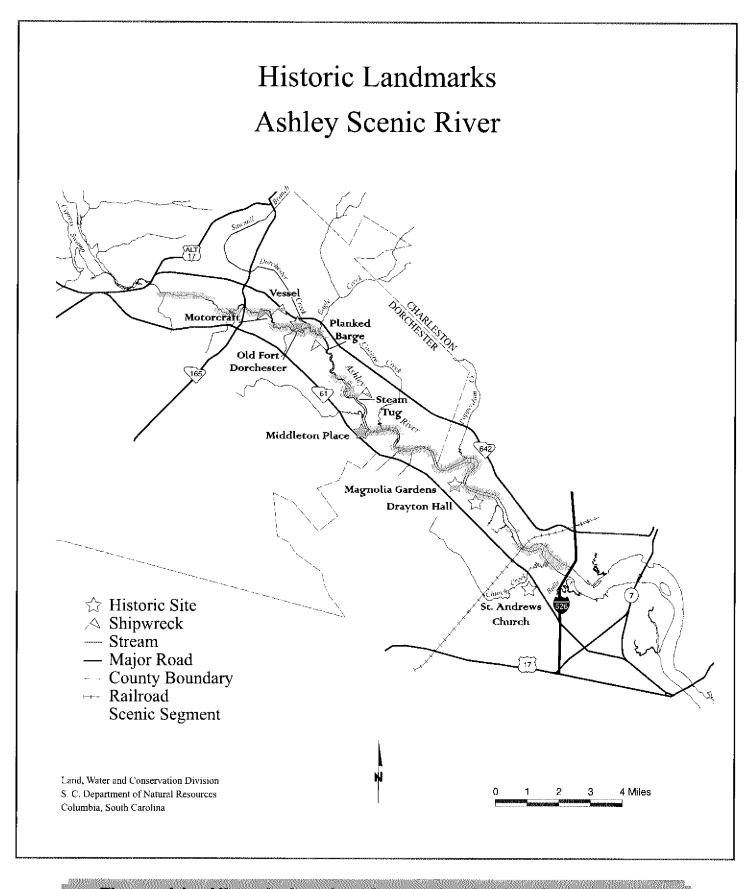
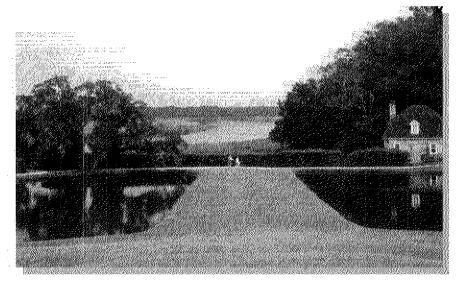


Figure 11. Historic Landmarks on the Ashley Scenic River



The Ashley is rich in natural and scenic resources. In addition to its cultural resources, the river corridor includes miles of near-pristine natural beauty (drawings in Figure 12 depict visual characteristics of the Ashley River valued by local citizens).

- * A dense moss-draped, fern-carpeted, floodplain forest borders the upper river to Bacon's Bridge, with branches forming a canopy over the stream.
- Below Bacon's Bridge the river opens to the sky, allowing freshwater marshes stands of wild rice, cattails, and pickerel weed flanked by wild rose thickets and towering oaks, maples, sweetgums and river birches.
- At Ashborough and King's Grant, limestone bluffs rise along the east side of the river and the river widens.
- * At Middleton Place and below, the tides create a new riverscape, with acres of Spartina grass at river's edge giving way to higher stands of black needlerush, then to salt-tolerant shrubs baccharis, wax-myrtle, willows, and hollies and finally to the trees and shrubs of the uplands. Residential and commercial development increases as one moves farther down river.
- The Ashley's changing landscape supports myriad wild creatures, from deer, bobcats, raccoons, and river otters, to alligators, turtles and water snakes, to flocks of songbirds, wading birds, and migratory

birds which feed and take shelter in the riverside vegetation.

Intense growth and land development pressures pose a threat. Poorly planned and designed development can degrade the appearance and character of the Ashley Scenic River corridor.

- Currently, approximately 25 major parcels of undeveloped land exist along the scenic river corridor, from Sland's Bridge to the CSX Railroad Trestle. If the scenic appearance of the river is to be maintained, the cooperation of these landowners is essential.
- Wurban sprawl in the Charleston/Summerville area is a growing concern, with the urban footprint of the tri-county area expected to expand from 160,000 acres to 386,913 acres by 2015, according to Clemson's Strom Thurmond Institute.
- More marginal land is being developed; roads, water and sewer lines are being expanded; and residential and commercial growth is proceeding at a rapid pace in the Summerville/North Charleston/upper Charleston County area.
- Local jurisdictions are attempting to enact comprehensive land use plans, creating "overlay districts" along the Ashley, re-zoning areas, and providing for building height and density limits, sign restrictions, setbacks, "greenbelts," buffers, etc. to control development and to minimize its impact on the natural and cultural landscape. Opposition has arisen from landowners and developers who view these efforts as unconstitutional "land takings."

Vegetative buffers are essential for resource conservation. Buffers along the river and its tributaries are essential to maintain the scenic and historic appearance of the Ashley River. As noted elsewhere in this plan, buffers are also essential to maintain the water quality by preventing sedimentation and by filtering pollutants from the

runoff of urban, suburban, and agricultural areas.

- The Ashley River Special Area Management Plan (SAMP) was created in 1992 by the S.C. Coastal Council (now the Office of Ocean and Coastal Resources Management (OCRM) at the S.C. Department of Health and Environmental Control) and the S.C. Department of Archives and History (Townsend and Brock 1992). The SAMP includes provision for protection of historic properties, archaeological sites and scenic natural areas from Bacon's Bridge to the CSX Railroad Trestle.
- The SAMP recommends that new developments on the Ashley be required to provide 50 to 100foot vegetative buffers along the river and its

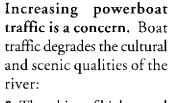
tributaries (Townsend and Brock 1992). Under the authority of the S.C. Coastal Zone Management Act, OCRM regulates activities in two ways: (1) direct permitting of construction activities in "critical areas" or tidal areas (this affects activities such as docks and bulkheads), and (2) "certification" for

stormwater management and wetland protection for development activities requiring other state or federal permits in coastal counties of South Carolina. Through this existing authority, OCRM can require buffers for an activity such as a new subdivision development.

Visual intrusions degrade river aesthetics. Intrusions that may threaten the river's appearance and character include:

- The ever-increasing number of communication towers.
- More docks and bulkheads.
- Buildings over two-stories high cannot be effectively screened by topography in the lowerriver areas below the Dorchester County line.

- These areas fall in the jurisdictions of both North Charleston and Charleston County.
- More building of high-rise offices, apartments or industrial buildings, such as those near the Mark Clark Bridge, is likely.
- The possible loss of wildlife habitat and the beauty of the riverscape by:
 - ** Timber harvesting in the flood plain forests along the upper river.
 - Clear-cutting of privately-owned building lots down to the river.
 - * The clearing of large construction sites on high ground bordering the river.



- The whine of high-speed motors drowns out the sounds of nature and interferes with the visitor's desire to "step back in time" to experience a sense of the past.
- Wakes generated by powerboats accelerate shoreline erosion that results in a loss of private property. Shoreline erosion increases the turbidity of the water endangering shellfish and essential marine organisms.

Litter and illegal dumping impact the scenic river. Litter comes from many sources and degrades the river:

- Litter accumulates in the marshes and backwaters and along trails paralleling the river, degrading the viewscape and endangering wildlife.
- At places readily accessible by road, such as Bacon's Bridge and Jessen's Landing, illegal dumping blights the landscape and introduces pollution.

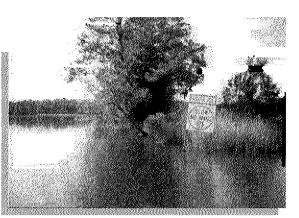
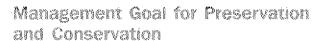


Figure 12. Visual Characteristics of the Ashley Scenic River:

- (a) upper river natural features
- (b) mid-river natural and cultural features
- (c) open river natural features
- (d) historic property features

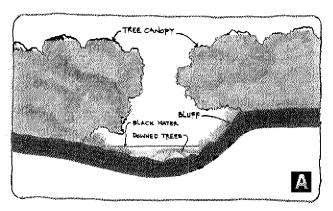
(Drawings by Bob Bainbridge)

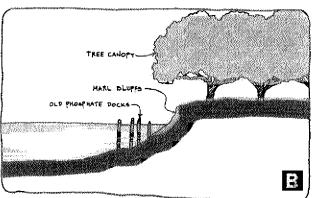


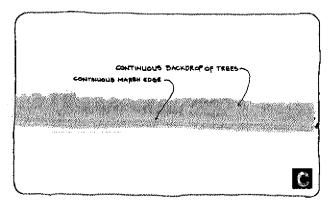
Preserve in perpetuity the unique cultural resources and conserve the outstanding natural and scenic resources of the Ashley Scenic River.

