

Plenary 6: Flood Policy and Storm Water Management

Day 2 -
Guam Assembly of Planners Symposium

Catherine McCall, Maryland Coastal Management Program



Stormwater Management in Maryland



**Total
Maximum
Daily Load**

**Stormwater
Management
Practices &
MS4**

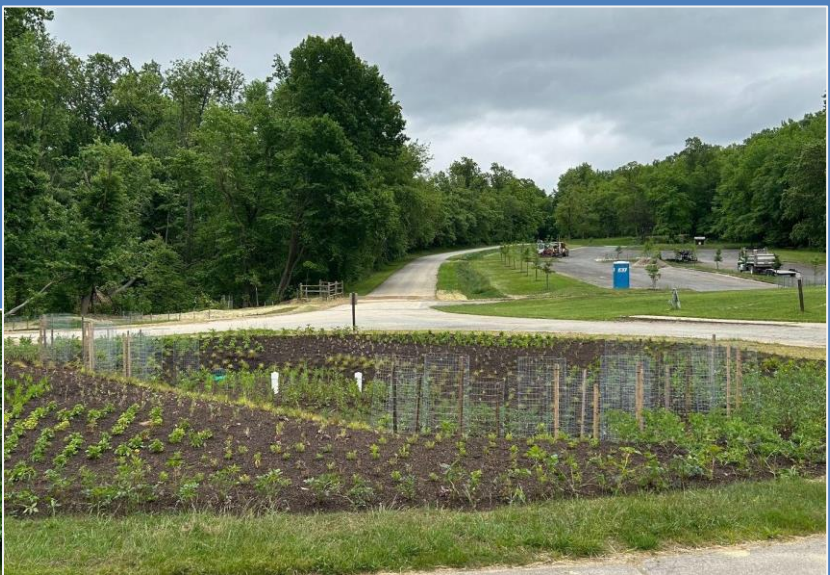


Community Resilience Partnerships

Fund Source: NOAA-CZM (Federal)

Building Flood Resilience:

Reducing coastal and precipitation-based flood risks to build community resilience to climate change



Trust Fund & Resiliency through Restoration

Fund Sources:
NOAA-CZM (Federal); Maryland Trust Fund and Resiliency through Restoration (State)

NonPoint Source & Resilient Restoration:

Accelerate recovery and restoration of natural resources and reduce community flood risk by implementing nonpoint source and resilient restoration projects.

