

# PETERSBURG WALKABLE WATERSHED CONCEPT PLAN

## Overview

The purpose of the Petersburg Walkable Watershed project is to develop a shared vision and set of strategies to address flooding and improve quality of life for the Robert E. Lee (REL) neighborhood.

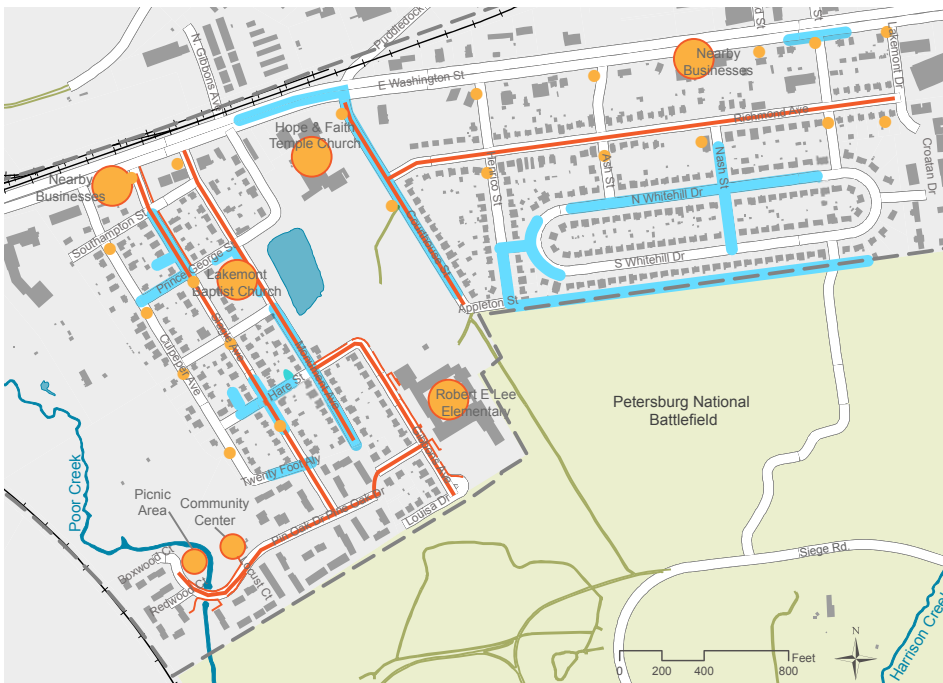
This concept plan is based on a walkable watershed approach, which integrates the flow of water and people into a cohesive strategy to improve the overall health of a community and the surrounding watershed. This approach is based on the idea that high-quality water goes hand-in-hand with a high quality of life, supporting access to the outdoors, enhanced community infrastructure and services, and increased health.

## Existing Conditions

The REL neighborhood is a quiet residential area, which is home to several churches, nearby businesses and REL Elementary. However, the neighborhood experiences regular flooding in their streets and yards, littering along streets and have few sidewalks or public gathering spaces.



Rain that falls within Poor Creek watershed (shown in blue) flows to Poor Creek or Harrison Creek, then to the Appomattox River and ultimately the Chesapeake Bay.



### Existing Condition Analysis

Petersburg Walkable Watershed  
Robert E. Lee Neighborhood

*For planning purposes only.*

- Community Destinations
- Transit Stops
- Primary Routes
- Existing Sidewalks
- Resident Reported Flooding

## Community Priorities

At a community meeting held during the REL Neighborhood Watch Association's monthly meeting, residents identified the following community priority challenges. Priorities highlighted in **bold** represent top priority areas for participants:

- Few sidewalks
- Few play areas
- **Flooding in streets and yards**
- Littering on streets
- Few areas to walk and interact with nature or the creeks
- Perception and awareness of creeks
- **Public safety**
- **Speed of traffic**
- Few public gathering places
- **Home ownership**
- **Street lighting**
- Distance to nearest grocery store
- Few trash cans

