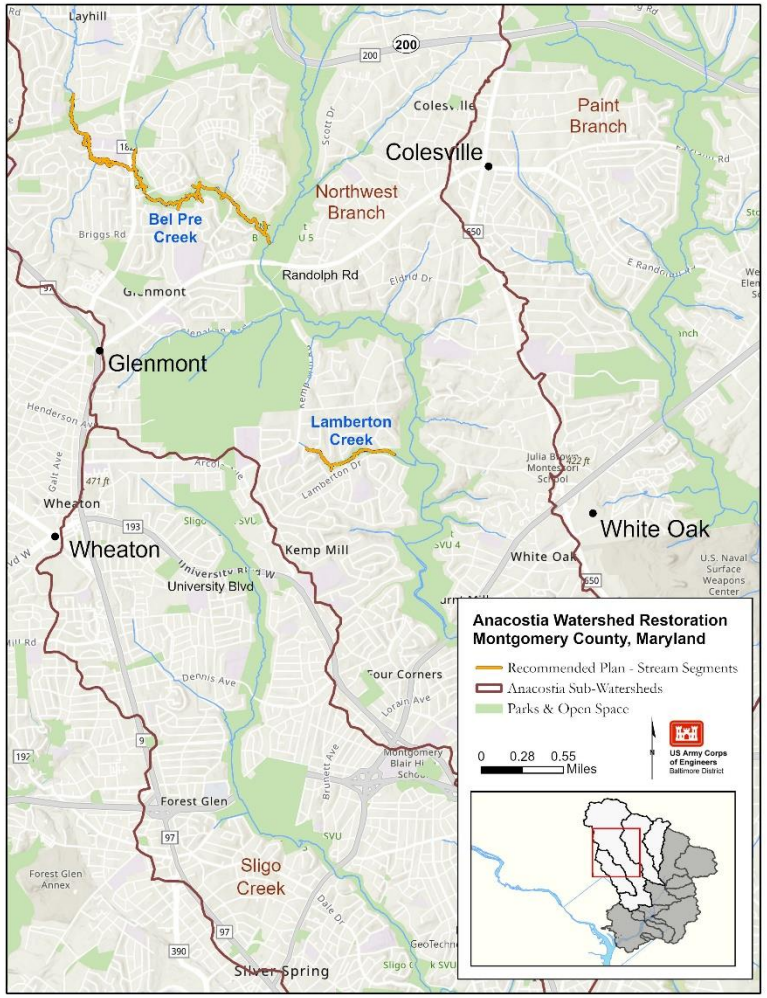
ANACOSTIA WATERSHED RESTORATION - MONTGOMERY COUNTY CONTINUING AUTHORITIES PROGRAM SECTION 206

DRAFT INTEGRATED FEASIBILITY STUDY & ENVIRONMENTAL ASSESSMENT

Public Involvement and Agency Coordination Meeting



Presented by:
Luis Santiago
U.S. Army Corps of Engineers
Baltimore District
April 2025

"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

U.S. ARMY

US Army Corps of Engineers®
Baltimore District

AGENDA

Presentation by Army Corps Staff (30 minutes)

- Study Goals and History
- Study Area
- Problems and Study Objectives
- Existing Conditions of the Selected Creeks
- Design Approach for Selected Creeks
- Recommended Plan and Proposed Project Extents
- Study Schedule

Questions & Opportunity for Public & Agency Comments (60 minutes)

