

# Looking for a new approach on resident illicit sanitary connections

## The DC Sanitary Sewer Correction Pilot project

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Mary Polacek



# AGENDA

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Introduction

Background

DC Sanitary Sewer  
Correction Pilot  
Project

Where are  
we now?



# Who are we?

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Government of the District of Columbia 

Department of Energy of Environment (DOEE) 

Natural Resources Administration 

Inspection and Enforcement Division 

Industrial Stormwater and Wastewater Branch 

Nutrient Source Tracking Team 



# Who are we?



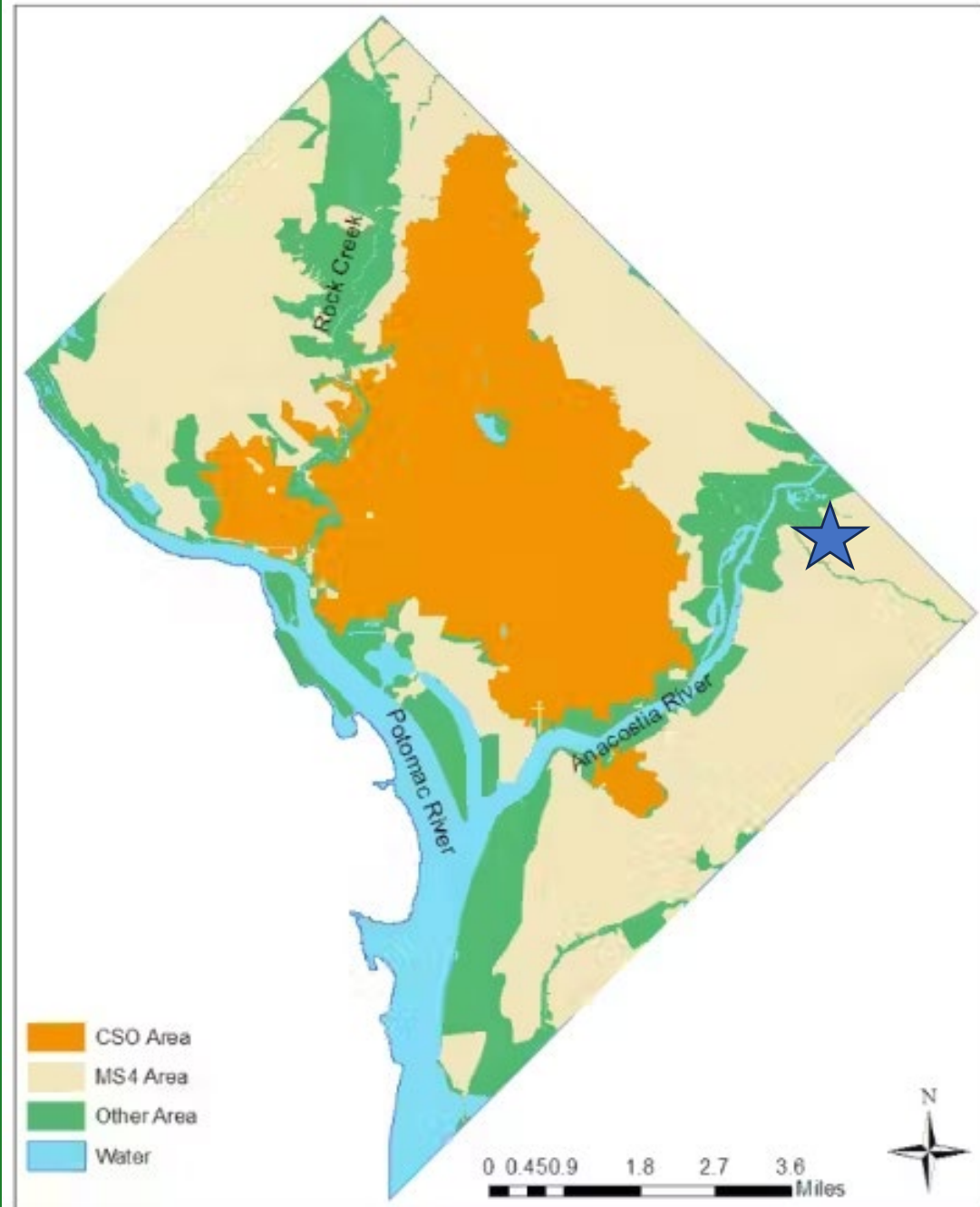


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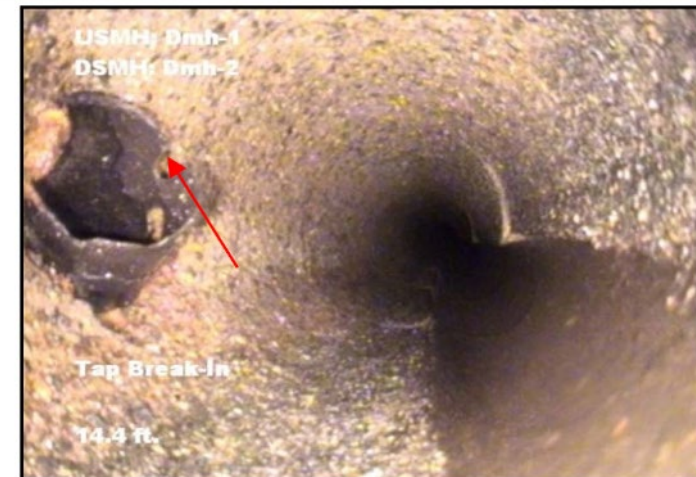
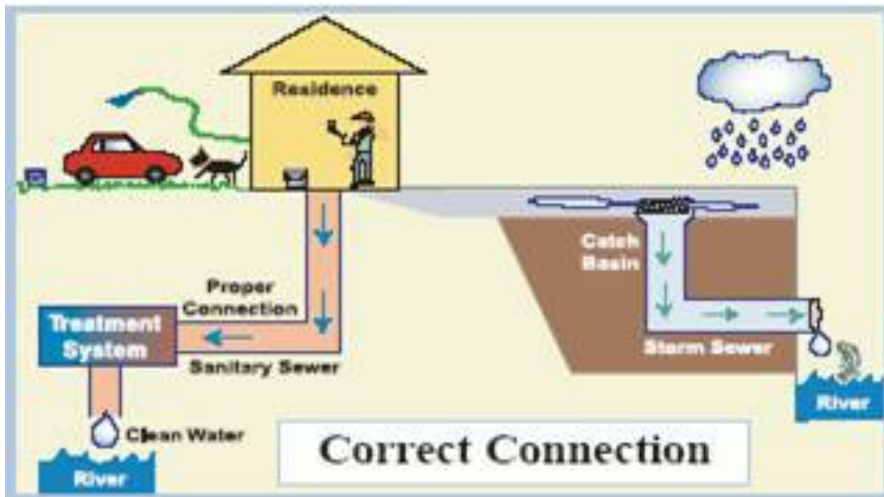
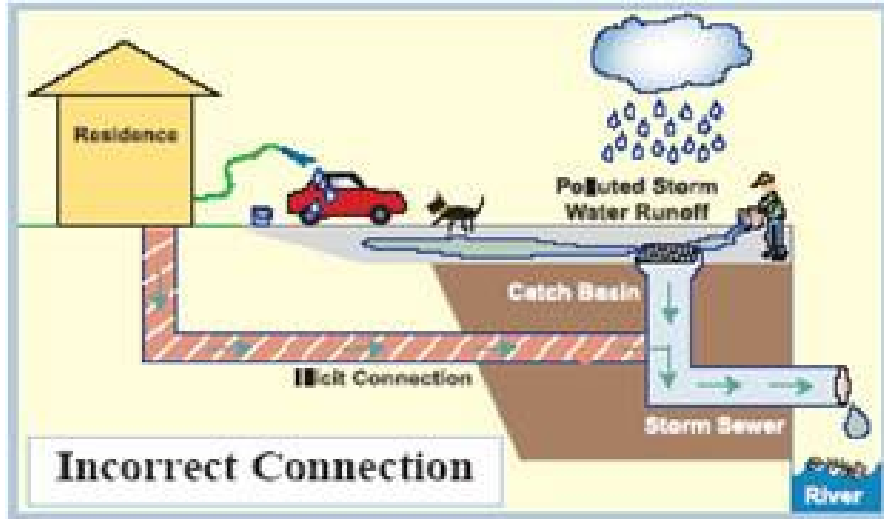
of the District  
drains into local rivers  
and streams with little  
to no treatment.

