

City of Charlottesville  
Department of Parks and Recreation  
Post Office Box 911  
Charlottesville, Virginia 22902  
434-970-3260



*"A World Class City"*

## **PARKS AND RECREATION ADVISORY BOARD AGENDA March 26, 2014**

### **ADMINISTRATIVE ITEMS**

ADMIN-1      Adoption of Minutes – February 19, 2014 Advisory Board Meeting

### **INFORMATION ITEMS**

- I-1              Playground Management Update
- I-2              McIntire Park Design Status
- I-3              Skate Park Design Status
- I-4              Rives Park Construction Schedule
- I-5              Azalea Park Master Plan Implementation Update
- I-6              NRPA National Partnership Award Submission

### **CHAIRMAN'S MATTERS**

### **BOARD MATTERS**

### **DIRECTOR'S MATTERS**

### **ADJOURNMENT**

City of Charlottesville  
Parks and Recreation Advisory Board – Agenda Item  
March 26, 2014

**ADMINISTRATIVE – 1**

Adoption of Minutes – February 19, 2014 Parks and Recreation Advisory Board Meeting

ACTION REQUIRED:

Advisory Board adoption of the minutes of the February 19, 2014 meeting.

ENCLOSED DOCUMENTS:

Minutes of February 19, 2014 meeting.

**PARKS AND RECREATION ADVISORY BOARD**  
**MINUTES**  
**February 19, 2014**

The Parks and Recreation Advisory Board held a regular meeting on Wednesday, February 19, 2014 @ 5:30 p.m. held @ Carver Recreation Center. Members present were: Ruth Barnett, Byron Brown, Llezelle Dugger, Anne Hemenway, David Hirschman, Scott Marshall, Jordan Phemister, Natasha Sienitsky and Maurice Walker. Members absent: Ned Michie  
Staff: Brian Daly, Chris Gensic

**Minutes:**

- Under paragraph Directors' matters – change to over 20.25 acres
- McIntire RFP – have firm selected instead of have a lease

**Motion**

- David Hirschman made a motion to approve minutes as amended, Anne Hemenway second, motion was unanimously approved.

**McIntire Design RFP**

- Brian Daly reported that the McIntire Design RFP contract has left the City Attorney's office, and needs to be signed by the City Manager, then executed by Parks and Recreation
- Proposed bridge - showed renderings to board members, announced that there was an open house a couple of weeks ago, attendance approximately 20 citizens.
- Chris Gensic reported that the map shows where it will be located on the west side of McIntire Park and that the citizens wanted lighting similar to the Downtown Mall.
- Chris Gensic showed a video that gave information about the proposed bridge and stated that the bridge work should be done about the same time as the interchange. Also that additional parking would happen on the west side of the park the same time as the bridge work.

**Skatepark Design**

- Brian Daly reported that the contract was finalized and it was awarded to Stantec Planning, also announced that there would be a press release in approximately a week on both projects.
- Reported that Stantec Planning has over 200 designs to their credit, and that they are a skatepark design only firm.
- Skatepark consultant will be in town next Tuesday to walk through scheduling with staff; Skatepark committee will also meet with them.
- Reported that there will be public input sessions as the project progresses. Timeline - approximately 9 months.

**Rives Park Construction Schedule**

- Brian Daly reported that the park was under construction and approximately 25% complete, and that there have been some issues with soil which they are working through solutions.
- Playground equipment is here, ready to be installed, weather permitting ribbon cutting Memorial Day weekend.

### **Azalea Park Master Plan**

- Brian Daly reported that the project was almost to a close, rebuilding fence around the athletic field, rebuild infield, picnic shelter to be installed
- Planted 67 trees in park, 100 in back storm water area

### **NRPA**

- Brian Daly reported that two weeks ago the department received notice of the annual NRPA awards. Staff has determined to submit an application for the National Partnership Award for the Meadow Creek Stream Valley Restoration Project.
- Reported that numerous departments were included with this project: Nature Conservancy, Virginia Aquatic Trust Fund, Corps of Engineers, construction firm, partnerships started in 2006, finished project last spring. Awards will be presented @ NRPA Congress in October.