- Speakers will be allowed 3 minutes to make comments or ask questions

STUDY GOAL

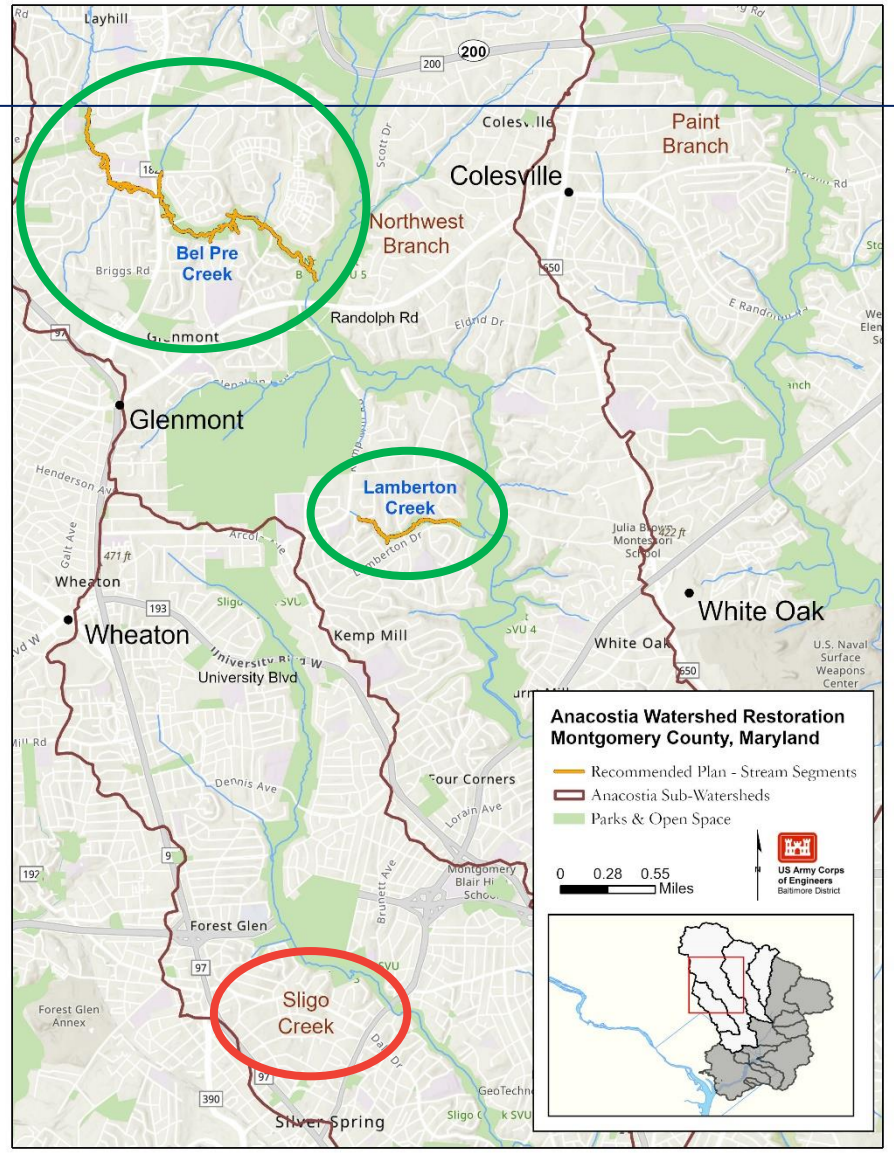
The goal of this study is to provide a solution in the Anacostia River watershed in Montgomery County that will restore ecological function, structure, and health in selected stream reaches and riparian zones and those areas downstream affected by restoration actions.

STUDY SCOPE AND HISTORY

- 2010 – Anacostia Restoration Plan – Identified over **304 aquatic ecosystem restoration projects** in Montgomery County.
- 2014 – USACE partnered with the Montgomery County Department of Environmental Protection (MCDEP) to conduct a General Investigation Feasibility Study. This feasibility study focused on **seven tributaries** of the Northwest Branch of the Anacostia River.
- 2015 – USACE identified **Lamberton, Bel Pre, and Sligo** tributaries as the study recommendation
- 2020 – USACE and MCDEP initiated this Feasibility Study with MCDEP as the non-Federal sponsor.