- Municipal Separate Storm Sewer System (MS4)
- Combined Sewer System (CSS)

District of Columbia Source Areas

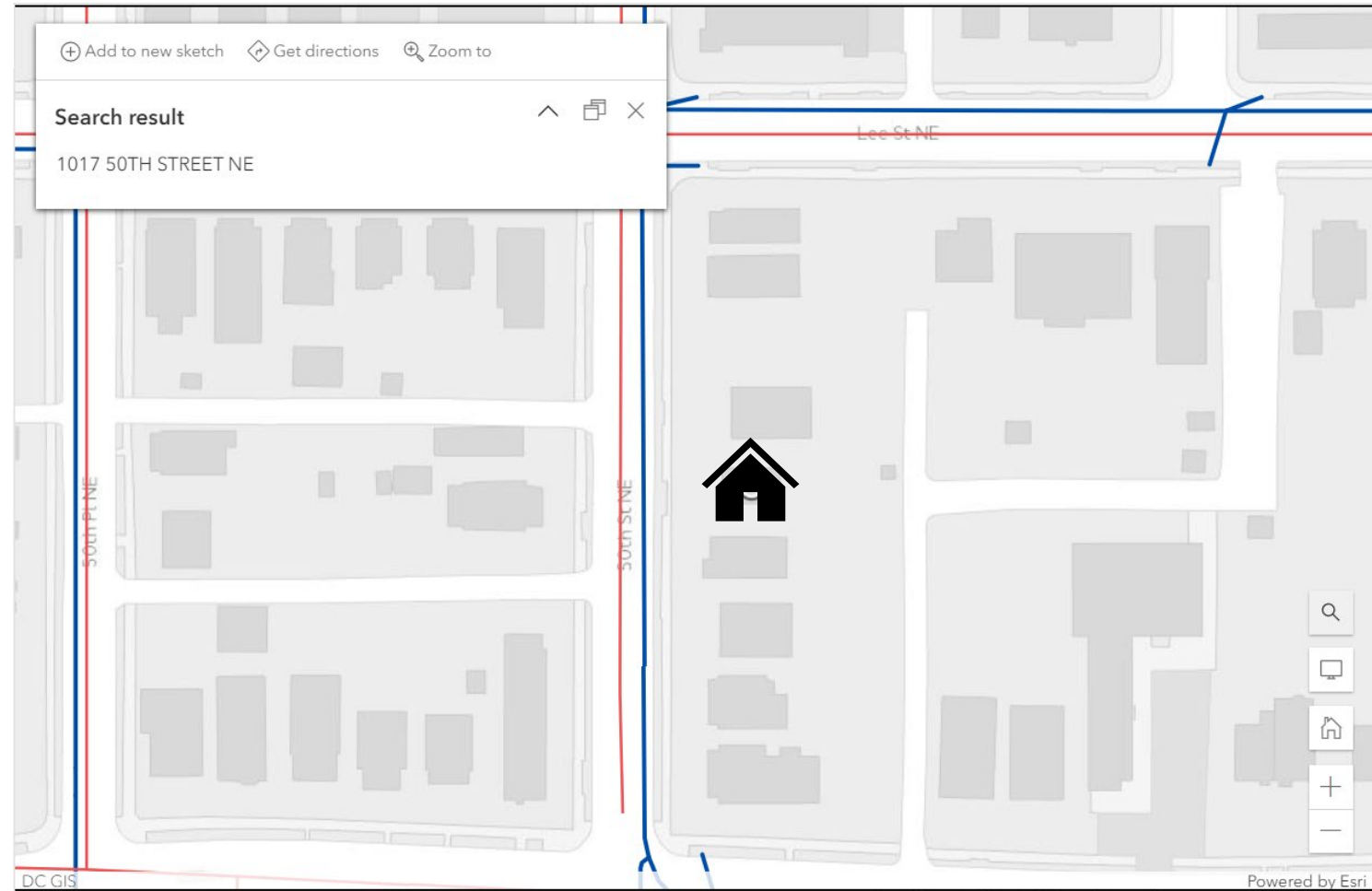


# What Is An Illicit Connection?



*Sewer camera photo showing an illicit connection (red arrow).*

- How does this happen?
  - Mistakes
  - Unlicensed plumbers
  - Only some of the permits
    - Plumber does not get the DC Water permit for DC Water to check maps
- What do you think happened with this house?



