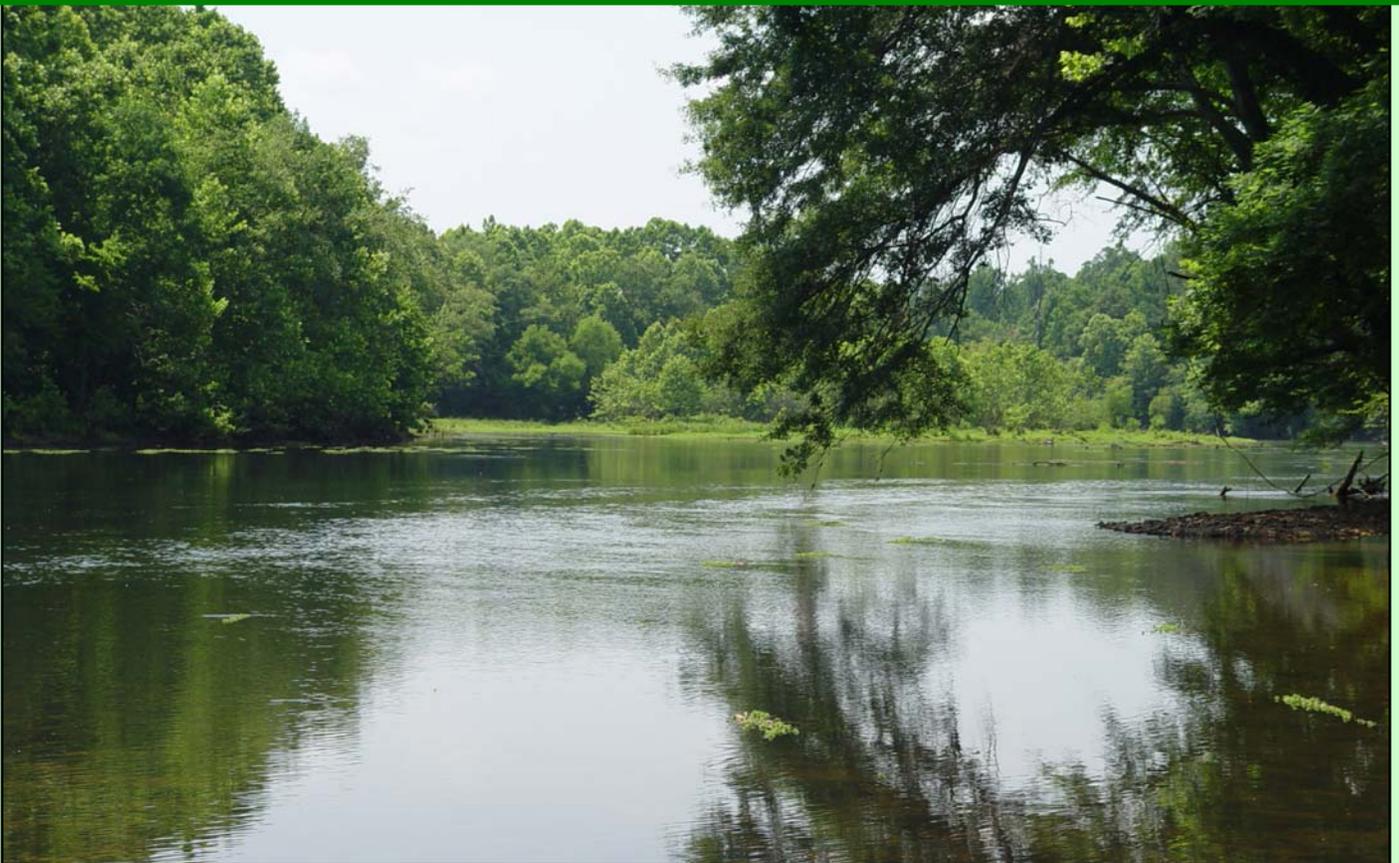




**KEEPING IT GREEN IN THE MIDLANDS:
Preserving Open Space in South Carolina's Capitol Region**



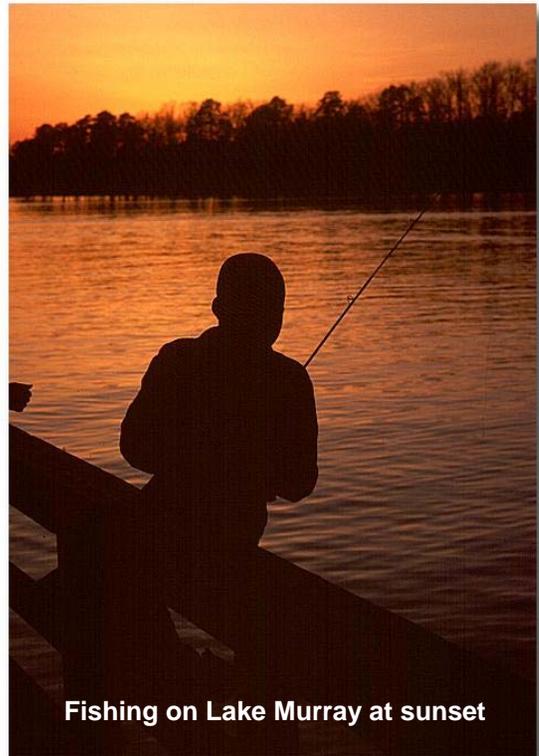
Introduction

The Central Midlands Council of Governments (CMCOG) has been working to produce a concept document for preserving open space within this region since 2006. The key goal in this effort is to create the vision for assembling a network of protected open spaces. It is the CMCOG's hope that this vision will inspire organizations and individuals within its four county area to take action and begin working to establish an open space network within their respective county.

Ultimately, these efforts must take place locally, as the CMCOG has no authority to acquire land or to regulate its uses. At the same time, however, persons working at the local level may feel that their efforts are limited in scope and take place in isolation. The benefit of creating this vision is that it can provide to those working locally a perspective of the regional benefit of what their efforts could be, that their work has significance beyond their local community. As these various local efforts come together, they create the basis for a region-wide network of protected lands. It is in this spirit that representatives from various governmental agencies and non-profit organizations throughout the Central Midlands region, as well as individual citizens, came together in January of 2007 to form the Green Infrastructure Steering Committee, whose overall goal for this effort was and is the protection of open spaces within the region.

The steering committee provided valuable input and recommendations for how CMCOG staff should engage the public-at-large about open space preservation. This input included how to inform the public about participating in an online open space survey, what kinds of questions to ask on the survey, how