Mission

Capital Trees works to transform Richmond into a greener, more beautiful, more livable city. We advocate for the powerful connection between people and nature.
Vision

Capital Trees envisions a greener, more beautiful Richmond through the thoughtful planning and planting of trees and public gardens, mindful of the city’s extraordinary heritage and location on the banks of the James River.

Capital Trees History

- Since its inception in 2010, Capital Trees, a 501(c)3, has played a crucial role in restoring civic green spaces and reducing storm water runoff that pollutes the James River. By identifying troubled urban landscapes and leveraging private capital and public funds and corporate goodwill among corporate volunteers, Capital Trees works to enhance the aesthetic and environmental health of Richmond, VA.
Capital Trees Project History

- Capital Trees has raised over $600,000 in grants, corporate gifts, private donations and partial match funding from the City of Richmond to meet the needs of its projects initiatives. This public-private funding mechanism has enabled Capital Trees to initiate projects along Cary Street, 14th Street, 10th Street and Dock Street and important civic spaces such as Great Shiplock Park and the RMA/10th Street Plaza.

Our Inspirational Project on Cary St.-
Our Inspirational Project on Cary St.
Lynden Miller on her 2011 visit to Richmond-
What a mentor and inspiration!

Another inspiration- Rachel Flynn

Richmond tree inventory finds them in 56% of available spots
14th Street Initiative

- **Project Limits:** Main Street to Broad Street
- **Total Project Costs:** $380,000
- **Phase I Completion Date:** December 2010
- **Phase II Completion Date:** September 2014
- **Key Site Features:** Improved Plantings, Expanded tree wells, storm water retrofits and bio-retention, pedestrian lighting and educational signage
- **Partners:** City of Richmond, Garden Club of Virginia and its four Richmond Clubs- Boxwood, James River, Three Chopt and Tuckahoe, Virginia Department of Forestry, Cabell Foundation, Mary Morton Parsons Foundation, Robins Foundation, Dominion Power, Luck Stone Corporation, 3north Architects, WaterStreet Studio
Description of storm water facilities

- As storm water sheet flows across the northbound lanes of 14th street and through the proposed curb cuts, the plantings and amended soils allow for increased rates of absorption and nutrient uptake, improving the quality of storm water.

- These cells each serve effectively as storm water detention facilities, slowing the rate of runoff and ultimately the velocity at our outfalls. Runoff passes through each curb cut, is absorbed by the soils and plant material and in peak flows and major storm events that water will rise and fall through a simple system of weirs.

Notes on 14th Street Phase I

- **Project goals to be twofold** – increase urban canopy coverage and improve storm water quality.
- **District**- Wide tree inventory completed to assess condition and aesthetic of specimen plantings
- **Block selection** – concrete canyon, nearly 7% slope with recognizable storm water narrative
- **Removed** 2,380 sf of impervious area
- **Plantings**: swamp white oaks at corners, ginkgos in median and along curb line
  - Continuous planting strips in median and west curb line increase prepared root volume from 800 Cubic Feet to 12,275 CF in this block
- **Bio-retention planters** at east curb line provide storm water quantity and quality benefits.
  - Soil Mix: topsoil, peat, 50% sand, 30% leaf compost, 20% topsoil
  - Drainage area 14,562 sf
  - Pollutant removal rate (phosphorous) = .37 lbs/year
  - Designed to provide water quality treatment for a .5” rain event and quantity reduction for the 1 year storm event.
Project Results:

- Aesthetic enhancements
- Increasing canopy coverage
- Root area, storm water quality improvements, and runoff reductions

14th St Phase I

Before
Before

14 St Phase I- Construction
14 St Phase I- Completed

After

After
14 St Phase I- Bio Retention Cells
14th Street Phase II

Before

14th Phase II

Before
14th Street Phase II- Plan View

Plan View of the Bio Retention Cells
Description of 14th Street - Phase II

- Site is sloped at 5.75%
- Project calls for 1,400 sf of impervious area to be removed from City Right of Way
- Bio retention Cells provide water quality treatment for 15,000 sf of drainage area and are sized to provide 50% total phosphorous removal for the first .25" rainfall.
- Bio retention Cells also provide attenuation for the 2 year storm event
- 6 trees removed (4 dead/dying, 2 removed to accommodate stormwater cells) - 19 trees planted

Great Shiplock Park Renovation Plan in Partnership with Virginia Capital Trail Foundation
Capital Trees at Great Shiplock Park

- **Project limits:** S terminus of Pear Street between Dock St. and the Kanawha Canal
- **Total Project Cost:** $120,000
- **Phase I Completion:** September 2014
- **Phase I Projected Start Date:** Spring 2015
- **Key Site Features:** Enhanced plantings (total of 1300 trees, shrubs and perennials), storm water retro fits and bio-retention, educational signage
- **Project Partners:** Virginia Capital Trail Foundation, Luck Stone Company, the William R. Trigg family, 3north Architects, Waterstreet Studios

Great Shiplock Park

**Before**
Great Shiplock Park

Before

Great Shiplock Park

Before
Great Shiplock Park - Before

GSP Rain Garden - Construction
GSP Rain Garden During Construction

GSP Rain garden

After
GSP Rain Garden

GSP Bio Swale
Educational Signage at GSP

Great Shiplock Park

After
Using Genworth Financial volunteers to help maintain Great Shiplock Park

Daffodils on Dock St.- This is what 10,000 bulbs looks like
Bulb Planting Brigade November 2013

Daffodils at their peak in April 2014
Serendipity!

Prosperity 4 Kids using GSP for summer training
10th Street- Jefferson Greenway

- **Project Limits:** Haxall Point to Bank Street
- **Phase I Limits:** Cary Street to Main Street
- **Phase I Project Cost:** $900,000
- **Phase I Construction Start:** January 2015
- **Key Site Features:** Improved plantings, expanded tree wells, storm water retrofits and bio retention, pedestrian lighting, site furnishings, crosswalk enhancements, educational signage

- **Project Partners:** City of Richmond, Alliance for the Chesapeake Bay, Altria Corporation, 3north Architects, Waterstreet Studios

A Partnership with Alliance for the Chesapeake Bay
Site Plan - Jefferson Greenway

A Section View of the Bio Retention Cells
Another Cross Section of one Block of Jefferson Greenway

Before and Conceptual After Pictures for Jefferson Greenway
JG Phase I

Before

JG Phase I- Conceptual Drawing

After
The Low Line

- **Project Limits:** Canal Walk to Great Shiplock Park between the Kanawha Canal and Dock St.

- **Project Budget:** TBD

- **Phase I Construction Start:** September 2014

- **Key Site Features:** Native plantings, enhanced canal and skyline views, storm water retrofits and bio-retention, canal overlooks, canal boardwalks, pedestrian lighting, seating and site furnishings, crosswalk enhancements, educational signage, interpretative public art, Floodwall Park/Green Space

---

The Low Line Site

*Before*
Canal Boats Running by The Low Line

Clearing of The Low Line in Progress
The Low Line Story Board

The Low Line Park - Proposed Condition
The Low Line and Capital Trail - Proposed Condition

The Low Line - Proposed Condition
The Low Line Gardens- Proposed Condition

The Low Line Dock Walk- Proposed Conditions