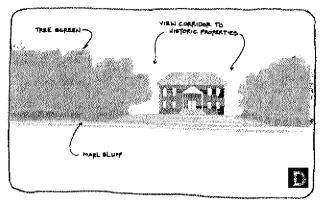
Recommendations

- 1. Municipalities and counties bordering the Ashley River should develop meaningful and coordinated standards for new construction to preserve and enhance the appearance of the scenic river. Included in these standards should be the 50 to 100-foot vegetative buffers specified in the Ashley River Special Area Management Plan (SAMP).
- 2. OCRM should exercise its authority under the Coastal Zone Management Act to enforce the policies of the Ashley River SAMP, particularly those that address buffers and docks:
 - a. Require vegetative buffers along the river in all









new developments, through the entire scope of permit review and certification. Additionally, OCRM should require developers to show required vegetative buffers in all deeds for individual land parcels or building lots, so as to maintain requirements along the Ashley Scenic River through successive changes in property ownership.

- b. Require docks to be limited in number, allowing one community dock for developments; limit size and structure, allowing no roofs, handrails, or second story decks; and consider location, avoiding visual impacts to historic properties on or eligible for the National Register.
- 3. The State General Assembly should enact legislation to encourage scenic easements and donations of buffer lands or greenspace. State and local funds should be made available to purchase development rights or to secure easements for critical greenspace bordering the scenic river. Incentives and funds should be provided for buffer planting, using native plants, along already established properties.
- 4. The owners of forested lands bordering the scenic river should be encouraged to donate easements or, as a minimum, to selectively harvest timber following South Carolina's Best Management Practices for Forestry (SCFC 1994), in order to minimize visual impact, bank erosion, sedimentation, and stream pollution.
- 5. Local governments should require structures for utilities, such as communication towers and power-transmission lines, to be built in ways that minimize visual impacts to the scenic river. The collocation of equipment for multiple users on existing and new towers or corridors is recommended. Wherever possible, utility structures should be screened from the scenic river by topographical features. Where this is not possible, structure height and design should be such as to minimize visual impact.

- 6. The S.C. Department of Natural Resources (SCDNR) and the advisory council should increase education of boaters as to wake damage and responsible boat operation, to minimize erosion, property damage, and noise pollution. Special consideration by SCDNR should be given, for reasons of public safety and the peaceful enjoyment of the river, to the creation of a "No-Wake" zone for the entire river above the landing at King's Grant subdivision.
- 7. Conservation Officers and local police should increase their surveillance of chronic litter and illegal dumping sites (such as Sland's Bridge and Jessen's Landing), enforcing the law more rigorously, and encouraging fishermen and boaters to help remove debris around them. In addition, the advisory council urges the state and local agencies involved to increase the number of "River Sweeps" to at least two per year.

Actions:

- 1. The advisory council will approach state, county, and municipal representatives; river-bordering landowners; and other organizations to actively advocate implementing these recommendations.
- 2. The advisory council will encourage voluntary activities that will protect important scenic and cultural resources.
 - Example of voluntary activity: Since 1992, partners with the Lowcountry Open Land Trust have succeeded in obtaining several land conservation easements within the upper Ashley corridor to protect the views from historic properties. A major landowner has made possible, through donation and bargain sale, the preservation of marshes and buffering high ground facing Drayton Hall. Most recently, land developers have considered establishing "linear parks" across the river from Middleton Place.

Land Management and Development



FINDINGS ON LAND MANAGEMENT AND DEVELOPMENT

This management plan promotes a voluntary and cooperative approach to land management and development and acknowledges the fundamental rights and responsibilities of property owners to guide what happens to their own property. This approach is workable because there are only a small number of properties that can be developed in a way that would dramatically impact the river. These numbers make personal contact, discussions, and exchange of information and plans possible. As the mission of the advisory council is to promote ongoing stewardship of the river, this mission is pursued recognizing the legacy of good stewardship among the landowners.

Major issues affecting land management and development that must be dealt with to promote goals of good stewardship include the following:

Recent regulatory proposals and plans are not successful.

- Regulatory efforts have been a major thrust employed thus far to achieve the objective of protecting resources of the Ashley River corridor. Many in the community have met regulatory proposals with much resistance on more than one occasion.
- Several comprehensive management studies and plans have been produced in recent years. Although well-intended, these studies tend to be difficult to implement.

Local zoning codes are inconsistent among jurisdictions. There is a lack of uniformity in zoning and other regulations of the five jurisdictions having authority and influence over the Ashley Scenic River corridor, resulting in a lack of coordination and much confusion among property owners and users.

Alternative, non-regulatory approaches to conserving land are poorly understood.

- There are various non-regulatory approaches to conserving land that can be financially viable for the landowner such as donating conservation easements, or selling development rights, or incorporating special design features for limited-impact development.
- Because these approaches are relative new and poorly understood, they are often met with distrust by local landowners.

Concern over loss of forestry and agriculture. There is much concern that the traditional land uses of forestry and agricultural practices in the Ashley Scenic River corridor may be lost due to intense growth and development pressures. More change could occur over the next 20 years than during the past 150 years.

Land Management and Development

Traditional development practices can degrade the Ashley River corridor. Development practices that have occurred in other parts of the greater Charleston area could have a devastating effect on the environment of the Ashley Scenic River corridor. The typical cookie-cutter maximum approach to commercial and residential development will degrade the natural, cultural, and aesthetic qualities of the Ashley Scenic River.

Proposed Glen McConnell Parkway extension will expose the Ashley to greater development pressure. The parkway extension will increase development pressure on formerly undeveloped lands west of Ashley River Road. The location and character of the parkway is uncertain at this time.

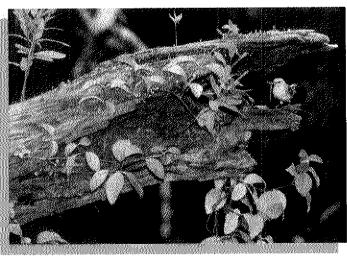
Management Goal for Land Management and Development

Preserve and enhance the scenic and water quality characteristics of the Ashley River corridor and encourage landowners to continue voluntary good stewardship of their land.

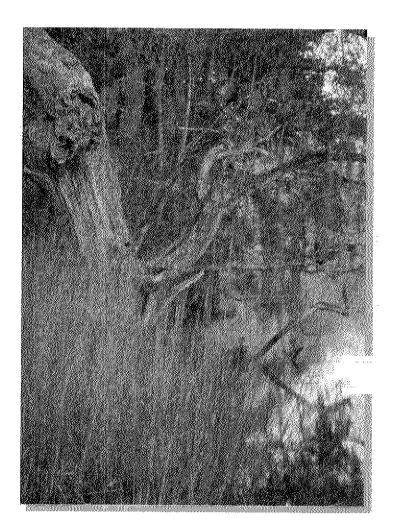
Recommendations

- 1. To develop a program that builds partnerships promoting mutual respect among landowners, developers, local government agencies and river users, protecting individual property rights to accomplish the management goals, the advisory council in cooperation with other organizations will pursue the following:
 - a. Develop a community association and a communications network to inform and educate Ashley River landowners, river users, and elected officials of success stories, activities, and issues related to the river.
 - b. Maintain contacts and communications with representatives of all local governments having jurisdiction in the Ashley Scenic River corridor to spearhead a coordinated

- regional effort to manage the land with as uniform standards as possible.
- c. Create landscape guidelines for future developments that preserve vegetation along the Ashley River, Ashley River Road, and adjacent properties. These guidelines should address ways to reduce and eliminate visual and water runoff impacts to the river and promote a seamless visual quality to the river corridor.
- d. Schedule land stewardship workshops that educate the property owners on alternative land use planning. The goal of these workshops would be to illustrate good design and identify financial incentives for various alternatives. Workshops would be most effective if actual properties could be used to test various design alternatives.
- The advisory council will produce a concise Land Use Guidebook that illustrates land stewardship principles on a site-specific basis. (See Appendix A and B for examples of components for a guidebook.)
- 3. The advisory council will advocate continued forestry and agricultural practices in the corridor to protect its rural character. These uses can be compatible within conservation areas.