Blue is Storm sewer  
Red is Sanitary sewer

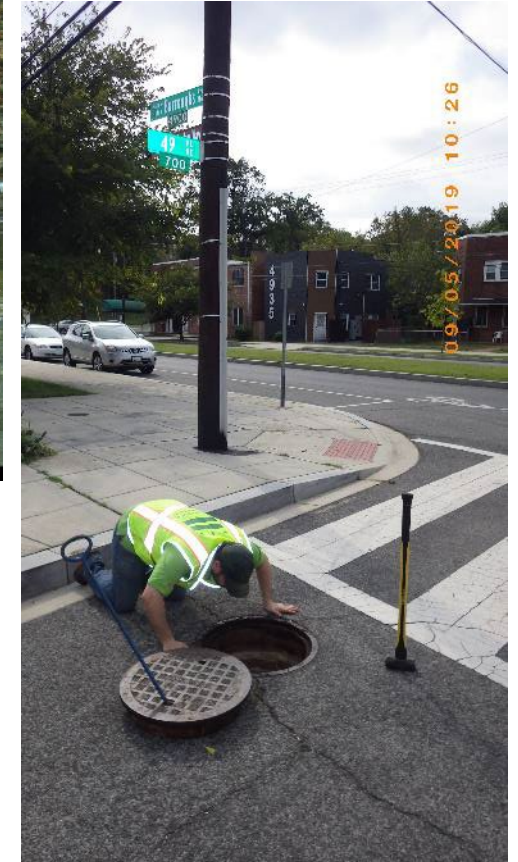


# Watts Branch / Nash Run

- Recurring reports of sanitary discharges
- Initial source tracking- dry weather flow, wildlife camera, manhole booms, sampling
- Dye Testing and CCTV with contractor
- Door to Door outreach/pamphlets



**Four** known residential properties found with potential illicit sewer connections





# DC Sanitary Sewer Correction Pilot Project

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## GOALS:

- Reducing pollution going into the Waters of the District by correcting illicit sanitary connections to the Municipal Separate Storm Sewer System
- Provide preventative outreach to educate residents on getting plumbing work properly
- Use this project as a case study to how we could approach other residential illicit connections in the future



# DC Sanitary Sewer Correction Pilot Project

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Applied and received two-year grant funding through the National Fish and Wildlife Foundation's Small Watershed Grant