### **CIP - FY 15-19**

- Brian Daly stated that at the last board meeting there were questions about changes to the FY 15 CIP plan that the Planning Commission had made, and told board members that there was information in their packet which included:
  - Parks & Recreation list represents 20% of CIP
  - Page 3 – Parks & Rec lump sum – \$200,000 – gives flexibility to staff. Board members agreed to let staff handle these funds.
  - Cost savings from other projects could be asked for approval by City Council to fund other projects.

### **Rives Park Master Plan**

- Brian Daly reported on the inclusion of gardens @ Rives Park in lieu of a volleyball court:
  - Have received 54 comments, 100% supportive of gardens
  - Belmont/Carlton Neighborhood Association opposed based on allocation of gardens; staff feels they raised a valid point. Not sure how to handle – some ideas are as follows: complete random lottery, three year grandfather period then go back to lottery, community gardens or not.
  - Anne Hemenway felt that the Rives neighborhood wanted garden plots available to neighboring citizens.
  - Brian Daly stated that staff is looking @ other locations in the mid-Atlantic on how they handle garden plots.
- Motion – Inclusion of garden plots
- Natasha Sienitsky made a motion to include inclusion of garden plots @ Rives Park, Llezelle Dugger second, motion was unanimously approved.

### **Chairman's Matters**

- None

### **Board Matters**

- David Hirschman reported the following:
  - That the power point on park acquisitions was graphically impressive. He stated that he was on the City as a Park Committee, and that it seems like it's really happening for people to be able to get around with connections, example: trails, land acquisitions.
  - Wanted to congratulate staff on moving snow from the storm
- Jordan Phemister reported the following:
  - That there was a screw missing from the swing set @ the Clark school big playground, post furthest from the street.
  - Applauded staff for taking on reworking the garden plot policy.
  - Had fun @ Washington park sledding during recent snow storm
- Scott Marshall stated that the guests @ the Omni hotel were impressed on how the snow removal on the Downtown Mall was cleaned
- Llezelle Dugger also stated that the snow removal on the Downtown Mall was great, and that her family was able to get out of the house and go to the restaurants on the mall.
- Ruth Barnett also stated that staff had done an amazing job on the snow removal, and that she is always overwhelmed on everything staff does and was proud to be a resident and board member.
- Anne Hemenway reported that she had met with Fran Lawrence with the Lewis & Clark Exploratory project and was working to raise more money. Stated that they were hoping for a grand opening in April and that this will be the only public building on the river.

### **Director's Matters**

- Brian Daly reported the following:
  - Board orientation – e-mail was sent to board members inviting anyone to attend an orientation which takes approximately 90 minutes
  - Met with City Council last night – land acquisitions was a closed session, approval to move forward. Land acquisitions - one on the northwest corner of town @ Angus Road & Cedar Hills Road, 1/3 acre, and second near Jordan Park – property donated.
  - Hartman's Mills property should close today
  - Will be out of office next Wednesday to March 4.
- Chris Gensic reported on the Meade Avenue Trail Project:
  - Phase I – Completes this spring
  - Phase 2 – Completes this summer
- **Motion – Adjourn Meeting**
  - Llezelle Dugger made a motion to adjourn the meeting, Jordan Phemister second, motion was unanimously approved.
  - Meeting adjourned @ 6:40 pm

Respectfully submitted,

Linda Daly  
Secretary to the Advisory Board

City of Charlottesville  
Parks and Recreation Advisory Board – Agenda Item  
March 26, 2014

## **INFORMATION - 1**

### Playground Management Update

Parks Division staff will provide an update on the ongoing work of evaluation of all of the playgrounds at the Parks and the Schools, performing numerous minor equipment replacements and upgrades.

## **INFORMATION – 2**

### McIntire Park Design Status

Staff will provide an update on the design process for the implementation of the Master Plan for the east side of McIntire Park. The design consultant, Mahan Rykiel from Baltimore has begun the process of schematic design following a series of meetings with staff and representatives of the McIntire Botanical Garden (MBG). The MBG has developed a Vision Statement for the garden portions of the park that has been discussed with staff, shared with the design team and is attached for your information.