Land Management and Development



- 4. There are currently about 25 to 40 major parcels of undeveloped land along the Ashley Scenic River corridor. Advisory council members will work with conservation organizations to present to these landowners (on an individual basis) the more conservation-oriented options available should they decide to develop their property. The advisory council, working with conservation partners, will also seek to communicate with new landowners to explain these options in the future. The following are examples of options to be addressed for conservation and development of properties:
- Conservation easements
- Purchasing development rights
- Tax incentives and other incentive-based options
- Limited development/maximum yield
- Setback and buffer guidelines
- Deed restrictions
- 5. The advisory council will explore and promote options for helping developed areas in the Ashley River watershed to retrofit stormwater drainage systems and bring the old systems in line with current standards for stormwater management.

Faced with increasing changes and stresses of urbanization, we need to preserve a few special places where people can escape the traffic, noise, and visual clutter. The apper Ashley River is just such a place. Here we can paddle through floodplain forests, drift passed old tabby walls, and beautiful gardens, listen to the chatter of blackbirds in the wild rice, and see up close the stiff-legged herons, basking turtles, and troops of fiddler crabs. Here our children can thrill to the surge of good fish on the line, and can learn that there's more to life than video games and shopping malls. A few hours on the river can strengthen our ties to nature and the past, and recharge our spirits, Whether we live along the river or in the communities nearby, it's in everyone's interest to keep the Ashley Scenic River our "special place" close to home.

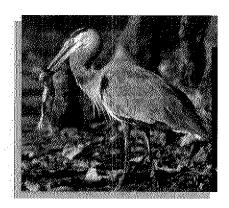
— George Neil

Implementation

THIS ASHLEY SCENIC RIVER Management Plan contains four management goals and 26 recommendations that address problems and opportunities regarding the river. The creation of this plan with its many objectives is an important accomplishment because it represents a consensus among a diversity of local citizens and it reflects community values, concerns, and desires for the river.

The plan serves as a guide for promoting good stewardship of the Ashley Scenic River. The challenge now is to put the plan into action and produce tangible results. Through implementation, the local community can take steps to achieve cleaner water in the river, a park/put-in at Bacon's Bridge, litter-free boat landings, beautiful trees and shrubs along the shoreline enhancing natural views, and exemplary development designs that conserve the open spaces and natural/cultural character of the Ashley River corridor.

The Ashley Scenic River Advisory Council will advocate this plan to the broader community and take actions to implement specific recommendations. Not all the recommendations can be implemented at once. Some recommendations



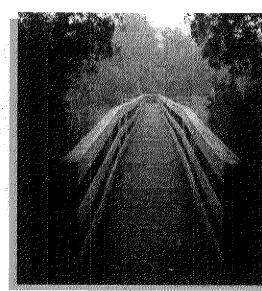
will require a short-term effort, while others will be ongoing and never ending, and still others will require much time and effort organizing and building partnerships and funding to be achieved. People and organizations such as landowners, river users, community interest groups, developers, or governmental entities that simply decide that this plan presents an appropriate way to manage the river can implement many of the recommendations.

Local citizens and organizations are encouraged to become involved with the advisory council to pursue the goals of this plan. The advisory council will continue to meet regularly in the Ashley River area and invite interested citizens to be informed of and involved in their ongoing plans and actions.

Recommendations for implementation are presented below to serve as guidelines for moving forward with advocacy, governmental coordination, funding, and education efforts to accomplish the objectives of the plan.

Recommendations for Plan Implementation

1. The advisory council will pursue the goals and recommendations of the Ashley Scenic River Management Plan and will use the plan to inform and encourage other citizens, landowners, developers, and leaders of the



Implementation



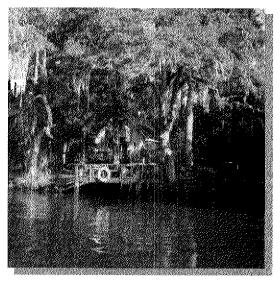
community to take specific actions for better stewardship of the natural and cultural resources of the river corridor.

- 2. The advisory council will seek to understand new and existing regulations, ordinances, codes, comprehensive plans, and transportation plans and seek to conform them to goals of the Ashley Scenic River Management Plan.
 - a. The plans and regulations of each government should be analyzed and compared to understand the similarities and differences, the level of enforcement, what works and does not work, and what needs to be updated or changed. With this information and analysis, the advisory council will more effectively address the actions of local, state, and federal agencies.
 - b. The advisory council will seek to review and provide comments on plans and permit applications for development projects that have potential impacts on the natural and cultural resources of the Ashley Scenic River corridor.
- 3. The advisory council and partnering organizations will identify and access sources of funding and incentives to facilitate the goals of the Ashley Scenic River Management Plan. Funding will be needed for programs, public education and public relations. Incentives will be needed to encourage resource conservation and conservation designs for

development among the riverbordering landowners. Relevant expertise will be sought and consulted to assist the council in understanding the sources of funds and grants and the processes of providing incentives.

- 4. Public education and information programs will be created by the advisory council to accomplish the following:
- a. Communicate the vision captured in the management plan and build partnerships among landowners, developers, designers, and local governments to bring about the goals of conservation and compatible development in the river corridor. Build partnerships with those who can provide assistance in conservation, design, development, and funding. Identify successful models that demonstrate economic value in blending conservation goals with compatible development.
- b. Engage, inform, and educate the public about the values of the Ashley Scenic River, the goals of the management plan, the facts leading to the creation of the plan, and the role of the advisory council. Build consensus and broad community support for the plan and the goals of good stewardship of the Ashley Rivet. Address community groups such as: scouts, schools, river users, churches, civic associations, business and industry, chambers of commerce, tourism associations, neighborhoods, governments, and elected officials.
- c. Communicate the values of the Ashley Scenic River and the goals and recommendations of the management plan by providing brochures, river maps, group presentations (speakers bureau), news articles, field trips and tours, lesson plans, service projects like river sweeps, and signs or markers at points of access and sites of interest/importance.





LANDOWNER OPTIONS FOR CONSERVATION AND FINANCIAL INCENTIVES

Introduction

Many landowners along the Ashley River own land that is largely undeveloped and has special natural, ecological, and historic resources. These special resources remain intact, thanks to many generations of good stewards. Today's landowners, interested in continuing the legacy of good stewardship, have a number of options, some of which contain financial incentives to encourage and ensure ongoing protection of the Ashley's natural, scenic resources.

All of the options presented below are entirely voluntary for the landowner. Private, voluntary action has proven over time to be the surest protection method against all threats. Note that this management plan proposes to preserve and improve the current scenic, historic, and ecological resources of the Ashley River corridor, and the alternatives listed below are presented for information and consideration. Further information may be obtained from attorneys, land trusts, or other entities specializing in conservation.

Options presented include the following:

- 1. Deed Restrictions
- 2. Conservation Easements
- 3. Purchase of Development Rights
- 4. Fee Simple Donation
- 5. Bargain Sale
- 6. Life Estate or Donation by Will
- 7. Setback and Buffer Guidelines and Easements
- 8. Limited Development or Conservation Design

Deed Restrictions

This is the simplest alternative to enact. The landowner, in conjunction with heirs or assigns, lists the conservation covenants that he or she expects to be fulfilled by all future owners of the property. This is included as a codicil (supplement or appendix) on the deed and recorded. It then has the force of law; however, it begs the question of who will enforce the covenants. It may be advisable to appoint a trustee, usually a corporation that has an extended life, to monitor the property in the future and be ready to enforce the terms of the codicil. There are no tax or financial incentives involved in this option and a fund may need to be set aside to aid in enforcement.

Conservation Easements

The conservation easement provides a voluntary and flexible means of protecting private property, while designating someone to provide stewardship and enforcement, when necessary. It also usually offers tax incentives. In a conservation easement, the owner and subsequent owners maintain title to the land, but enter into a legally binding contract with a land trust that permanently removes some of the rights to fully develop a property. The landowner promises to preserve the conservation values of the property as outlined in the terms of the agreement, and the land trust is granted the right (and responsibility) to monitor the property and enforce the terms. The owner and heirs may continue to live on the land, use the land for traditional uses (such as farming, hunting, and forest management) and transfer ownership, if desired. The IRS usually considers this a charitable donation and is willing to allow a deduction for the difference in value of the property between its worth if development were allowed and its worth with the restrictions.

