



Briefing on:

DC Clean Rivers Project:

***Green Infrastructure:
Rock Creek Project B
Project Description Meeting #2***

May 4, 2021



Virtual Meeting Participation Tips

- Online meetings are subject to your bandwidth limitations. If your connection to the meeting should freeze, please exit and reenter the meeting to refresh your connection.
- All attendees are muted to minimize disruptions.
- The Questions and Answers (Q&A) period will be held at the end of the presentation. Please hold your questions until the Q&A portion of the meeting.
- During the Q&A portion of the meeting, we will acknowledge questions from attendees who are online and on phone.
- **ONLINE PARTICIPANTS:** send your questions to the Panelists by using the Chat mode. You may also click on the hand logo to raise your hand to ask a question.
- **PHONE PARTICIPANTS:** press *9 to alert us that you want to ask a question. We will unmute you when it's your turn to ask a question.

Agenda

- Introductions
- Clean Rivers Background
- Green Infrastructure Program
- Rock Creek Project B
 - Facility Types
 - Proposed Locations
 - Downspout Disconnections
- Comment Period



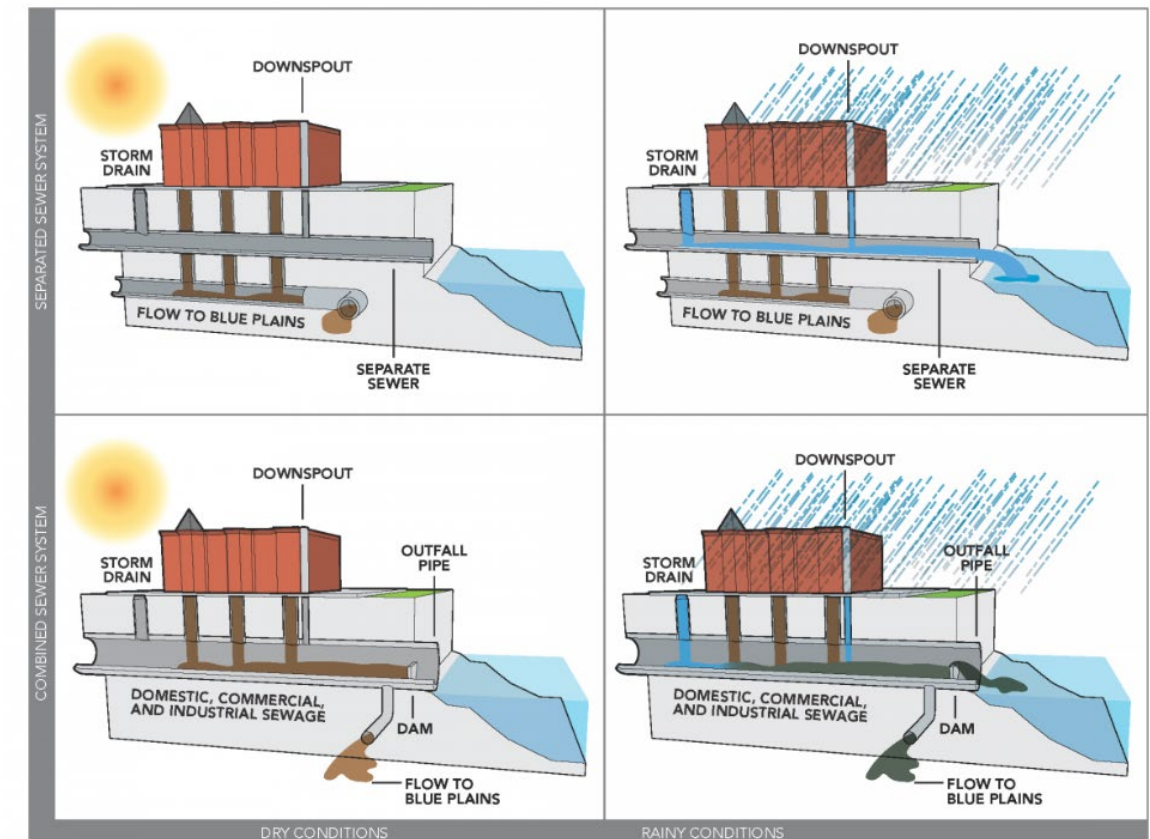
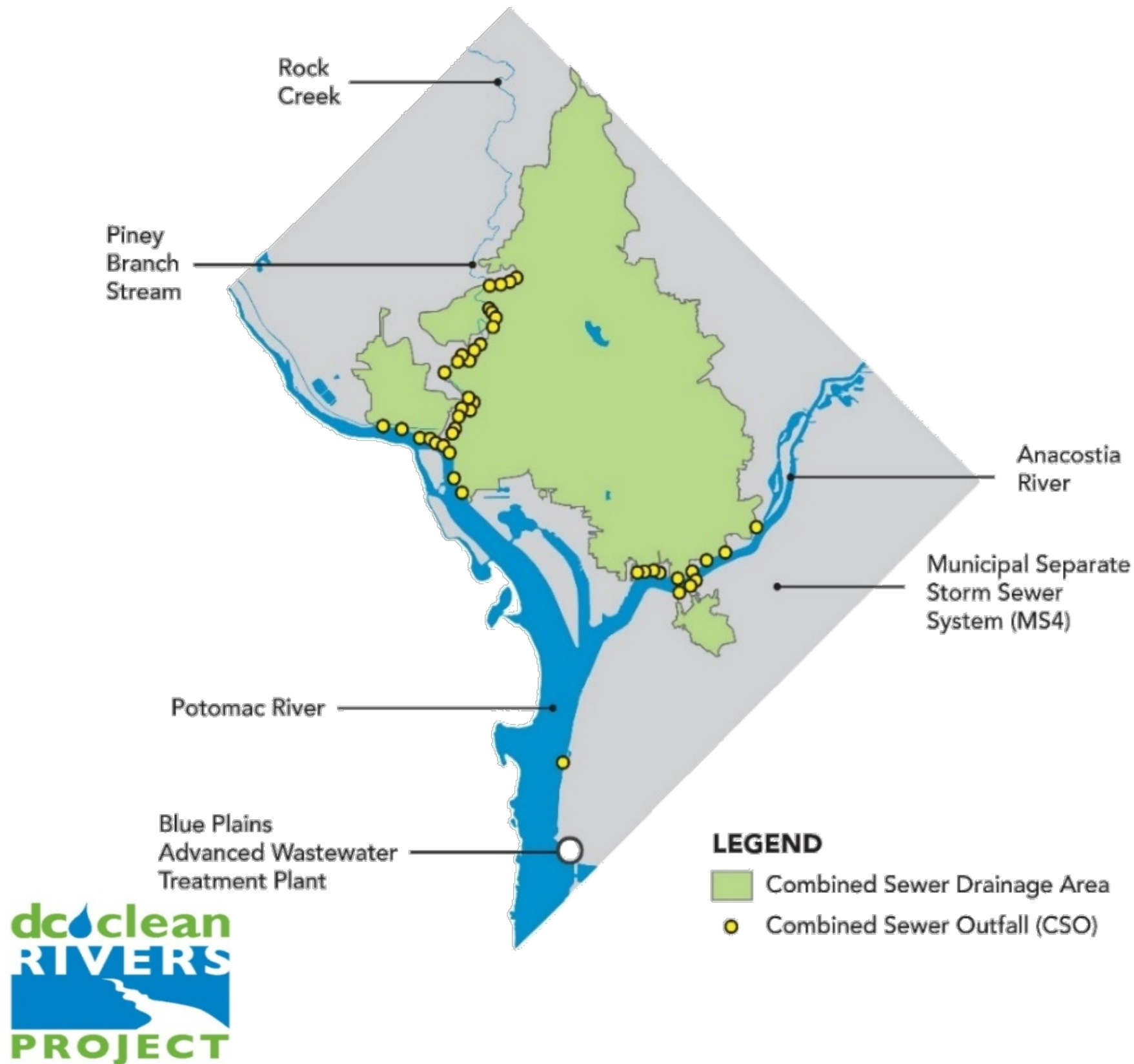
CLEAN RIVERS BACKGROUND