City of Hyattsville: Lower Ward 1 Resilient Stormwater Planning Study

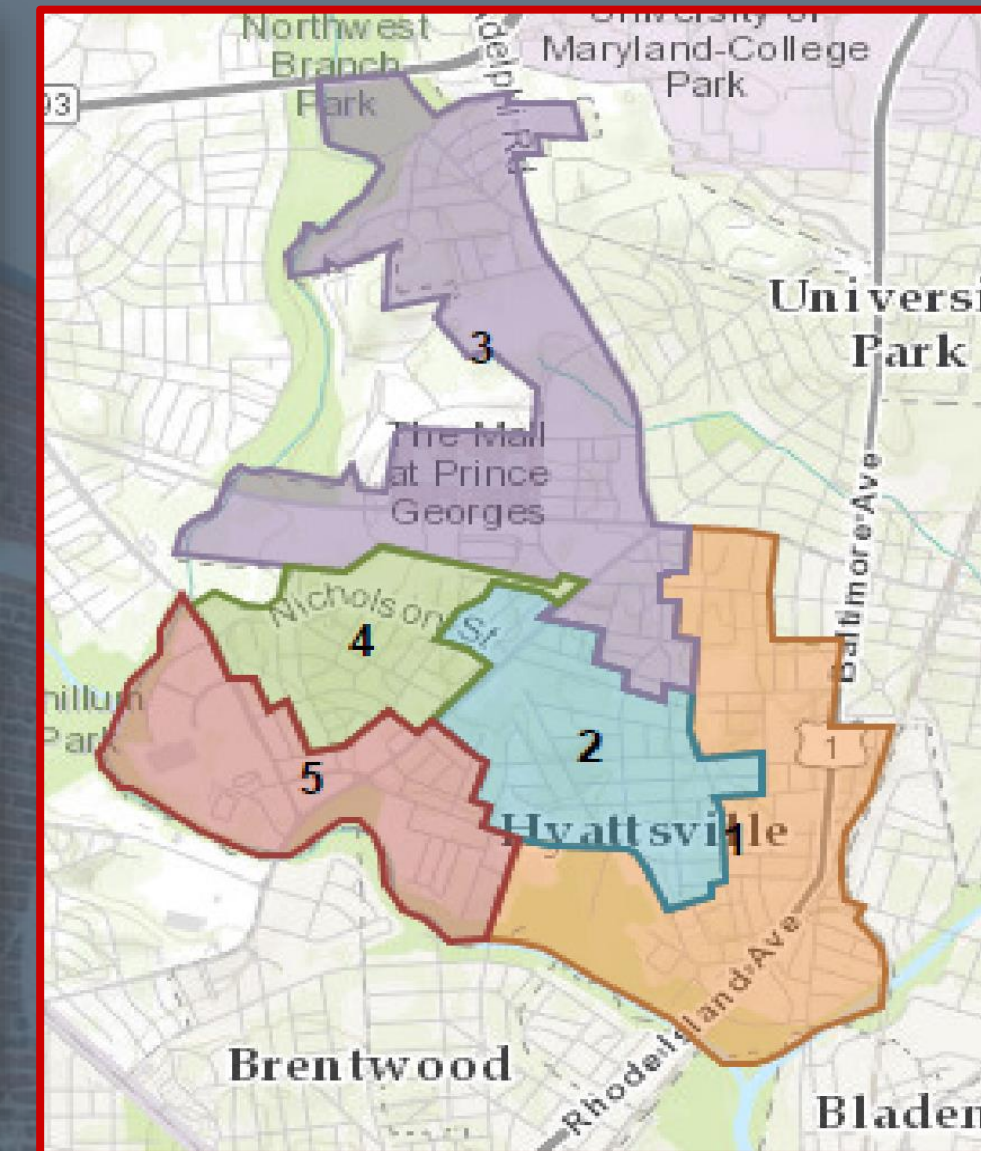
Project Partners:



Low Impact
Development
Center

Weston & SampsonSM

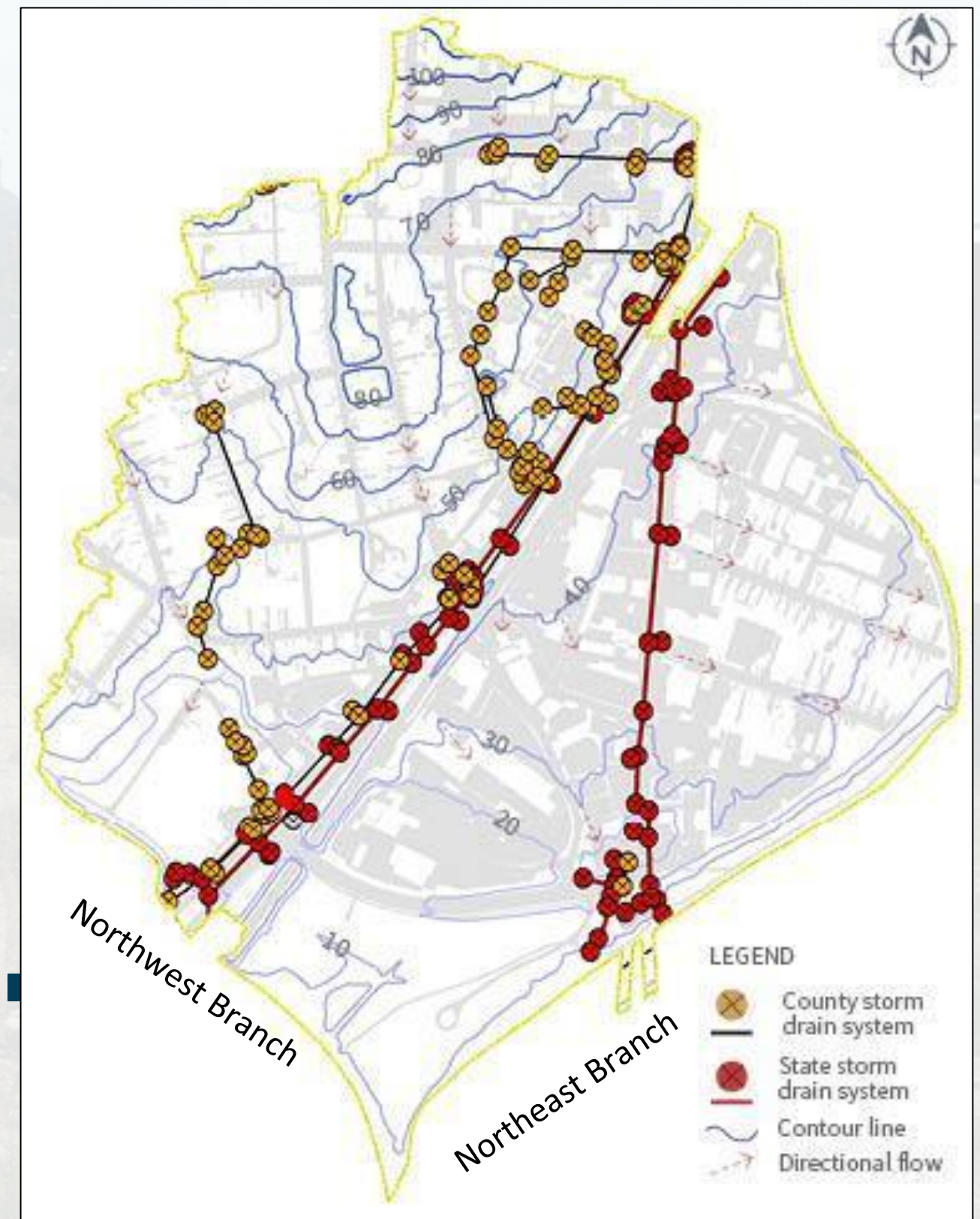
Funding Partners:



Challenge 1: Limited Grey Infrastructure Information

168-acre study area

- ✓ Defined by topography & existing grey infrastructure
- ✓ Areas draining to Northeast & Northwest branches of the Anacostia River