# **MCINTIRE BOTANICAL GARDEN**

## **VISION STATEMENT AND PLANNING OBJECTIVES**

### **VISION STATEMENT**

To create, fund and maintain a sustainable landscape garden in McIntire Park East in partnership with the City of Charlottesville. This public garden will feature native and site-adapted trees, shrubs and perennials in designed and natural landscapes that are inviting, educational, inspirational, and reflect the unique character of the Piedmont region.

### **MISSION STATEMENT**

The mission of McIntire Botanical Garden is to develop a public garden that promotes knowledge, enjoyment and conservation of plants and nature through display, education and research.

### **GOALS OF MCINTIRE BOTANICAL GARDEN**

#### **DISPLAY**

To design a landscaped garden of native and site adapted trees, shrubs and perennials that complements the existing parkland and enhances the site's topography to create a setting that is beautiful and attractive to all the senses.

- Display plants in designed and natural settings.
- Emphasize regionally native plants throughout the garden.
- Design landscapes with the highest degree of horticultural excellence.
- Create spaces for gathering and garden observation/enjoyment.
- Unite the site through architecture and landscape architecture of the highest standard and regional appropriateness.

#### **EDUCATION**

To create a garden that is a place of discovery for all visitors through active and passive programs of interpretation and education.

- Serve as an educational resource for schools, pre-K-12, colleges and universities, emphasizing the disciplines of horticulture and the natural sciences.
- Provide educational and interpretive labeling in the garden with all sections using best available technology.



- Present adult and children's symposia, workshops and classes related to:
  - Horticulture and the natural sciences
  - Fine arts
  - Design
- Design and interpret demonstration gardens, display gardens, special exhibits

## **STEWARDSHIP AND CONSERVATION**

To preserve and enhance the existing features of the site while designing and managing gardens that complement the natural character of the park.

- Design and manage the site and its resources in as sustainable a manner as possible.
- Implement a financial model that supports and ensures sustainable long term funding
- Design and manage in a sensitive manner to enhance the wildlife habitat.

## **RESEARCH**

- Form an advisory committee of local scientists, allied academics and Board representatives to develop a research plan for the garden; enlist the advisory committee to foster and direct research objectives.
- Establish partnerships with local and regional academic institutions to fund and direct a research program within the garden.
- Provide facilities and field support for academic institutions and individuals conducting research in the garden.
- Research programs should be consistent with our mission.

## **PLANNING OBJECTIVES**

### **SITE OPPORTUNITIES AND CONSTRAINTS**

- A central location in the city of Charlottesville accessible by foot, bike, car or by public transit.
- The ability to create a garden that is uniquely reflective of, and appropriate to, its place in the Piedmont province of central Virginia.
- The dramatic topography of the site is its greatest asset, but also its greatest limitation. The circulation system will provide maximum accessibility.
- The mature oak trees that crown the knoll and those along the US 250 corridor are magnificent and should be preserved.
- The varied topography provides micro-climate opportunities to grow a wide range of plants.

## **OBJECTIVES**

- To create a garden that is visually inviting.
- All elements of the park including the Skate Park, Vietnam Memorial and Family Activities Center should be designed with a holistic vision.
- To create a garden that incorporates features that provide cultural and educational experiences for visitors of all ages.
- To provide sensory experiences throughout the garden to awaken a feeling of wonder in visitors.
- To choose an architectural vernacular and use materials of the highest quality.

## **SPECIFIC ELEMENTS OF THE PLAN**

### **VISITOR SERVICES**

- Visitor Center and Education Building, LEED Certified - including facilities, such as meeting rooms, café, gift shop, staff and volunteer offices as well as outdoor spaces for gathering, relaxing and education.
- A circulation system, often envisioned as a spiral, that creates a sense of order and hierarchy, and provides access to all the gardens and significant site features.
- Connections to regional trail systems such as Rivanna Trail, McIntire Park Pedestrian bridge and Schenks Branch Greenway.
- Parking area designed with best management practices including sustainable technologies such as bioswales and strategic tree placement.