DC Water Overview: Who We Are

- Serving a regional area of approximately 725 square miles with:
 - Drinking water distribution for the District
 - Wastewater collection and treatment
 - Stormwater collection and conveyance
- Operating the world's largest advanced wastewater treatment plant :
 - Average daily capacity, 384 mgd
 - Peak daily capacity, 780 mgd
- Serves a population of 2.1 million in the District of Columbia; Montgomery & Prince George's Counties, MD; Fairfax & Loudoun Counties, VA



DC Clean Rivers Project Overview: Separate and Combined Sewer Systems



- 1/3 of area within District is served by combined sewers
- 48 active Combined Sewer Overflow (CSO) outfalls
 - 15 to Anacostia River
 - 10 to Potomac River
 - 23 to Rock Creek

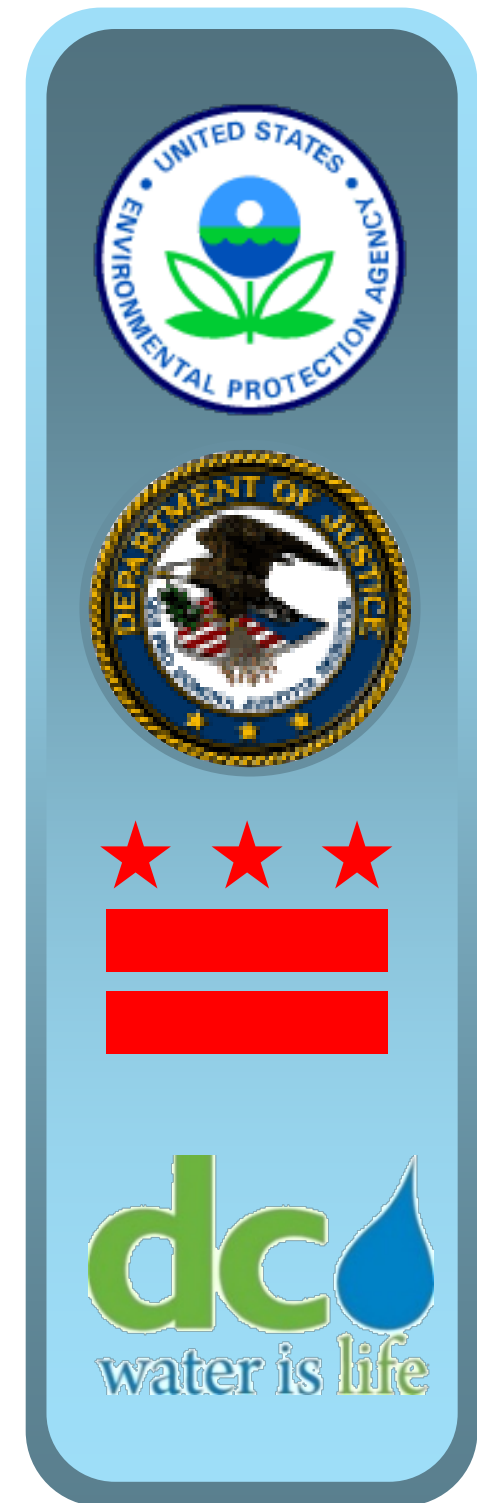
DC Clean Rivers Project Overview:

What is the Purpose of the DC Clean Rivers Project?

- Control combined sewer overflows to the:
 - Potomac River
 - Rock Creek
 - Anacostia River
- Relieve flooding in the Northeast Boundary Area
- Implemented under a Federal Consent Decree :
 - US Environmental Protection Agency (US EPA)
 - US Department of Justice (US DOJ)
 - District of Columbia
 - DC Water
- Significant stipulated penalties for missing schedule deadlines