to best organize the survey, and ensuring that information was stated in a clear, understandable manner. Committee members reviewed the survey results and gave guidance on what format the public workshops should follow – formal vs. informal, drop-in vs. having a speaker, and so on. Making this transition from working in the office to taking this effort out to the public was perhaps the most challenging aspect for CMCOG staff, and the steering committee's guidance and assistance was most needed (and appreciated) in this area.

This concept document was reviewed by the CMCOG's Regional Planning and Development Committee and was approved by the CMCOG Board in December of 2007. The next step in this process is to provide this information to elected officials, planners, environment groups and other interested parties with the CMCOG's four counties (Lexington, Newberry, Fairfield and Richland). Already work is taking place in Richland County to preserve open space; these efforts will need to take place in the other three counties as well, in order for this concept to become reality. The CMCOG staff sincerely hopes that this concept document will provide a suitable starting point for such activity.

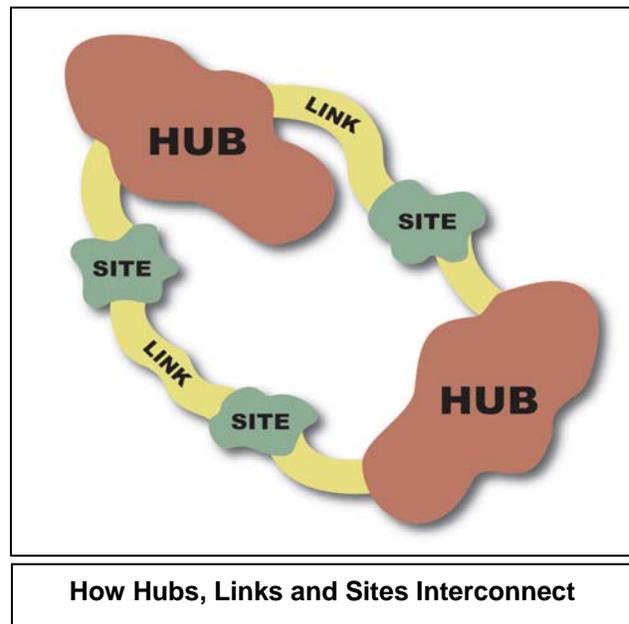


Fishing on Lake Murray at sunset

Green Infrastructure Overview

Green infrastructure can be defined as: *an interconnected network of green space that conserves natural ecosystems and functions and provides associated benefits to human populations.* It is this “interconnected network” that differentiates green infrastructure planning from more traditional open space preservation efforts. These efforts, while important in their own right, have resulted in “wilderness islands” that are unlikely to meet their conservation objectives, as wildlife cannot flourish if they are isolated and ecological processes cannot function if natural connections are severed.

