Anacostia River & Oxon Run Watershed Stream Restoration Projects

September 20, 2023



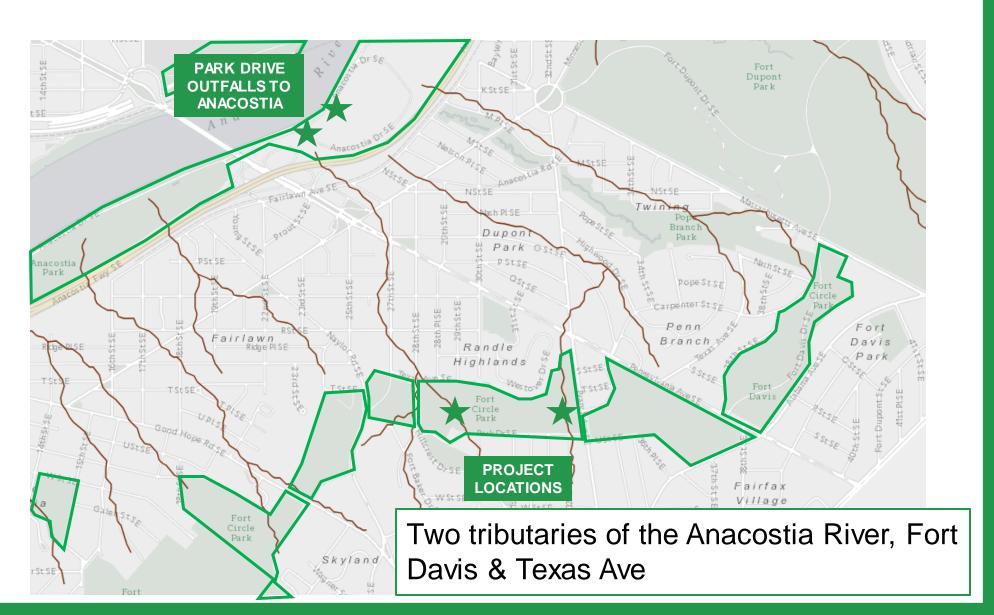




Park Drive Stream Restoration

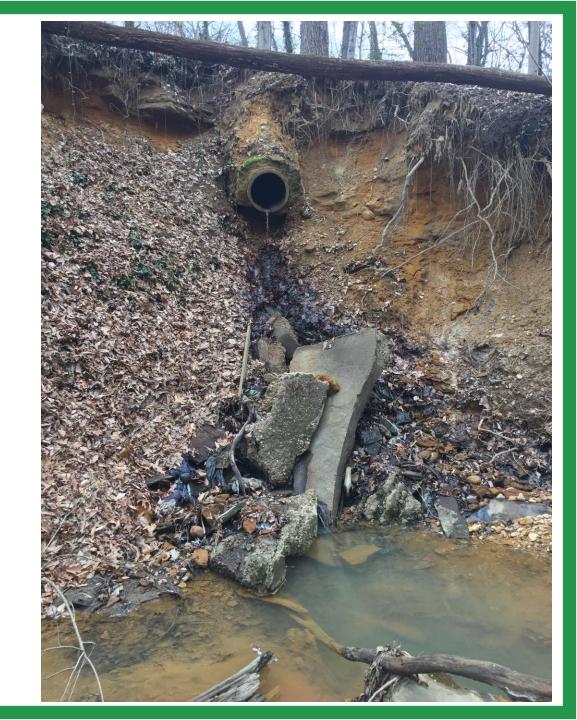
NPS park boundaries

— Historical stream network



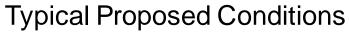
Park Drive - Existing Site Conditions

- Active streambank erosion and channel incision are occurring within the stream segment.
- Headcuts are occurring at the tributaries and drainage channels primarily from unmanaged stormwater flows.
- Collapsing stormwater outfalls and head cutting back toward roadways.
- Trees along the stream have fallen due to channel widening.
- Trash and debris are dumped into the site from the roadway and enter the site via the stormsewer system.
- Japanese knotweed, a highly invasive plant species, has overtaken an area along Park Drive near Site 2.