Challenge #2: Understanding Precipitation Trends & Modeled Rainfall

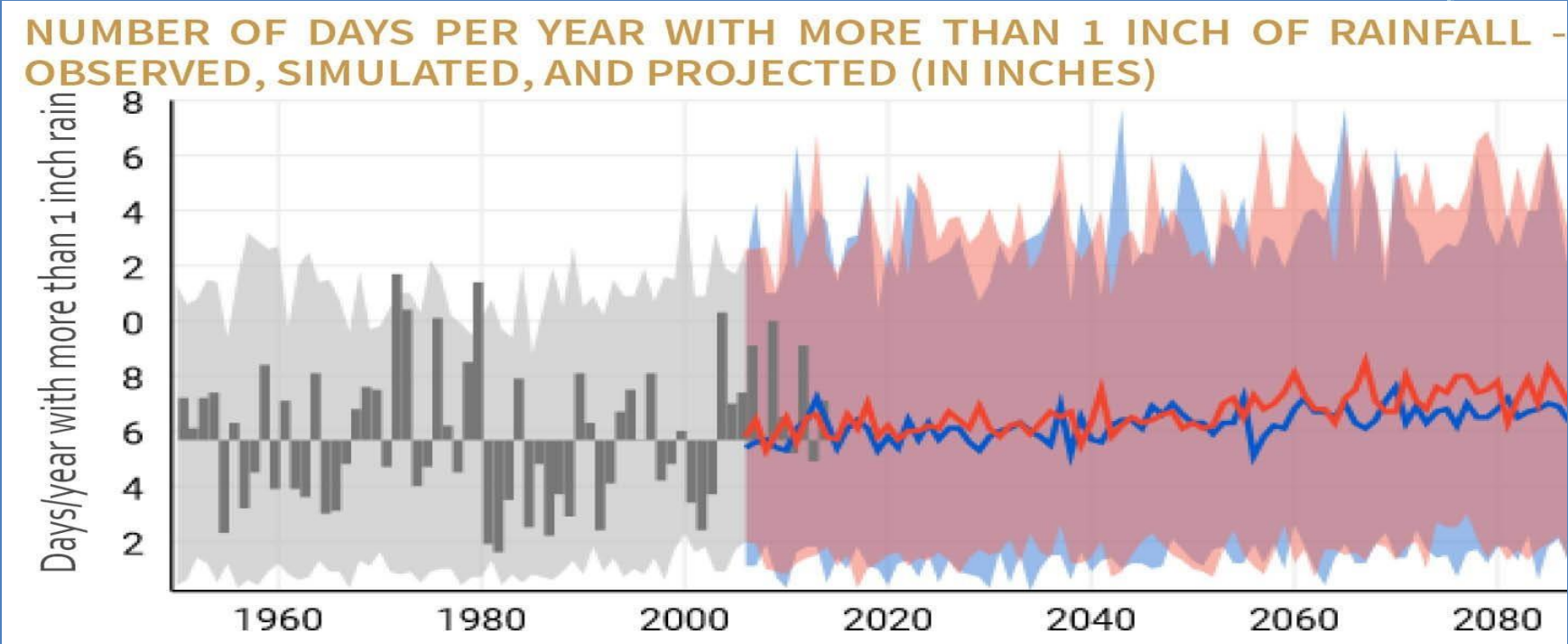
Current

Frequency – Duration	6-hr	24-hr
10-year	3.35	4.88
50-year	4.69	7.20

Future

Frequency – Duration	6-hr	24-hr
10-year	4.19	6.10
50-year	5.86	9.00

25% Increase



Project Deliverables

- Mapped stormwater network
- Identified retrofit opportunities

IDENTIFIED RETROFIT OPPORTUNITIES

Id	Project name	Location	Localized Flood Reduction Benefit	Water Quality Benefit	PRIORITY	Time frame	COST ESTIMATE design + install
1	41st Place storm drain inserts	41st Pl. at Emerson; 41st Pl. at Decatur St.	Minimal	Medium	Low	Mid- to Long-term	\$10,000 - \$12,000
2	41st Street outfall protection	41st St. from 41st Pl. to Northwest Branch Trail	High	Medium	High	Short-term	\$150,000-\$250,000
3	41st Street pocket wetland	41st St. trail, near Northwest Branch Trail	Low	Medium	Medium	Short- to Mid-term	\$75,000-\$150,000
4	41st Street trail culvert	41st St. trail, adjacent to the Northwest Branch Trail	High	Low	High	Short-term	\$40,000-\$60,000
5	41st Place stream crossing	41st Pl., near Melrose Park	Low	Minimal	Low	Mid-term	\$30,000-\$50,000
6A 6B	Rhode Island Avenue Baltimore Avenue curb improvements	Rt. 1 southbound, Braxton Pl. to 41st Pl. Alt-Rt. 1 near Charles Armentrout Dr.	Medium	Minimal	Medium	Mid-term	SHA Project Not Estimated
7	Rhode Island Avenue submerged gravel wetland	Rt. 1 northbound, southeast of Charles Armentrout Dr. intersection	Low	High	Medium	Mid-term	SHA Project Not Estimated
8	Charles Armentrout bioswale	Charles Armentrout Dr. (westbound), west of 42nd Pl.	Low	Medium	Low	Long-term	\$200,000-\$400,000
9	Charles Armentrout submerged gravel wetland	Charles Armentrout Dr. at 42nd Pl.	Medium	High	High	Short-term	\$350,000 - \$380,000

LEGEND

Retrofit Types

-  Storm drain insert
-  Submerged gravel wetland
-  Culvert
-  Green parking lot
-  Outfall stabilization
-  Bioswale
-  Green street
-  Curb improvement