In contrast, the tying together of open spaces into an interconnected network is the hallmark of green infrastructure planning. This concept is based on three components: 1) large **hubs** that anchor the system; 2) **linkages** that tie the system together; and 3) smaller **sites** that may or may not be linked together, but nonetheless provide important open space functions. The interrelationship of these three elements is shown in the diagram to the right.



Linkages are the key to green infrastructure planning, because they provide the following advantages over traditional open space preservation: **1) Plant and Species**

Preservation – wildlife biologists and ecologists have long recognized that the best way to preserve native plants, animals and ecological processes is to create an interconnected conservation system, to counter habitat fragmentation; and **2) Maintenance of Ecological Processes** – the strategic connection of different network components – parks, preserves, riparian areas, wetlands, and other green spaces – is critical to maintaining vital ecological processes, such as: 1) carrying and filtering stormwater runoff; 2) storing and cleaning fresh water; and 3) cleaning urban air.

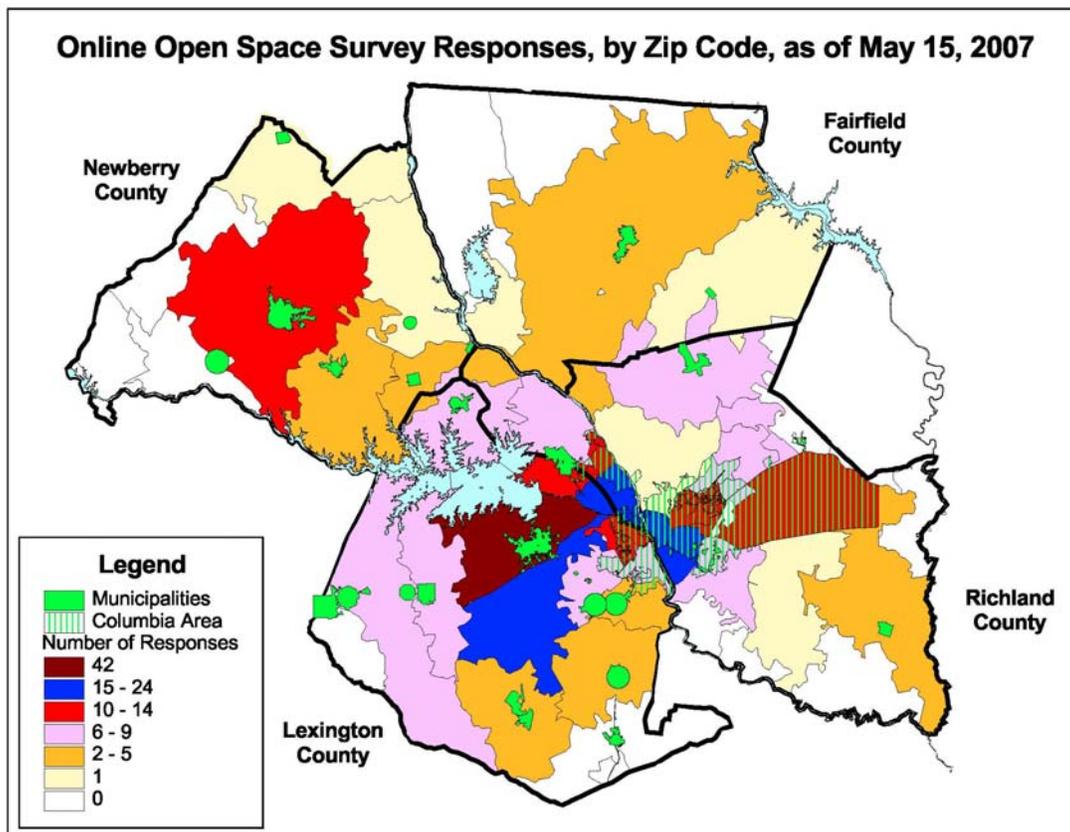
The State of Maryland’s GreenPrint program provides an excellent definition and description of these linkages, also known as wildlife corridors: *Corridors are linear features connecting hubs together, to help animals and plant seeds to move between hubs. Generally speaking, corridors connect hubs of similar type (hubs containing forests are connected to one another; while those consisting primarily of wetlands are connect to others containing wetlands).*

As for corridors, they generally follow the best ecological or ‘most natural’ routes between hubs. Typically these are streams with wide riparian buffers and healthy fish communities. Other good wildlife corridors include ridge lines or forested valleys.