Project timeframe is 1/1/2023 to 12/31/2024



NFWF



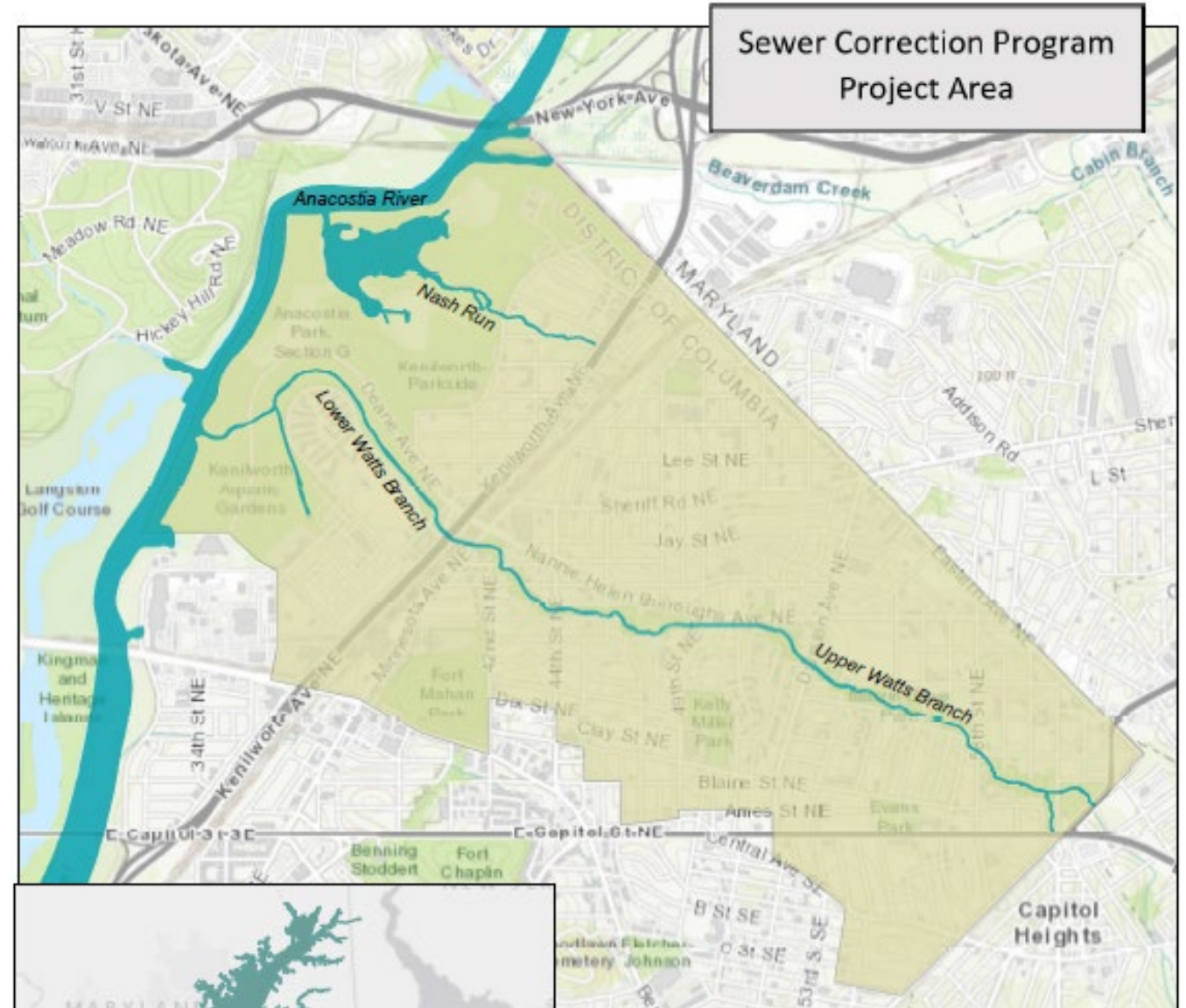
Chesapeake Bay Stewardship Fund

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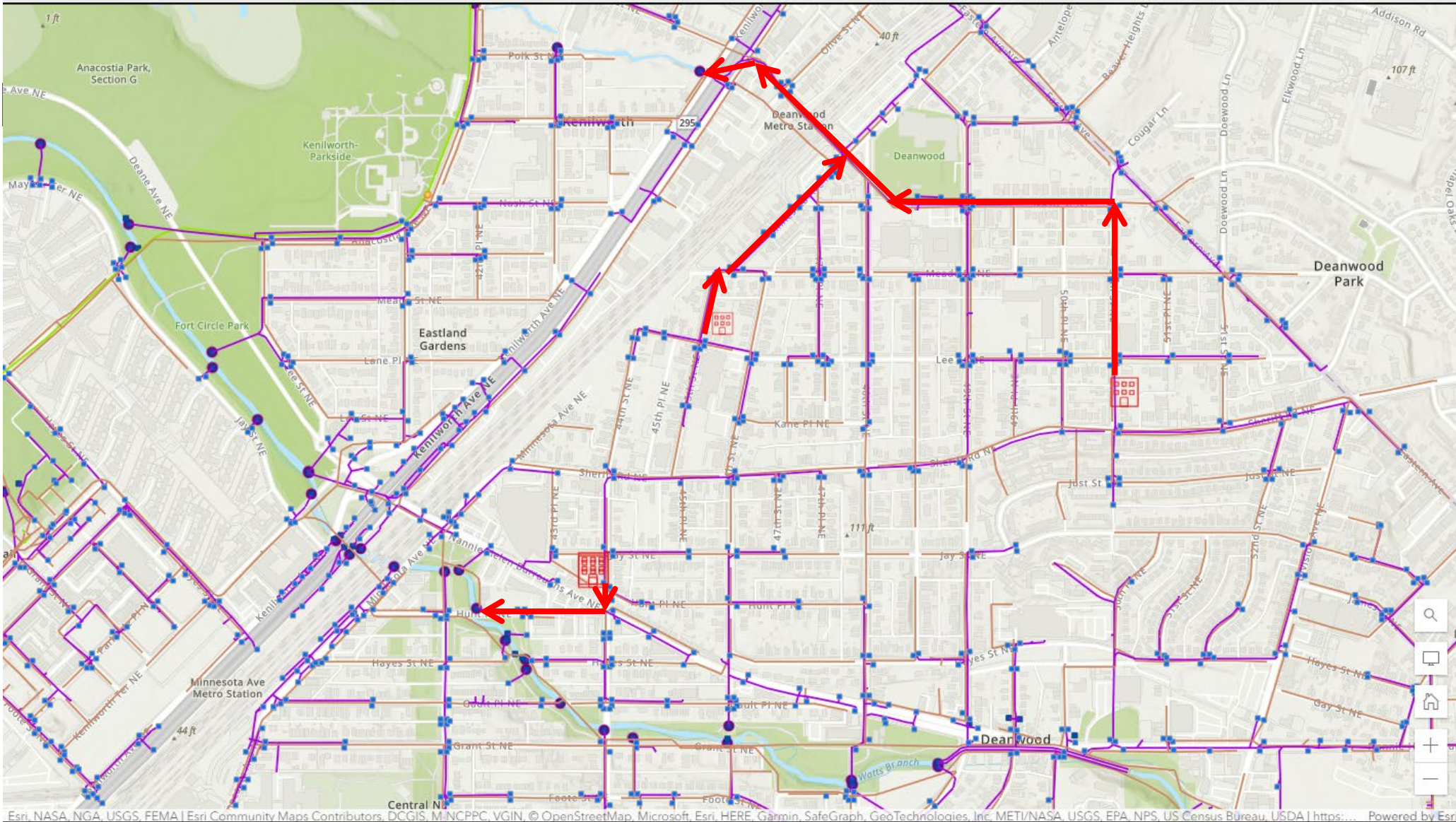