### **GARDENS**

- Preservation and enhancement of the great lawn as a central feature of the park.
- Display gardens of trees, shrubs and perennials woven into a tapestry of landscape experience.
- Features throughout the garden to delight and engage children.
- A matrix of meadow, woodland and wetland habitats as demonstrations of the Piedmont's native plant communities.
- Pond and water features.
- Native plant and habitat gardens such as woodland and meadow as the matrix in which display gardens are imbedded.
- Demonstration gardens reflective of different types of soil and solar exposures of the site such as small scale garden design, vegetables, trial beds for new introductions and display of plants.
- Public events spaces such as amphitheater, wedding venue, art in the park.

- A variety of outdoor spaces and seating within the garden for gathering, relaxing and passive education.
- Landscape to reduce the visual and auditory impact of the Parkway.
- Wildlife control measures as appropriate.
- Possible collaboration with the Sister Cities of Charlottesville.

#### MANAGEMENT AND MAINTENANCE

- Working greenhouse, volunteer and staff facilities.
- Maintenance facilities.
- Service area including composting/soil storage facilities.

### SUMMARY

In presenting our vision, mission and objectives, the Board of Directors and supporters of McIntire Botanical Garden propose a unique garden that takes its place among the premier contemporary and historic gardens of the region. We are excited about the prospects of offering this extraordinary amenity to the Charlottesville community.

*Approved by the McIntire Board of Directors on January 28, 2014*

### **INFORMATION - 3**

#### Skate Park Design Status

Staff will provide an update on the design work to date on the skate park at McIntire Park and the outcomes of meeting with the design consultant; Stantec. Additionally, staff will outline the context of the first public meeting on the design initiatives, to be held Tuesday, April 8, 2014 at the Carver Recreation Center, 6.30 pm.

### **INFORMATION - 4**

#### Rives Park Construction Schedule

Staff will provide an update on the construction sequence for the renovations at Rives Park, which is currently underway.

### **INFORMATION - 5**

#### Azalea Park Master Plan Implementation Update

Staff will provide an update on the continuing work to finish the implementation of the Master Plan for Azalea Park.

### **INFORMATION - 6**

#### NRPA National Partnership Award Submission

On March 24, 2014, the Parks and Recreation Department submitted an application for the Meadow Creek Stream Restoration project as a contender for the National Recreation and Park Association's *National Partnership Award*. The project involved numerous entities, including the City, The Nature Conservancy, the Virginia Aquatic Resources Trust Fund and a private landowner, all who came together in a unique partnership to make the project a reality.

The award submission package is included on the following pages.



# National Recreation and Park Association

## National Partnership Award 2014 Nomination Form

The National Partnership Award is presented to an agency/organization that has developed a successful partnership to create a project or program that benefits the community, region, state, or nation and increases awareness of the importance of parks, recreation, and leisure services in quality of life.

The nomination deadline is **March 24, 2014**.

### Eligibility Criteria:

- Agency or nominator must be a member of NRPA
- Partnership was established to address a particular issue or opportunity
- Partnership has been in existence for at least one year.

### Required Materials

- Answers to the questions provided below

### Supplemental Materials

- Flyers, posters, brochures, press releases, media coverage, websites, videos that describe the partnership

### NOMINATION INSTRUCTIONS:

- All nominations must be **received by NRPA** no later than March 24, 2014. NRPA will not return any materials submitted with the nomination.
- Nominator may only nominate using this official nomination form.
- All materials must be submitted electronically in either Microsoft Word or Adobe PDF format.
- Submit no more than two documents (multiple documents may be combined, video links included, however, submit no more than two separate documents). No separate photographs will be accepted.
- Nomination is automatically disqualified if it does not meet criteria, submission instructions or if the responses are over the word limit.
- Submit your nomination via email to [awards@nrpa.org](mailto:awards@nrpa.org). For more information, contact the NRPA Awards Programs at 703.858.2141 or [awards@nrpa.org](mailto:awards@nrpa.org)



# National Recreation and Park Association

## National Partnership Award Program

City of Charlottesville Parks and  
Recreation Department

Company/Agency

Brian Daly

Submitted by (contact)