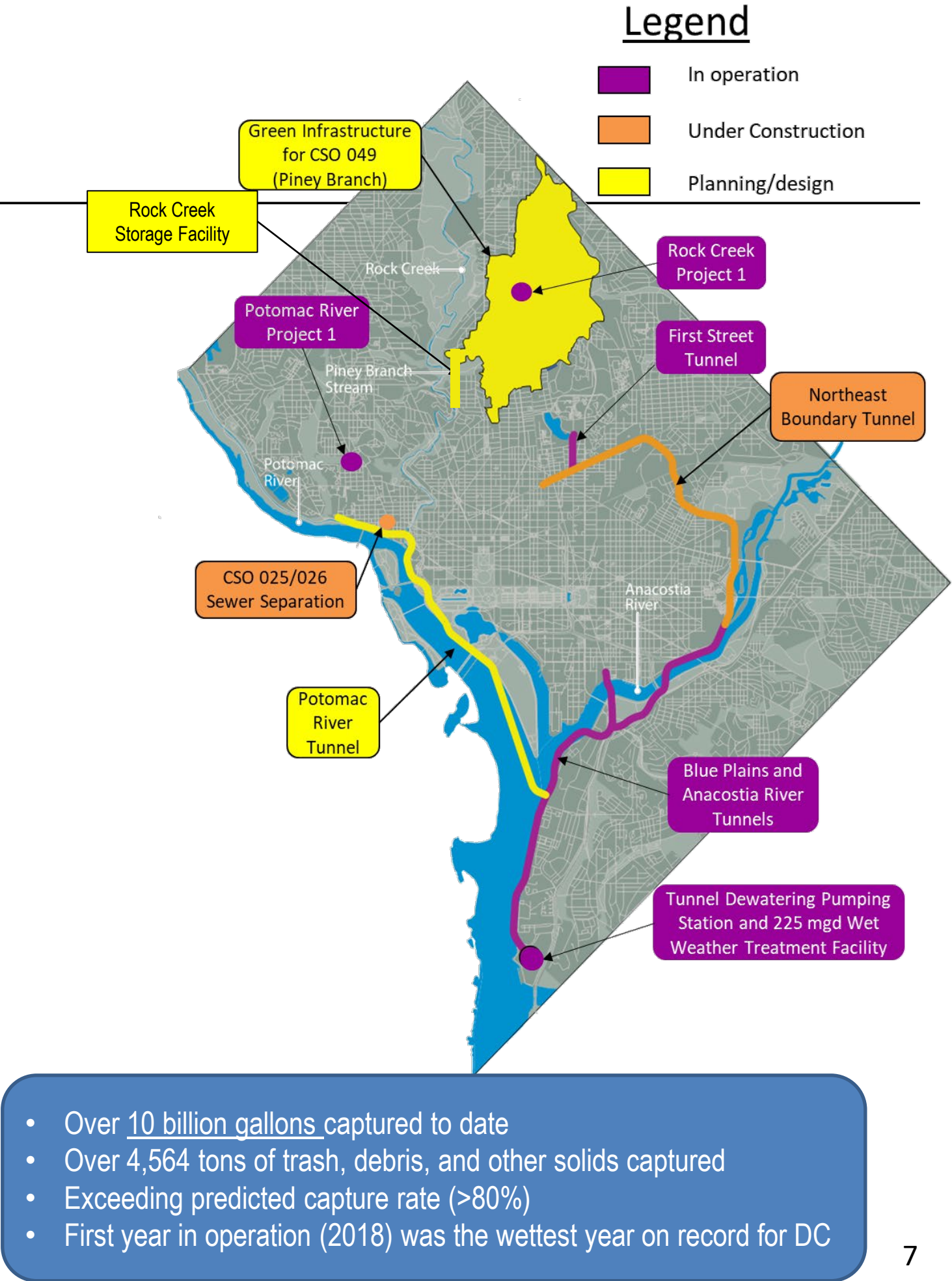


Fully operational by 2030

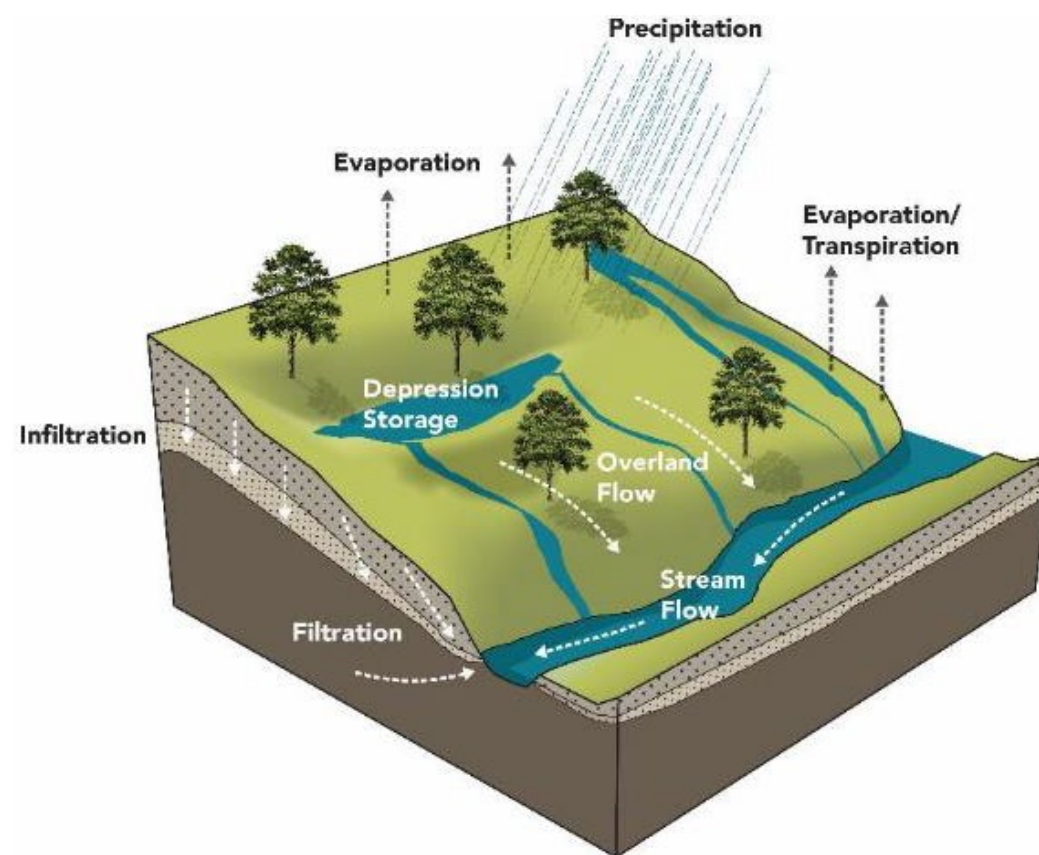


DC Clean Rivers Background

Month	Rainfall, DCA Gauge (in)	Volume Captured by Tunnel (MG)	Measured Overflow (MG)	% captured
March 20 -31, 2018	1.48	20	0	100%
April 2018	3.59	249	10	96.0%
May 2018	8.73	860	13	98.5%
June 2018	5.21	265	47	85.0%
July 2018	9.73	679	260	72.3%
August 2018	5.19	334	14	95.9%
September 2018	9.73	784	116	87.1%
October 2018	3.06	164	0	100%
November 2018	7.57	777	5	99.3%
December 2018	5.82	468	100	82.3%
January 2019	3.30	259	0	100%
February 2019	3.52	74	0	100%
March 2019	4.00	337	46	87.9%
April 2019	2.24	77	0.1	99.9%
May 2019	4.97	311	1	99.7%
June 2019	4.27	134	0.1	100%
July 2019	6.49	339	77	81.4%
August 2019	1.99	186	22	89.3%
September 2019	0.25	19	0	100%
October 2019	6.66	450	18	96.2%
November 2019	1.37	55	0	100%
December 2019	2.80	80	0	100%
January 2020	2.79	150	0	100%
February 2020	3.21	143	0.6	99.6%
March 2020	2.31	38	0	100.0%
April 2020	6.30	338	127	72.7%
May 2020	2.49	169	0	100.0%
June 2020	3.51	205	0	99.9%
July 2020	6.51	265	2	99.2%
August 2020	8.73	463	52	89.8%
September 2020	5.53	267	186	59.0%
October 2020	4.86	264	6	97.6%
November 2020	6.14	456	25	94.7%
December 2020	4.96	430	0	100%
January 2021	1.93	56	0	100%
February 2021	4.66	147	0	100%
March 2021 (DRAFT)	2.18	142	3	100%
Total	168.08	10,450	1,133	90.2%



DC Clean Rivers: What is Green Infrastructure?