# Project Location:

- Nash Run and Watts Branch Sewershed
- Little less than half of Ward 7
- Includes:
  - Deanwood
  - Burrville
  - Lincoln Heights
  - Grant Park
  - Hill Brook












**Project Houses**

**Properties**

**Sketch features**

-  1111 45th Street NE
-  1017 50th St NE
-  812 44th Street NE
-  814 44th Street NE


 Add

**Appearance**

**Blending**


▼ Normal

**Transparency**

0%  25% 50%

**Visibility**

**Visible range**

 World



# Impacted Water Bodies

## Watts Branch

- Listed in 1996 for failing to support two designated uses: (1) the protection and propagation of fish, shellfish and wildlife and (2) the protection of human health related to consumption of fish and shellfish. **Impairment was attributed to a number of pollutants, including TSS**
- Tributary of Anacostia
- 60 outfalls
- 4920.52 Acres in project area



## Nash Run

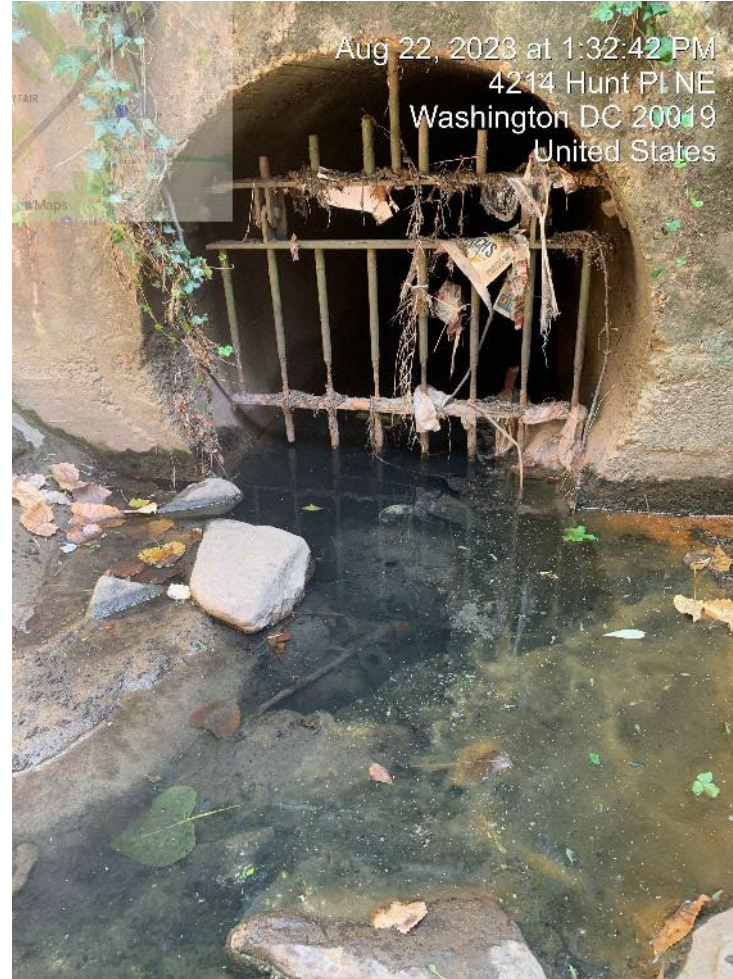
- listed as impaired as of 2016 for turbidity, flow alternations, organic enrichment/oxygen depletion and pathogens
- Tributary of Anacostia
- 5 Outfalls
- 324.7 Acres in project area