120 7<sup>th</sup> Street, NE, City Hall  
Annex, Room 107

Street Address (UPS delivery)

dalyb@charlottesville.org

Email

The Nature Conservancy of Virginia

Partner Company/Agency

Director, Parks and Recreation, City of  
Charlottesville

Title

Charlottesville, VA, 22901

City / State / Zip

434.970.3215

Phone Number

55444

NRPA Membership Number

**National Partnership Award Program  
Essays & Questions**

*Please provide answers to the questions below:*

1. Describe the scope of the program or project, including information about the partner and length of partnership. *(250 word maximum)*

The Meadow Creek Stream Restoration project is a partnership between the City of Charlottesville, The Nature Conservancy and funded through the Virginia Aquatic Resources Trust Fund (VARTF) of the Commonwealth of Virginia. The project occurred on existing and newly acquired City park lands, leveraging \$3.95 Million of non-local funds to restore almost two (2) miles of urban stream, treating over 5,800 acres of drainage area and is the largest urban stream restoration project undertaken to date in Virginia.

The partnership began in 2005, when numerous local watershed assessments identified the seriously deteriorated state of Meadow Creek in the City of Charlottesville. The Virginia Department of Environmental Quality listed Meadow Creek and a segment of the Rivanna River downstream as “impaired waterways.” Impairment of these waters was due primarily to excessive sedimentation from streambank erosion.

The project represents the significant collaboration between multiple entities (City, Nature Conservancy, VARTF, the U.S. Army Corps of Engineers, the Rivanna Water and Sewer Authority) that required years of coordination, funding approval, permitting, design which produced stream restoration construction, establishment of conservation easements, eradication of invasive species and ten years of follow-up monitoring.

The outcome of this multi-year partnership resulted in close to two miles of restoration of urban stream, the establishment of permanent conservation easements on over seventy (70) acres of City park land (and some private property); the leveraging of almost \$4 Million in non-local funding and creating water quality improvements for a 5,800 acre drainage area. The partnership will continue through 2023.

2. Describe the community issue or opportunity the program addressed (250 word maximum)

Meadow Creek is a tributary of the Rivanna River within the Chesapeake Bay watershed. The Meadow Creek project was selected to address increased sedimentation, stream bank erosion, lack of healthy forested riparian buffers posing a threat to stream health, and subsequently the river and bay. The location of the stream on a large site with a wide floodplain presented a unique opportunity to restore a significant length of a severely degraded stream in an urban area. The project also presented the opportunity to build on restoration work that the University of Virginia had completed on upstream reaches of Meadow Creek, extending those enhancements downstream and working collaboratively towards watershed improvement.

Meadow Creek receives water from a 5,800 acre drainage area, including the entire northern half of Charlottesville, stormwater runoff from urban developments, neighborhoods, schools, and shopping centers. Meadow Creek's deteriorated quality and health had been documented by many local assessments and the creek has been listed as an "impaired waterway" by the Virginia Department of Environmental Quality. Excessive sedimentation from erosion, due to uncontrolled stormwater runoff, was the major cause of impairment. Prior to restoration, the stream's banks were steep and unstable, the streambed habitats were buried in large piles of sand, and the stream was hydraulically disconnected from its floodplain, which was filled with invasive vegetation threatening the health of the native forest.

The outcome of the restoration is a stabilized stream corridor, improved water quality, enhanced aquatic and forest habitats, recreational and educational opportunities, and aesthetic values.



3. Describe the agency and partner contributions *(250 word maximum)*

Charlottesville Parks and Recreation took a lead role in the acquisition of additional land necessary to complete a comprehensive restoration project; participated in the negotiation of terms of the conservation easements, provided oversight and input into the design and construction of the project, and undertook a community-driven Park Master Planning process for the Meadow Creek Valley. The Master Plan was adopted by the City Council in 2013. Restoration work began in May 2012 and was completed in March of 2013.

The Nature Conservancy in Virginia (TNC) serves as the implementation agent for Virginia Aquatic Resources Trust Fund funded projects throughout the Commonwealth. TNC is also the holder of the conservation easements placed on the property as a condition of funding. TNC led the design team selection process, provided direct project management services and committed to long-term post construction monitoring of the stream channel, biological and invasive species and compliance with the conservation easements.