Research Process

A. Identification of Public/Protected Lands. The first step in this process was to identify those lands within the region that were already protected in some fashion. Much of this came from SCDNR data on publicly-owned lands within the state. In addition, information on existing conservation easements within the region was sought after. The information was obtained, but as it was available only as points, rather than shapes reflecting the actual parcel size, the decision was made to not include the data within the regional green infrastructure map. A follow-up effort to convert this data from points to shapes is already planned and these conservation easements will be included in future green infrastructure maps of the region.

B. Online Open Space Survey. The second step in the research process was to create an online open space survey and post it on the CMCOG's website. The survey asked residents of the Central Midlands to identify open space areas they would like to see protected and to rank their preferences. Links to this survey were posted on municipal and county websites throughout the region. In addition, flyers discussing the survey and listing where it could be found online were distributed to every library within the four counties. As a result of this effort, nearly 300 surveys were completed over a two-month period, with the greatest number of responses coming from around the Town of Lexington, as shown below. A breakdown of the survey results by number, demographics, and preferences are shown on page 4. The ideas generated from these surveys, as well as the public workshops, are shown on the Preliminary Green Infrastructure Concept map (pages 5 and 6).



Online Open Space Survey Participants and Results
March 15th to May 15th, 2007

	<u>March 30th</u>	<u>April 25th</u>	<u>May 15th</u>
Total responses: (Each date shows cumulative total)	122	240	287
Gender:			
• Male	64	126	150
• Female	55	109	136
Age ranges:			
• Under 18	0	0	0
• 18-24	6	9	14
• 25-34	40	67	81
• 35-54	52	101	122
• 55+	23	62	71

Green space plan elements ranking (1 to 10, with 1 as the lowest score and 10 as the highest):

• Open Space Areas:	8.8	8.6	8.7
• Plant/Wildlife Corridors:	8.5	8.4	8.5
• Water Quality Areas:	9.5	9.2	9.2
• Farmlands	8.3	8.3	8.3
• Forest Lands	8.6	8.3	8.4

C. Public Workshops. After the online survey results were tallied, a series of workshops were held throughout the region, in order to provide these results directly to the public, as well as to solicit further input on open space preservation. These workshops were held in the following locations: 1) at the CMCOG offices in Columbia; 2) at Lexington Town Hall; 3) at Newberry City Hall; and 4) at the Clock Tower in Winnsboro. Although attendance at these was somewhat limited, the workshops were a source of valuable input, in addition to the online surveys, particularly for preserving open space in Fairfield and Newberry Counties.