STUDY AREA

- Anacostia River watershed spans approximately 176 square miles
- Entirely located within Washington D.C. Metropolitan Area
- This project focuses on the Montgomery County portions of the watershed
- Three tributaries studied:
  Bel Pre Creek, Lamberton Creek, and Sligo Creek
- Sligo Creek – Planned for implementation for asset protection and rehabilitation by the Washington Sanitary Sewer Commission (WSSC)
- **Two Selected Tributaries:**
  Bel Pre Creek and Lamberton Creek

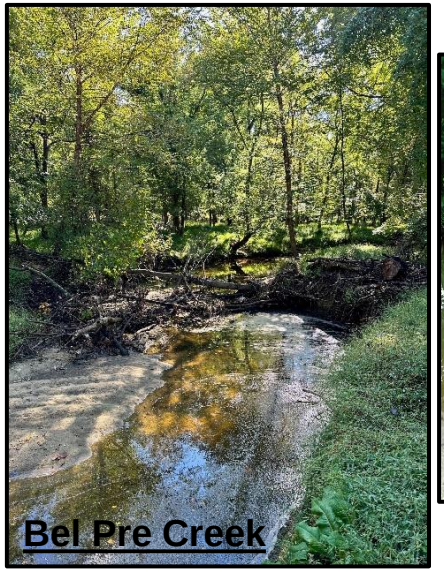


DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

U.S. ARMY
US Army Corps of Engineers®
Baltimore District

PROBLEMS

- Bel Pre Creek and Lamberton Creek are tributaries of the Anacostia River and their riparian zone has been changed by the human alteration of the natural landscape.


Bel Pre Creek


Bel Pre Creek

- Channel bank instability leads to:
  - Erosion of the channel bank
  - Bypassing of the channel
  - Exposed infrastructure along the stream
  - Excess sedimentation

- Floodplain wetlands are impacted as stream cuts into the floodplain, causing loss of water within the wetlands.

- Urbanization within the watershed leads to flooding, high stormwater velocities, poor water quality, poor instream habitat, invasive species introduction, and floodplain disconnection.


Lamberton Creek

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

U.S. ARMY
US Army Corps of Engineers®
Baltimore District

OBJECTIVES

This study's planning objectives describe the desired results from addressing identified problems and include:

1. Restore in-stream habitat and associated ecosystem function in Bel Pre Creek and Lamberton Creek.

2. Restore the natural range of resident fish in Bel Pre Creek and Lamberton Creek.

3. To the extent practicable, re-establish hydrologic connection of the streams to the floodplain along stream restoration reaches.

4. To the extent practicable, restore floodplain wetlands.

5. Stabilize stream channels to reduce the supply and transport of sediment to downstream receiving waters.

EXISTING CONDITIONS – BEL PRE CREEK

Bel Pre Creek, Bel Pre Neighborhood Park, October 2021

Sediment buildup in Bel Pre Creek, October 2021

Existing Conditions of Bel Pre Creek

- Heavily forested
- Multiple forested wetlands
- “Fair” Benthic environment rating
- Degraded habitat located in multiple segments along the stream

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

U.S. ARMY
US Army Corps of Engineers®
Baltimore District

EXISTING CONDITIONS – LAMBERTON CREEK

Lamberton Creek, October 2021

Lamberton Creek, October 2021

Existing Conditions of Lamberton Creek

- Heavily forested
- Small drainage basin area: 0.56 square miles
- “Poor” Benthic environment rating
- Areas of significant erosion, incised stream banks

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

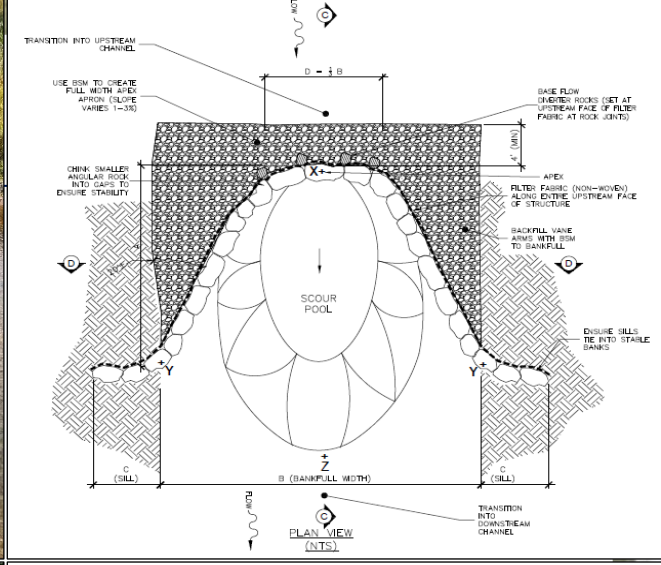
U.S. ARMY
US Army Corps of Engineers®
Baltimore District