The terms of an easement usually include both restrictions and reserved rights. Restrictions generally prohibit industrial and most commercial uses, restrict the number of subdivisions, limit the number and size or nature of structures, docks, roads, etc., and specify that most vegetation, wetlands, topography, hydrology, and significant habitat remain undisturbed. Reserved rights are exceptions to the restrictions and may include the right to farm, manage timber, build a homestead, run home-based businesses, hunt, fish, have stables, and manage the wildlife and ecology. The restrictions are designed to maintain residential and recreational uses, while not limiting the income-producing prospects of the property so severely that it becomes a financial burden on present and future owners.

The landowner is generally responsible for obtaining and paying for attorneys, appraiser, surveyor, and appropriate consultants, as required. However, the tax advantages can offset most if not all of these costs and will carry forward for up to six years (the year of donation, plus five) on federal and state income taxes, should there be insufficient income to carry the entire deduction in one year. There is generally also a reduction in estate taxes and property taxes due to the documented loss in value of the property. Change in value for tax purposes means little in comparison to the worth of ecological and scenic values maintained. Some properties with conservation easements have been shown to appreciate in value because of the easement.

Purchase of Development Rights

This alternative involves the outright purchase of the right to develop the property, usually by a conservation-minded second party, who is not interested in developing the land at all. It could be a non-profit corporation or it could be a state or federal agency. Recently passed state legislation known as the Conservation Land Bank Act provides for funds to be used for this purpose, beginning in 2004. The agreement for the purchase of development rights will generally specify the nature and extent of development intended. There are no tax incentives associated with this option, as consideration is made, and it is not necessarily permanent, as development rights can be resold at a later date.

Fee Simple Donation

Of course, the landowner may donate land to a conservation interest. Under this strategy, all interest in the property or portion of the property is gifted to a land trust or other agency and the charitable contribution reflects the full value of the property. One caveat with this strategy is that title must be clear. In a recent court decision, marshland titles traced back to a "Kings Grant" allow for the donation of marshland or lowland areas below the mean high tide mark. Many Ashley River owners can trace their title thusly.

Appendix A

Bargain Sale

This strategy is similar to donation, except it is an actual sale but at a consideration noticeably below market value. The difference between the sale price and market value would be a charitable contribution (provided it is made to a qualifying charity or agency) and treated as such for tax purposes.

Life Estate or Donation by Will

There are many options available in estate planning. Either property or easements may be donated at the time of the landowner's death, both of which will reduce estate taxes. Provisions may be made for a number of options for the landowner's survivors and heirs. A specific example of this is the Life Estate, where a remainder interest in the property is donated to a land trust, for instance, but a designated family member is given the right to live on and use the property until their death, at which time the land trust acquires full ownership.

Setback and Buffer Guidelines and Easements

Should a landowner decide to develop part of his or her property, it is important to at least comply with the Standards for Voluntary Buffers on the Ashley Scenic River presented in Appendix B. In addition, Figure 13 presents two different levels of development for a piece of property, both of which include the conservation of buffers and natural open space and setbacks that move development away from the streams, wetlands, cultural resources, and the highway. The essential function of the buffers and open space is to ameliorate the negative effects of development on scenery, water quality, and wildlife habitat; however, these features also enhance the market value of the lots or home sites. Placing setbacks or buffers in conservation easements before selling or developing property can result in some tax offsets to the income derived from the sale or

development. As this management plan seeks to minimize development impacts to the river corridor, meeting setback and buffer guidelines is recommended as an essential practice for all development.

Limited Development or Conservation Design

Landowners who need to consider selling all or part of their property should be aware of a development technique known as conservation design or limited development. This process allows development in only a limited portion of the property, dedicating the major portion to conservation, usually through the vehicle of an easement. The combination of tax advantages accruing from a conservation easement, the sale of higher-valued, more prestigious lots, and lower development costs can make the financial returns of a limited development option comparable to selling the land outright to a developer. This approach is particularly beneficial to a landowner who may wish for him/herself and his/her family the opportunity to continue living on the property and enjoying its special resources.

In the way of further explanation of this alternative, an example is included as an attachment to this Appendix containing three drawings. The first, an Environmental Conditions Plan (Figure 13-a), illustrates the physical and cultural attributes of the property. It identifies the opportunities and constraints for its development. The second drawing, the "As of Right" Plan (Figure 13-b), illustrates the actual development yield of the property based on current zoning/buffering requirements and physical characteristics of the property. This plan establishes the full development potential (highest and best use) for the property and can be used to establish a corresponding financial value. The third drawing, (Figure 13-c) the Limited Development Plan, demonstrates a use of the property with only five home sites, with the rest of the property placed in

Appendix A

conservation easement, donated to a land trust. The appraised value of this plan will be subtracted from the highest-and-best-use value to arrive at the value of the charitable deduction.

Several conditions are required for the limited development technique to be successful (most of which exist along the Ashley River):

- The land has significant conservation value (*i.e.*, water edges, wetland, scenic views, archeological sites, and/or wildlife habitat).
- There is little or no debt on the land (easements require subordination).

■ The land has a high interest for development, causing property values to rise significantly.

When these conditions are met, this form of development can make sense economically as well as preserve much of the conservation values. It can allow someone who is "land-rich" but "cash-poor," who values their land and wishes to remain on it, to conserve it, obtain some return, and still be able to pass the use and legacy on to his or her heirs.



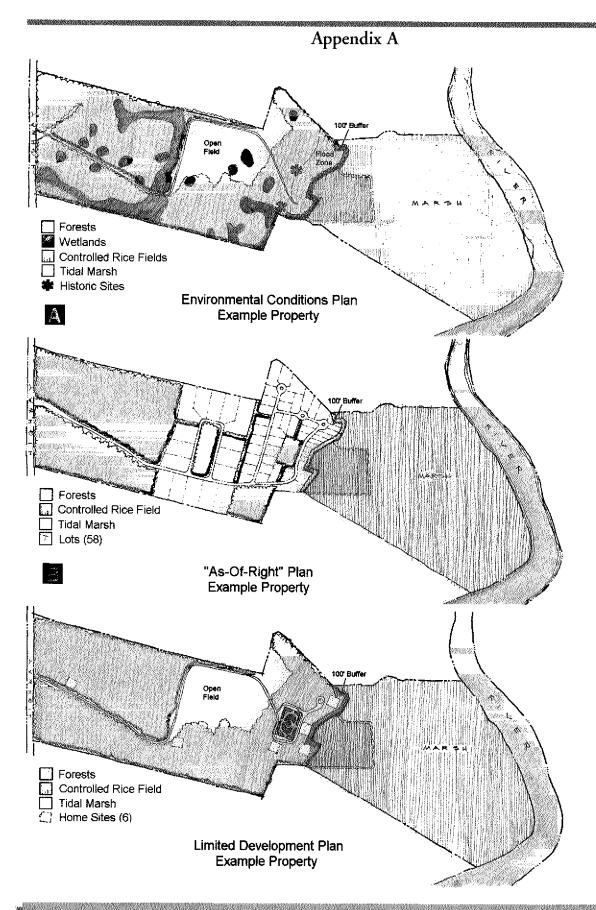


Figure 13. Example Property on Ashley River Illustrating a Limited Development Approach: (a) Environmental Conditions Plan, (b) "As-Of-Right" Plan, and (c) Limited Development Plan (Drawings by John Tarkany)

Appendix B

STANDARDS FOR VOLUNTARY BUFFERS ON THE ASHLEY SCENIC RIVER

Comments and Drawings by Bill Eubanks with Morgan Bultman

While mandatory buffer requirements have been discussed and are in place at a few locations, voluntary buffer standards that could be applied to the Ashley Scenic River are presented in drawings (Figures 14 and 15) and described below (SCDAP 2000).

It is not the goal of the designs to illustrate a totally opaque or impenetrable buffer. Much of the desire to live on the Ashley comes from a desire to be able to see the river. If you can see the river, then, to some extent, you can be seen as well. The goal for voluntary buffers is to preserve the character of the views and provide filtering of water going to the river, while preserving access and views to the river.