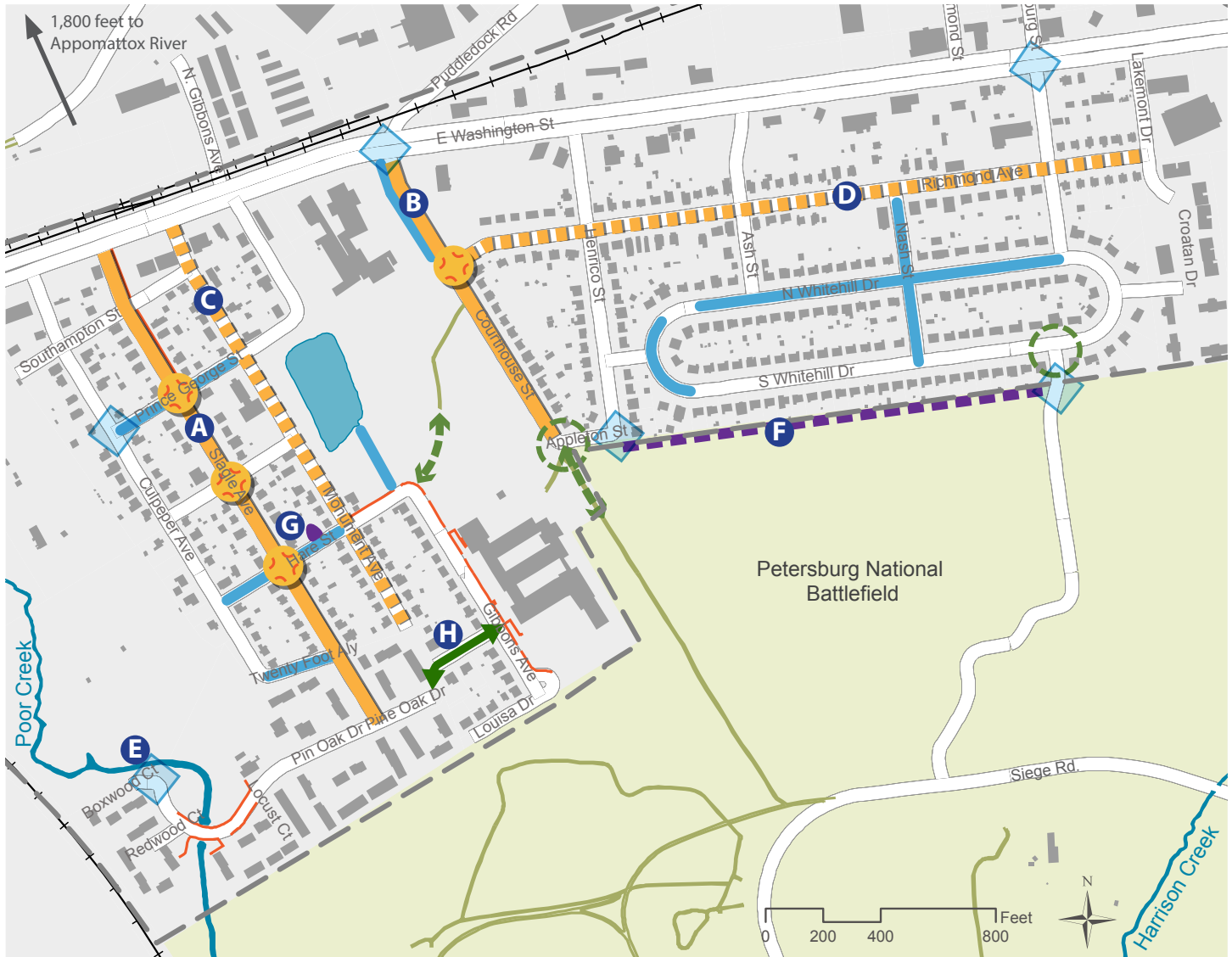
## Project Partners

*This project is made possible by a grant from the National Fish and Wildlife Foundation.*



The Walkable Watershed Concept Plan on the following page identifies opportunities to begin to address community priorities.

# CONCEPT PLAN



## On-Street Opportunities

### Sidewalks and Natural Drainage

- Primary Route
- - - Secondary Route

### Safe Crossing

- Intersection Retrofit

### Natural Drainage Retrofit

- Swales

### Existing Infrastructure

- ◇ Stormwater Infrastructure Improvements

## Off-Street Opportunities

### Natural Drainage Retrofit

- - - Planted Buffer or Rain Garden
- Rain Garden

### Trails

- - - Connect to Existing Trails
- On-Street Route
- Trailhead Access

- Existing Sidewalks
- Existing Trails



Example of how grassy swales along streets without sidewalks could address on-street flooding by providing holding space for stormwater during rain events.

## Reduce Flooding through Natural Drainage and Complete Streets

### Primary Routes

- A Slagle Avenue** - Add sidewalk on side of street to connect with new sidewalk. Narrow traffic lanes to help slow traffic. Integrate natural drainage strip between sidewalk and streets to absorb stormwater. Include on-street parking on one or both sides of street.
- B Courthouse Avenue** - Widen swale on east side of road. Clean and maintain storm drains. Consider upgrading drainage pipe at at Courthouse and Appleton.

### Secondary Routes

- C Monument Avenue** - Consider installing a drainage swale on the west side of the street to allow stormwater to drain off the road and away from homes.
- D Richmond Avenue** - Add pedestrian safety amenities, such as sidewalks, or natural drainage strip where feasible.