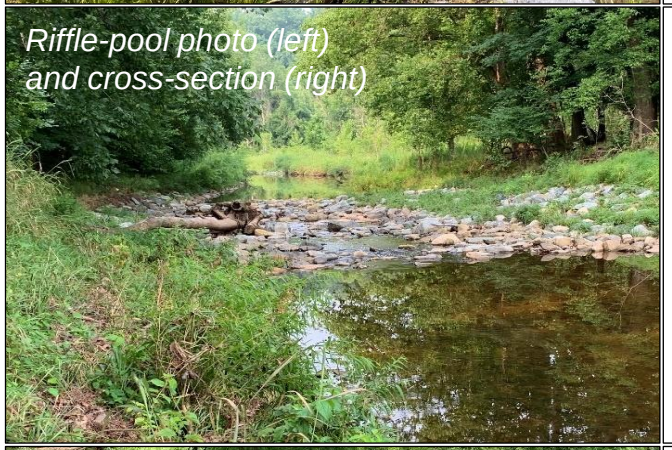
DESIGN APPROACH

The approach to developing the natural channel design for each stream include the following features:

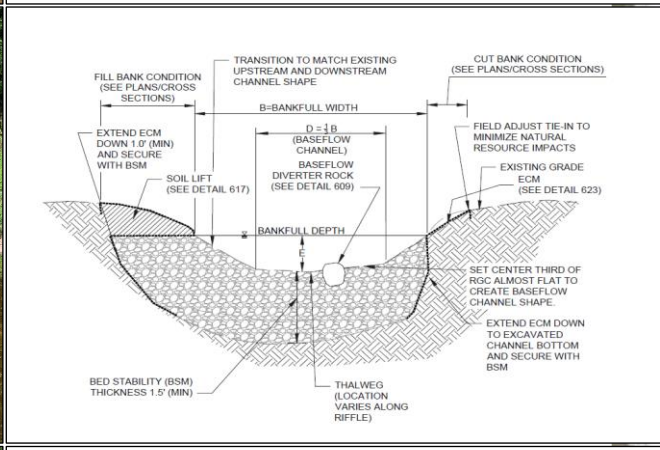
- A combination of grading, rock placement, and using existing bedrock along the existing stream
- Consistently lift the channel and provide grade control using constructed riffles, pools, cross-vanes and j-hooks along the stream
- Provide floodplain enhancements via grading, plantings of native shrubs and tree species, incorporation of woody habitat, and management of non-native invasive species using best practices
- Natural channel design approaches may be limited in areas where existing infrastructure including water and sewer mains are present. In these areas the design will incorporate protection of the existing infrastructure and long-term stabilization of the stream bed and banks
- Specific locations of features will be identified during the design phase following a survey

Cross-vane photo (left) and plan view (right)

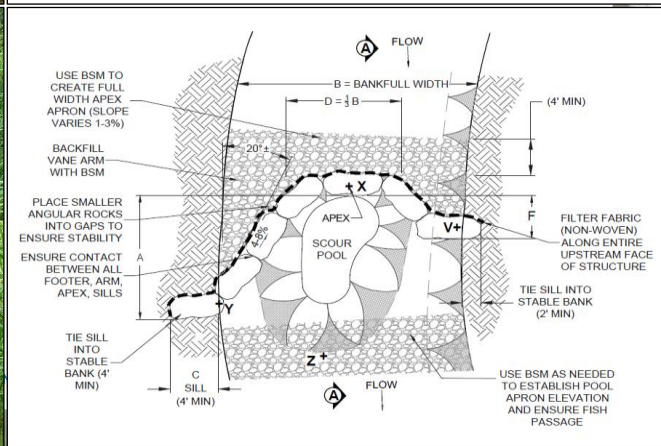




Riffle-pool photo (left) and cross-section (right)