- Mimics natural water processes:
 - Filtration, infiltration, slowing water, storage, and evapotranspiration



Rain Gardens and
Bioretention



Downspout
Disconnection and
Rain Barrels



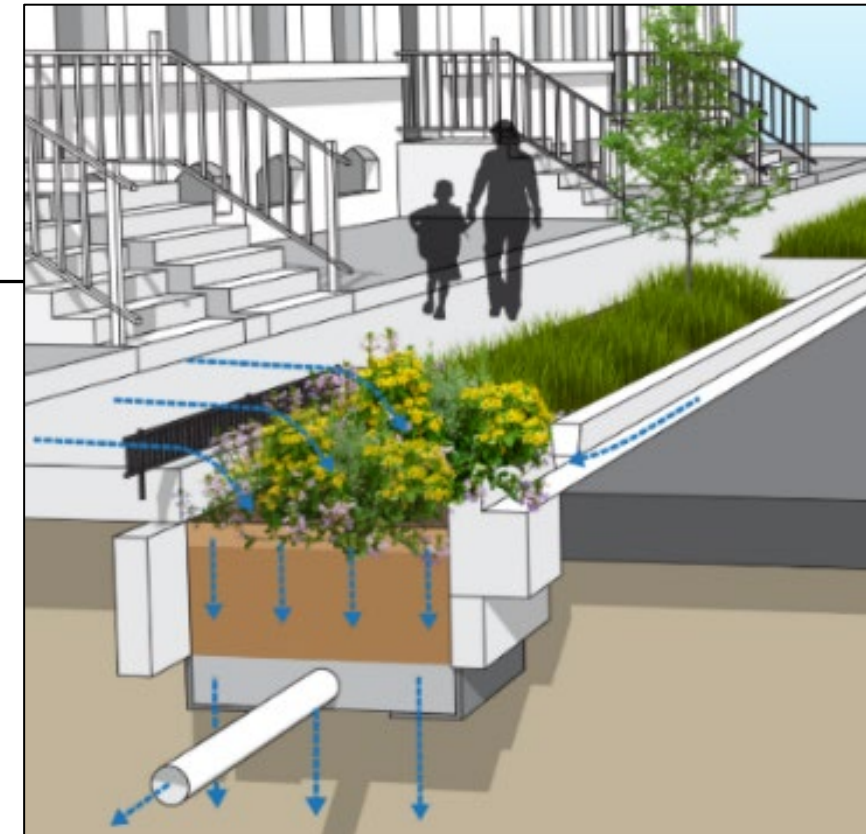
Green Roofs



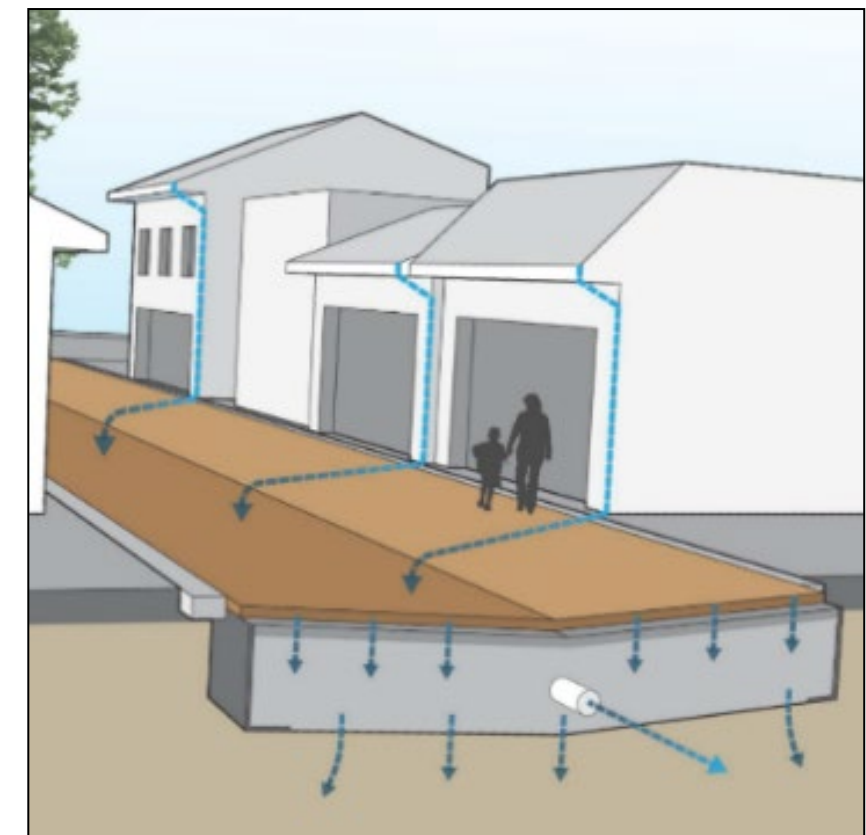
Pervious Pavement

Green Infrastructure: Program Drivers

- Volume Management (Gallons)
 - Control Combined Sewer Overflows
- Cost Effectiveness
 - Responsibility to Rate Payers
- Maintenance/Asset Management
 - Safety
 - Aesthetics
 - Performance
- Outreach
 - Build Public Awareness and Stewardship
- Triple Bottom Line Benefits
 - Deliver Multiple Benefits to the Community