Expected Changes Post Restoration

Existing Site Conditions







Restoration Design Approach – Construction Access



PARK DRIVE GULLY OUTFALL AND STREAM RESTORATION

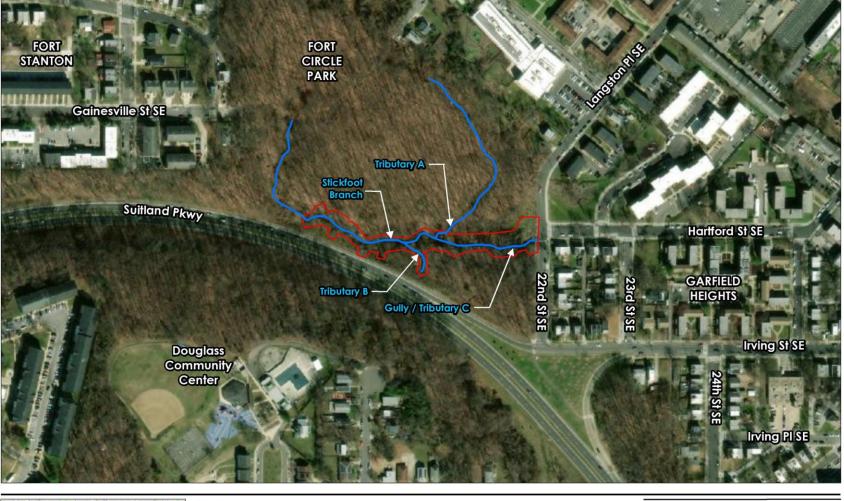
TEXAS AVE & FORT DAVIS GULLY - PROPOSED CONDITION VICINITY PLAN WASHINGTON, DC

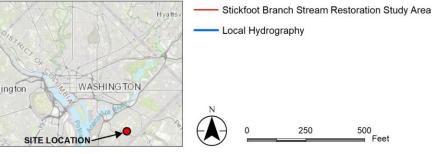






Stickfoot Branch





Stickfoot Branch
Stream Restoration Project

Figure No.

Study Area Map



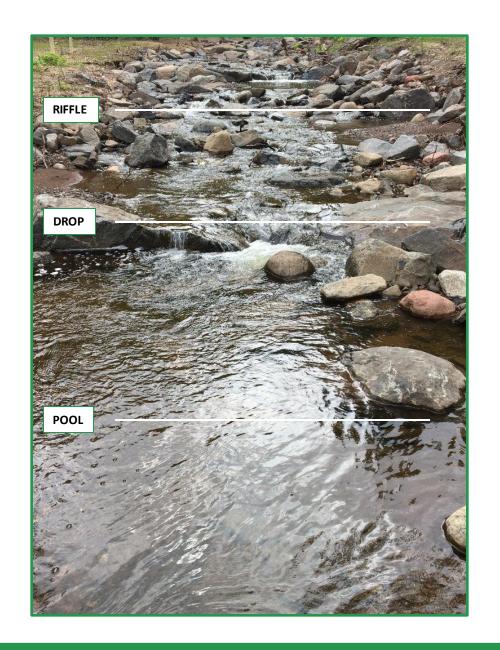
Stickfoot Branch - Existing Site Conditions

- Active streambank erosion and channel incision are occurring within the stream segment.
- Headcuts are occurring at the tributaries and drainage channels primarily from unmanaged stormwater flows.
- Concrete encased sewer lines that cross Stickfoot Branch have become exposed.
- Trees along the stream have fallen due to channel widening.
- A large gully has formed on the embankment of 22nd
 Street SE due to unmanaged stormwater flows.
- Kudzu, a highly invasive plant species, has overtaken the northeast portion of the study area.