J-hook photo (left) and plan view (right)



RECOMMENDED PLAN

The Recommended Plan is a natural channel design approach for the two streams:

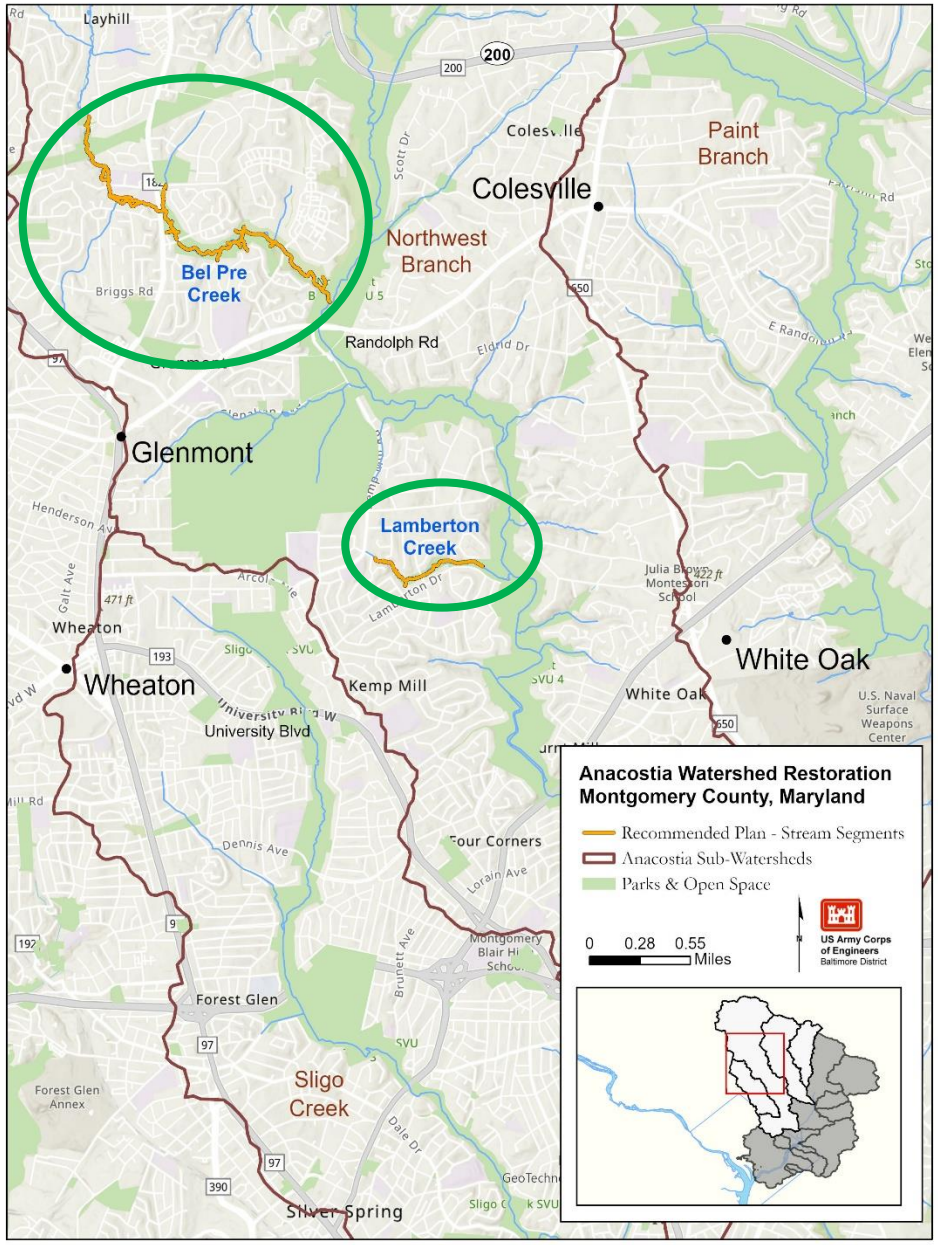
Bel Pre Creek & Lamberton Creek

The Recommended Plan:

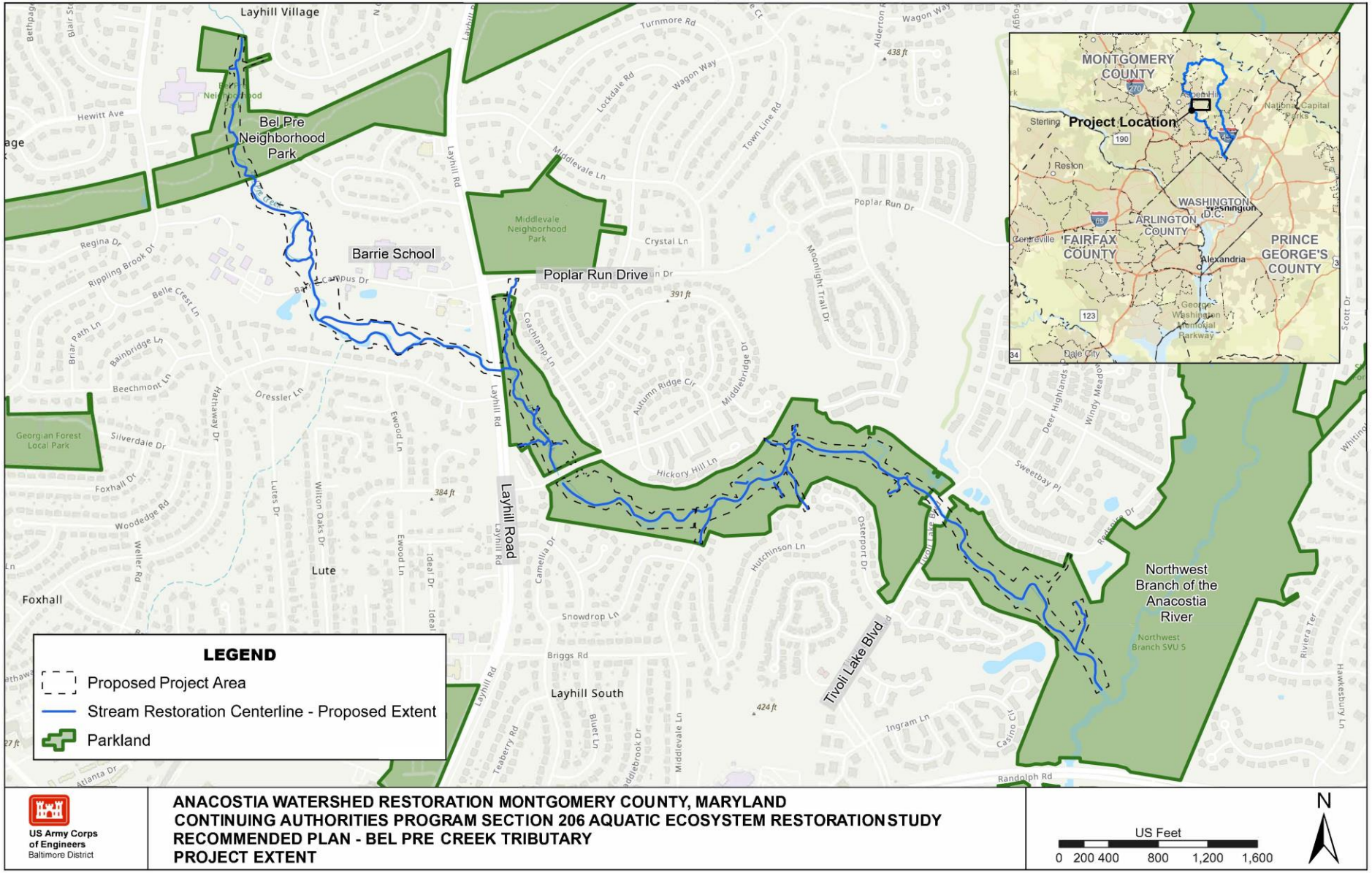
- Restores 3.2 miles of in-stream habitat
- Restores fish passage for resident fish species in both tributaries
- Improves benthic habitat
- Improves fish habitat
- Improves water connectivity to floodplain wetlands
- Creates management plan to remove invasive species and replace with native species
- Creates educational opportunities on stream restoration for Barrie School and local public schools