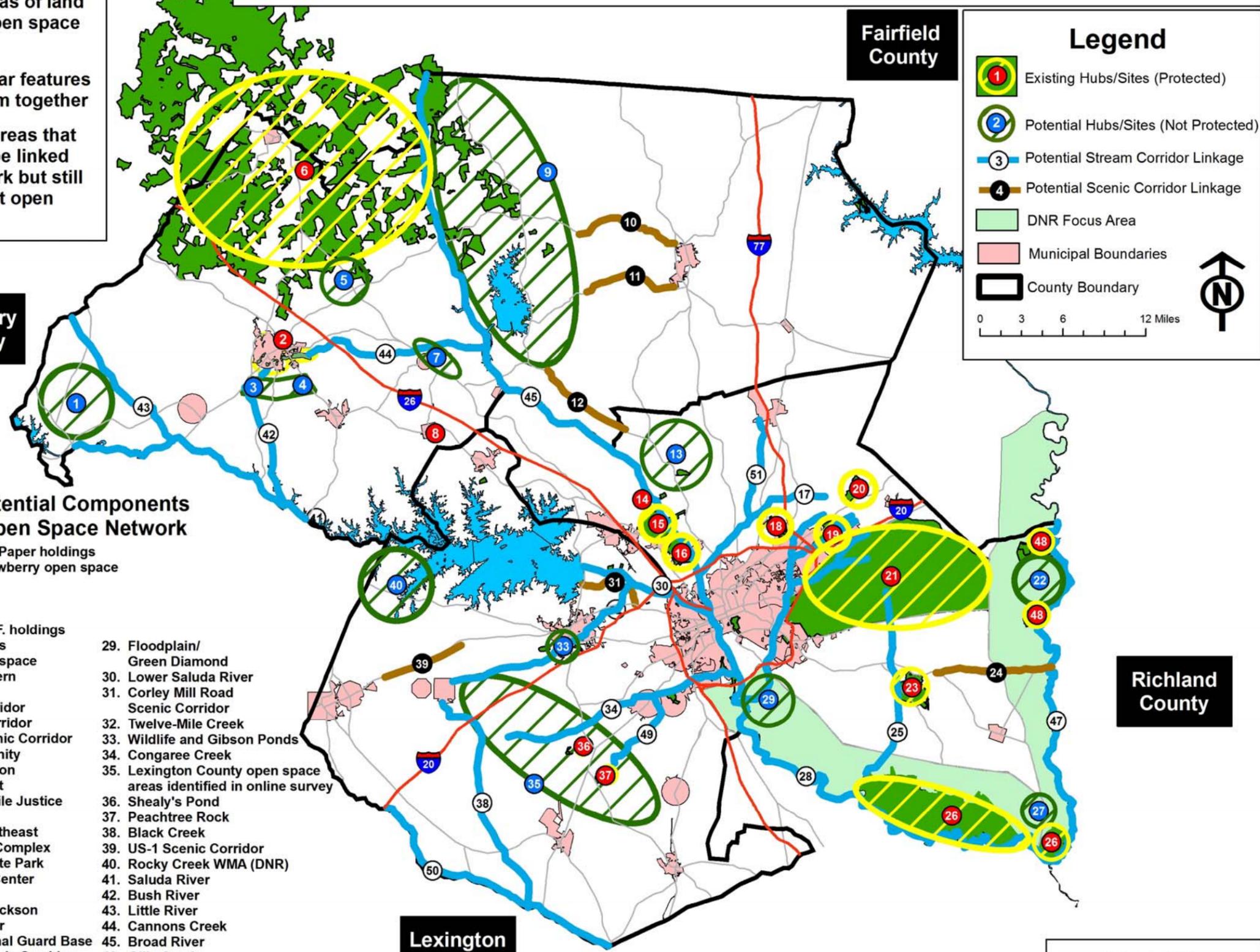
Green Infrastructure Terminology

HUBS: Large areas of land that anchor an open space network

LINKAGES: Linear features that tie the system together

SITES: Smaller areas that may or may not be linked to a larger network but still provide important open space functions.

Preliminary Green Infrastructure Concept for the Central Midlands Region, based on Existing Protected Lands, Online Survey Results and Public Workshop Comments



Existing and Potential Components of a Regional Open Space Network

- | | |
|---|---|
| 1. Former International Paper holdings | 29. Floodplain/ Green Diamond |
| 2. Lynch's Woods & Newberry open space | 30. Lower Saluda River |
| 3. Quaker Cemetery | 31. Corley Mill Road Scenic Corridor |
| 4. Old Rock House | 32. Twelve-Mile Creek |
| 5. Maybinton | 33. Wildlife and Gibson Ponds |
| 6. Infilling of Sumter N.F. holdings | 34. Congaree Creek |
| 7. Pomaria Historic Sites | 35. Lexington County open space areas identified in online survey |
| 8. Little Mountain open space | 36. Shealy's Pond |
| 9. Scenic areas in western Fairfield County | 37. Peachtree Rock |
| 10. Route 34 Scenic Corridor | 38. Black Creek |
| 11. Route 213 Scenic Corridor | 39. US-1 Scenic Corridor |
| 12. Monticello Road Scenic Corridor | 40. Rocky Creek WMA (DNR) |
| 13. Cedar Creek Community | 41. Saluda River |
| 14. Chestnut Hill Plantation | 42. Bush River |
| 15. Harbison State Forest | 43. Little River |
| 16. Department of Juvenile Justice | 44. Cannons Creek |
| 17. Crane Creek | 45. Broad River |
| 18. Midlands Center, Northeast Campus, State Park Complex | 46. Gills Creek |
| 19. Sesquicentennial State Park | 47. Wateree River |
| 20. Sandhills Research Center | 48. USDA Wetlands Reserve |
| 21. Fort Jackson | 49. Second Creek |
| 22. Area between Fort Jackson and the Wateree River | 50. North Fork - Edisto River |
| 23. McEntire Joint National Guard Base | 51. North Branch - Crane Creek |
| 24. Sumter Highway Scenic Corridor | |
| 25. Cedar Creek (Lower Richland County) | |
| 26. Congaree National Park | |
| 27. Land areas between Congaree N.P. | |
| 28. Congaree River | |