### Safe Crossings - Intersection Retrofit

Add natural drainage strategies like a vegetated traffic circle and/or bioretention curb extensions. Integrate bus stop and amenities such as trash cans. Add crosswalks to slow traffic at intersections.

### Swales

Consider installing grassy swales to catch and hold stormwater during major rain events to reduce flooding.



### Stormwater Infrastructure Improvements

- E Boxwood Court** - Consider moving trash dumpster to reduce trash and litter entering Poor Creek.

**Pin Oak, Appleton, National Battlefield fire road, and Prince George** - Inspect, repair and maintain storm inlets. Consider updating infrastructure to accommodate possible increase in runoff to reduce flooding.

### Planted Buffer or Rain Garden

- F** Coordinate with National Battlefield (NPS) to install a swale or buffer to address flooding in backyards along Whitehill Drive.

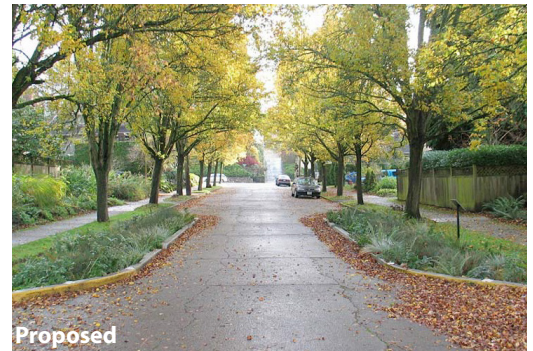


### Rain Garden

- G** Consider installing rain garden off Hare Street to reduce on-street stormwater flooding backyards and alley.



Existing



Proposed

Example of how curb extensions, street parking, and vegetation between sidewalk and street could be added along Slagle Avenue.



Planted Swale Example

## Integrate Public Safety and Enhance Connectivity

### Connect to Existing Trails

Improve walkability and access to community amenities by connecting to other trails and creeks in open space between pond and REL Elementary and at National Battlefield access area.

### Trail Connecting Pin Oak and Gibbons

- H** Improve route amenities such as overhead lighting and connect to existing trails to create neighborhood walking loop.

## Foster Neighborhood Stewardship

Community Programs (see next page)



## Potential Community Programs

### Adopt a Drain Program

Develop an 'Adopt a Drain' program, modeled from other programs around the country. Residents adopt a drain and help keep it clear of trash and debris and report any issues to the City. The program connects residents with their local utility staff. The neighborhood's ~70 drains could be adopted by resident volunteers. Tools could be provided including rakes, brooms, trash bags, safety vests and shovels could be requested via grants.

### Litter and Debris Reduction

Coordinate with community organizations on education and outreach on:

- promoting litter prevention and removal
- organizing community clean up days
- installing public trash cans and signs that celebrate Poor Creek, Harrison Creek and the Appomattox River.

### Public Art as Cue to Care/Education

Work with local artists to design storm drain art to illustrate that rainwater drains to local waterways. Engage residents in the design and identifying key locations for storm drain art and/or storm drain markers.



Example of storm drain art.

## Additional Natural Drainage Examples



### Safe Crossings - Intersection Retrofits

Vegetated residential traffic circle and curb extensions at intersections are natural drainage strategies that reduce traffic speed to increase pedestrian safety and improve stormwater management.



### Swale and Rain Gardens

Planted areas that can hold, absorb or slow the flow of stormwater can address flooding concerns while also providing aesthetic benefits. The rain garden pictured above is located at City of Charlottesville High School and also provides environmental education opportunities.

## Next Steps

- **Finalize Concept Plan**
- **Pursue Drainage Study**

## Principles for Implementation

- **Grow Community Stewardship** - Continue to grow and foster community stewardship through outreach, education and opportunities for community involvement.
- **Engage Youth** - Build on existing youth programs and initiatives to engage youth in environmental education opportunities. As projects move forward, invite youth to participate in the design process and in the designing and building of outdoor play and learning areas.
- **Build Partnerships** - Strengthen existing and develop new partnerships between federal, state and local governments and community organizations for implementation and stewardship.
- **Seek Funding** - Develop a plan to seek funding, including a list of potential grants and associated deadlines. Assemble teams early to develop winning proposals. Continue to seek opportunities that cross programs and initiatives to leverage funding for projects.
- **Phase Projects Over Time** - While some recommendations may be implemented in the near term, some projects will need to be phased over time. Develop an action list to coordinate initiatives and projects among partners. Continue to refine ideas during the design process.
- **Celebrate Successes!** - Sustain momentum and support by celebrating successes along the way.