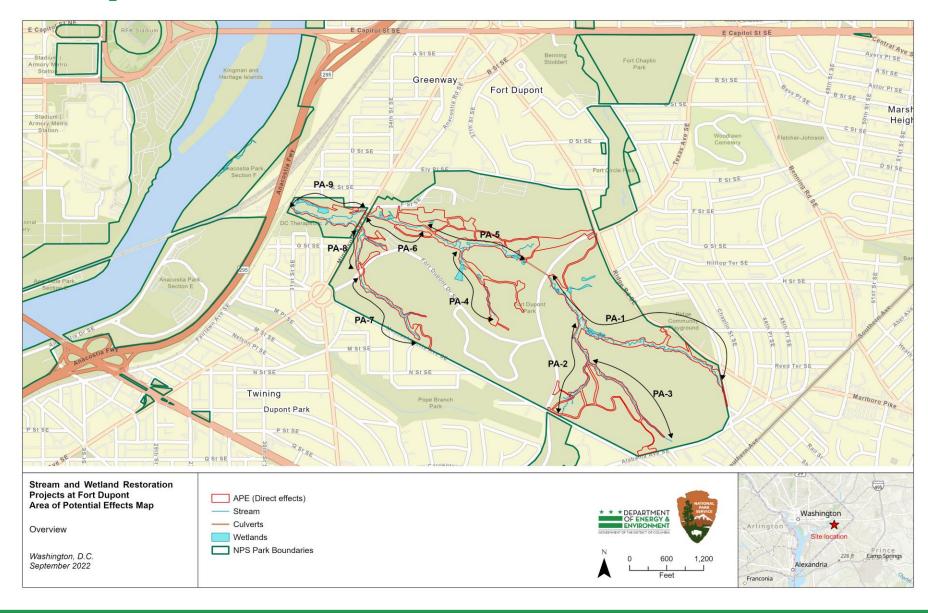


Restoration Design Approach

- Restore Stickfoot Branch using a roughened channel design approach that mimics natural stream channels
- Install buried boulder sills to prevent channel downcutting and to protect sewer infrastructure
- Place rocks to promote flow diversity (drops, pools, and riffles)
- Remove piped sections of stream to increase length of natural channel design
- Restore side tributaries and drainage channels
- Implement invasive species management practices to control kudzu



Fort Dupont Stream & Wetland Restoration



Fort Dupont Existing Conditions

Active, extreme streambank erosion and channel incision are occurring within the stream segment.

Headcuts are occurring at the tributaries and drainage channels primarily from unmanaged stormwater flows.

Aging infrastructure within the stream valley are being impacted by stream channel instabilities.

Trees along the stream have fallen due to channel widening.

Down cut stream channels are functioning as drainage gullies; dewatering wetlands and degrading stream habitat

Several species of highly invasive plant species have overtaken portions of the project area.

Sewer line infrastructure that cross Fort Dupont Creek have become exposed.



Restoration Design Approaches Overview

- Restore Fort Dupont Creek using a baseflow channel/floodplain reconnection approach that mimics natural stream channel functions
- Install grade stream control structures built from materials naturally found in coastal plain stream channels such as wood, gravels and cobbles to stabilize the stream.
- Ensure a diversity of habitat conditions within the stream to improve the aquatic resource
- Daylight sections of the stream that are currently piped
- Plant a variety of native trees, shrubs and herbaceous plants
- Implement invasive species management practices to control the spreads of non-native invasive plants

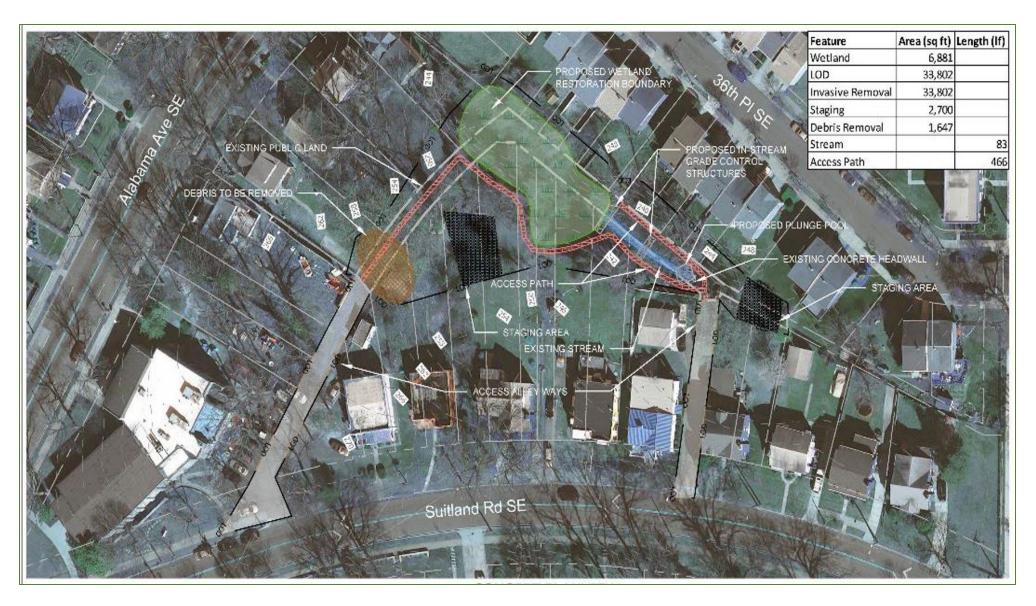


36th Pl. SE Wetland Restoration

- Small Wetland & Stream Complex
- Relatively flat center area with steeper side slopes
- Invasive Plant Species
- Debris at upstream end of project area



36th Pl. SE Wetland Restoration



Oxon Run Stream Restoration & Park Master Plan





Project Schedules

Project	Current Status	Expected Construction Start
Park Drive	Permitting	November 2023
Stickfoot Branch	Construction Solicitation Development	Summer 2024
Fort Dupont	EA Public Comment	Summer/Fall 2024
Oxon Run	Designs/Pre-NEPA	TBD
36th Pl. SE Wetland	Designs	May 2024