The project also included collaboration with the Rivanna Water and Sewer Authority (RWSA), who owns and operates a major sanitary sewer interceptor in the Meadow Creek stream valley. RWSA was concurrently designing a replacement of the interceptor line, which was undersized and failing in places, in part due to erosion of Meadow Creek's banks which was undermining the pipe. TNC, the design engineer, the City of Charlottesville and RWSA worked together to design the interceptor alignment, stream pattern and features to provide long-term protection of both the hard and green infrastructure improvements in the stream valley.

4. Describe why the program could not have been done without the collaboration and support of the partner (250 word maximum)

Without the collaboration and active partnership between multiple parties, this project would never have taken place.

Years of coordination and planning between all parties provided for a logical sequence of events that resulted in:

- Replacement and upgrade of a major sanitary sewer interceptor line traversing the length of the project area.
- Further park land acquisition required to ensure a comprehensive stream restoration along a contiguous reach of stream.
- Negotiations with a willing private landowner whose property is adjacent to and within the project limits.
- Selection of the design team and development of precise natural channel stream design for construction.
- Negotiation and establishment of conservation easements adopted by the City Council.
- Integrated project management during construction with a team approach from the City, TNC, the design team and construction contractor.
- Coordination with a community driven Park Master Plan process for the lands to address natural resource management, trail connectivity and future interpretive opportunities.

Only through the commitment to partnership of all the parties has this unique environmental improvement of a highly degraded urban stream come to fruition.

5. Describe the mutual benefit for your agency and partner *(250 word maximum)*

The mutual benefit received by the primary partners in this effort, the City and The Nature Conservancy, was not only the physical improvement of a natural environment, but the lessons learned through the collaborative process over many years.

This project began in 2006 with an all-day walk by staff of the City and TNC of numerous stream locations throughout the City – with the notion to identify location(s) for potential stream restoration that could be funded through the VARTF. Six years later, after countless meetings, public information sessions, presentations to governing bodies and regulatory agencies, the project began construction in May of 2012.

These lessons, along with the demonstrated and long-term commitment to partnership between the City and TNC will bear further fruit in the future on other stream restoration projects and partnerships. Already, discussions are underway for other sections of Meadow Creek and different waterways within the City that also are degraded and require restoration activities. This is particularly vital today with the requirements of the Commonwealth of Virginia to reduce Total Maximum Daily Loads (TMDL) in streams and rivers. Charlottesville remains an urban area and other opportunities exist well into the future for a continuation of this partnership.

Additionally, the partnership and collaboration exhibited by all parties in this endeavor has become a model for other jurisdictions in Virginia, providing a framework for TNC to assist other Virginia localities on similar projects.

6. Describe how the partnership benefits the community, region, state, or nation and increases awareness of the importance of parks, recreation, and leisure services in the agency's community. (250 word maximum)

The benefits of this project to the immediate region and ultimately the Chesapeake Bay are numerous. Some specific environmental and community benefits are:

- Reduced inputs of sediment by 1,790 tons per year.
- Reduced inputs of phosphorus by 442 pounds/year and nitrogen by 1,300 pounds/year.
- Reduced the extent of invasive vegetation by up to 95%. The majority of the buffer contained over 50% cover of invasive species, with 75-100% cover in several areas.
- Increased extent of wetlands by one (1) acre - Low lying features were created along the stream which are expected to develop into wetland habitats.
- Preservation of twelve (12) acres of existing wetlands
- Provision of outdoor public space and recreational opportunities for adjacent low-income housing.
- Provides active recreational opportunities through the addition of more than forty (40) acres of new parkland and access to the restored stream.
- New opportunities to learn from and research urban stream restoration, including completed projects by the University of Virginia School of Architecture and Department of Engineering, Virginia Tech, Piedmont Virginia Community College, and Tandem Friends School.
- Provides opportunities for volunteerism. To date, eighty-five (85) volunteers have been involved in stream cleanups, invasive species removal and monitoring activities.
- Improved aesthetic values in the stream corridor.

The completed project provides increased awareness of the importance of land and riparian buffer protection throughout the community, its relationship to the control of invasive species, the improvement to water quality and the critical role Parks and Recreation plays in the stewardship of natural resources.