Research Results by County

A. Richland County. Within the Central Midlands, Richland County is blessed with the greatest quantity of public and protected lands within the region, totaling nearly 85,000 acres within five federal and state facilities. During this process, additional areas were highlighted as also being worthy of protection. They were identified within the northern, middle, and lower portions of Richland County.

The Cedar Creek community, in north-central Richland County, is an ideal candidate for preservation efforts, given its scenic rural character, strong community identity, and landowners with deep roots in the land going back many generations. Within the middle portion of the county, those lands that lie between Fort Jackson and the Wateree River are a logical choice for preservation efforts, as a means of both protecting the floodplain and preventing residential encroachment that could potentially limit training operations at the S.C. Army National Guard's McCrady Training Center.

Lower Richland County already has protected lands: 1) McEntire Joint National Guard Base, and 2) Congaree National Park. Recommendations for protecting additional lands near these facilities were made in the surveys and workshops, including: 1) creating a scenic corridor along U.S. 76/378 that runs to Sumter; and 2) filling in the "gap" that exists between already protected lands of Congaree National Park, so that the park will consist of one contiguous piece of property, rather than two separate parts.

Finally, the Green Diamond property, located on both sides of I-77, east of the Broad River, was identified for open space preservation. The developer is considering constructing an artificial wetlands there, to filter treated wastewater, which would help improve water quality in the Congaree River.

B. Lexington County. In terms of development pressures, Lexington County mirrors Richland County; unlike Richland County, however, Lexington County has no large-scale tracts of protected land. Within the four-county region, Lexington County faces the greatest risk of losing much of its open space to development, particularly in those areas adjacent to Lake Murray, I-20 and I-26. The strong response rate in Lexington County to the online open space survey, and the answers given, indicate that Lexington County residents are well aware of this issue and are concerned about future development trends within their county. In terms of where to preserve open space, a number of places within an area west of Gaston, north of Pelion, and southeast of Gilbert were recommended by survey respondents. Two protected places already lie within this area: Shealy's Pond and Peachtree Rock. Given the looming development in eastern Lexington County, adjacent to I-26, and the extensive investment in agricultural infrastructure in the southern part of the county, this area in the south-central part of the county may be the best potential location for efforts to create an open space hub within the county.

C. Fairfield County. Given its rural nature, Fairfield County possesses the greatest percentage of undeveloped open space of any county within the Central Midlands. This gives the county significantly more time to consider and plan for open space preservation, as compared with Lexington County, for example. The challenge is in generating sufficient interest in protecting open space, given that there is limited to non-existent threat to it at present (other than around Lakes Monticello and Wateree). Fairfield County already has some protected lands - a portion of Sumter National Forest lies within the northwest corner of the county. During the July 11th public workshop in Winnsboro, several suggestions were made regarding potential places worth protecting within the county. In particular, the area of western Fairfield County, running from the Broad River to the east, paralleling the eastern edge of Lake Monticello, was suggested. In addition, two scenic road corridors, SC-34 and SC-213, running from the Newberry County line east to Winnsboro, were suggested.

D. Newberry County. Newberry County is in a very similar position to that of Fairfield County, in that the majority of Newberry County's land is rural in character, with forestry and farming predominating. The biggest difference, in terms of protected land, is that much of northern Newberry County lies within Sumter National Forest.



The July 12th public workshop at Newberry City Hall generated much discussion, with one of the participants, a landscape architect, suggesting that, given the lack of distinctive ecological resources within the county, historical areas could instead serve as green infrastructure hubs or sites. These include the community of Maybinton, historic areas around the Town of Pomaria, and the lands around two historic sites that lie south of the City of Newberry, the Quaker Cemetery and the Old Rock House. An additional potential preservation opportunity is located in western Newberry County, where International Paper is considering divesting itself of its timber holdings.