The Middleton Inn provides some good examples. It has good views to the water, and as a result can be seen, but only in short glimpses through the trees. There is access for canoes and kayaks, but it is through a tunnel of trees that make it virtually invisible from the river.

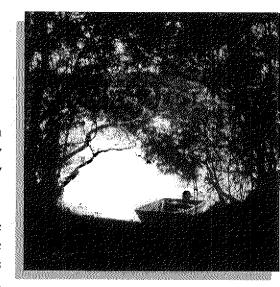
The proposed standards call for a 100-foot buffer. The first 50 feet will be a "No Touch" buffer extending inland from the OCRM critical line. The next 50 feet of the buffer will allow for selective clearance to create views to the river. Anything farther inland could be cleared.

Even within the buffer zone, clearing for access would be permitted. For each 100 feet of bank frontage, 20 feet can be cleared for paths, boardwalks, or docks to the river edge. The walk itself could be up to 10 feet wide.

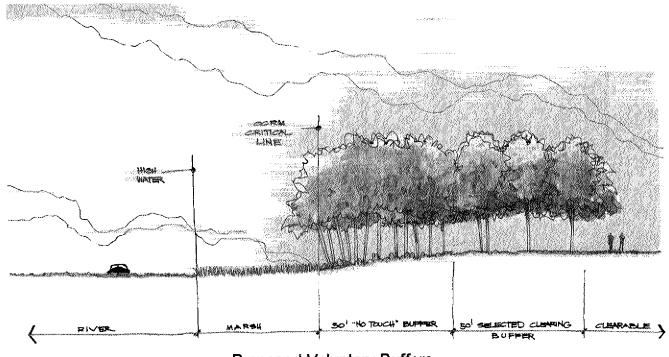
Raised boardwalks are preferred, especially in the 50 feet closest to the river, in order to minimize disturbance to the landscape.

While not shown in the drawings, creating a bend in the path will visually reduce the impact of the walkway cuts. The bend is easily accessible, but makes it impossible to see straight in to the property from the river.

If all 20 feet of the allowed clearing area is needed for construction of improvements, then the fringes on either side of the path should be allowed to grow back, preferably with a full canopy of mature trees. If buildings are seen at all, they are seen through gaps below the continuous canopy of trees.

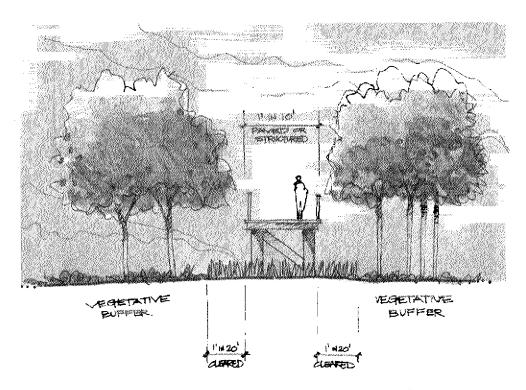


Appendix B



Proposed Voluntary Buffers

Figure 14. Proposed Voluntary Buffers



River Access Through Buffer

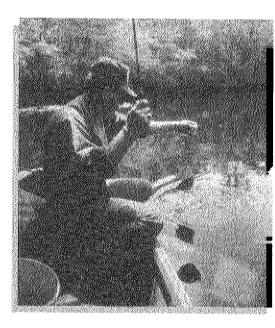
Figure 15. River Access Through Buffers

PUBLIC INPUT, SUMMARY NOTES, AND RECOMMENDATIONS FROM THE JULY 2000 COMMUNITY VISION WORKSHOP

By Robert W. Bainbridge, AIA, and Irene Dumas Tyson South Carolina Design Arts Partnership

The Values of the Ashley River

Four questions were asked during public input sessions of the July 18-20, 2000 workshop and used to understand the importance of the river as it is now and as it could be in the future. The questions asked about a perfect day on the river, the value of the river, treasures along the river, and visions for the river. While there are duplications between the four lists, each question evoked slightly different perspectives and fresh ideas (SCDAP 2000).



What would be a Perfect Day on the Ashley River?

Sneak boat, crickets, and brim buster to go fishing Crabbing w/ grand kids

Canoeing with wife on upper Ashley, fishing on banks

Lying in hammock, under trees, with cool breeze

Watch ospreys hunt

See a lot of wildlife

Not having to chase duck hunters out of pond

Fishing . . . catching fish

A day without new development popping up

Not wondering what will be left next year

Skiing from Bacons Bridge to the harbor again

A day without government management oversight

Viewing old plantation houses from river

A day without litter — styrofoam cups

Paddling from Sland's Bridge, hearing man's sounds melt to natural sounds Sharing river with adults and students and teaching about nature and history

Being able to see and enjoy archaeological resources

Not seeing a jet ski

Water skiing on the river

Float by where Cedar Grove was and other historic sites

Tell kids about history of village of Dorchester as they peer over fort walls

Take water taxi from Colonial Dorchester to Charles Towne Landing, stopping at plantations along the way for breakfast, lunch, or dinner

Not having to worry about water quality

Swimming in the river

■ What are the Special Treasures of the Ashley River Corridor?

Saw Mill Branch into river — fossils Bream fishing upriver from Sland's Bridge Tidal river makes interesting Marshes in Fall — blue sky and water Seeing and hearing birds in the wild rice At extremely low tide — alligators Plantations as seen from river Catching spot-tail bass, stripers, and crabs Seeing historic sites Surprises in what you'll see — natural Parties / oyster roasts at boat club Cooking pig / breakfast at sunrise St. George's Church tower at Colonial Dorchester Canoeing / kayaking Swimming, boating, skiing Close place to test seaworthiness of boat Great place to grow tomatoes Listening to ducks and geese in Fall Sounds of nature

■ What is Valuable about the Ashley River?

Sunsets

Other worldly

Number of people who passionately care about preservation - conservation

It has maintained its historic value over the years It is quiet, most of the time

Knowing it used to be people's lives

The stories it tells

The people you meet on river

It calls you to improve, nurture, and to be involved The diversity of the environments and the views

The narrow and sweeping view sheds

Varied vegetation in marshes and higher

Birds

Historic sites

Diverse wildlife

A remarkable combination of nature and history in short distance

Sheer beauty

Easily accessible to urban area It is a place that inspires reflection, connection, and a sense of place



■ What is your Vision for the Ashley River?

Coordinated regional planning and zoning along river

Limited development

Eco-tourism

Have safe public access on the upper river for canoes and kayaks

Have a pristine clean river

Maintain and restore view sheds and vegetation Maintain historic sites — protect their view shed Resolve divisive property rights issues, work cooperatively

More emphasis on prehistory, geologic history, not just 16-18th century

Historical markers and signage for the scenic area, education programs

Tell the story of the River

Camouflage or hide visual intrusions such as cell towers and power lines

Conserved 17th century birthplace of the south, nation; early civilized settlement

Develop ways to preserve large family properties; to thrive, make living and not have to subdivide Greater DNR presence on the river, regulations and protection, pay staff more

Use quasi-public land for public access — parks, nature trails, along river

Ashley Scenic River extent to Wappoo Cut, to its mouth, up to Cypress Swamp

Preservation of natural and historic / archaeological landscapes and resources so stories can continue to be told

Involve US Coast Guard in Scenic River Program Public education program Incentives to get landowner cooperation

MANAGEMENT PLAN OUTLINE / FRAMEWORK

The following lists were taken from public input sessions of the July 18-20, 2000 workshop and organized in a set of five categories about WHAT needs to be done to protect and enhance the river and three categories of techniques on HOW to go about doing it. The categories may form the basis for committees or task forces of the advisory council. First, public comments regarding the matters of property rights and corridor definition are listed (SCDAP 2000).