**NRPA NATIONAL PARTNERSHIP AWARD SUBMISSION – 2014**  
**CITY OF CHARLOTTESVILLE, VIRGINIA**  
**DEPARTMENT OF PARKS AND RECREATION**

**SUPPLEMENTAL MATERIALS**

Website Links:

City of Charlottesville Meadow Creek Stream Restoration:  
<http://www.charlottesville.org/Index.aspx?page=2235>

The Nature Conservancy of Virginia  
<http://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/virginia/explore/vartf-meadow-creek-restoration.xml>

American Council of Engineering Companies, Virginia Chapter  
Merit Award for VHB, design/build contractor for the project:  
<http://www.acecva.org/component/content/article/49-newsletters/newsletters/656-2014-engineering-excellence-awards-winners.html>

Media Coverage  
[http://www.dailyprogress.com/news/meadow-creek-restoration-project-open-house-set/article\\_be22f63a-fc57-51e1-8a67-5e6b30206ffe.html](http://www.dailyprogress.com/news/meadow-creek-restoration-project-open-house-set/article_be22f63a-fc57-51e1-8a67-5e6b30206ffe.html)

<http://www.cvilletomorrow.org/news/article/5822-meadow-creek-restoration/>

<http://www.newsplex.com/home/headlines/Meadow-Creek-Restoration-Complete-207615831.html>

**EXCERPT FROM CITY OF CHARLOTTESVILLE  
PARKS AND RECREATION PROGRAM GUIDE  
SPRING/SUMMER 2012**



CHARLOTTESVILLE

# parks & recreation



## MEADOW CREEK STREAM RESTORATION

PAGE 60



## SMITH: AWARD WINNING FACILITY

PAGE 49





# natural resource management

## Meadow Creek Stream Restoration



### Project Summary

The City and The Nature Conservancy (TNC) will be undertaking a significant stream restoration project on Meadow Creek, one of Charlottesville's major waterways. The health of Meadow Creek is threatened by excessive sedimentation resulting from severe stream bank erosion. The goals of the project are to reduce stream bank erosion and associated sedimentation, improve water quality and stream stability, protect and enhance aquatic and forest habitats, and improve wildlife habitat and aesthetic values. The restoration project will begin at Hydraulic Road and will extend through Greenbrier Park.

### Why Meadow Creek?

Numerous local assessments have documented the deteriorated state of Meadow Creek and identified the need and potential for its restoration. In addition, the Virginia Department of Environmental Quality has listed Meadow Creek and a segment of the Rivanna River downstream as "impaired waterways." Impairment in these waters is due in large part to excessive amounts of sediment being torn from stream banks and deposited on stream beds. Restoring Meadow Creek, as well as preserving and enhancing the forested buffer and wetlands along the creek, will greatly reduce sedimentation while filtering runoff entering Meadow Creek and the Rivanna River. This project also builds on investments that the University of Virginia has made to improve the headwaters and upper reaches of Meadow Creek, including the stream daylighting project completed at the Dell and restoration work at the John Paul Jones Arena.