Site	Length (miles)	Total Project Cost*
Lamberton Tributary	0.7	$4,214,000
Bel Pre Creek	2.5	$14,684,000
Total	**3.2**	**$18,898,000**

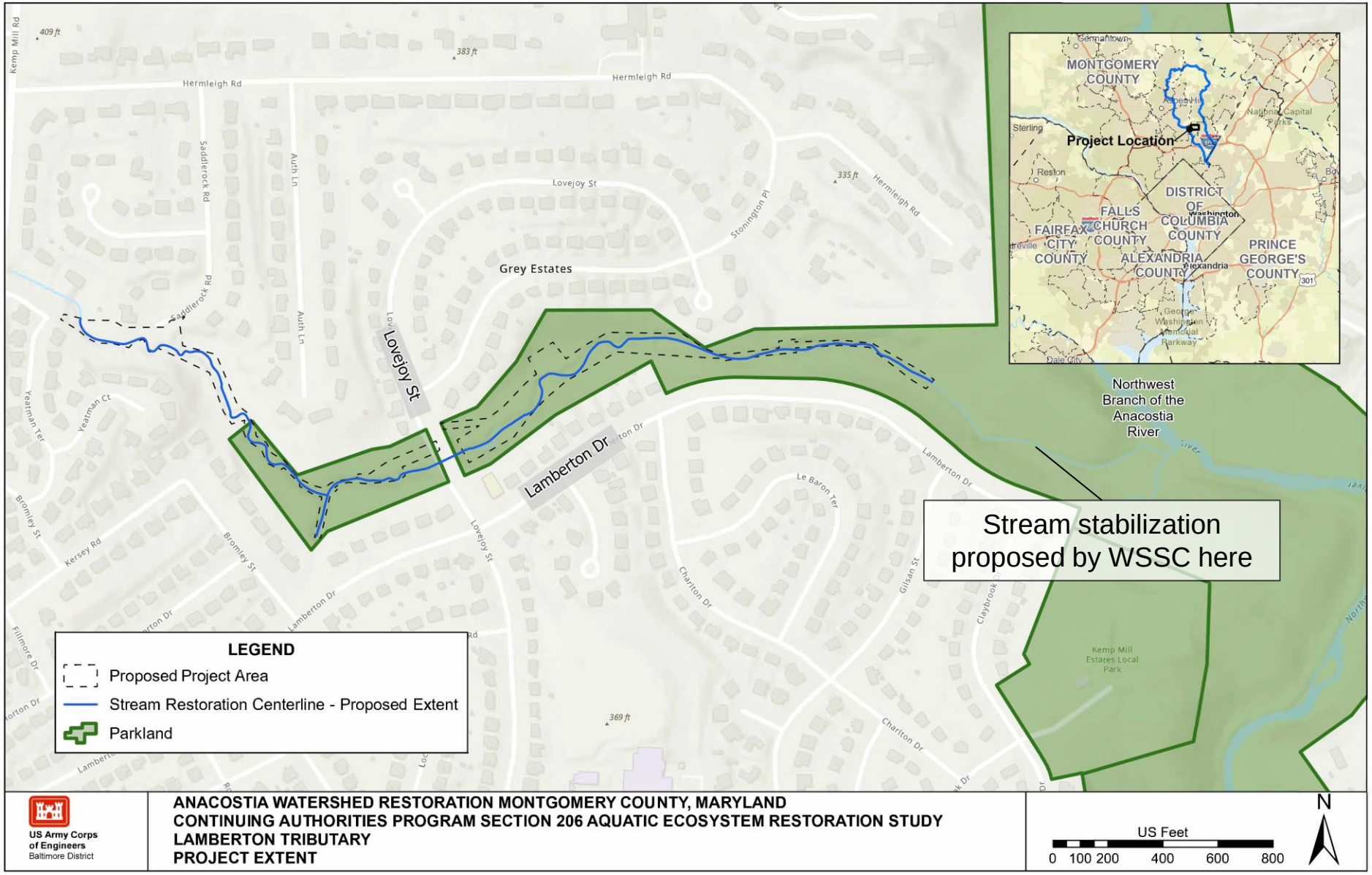
*Total Project Cost includes real estate, design, construction management, construction, monitoring and adaptive management costs.