Property Rights Issues

Cooperative and voluntary emphasis
Don't need new regulations that limit what owners
can do
Fear of too many government restrictions
Fear of "creeping" regulations

Corridor Definition

Scenic River: 22 miles 1998 to RR bridge, 2 miles 1999 to Mark Clark
Extend down to: Charles Towne Landing (state park to state park)? To mouth of river? To Wappoo Cut?
Extend up to Cypress Swamp
Include area west of Ashley River Road
Scenic By-way as well as river

What Needs To Be Done

1. Water Quality

■ Water Quality & Quantity Upper river: not advised for swimming,

shellfish: fin fish OK

Point source: treated wastewater, toxics from RR and industry
Non-point source: urban run-off
(Summerville ditches?) impervious surfaces

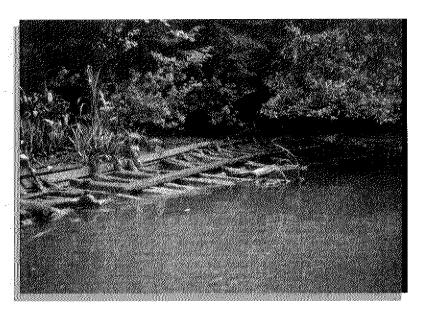
Long-term drainage plan for Summerville area Flooding and flood plain, storm surge Eagle Creek? unknown quality Quality may vary day-by-day Swales, ditches, intermittent also

important

Litter in water is a different kind of pollution An Environmental Baseline is needed Water quality, pollution, monitoring, erosion

■ Threats

Toxic contaminants: manufacturing, RR
Inadequate buffers
Development
Water pollution from treatment plants, industry
Non-point source pollution
"Historic" pollutants already in river or riverbed
Sedimentation
Noise pollution
Non-point pollution, not fully treated sewage,
parking lots, new development
Intro of toxins, hazardous materials
Could come from what is crossing the river- trains,
pipelines



Hazards may be downstream and upstream due to tidal action
Destruction of wildlife habitats
Can't eat fish or shellfish
Erosion of riverbanks, cleared land
Too many lights could blot out the stars
Lack of understanding importance of river
Lack of scientific understanding

2. Recreational Use and Access

■ Uses and Users

Recreational Uses, active and passive Paddlers: canoe, kayak, rowing Level of Powerboat traffic and speed Water skiing? Water taxis? Sailboats Jet skis? Racing problem Jon boats, bank fishing, fishing piers: catfish, bream, red drum Tubing: round trip? Bird watching: waterfowl, eagles Nature watchers, bird watchers Swimmers? (Bacon's bridge historically) Picnickers: Colonial Dorchester, plantations Just watch the river: hammock and cool breeze, sit on deck, listen Scuba divers Nature photography Hunters

Public Access Points

Restaurants, dining

Shrimping, crabbing, oysters?

Nature programs for children

Near Bacon's bridge, public park

Golfers

Near roads now Need safe launch points in the upper river: tube, paddlers; Limit powerboats on the upper river, no boat landings: control litter

Visit plantations, historic sites, look for artifacts?

(Summerville Water, Charleston Southern own land)
Avoid vulnerable sites: archaeological, etc.
Do visitor impact study
Concern: more access leads to more use
Tie in to public transport
Hazardous parking on Hwy 17, at Sland's Bridge

■ Needed

Nature trails (1996 CHATS study-Ashley Trail...) Biking trails

■ Threats

Explosive growth of boat traffic Noise from boats and jet skis Bank erosion accelerated by boats Litter Over-use Vandalism to landings Trash left behind or dumped Lack of safety and security

3. Visual Quality and Character

■ Viewsheds / Visual Quality

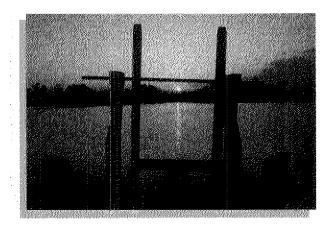
Setbacks, buffers. Width?
Utility lines
Bridges (RR & Highway) (RR bridge is on national register)
Sunlight, moonlight, shadow
Viewscapes, waterscapes
Cellular towers
Design quality of docks

Character of the River

Tidal River, diverse in short distance, four in one Bluffs: High bluffs, lower marl bluffs Canopy of trees at upper reaches Marsh lined by trees Wild Rice, Spartina grass, cattails Historic sites

■ Character of the Corridor

Special treasure Transitional



Urban/rural Tidal wetland Private and public, large and small owners Historic and archaeological sites Wildlife Habitat Diverse governance Potential development sites Eroding Utility easements Residential areas Recreation Scenic & ugly Interactive with river: side streams, wetlands, etc. Both sides of river Scenic vistas, aesthetics Vegetative buffers

■ Bank Treatment

Docks? quantity, spacing, size: 1992 special area management plan with Archives and History Deed restrictions? Planned development? Erosion Armoring: rip-rap?, concrete block? Geosynthetics plus sandbags and plantings (Drayton Hall) Downed trees in water slow power boats, diminish waves

■ Character of Ashley River Road

Tree canopy recovering: thirty years to go National Register management plan in preparation Cut back some after Hugo at Summerville end

■ Threats to Visual Quality Communication towers— tall

Utility blight / infrastructure
Bridges
Tree cutting
Docks
Unattractive erosion and rip-rap

4. Preservation and Conservation

■ Ecological Resources

Wildlife Habitat, diversity,

Marshes, limestone or marl bluffs (don't erode) Stocked Red Drum (DNR) testing effect on local fish

Environmental integrity of river itself but also adjacent land

Restore damaged habitats (industrial area cleanup)

Historic, Archaeological and Cultural Resources

Drayton Hall, Middleton, Magnolia?, St. Andrews Church, Colonial Dorchester,

Relation of people to the land

Archaeological resources (protection without publicity)

Phosphate docks? Narrow-gauge bridge abutment?

Native American

Revolutionary and Civil Wars,

Ferries (Bee's Ferry)

■ Threats

Habitat Destruction

Growth of boat traffic: congestion, safety, erosion

Ignorance of resources

Too much hunting

Vandalism

Poaching

Natural disasters — hurricanes

5. Land Use / Appropriate Development

■ Types of Properties

Stable, long-term public ownership or easement Existing developed residential lots Subdivided but unbuilt lots

Developable property Commercial development, multi-family Public buildings, churches Golf courses, recreation facilities

Development

How much? Where?
Remediation of poor projects
Uncertainty about plans
Churches & Public facilities can cause problems,
too
Growth, balance of uses, commercial enterprise
Ecotourism

Deed restrictions? Planned development?

■ Threats

Development — cutting down trees
Stormwater runoff
Concern about well financed developers from outside of area
Press of development — effect on appearance
Poorly designed development - no consideration of area impact
Clearing of vegetation from edge of river or marsh
Conflicting uses: residential, industrial
Communication towers— tall
Utility blight / infrastructure: power lines, sewer lines, roads
Greed

How To Do It

■ Implementation Strategies

Natural disasters — hurricanes Poorly maintained properties

Purchase of development rights, conservation easements
Public education and awareness
Learn from others: case studies, pitfalls and opportunities
Economic incentives
Tax incentives
Referendum process

Design Review/Design Guidelines
Coordinated Land Use Plan
Coordinate with plans for Ashley River Road
Scenic Byway
Consensus and advocate or lead group
Tangible early project
Make plan fit within existing regulatory structure:
find common ground between existing
ordinances: land use, subdivision, tree
protection, sedimentation

Break down into sections with different rules?

Overlay district

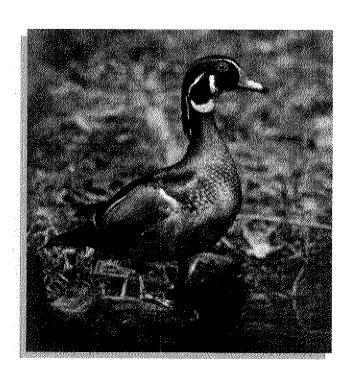
Incentives for good conservation design Awards, testimonial program for good examples "Voluntary" partnership for development or voluntary guidelines

Develop scenarios based on existing regulations (STI/Sea Grant)

Transfer fee for funding?

More flexible zoning: PDR, density variations, incentive zoning

Promote positive models: I'on, New Point What can be done regarding exploitative growth such as cutting all trees? consideration for those concerned?