### Existing Conditions

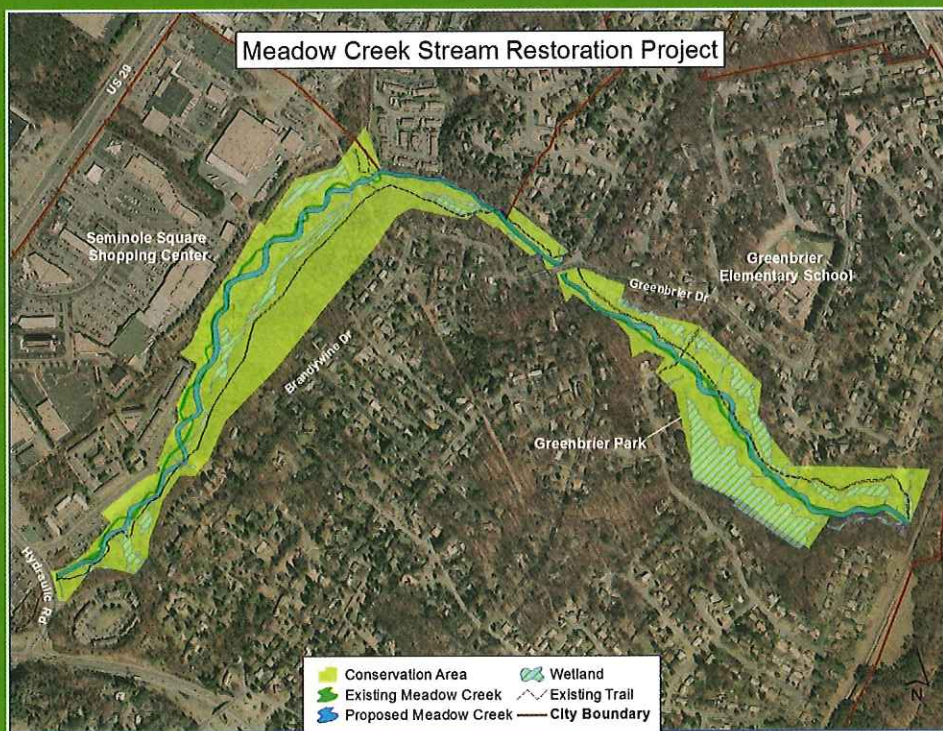
In a natural setting, streams and rivers create meanders and floodplains that slow their flow during storm events, dissipating energy and reducing erosion. But in urban environments, there are large areas of impervious surfaces such as rooftops, roads, and parking lots. As a result, rain water cannot infiltrate or soak into the ground, and instead drains via the stormwater system into waterways much faster than it naturally would. This rapid drainage and dramatically increased volume of runoff results in high volumes and velocities of water in streams and rivers during storm events. In Meadow Creek, these conditions





are made worse by the fact that the stream was once straightened, reducing the natural capacity of the waterway to slow down and dissipate the water's energy. The result is severe erosion of stream banks and scouring of stream beds. Sediment carries pollutants into waterways, suspends in the water column and blocks sunlight needed for the growth of aquatic vegetation, clogs the gills of fish (sometimes suffocating them) and eventually destroys aquatic habitat in stream beds when it settles.

(continued on next page)





# natural resource management

## Restoration Activities

Restoration work will begin in the winter of 2011/2012 and will entail reducing the steep height of the stream banks, realigning the stream channel, adding meanders and in-stream habitat structures, and planting trees to enhance the vegetated buffer along the stream. To permanently protect Meadow Creek and its riparian wetlands and buffer, conservation easements will be placed over the project area. The conservation easements will also protect over a mile of the Rivanna Trail located along Meadow Creek. A trails plan is being developed that will work in concert with the new easements and stream alignment. The restoration project has also been coordinated with the Rivanna Water and Sewer Authority, which has completed a sanitary sewer interceptor upgrade along the same corridor, to ensure protection for both the stream and the interceptor.

The project is a partnership between the City's Parks and Recreation Department, the City's Environmental Sustainability Division, The Nature Conservancy of Virginia, and the Virginia Aquatic Resources Trust Fund, and will be one of the most extensive urban stream restoration projects to be completed in Virginia.

- The \$3.95 million project involves restoration of over 9,000 feet of degraded stream and protection of 72 acres of land, including preservation of 12 acres of wetlands.
- Over 38 acres of new public parkland is being created as a result of the project. A Meadow Creek Stream Valley Master Plan will be pursued to inform the use of the public lands in the stream corridor.
- The project is funded by the Virginia Aquatic Resources Trust Fund, an in-lieu-fee agreement between TNC and the U.S. Army Corps of Engineers which establishes a mechanism to provide compensatory mitigation for wetland and stream impacts, while maximizing the benefit to aquatic resources.

The City is very excited to be on the cusp of realizing this incredibly unique opportunity, which has been over five years in the making. The restoration of Meadow Creek will bring a showcase environmental improvement to our community, provide wonderful new educational opportunities, and significantly expand the park system.

For more information on the project, check the Project Website at [www.charlottesville.org/meadowcreek](http://www.charlottesville.org/meadowcreek).