Planter Bioretention

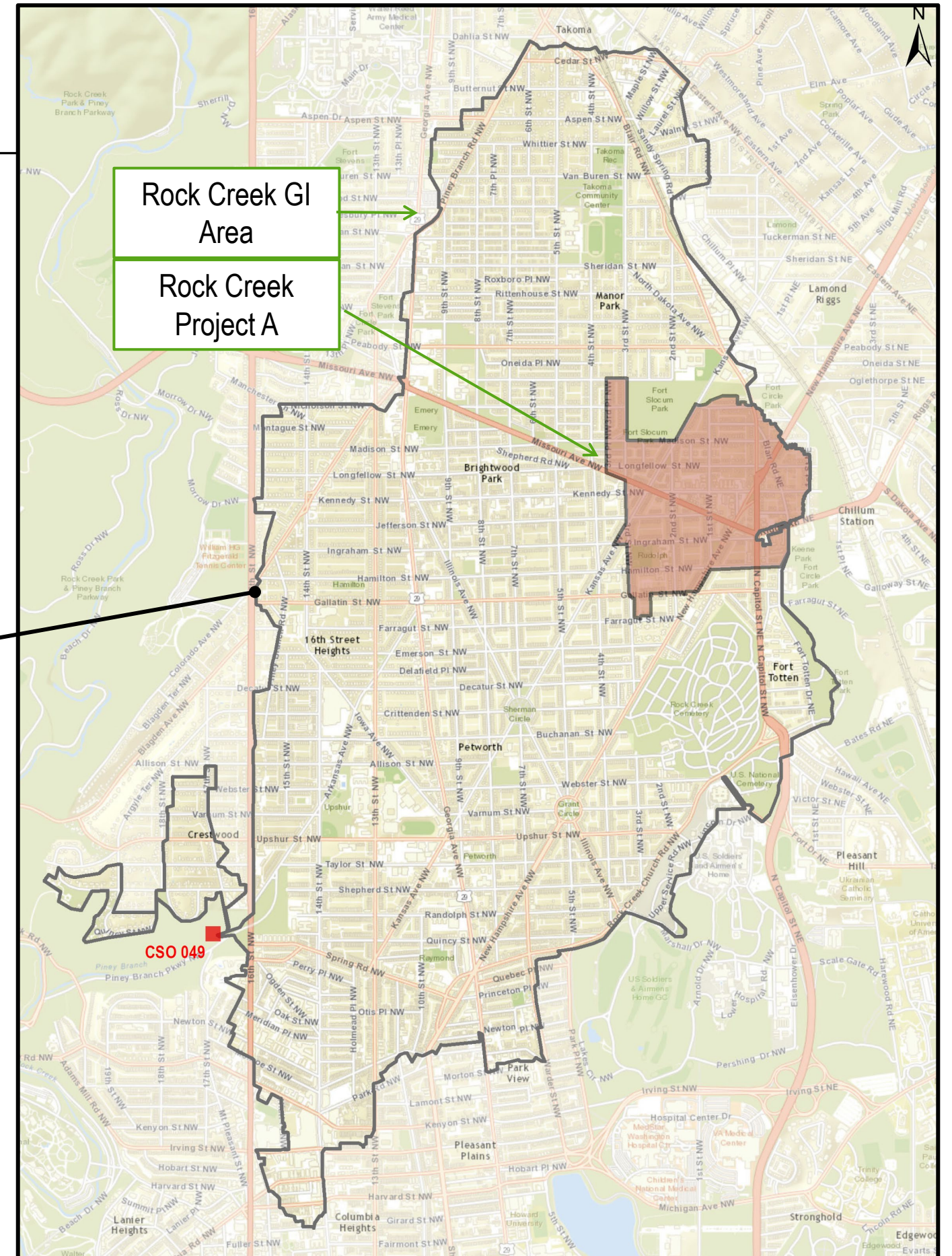