1. Public Education

■ Approach

Target interest groups: schools, boy scouts, homeowners associations, Wal-Mart, COC, tourist groups, preservation groups, Summerville DREAM, property owners on river, media, owners of developable land

■ Story

Same with improvements: buffers, bury utilities; better recreational access, cell towers hidden Living history lesson — sunken ships, tunnels at fort, wharf

Maintain character — mother nature did a great job, nature taking its course, trees in river; balance access (man made) with nature's cycles

Be able to tell story of how community saved the river

Voluntary, cooperative process Grass-roots effort, not imposed plan

■ Telling the story

Integrity of landscape
Interpretation but not a clutter of signs
Education programs
Field trips, get on the river
River event, festival: tie to SC Wildlife Expo (Feb),
Earth Day (April)
Historical markers, signs, but not clutter
Ashley River Sweep, September 16
Interpretive center

■ Sources of Information

Brochures,
Outfitters
PR campaign
Media: newspapers, radio, television
Maps

■ Signage

Good information and interpretive signs Regulatory signs that get the point across but don't blot out the scenery Clutter

■ Threats, obstacles

Limited number of people who know and use the river

General lack of experience of the river People who don't support and understand Apathy

Feeling that river is already protected Ignorance and misinformation regarding historic and environmental resources Unsuccessful or misleading interpretation (Magnolia Plantation)

2. Intergovernmental Cooperation

■ Government/leadership

Dorchester County slow, Charleston County growing fast
North Charleston, Summerville
Coordinate information, sampling, ...
Coordinated rather than conflicting plans
Joint government commission
Include Coast Guard & Coast Guard auxiliary
Coordinated regional planning and zoning along
the river

Make plan fit within existing regulatory structure: find common ground between existing ordinances: land use, subdivision, tree protection, sedimentation

■ Threats, obstacles

Lack of coordination of set backs between municipalities and counties Big differences in priorities and constituencies Changes in leadership, political influence

3. Organization, Partnerships and Funding

■ Who should be involved?

Define who we is and who will do what Joint communication between municipalities, counties, state, federal agencies Developers should be involved Landowners Users Educators

Media

Need more political/public leaders to be involved Balance of different interests

Building permits, laws with proof (no wake zones only if proof of erosion); river is better now; do not want government telling what to do with land

Group efforts — landowners, education Advisory council needs specific expertise represented: legal, small and large landowner, local government, coordinator/administrator, finances, realtor, business, development representatives/experts, county economic development

■ Need to manage

No restrictions — keep river free
Access controls
Natural resources
Coordinated rather than conflicting plans
Education, interpretation, public information
Hopperdam Creek, Sawmill Branch, Dorchester
Creek, Eagle Creek, Church Creek
Oxygenate water?
Constructed wetlands
Vegetative buffers

How

Develop a shared / agreed upon vision with public and private strategies

Hold fundraisers

Stage a river event - big regatta, run etc Enforce current laws, compile list of existing rules Create a road map of coordination with

communities, owners, municipalities

Turn advisory council issues into referendums for public discussion / debates define the arguments

Public education for public involvement Better tax breaks, or purchase of development rights; make proposals financially attractive for landowners

How is the information processed into the plan? Advisory council will lead process

Build broad community support - promote, educate, implement

Find funding

Finding the balance between protection of homeowners and protection of river

Public education and info program

Clearly define and communicate process of management plan development and implementation

Focus the plan - it cannot do and be everything, prioritize issues, goals

Do a demonstration project - make it a great success, build momentum

Look at other models

Truly understand diversity and character along the river

Document the complexities of water quality Look beyond river into region and all waterways that feed the Ashley

Make the advisory council the unified voice on issues — bring in experts to help on each issue

■ Law Enforcement and Rules

No wake areas: expand?
Better enforcement of current laws
How can you prevent litter?
What is the impact of Antiquities laws
Who is in charge?

What can they control? Life preservers? drinking? litter? dumping?

DNR: 1-800 #: boating and fishing laws

Docks: OCRM

Sheriff's department, Coast Guard Public education on rules and courtesies

Apathy and misinformation: Many think river is already saved

Disobedience to rules: no wake, etc.

■ Threats

Not obeying rules

People who don't respect river, people around them, or landowners

Lack of enforcement of existing rules and regulations

REFLECTIONS ON THE ASHLEY RIVER COMMUNITY AND RECOMMENDATIONS FOR IMPLEMENTATION

By Irene Dumas Tyson, South Carolina Design Arts Partnership

Opening Session at Middleton Place, July 18, 2000

I had one of those perfect summer days today.

I met a group of new and old friends on the bank of a river. I got in the word and traveled up river. The sun was high and hot, but the company and conversation was excellent. I saw egrets, cranes, turtles, but no gators or snakes. We went somewhat fast, we went slow; I waved to people. I learned about South Carolina's history of rice plantations, sunken ships, a lost colonial town, earthquakes, and old family names. I learned about geography and about flora and fauna. I just missed seeing a bald eagle.

We were in wide-open spaces, and we were in tight curves shaded by canopies of oaks, cypress and moss. We had snacks – wonderful homegrown tomatoes and cucumbers! We discussed architecture, landscape architecture, and I finally saw Middleton Place and Drayton Hall. Dr. Fazio, my architecture history professor would have been thrilled – I learned to draw Drayton Hall in plan, section and elevation; and, behold, there she was! It was a special moment.

We rode the tide in, then rode it back out. I got a bit of sunburn but was cooled by the breezes made by the boat. I learned that mullets jump and that shrimp spawn up river. We walked on water, marsh and terra firma. I did my first river trip in South Carolina. It was a perfect summer day.

Chief Seattle: "When we lose the four corners of our land, we cease living and begin surviving."

Closing Presentation at Bethany United Methodist Church, July 20, 2000

On your perfect day you will watch the sun rise over the marshes of the Ashley River, then you may fish for bream, spot-tail bass or stripers, maybe shrimp or crab or water ski or swim because the water is fine and good. You may kayak, canoe or row upriver or down or teach and learn with your children the wonders of the natural habitats and historic sites.

But, mainly, your perfect day will be an amazing and diverse sensory experience.

You will see osprey hunting, bald eagles landing, blue herons in the wild rice. You will see the brown of the marsh against a blue autumn sky, a deer, an alligator, a porpoise, oaks, cypress, a plethora of greens dotted by flowers of pinks, purple, red, and orange, the majesty of Drayton

Hall and the grandeur of Middleton Place, the secrets of the sunken ships ... you will imagine life as it might have been.

You will hear the water lap, the call of the red-winged black bird; the peeps and croaks of families of frogs, the splashes, bubbles and gurgles of life beneath the water, you will bear the ducks and geese signing off to summer; you will hear Mother Nature little.

You will taste oysters freshly roasted, bream freshly grilled, a cool drink.

You will feel the sun on your face, a cool breeze on your skin, the stings of mosquitoes on your legs, the brush of moss on your head as you pass beneath the oaks and cypress.

You will share the River with people who know it, respect it... respect you.

You will be surprised with each bend of the River but confident it will be the same tomorrow, maybe a bit better.

The River presents what came before and opens windows to what is ahead while being totally immersed in now.

You will end your perfect day just sitting and watching the sun slip behind the River Road and you will smile.

Thank you for sharing your perfect day with us.

And there is no doubt that you value and love the Ashley River. You value the rich diversity in views, in histories, in cultures, in habitats, in geography, in flora, in fauna. You value preservation and conservation and the show of past generations. You value the views and scenic qualities. You respect the fact that the River was, is and will be the sustenance of peoples' lives. You value the quiet, the tidal nature, this rural gem in a growing urban area. You value the stories the River tells and that it inspires reflection, connection, good times, and a sense of place.

But what you value and love is threatened by a lack of a comprehensive, coordinated, regional approach in addressing point and non-point run-off and drainage, pollution and what crosses over and travels by the River. These things are threatened by growth and development that is not managed or done without consideration of the contexts; by erosion, litter, natural disasters, conflicting uses and hazardous parking on Highway 17 and Sland's Bridge. The River is threatened by apathy and a lack of public knowledge about the natural, cultural and environmental resources and scientific data; by growth of motorboat traffic, inappropriate management of vegetation and destruction of wildlife habitats. It is threatened by lack of government coordination and lack of respect for the rights of property owners. It is threatened by development driven by the dollar and outsiders, not by respect for the River.

And, yet, you have great hope and faith in this river. You have a vision of the scenic character

maintained from the banks and from the River. A river that is pristine with improved water quality and improved fishing. You want the River to continue as a historic and cultural treasure and to continue to build its legacy. You want a consistent and visible law enforcement, a comprehensive public education program. You want safe, public access for canoes and kayaks. You want to extend the scenic river designation from the Cypress Swamp to the mouth. You want a coordinated plan by local governments. You want nature trails and a park at Bacon's Bridge. You want all development, whether residential, commercial, utilities, or tourism, managed in order to enhance and celebrate the natural, historic and cultural resources. You want an understanding of the diversity and character along the River. You want to preserve large family properties with the ability for families to thrivel live because of their properties.