Goals and Objectives

Our work to date has consisted of the following: gathering data on existing protected lands, forming a green infrastructure steering committee, creating and distributing open space surveys, conducting public workshops, and putting all of the results together into one map. The next step in this process is to begin working to make open space preservation a reality within the region.

To that end, a number of goals and objectives have been drafted, to provide a path for moving forward, along with the action steps on the next page. Ultimately though, for this effort to succeed, people at the local level have to take ownership of it and translate these ideas into concrete results.

GOAL #1: Create a vision for open space preservation at the county level and below within the Central Midlands.

- Establish county-level green infrastructure committees.
- Identify priority open preservation areas at the county level.
- Turn regional concept into a regional plan, using county-level preservation priorities.

GOAL #2: Incorporate working lands into regional/county preservation plans

- Bring farmers and foresters into county-level steering committees.
- Coordinate with foresters/farmers to include working lands in regional/county plans.
- Identify federal, state and other resources for preserving working lands

GOAL #3: Implement regional/county open space preservation plans

- Bring landowners into county-level steering committees, as liaisons for reaching out to fellow landowners to request conservation easements.
- Identify financial (and other) resources for protecting and preserving open space.
- Build relationships with local landowners and solicit conservation easements within priority open space preservation areas.

GOAL #4: Expand open space preservation vision, to incorporate other COGs

- Encourage COGs adjacent to CMCOG to do open space preservation within their own regions.
- As adjacent COGs begin protecting their own open spaces, look for ways to link these together with CMCOG protected lands.
- After connecting with adjacent COGs, encourage COGs around the state to also protect open spaces.
- Use these efforts by COGs around South Carolina to create the basis for a statewide network of protected open spaces.

Action Steps

Immediate (6 months to 1 year)

- Identify and recruit a leader within each county to champion open space preservation efforts.
- Identify and recruit members of a county-level green infrastructure steering committee, including technical experts, elected/appointed officials, developers and private citizens.
- Identify and recruit local landowners, as potential sources for conservation easements.
- Identify potential financial resources for implementing open space preservation.

Short-Term (1-2 years)

- Refine and prioritize open preservation objectives within each county.
- Refine the regional open space preservation concept into a regional plan, based on objectives and priorities identified at the county level.
- Apply for federal grants and other implementation resources, based on open space preservation priorities identified at the county level.
- Initiate discussions with landowners to acquire conservation easements within priority areas.
- Initiate contacts with farmers and foresters in each county, to discuss how their working lands can be preserved and integrated into the regional plan.
- Hold meetings in each county annually, to provide updates and seek continued public input.

Mid-Term (3-5 years)

- Acquire dedicated source(s) of funding for open space preservation (e.g. ½ cent sales tax).
- Update regional plan regularly (every 3-5 years), based on implementation successes (and challenges), along with input from the steering committees and the public-at-large.
- Acquire conservation easements within priority areas in each county.
- Identify and integrate working lands of interested farmers and foresters in each county into the regional plan.
- Identify and acquire state and federal resources to preserve working lands in each county.
- Coordinate open space planning with COGs adjacent to CMCOG, to encourage similar efforts in these areas, to create a network of protected open spaces beyond the CMCOG's boundaries.

Long-Term (6-10 years)

- Construct low-impact use trails within protected open space areas, to make them available for public use and to rally support for future open space preservation efforts.
- Identify gaps in acquiring conservation easements within priority areas and use available funding to purchase the most valuable open space lands.
- Implement connecting CMCOG protected open spaces with those of adjacent COGs.
- Coordinate with COGs statewide, to identify opportunities for creating a network of protected open space throughout the state.

Green Infrastructure Steering Committee Members

City of Columbia

Columbia Planning Department

Fairfield County

East Piedmont Resource Conservation and Development Council
USDA Natural Resources Conservation Service – Fairfield County

Lexington County

Lexington County Planning
Lexington County Public Works
Lexington Soil and Water Conservation District
USDA Natural Resources Conservation Service – Lexington County

Newberry County

USDA Natural Resources Conservation Service – Newberry County

Private/Commercial

Dennis Corporation
Southeastern Environmental Solutions, Inc.
Sommer-Green Company, LLC

Private/Non-Profit

Community Open Land Trust
Congaree Land Trust
League of Women Voters of S.C.
Sierra Club/John Bachman Group

Richland County

Richland County Conservation Commission
Richland County Department of Public Works
Richland County Planning and Development Services

State of South Carolina

Clemson University Cooperative Extension Service
South Carolina Department of Natural Resources