Catchments

-  1
-  2
-  3
-  4
-  5
-  6

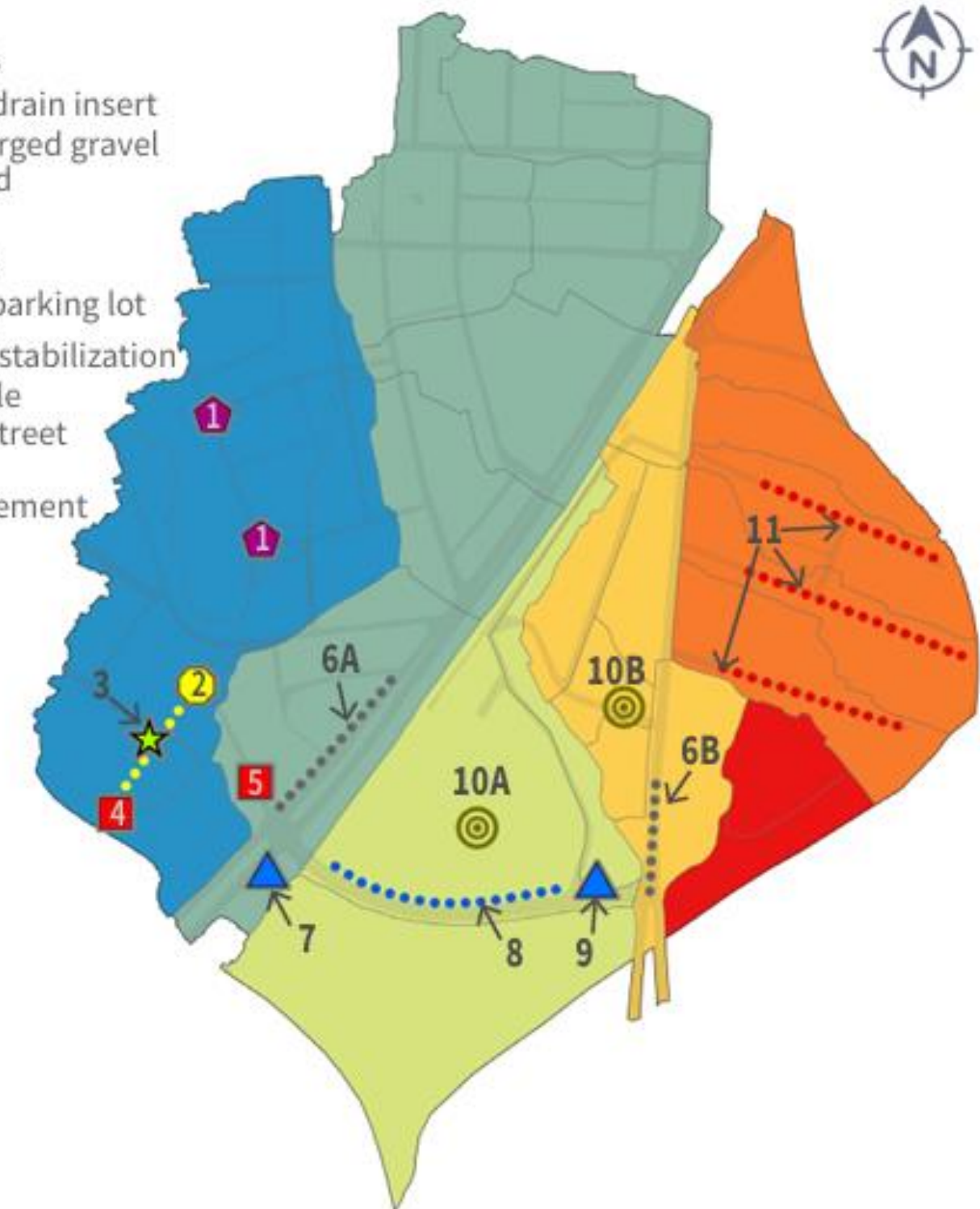
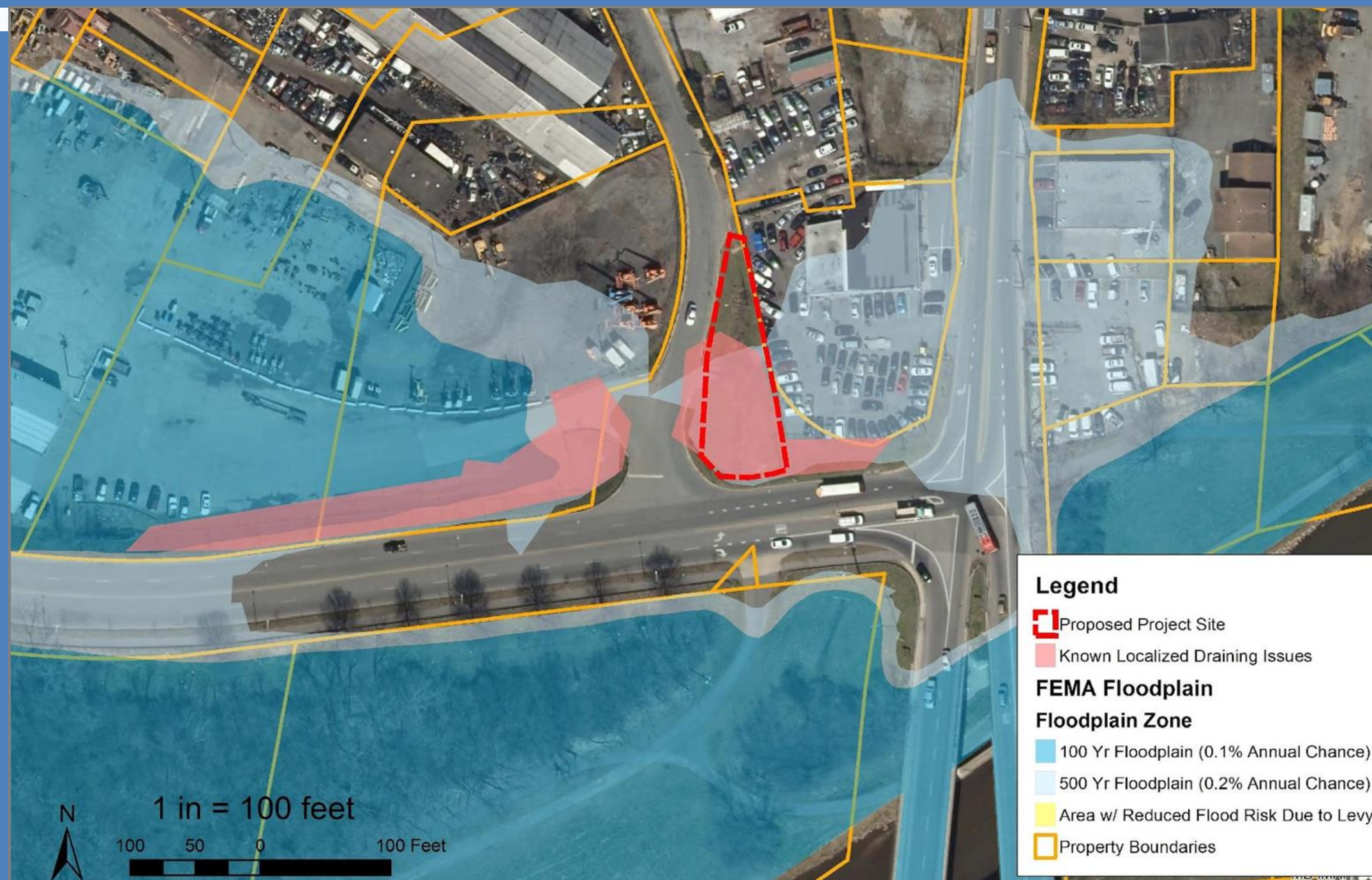
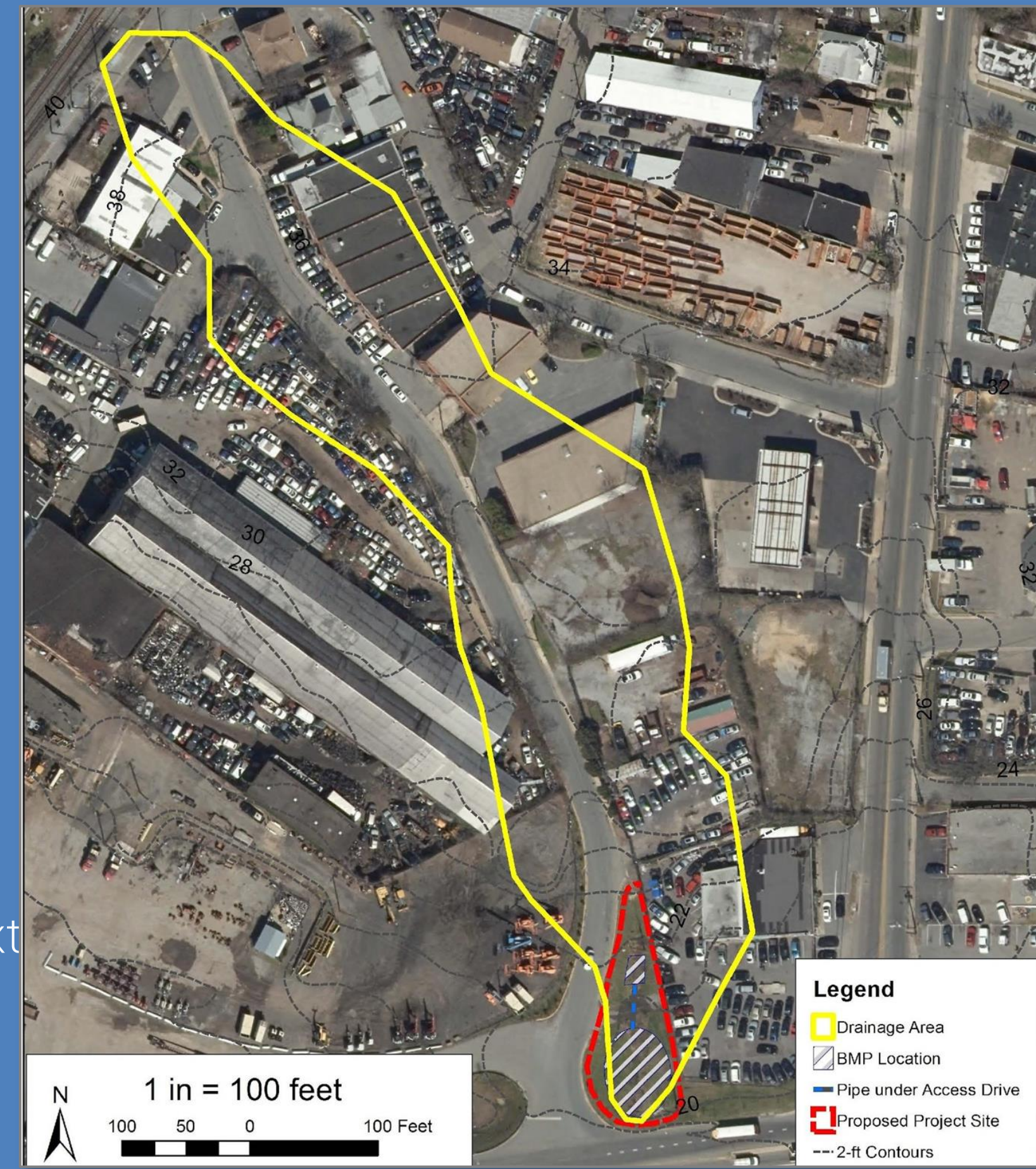


Figure 14. Locations of identified retrofit opportunities in lower Ward 1

42nd Street - Catchment and Flooding



Placeholder text





Washington Air Compressor



Washington Air Compressor, 4622 42nd Pl (across the street) on September 10, 2020

Evidence of sediment build-up after storm events at edge of subject property



Aerial view of subject property (circled in red)

Project Spotlight:

42nd Street Submerged Gravel Wetland

- Submerged Gravel Wetland (42nd Place, Hyattsville)
- City of Hyattsville Demonstration Site
- Lower Ward 1 Resilient Stormwater Planning Study
- Design Phase

CONTACT

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