You want balance. Balance in motor versus non-motor boats, in the uses on the River, in the protection of the rights of landowners versus protection of the River, and in man-care and maintenance vs. nature's cycles of life. As Chief Seattle warned, "When you lose the four corners of your land, you cease to live and begin surviving"... you want the Ashley River to live, not survive... to live freely.

This is your story – your chapters to the River's stories. It is, as was mentioned last night, the beginning of how a community nurtured a river for generations. And, it has been a joy and a privilege to hear your stories for they are the foundation of our team's recommendations.

Recommendations for Implementation:

- 1. First and foremost, it is the responsibility of the advisory council to take these recommendations and craft them into the beginning of the management plan.
- 2. One of the first steps the advisory council must take is to get the appropriate expertise to research and develop a funding and incentives program. Funding will be needed for programs, public education and public relations. Begin researching sources of funds, grants and the processes of providing incentives such as tax breaks, easements and development rights.
- 3. Coordination of local governments is imperative. This is a tremendous effort but is absolutely necessary. Dorchester County, Charleston County, Summerville, North Charleston, and Charleston no small task. Before any new guidelines or plans are developed, the regulations, ordinances, master plans, comprehensive plans, and codes of each government must be analyzed and compared. Where are the similarities? The differences? What is being enforced? Not

enforced? What truly works? What needs updating? Pay attention to previous master plans such as the 1987 study for Highway 61. With this information and analysis, design the appropriate guidelines for the Ashley Scenic River corridor that address the five elements and the five segments of the River.

- 4. Public Education and Information Programs:
 - a. Develop a program to engage and educate the public about the management plan keeping public officials and local governments informed and educating the public about the facts leading to the creation of the guidelines. This program is necessary in order to build consensus and broad support... to build your advocates. Target all community groups scouts, schools, churches, retailers, chambers, tourism, and neighborhoods. They must become involved and help shape the plan. In turn, they will become the plan's advocates as well. The message must be that this is a management plan for living and leaving a legacy.

b. A program that builds partnerships between landowners, developers and local governments – You must communicate your vision and values to developers, architects, landscape architects, and government in order to ensure appropriate development and growth. Building these partnerships can provide assistance in design, development and funding. Use successful models to show economic value in relationship to appropriate development.

There exists a very good model of balance and partnerships right on the River in Middleton Place. Middleton Place has discovered balance in a few key areas.

■ Views and visual quality — The very natural framing of views to the River and respecting the views from the River, particularly with the Inn

■ Preservation, conservation and new development – There is a wonderful balance between the interpretation of farm life, the gardens, and the wildlife. Yet, they dared to introduce new architecture into the historically hallowed ground. WG Clark's design and the challenge of establishing the Inn were well known in the architecture profession – his design rocked the establishment a bit. But a true respect for and understanding of the plantation's history allowed a modern interpretation of the historic and the classical. And it works beautifully.

■ Earning a living on family property — On the Middleton Property, a fine balance has been found with residential development, an inn, a museum, gardens, outdoor recreation, a restaurant and research.

■ Coming to the table with the Ashley River

Conservation Coalition and the Ashley Scenic River Advisory Council and developers across the River to work out appropriate development solutions that preserve views and respect the river environment and history.

The work of Middleton Place is not perfect or without significant challenges, but it is worthy as a model.

c. Recreational Opportunities – You have a story to tell about this river. Even though you may not welcome droves of new river users, there is an existing community and those who do want

a new experience who want and need to know where public access points are, where historic and cultural sites are, where they can rent kayaks and canoes. People need maps and they need the rules of the River. Invite people to the Ashley River, then educate them on its value and its rules. Encourage responsible use and relate the balance in awareness and protection.

d. The History – Relate the River to the Scenic By-way (Highway 61); tell the history and the present through maps, historic markers and brochures. Historic markers throughout the River can interpret the archeological resources, the historic sites, the wildlife habitats, and user guidelines and cater to non-motor boats through sensitive designs and locations. Help others fall in love with the River, and they will become stewards, too.

You have a beautiful story to tell. In closing, I share with you the "Citizenship Oath of Ancient Athens:"

We will strive unceasingly to quicken the public sense of civic duty; and, thus, in all ways we will strive to transmit this city not less, but greater, better and more beautiful than it was transmitted to us.

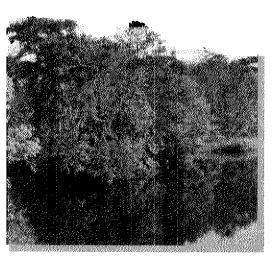
This is your calling.



Literature Cited







Artuso, A. and H. McKellar. 1996. <u>Charleston Harbor Project: Water Quality Management Focus Group Research Summary Report.</u> S.C. Coastal Council and S.C. Dept. of Health and Environmental Control, Office of Coastal Resource Management. Charleston, S.C.

Berkeley-Charleston-Dorchester Council of Governments (BCD-COG). 1980. Regional Outdoor Recreation Plan: 1980. Charleston, S.C. Cited In: Cunningham, M. G. 1994. Need Assessment of Outdoor Recreation for the Charleston Harbor Project Area. Clemson University, S.C. Office of Ocean and Coastal Management and NOAA. Charleston, S.C.

Charleston County Parks and Recreation Commission (CCPRC). 1995. <u>The CHATS and Charleston County Bikeway and Pedestrian Master Plan</u>, an element of the Charleston Area Transportation Study. Charleston, S.C.

Cunningham, M.G. 1996. <u>A Long-Range Plan for the Provision of Outdoor Water-related Recreational Opportunities in the Charleston Harbor Project Area.</u> Clemson University, S.C. Office of Ocean and Coastal Management and NOAA. Charleston, S.C.

Holland, A. Fred. 2000. "Coastal Sentinels," in <u>South Carolina Wildlife Magazine</u>, November-December, 2000 issue. S.C. Department of Natural Resources, Columbia, S.C.

Lacy, R. B. 1997. Twenty Year Time Series Analysis of Satellite Remote Sensor Data to Detect Environmental and Developmental Change along Coastal South Carolina and Georgia. NASA Research Grant NAGW-4014. S.C. Dept. of Natural Resources, Univ. of South Carolina, BCD Council of Governments, Berkeley County GIS Consortium, Georgia Tech Research Institute, Georgia Wildlife Federation, Savannah Area SAGIS Consortium. Columbia, S.C.

Shakarjian, M. 1998. <u>Ashley River Eligibility Study for the South Carolina Scenic Rivers Program</u>, South Carolina Department of Natural Resources, Water Resources Division. Columbia, S.C.

South Carolina Department of Health and Environmental Control (SCDHEC). 1999. Watershed Water Quality Management Assessment: Santee River Basin. Technical Report No. 012-99. Columbia, S.C.

South Carolina Department of Health and Environmental Control (SCDHEC). 1996. Watershed Water Quality Management Strategy: Catawba-Santee Basin.

Technical Report No. 002-96. Columbia, S.C.

South Carolina Department of Parks, Recreation and Tourism (SCPRT). 1997. The Tourism Industry in South Carolina 1996 Annual Report: Significant Contributions to the Economy and Quality of Life of South Carolina. Columbia, S.C.

South Carolina Design Arts Partnership (SCDAP) 2000. Summary presentation and notes from the Ashley Scenic River Community Vision Workshop conducted July 18-20, 2000; with recommendations for an outline of the Ashley Scenic River Management Plan. Provided by Robert W. Bainbridge and Irene Dumas Tyson. Available from the S.C. Department of Natural Resources, Scenic Rivers Program. Columbia, S.C.

South Carolina Forestry Commission (SCFC). 1994. <u>South Carolina's Best Management Practices for Forestry</u>. Columbia, S.C.

Townsend, A and N. Brock. 1992. <u>Ashley River Special Area Management Plan.</u> S.C. Coastal Council (now the Office of Ocean and Coastal Resources Management at the S.C. Department of Health and Environmental Control) and S.C. Department of Archives and History. Charleston and Columbia, S.C.

Van Dolah, R.F., P.H. Wendt, E.L. Wenner and P.A. Sandifer. 1990. A Physical and Ecological Characterization of the Charleston Harbor Estuarine System: Executive Summary. S.C. Coastal Council, S.C. Wildlife and Marine Resources Department, S.C. Sea Grant Consortium, S.C. Dept. of Health and Environmental Control, Univ. of South Carolina and The Citadel. Charleston, S.C.