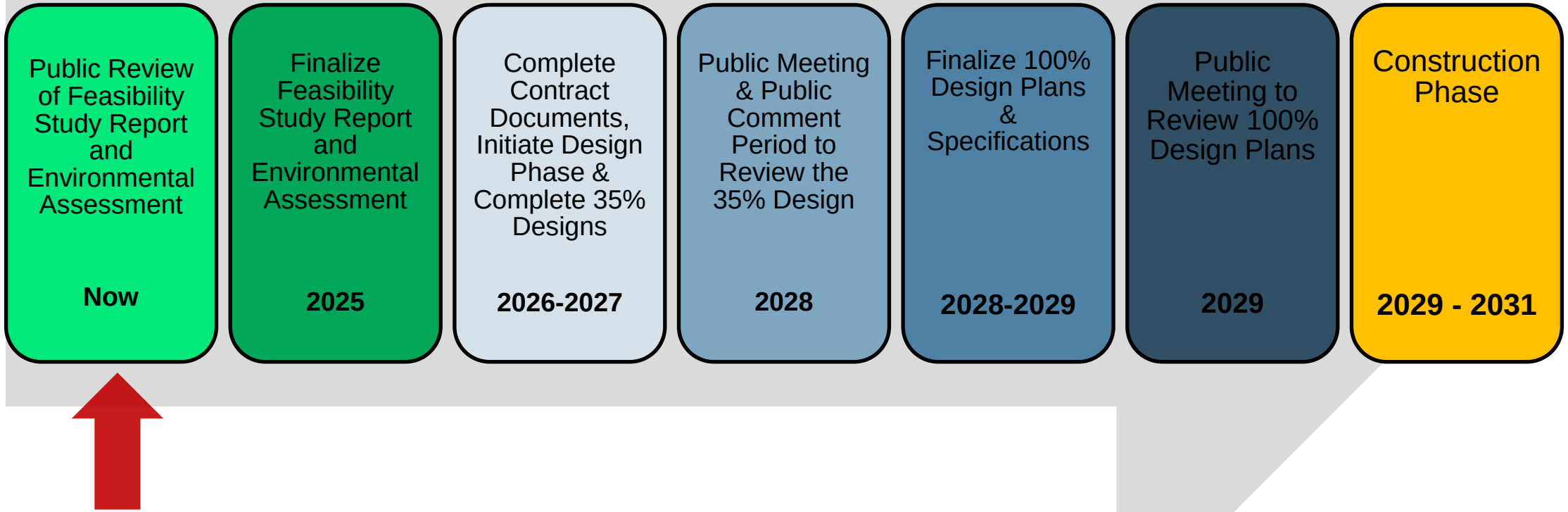
PROPOSED PROJECT EXTENT – BEL PRE CREEK



PROPOSED PROJECT EXTENT – LAMBERTON CREEK



STUDY SCHEDULE – TO BE UPDATED



QUESTIONS AND COMMENTS

Submit comments via mail or e-mail by **May 30, 2025** or reach out to us.

Mailing Address:
U.S. Army Corps of Engineers,
Baltimore District, Planning Division
Subject: Montgomery County Study
2 Hopkins Plaza
Baltimore, Maryland

E-mail: CENAB-MOCOCAP@usace.army.mil

DEPARTMENT OF ENVIRONMENTAL PROTECTION
MONTGOMERY COUNTY • MARYLAND

U.S. ARMY
US Army Corps of Engineers®
Baltimore District