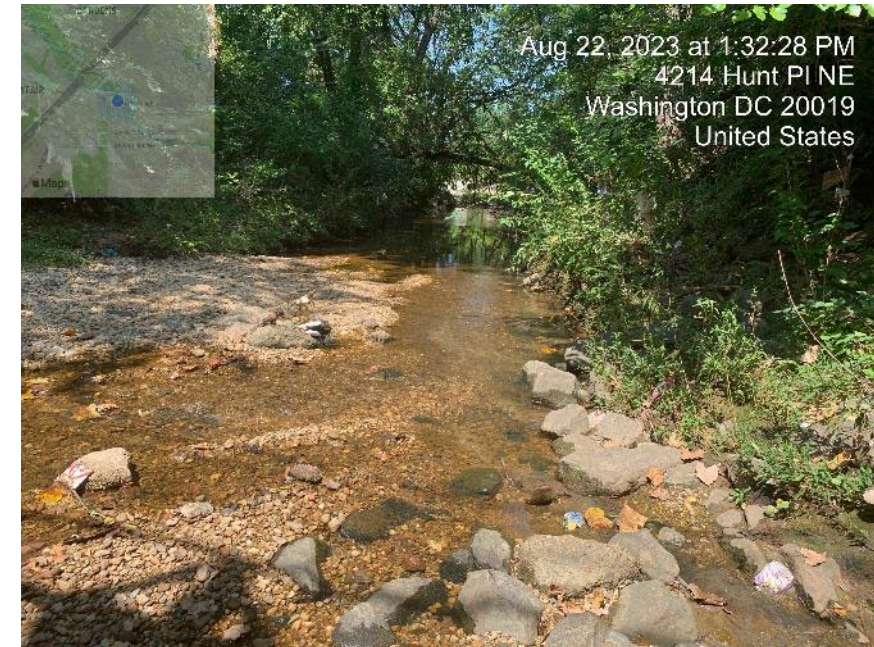


# Impacted Water Bodies

## Watts Branch- Outfall 243- Hunt Place NE



- Odor and water quality complaints since 2016
- Heavy bacteria stains. Sewage odor, trash and plant detritus caught on boom, toilet paper and waste observed

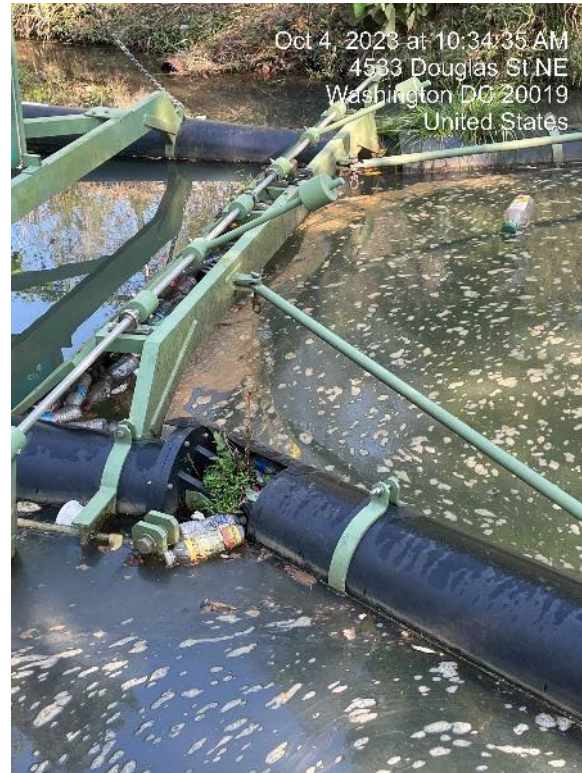




# Impacted Water Bodies

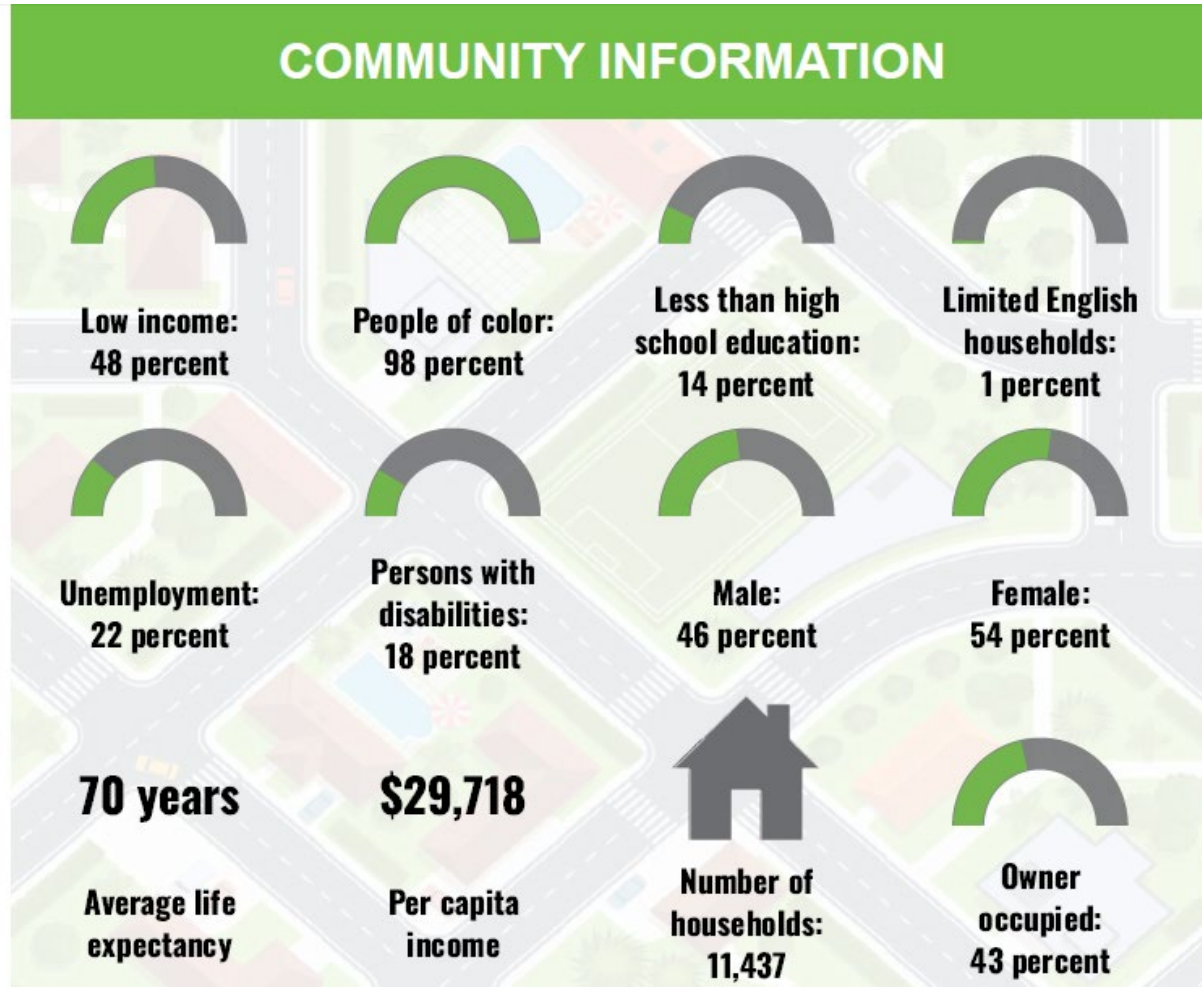
## Nash Run - Outfall 1035-1400 Kenilworth Ave NE

- Majority of concerns have been trash and oil discharges. But there is evidence of sewage discharge as well.

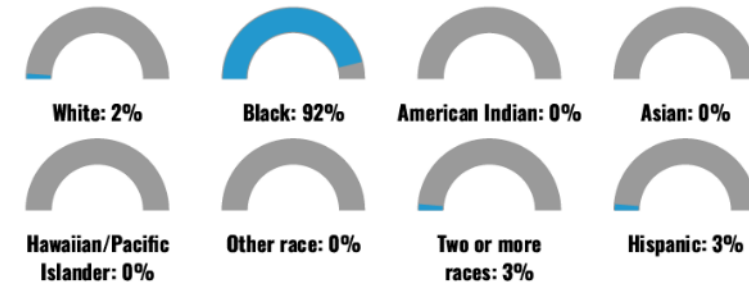




# Project's Environmental Justice Report



## BREAKDOWN BY RACE



## BREAKDOWN BY AGE



## LIMITED ENGLISH SPEAKING BREAKDOWN



Notes: Numbers may not sum to totals due to rounding. Hispanic population can be of any race. Source: U.S. Census Bureau, American Community Survey (ACS) 2017-2021. Life expectancy data comes from the Centers for Disease Control.



# Why is this project important?





# Where are we now?





# Where are we now?

- Exceeded our goal of outreach to over 100 residents in the Watts Branch / Nash Run Sewershed
  - Received feedback that residents were not aware of these issues
  - Received feedback that there is a need to know how to report these issues
  - Residents concerned and want to have their house dye-tested
- Meaningful engagement included:
  - Art project with high school students
  - Virtual Reality to demonstrate project impacts
  - Active listening to community leaders and residents
  - Translation services for homeowners
- Successfully gained access and support to dye test the four identified houses, three were confirmed illicit misconnections
- Received signed easement documents from homeowners to proceed with correcting illicit connections
- Lessons learned on budget and the plumbing contractor process



# Questions?

Mary Polacek

[mary.polacek@dc.gov](mailto:mary.polacek@dc.gov)

202-897-5341



*Dennis Chestnut in Marvin Gaye Park in Watts Branch, Ward 7, Washington D.C. Chestnut has devoted much of his life to promotion of Ward 7's history and upkeep.*

*(Photo by Ethan Weston/Chesapeake Bay Program)*