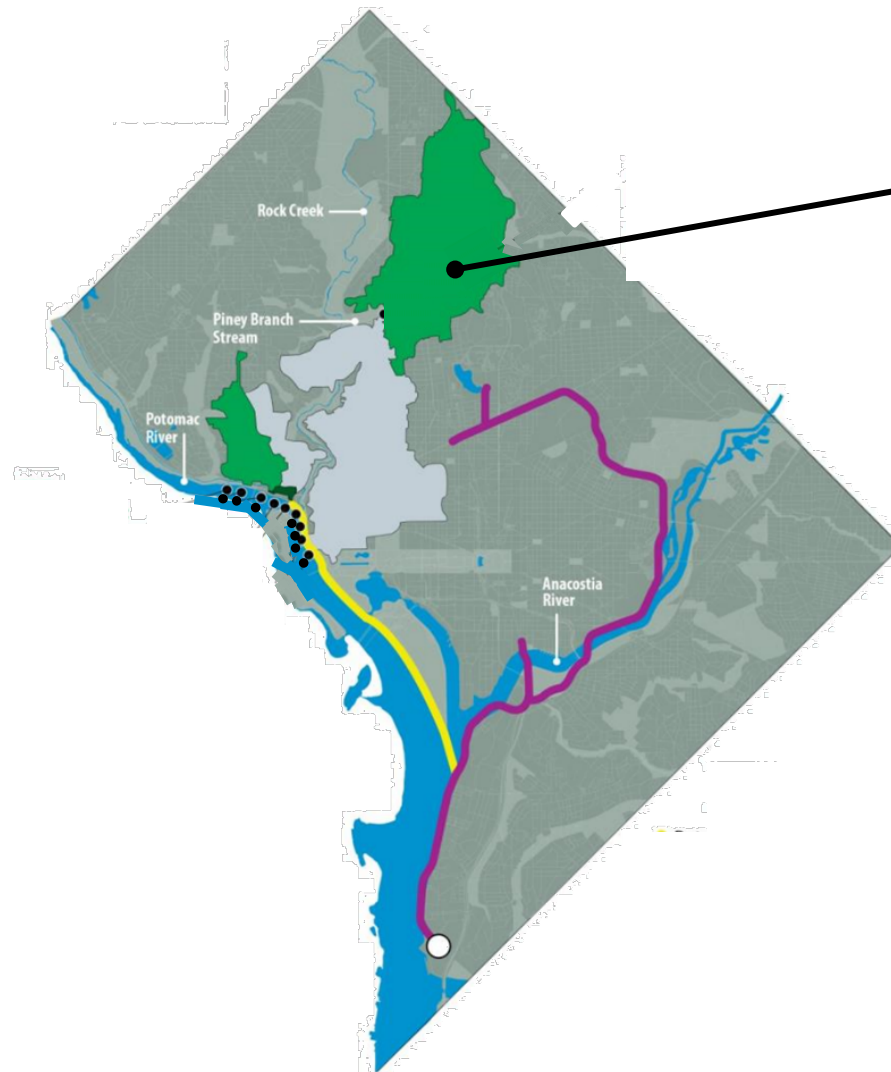


Permeable Alley

First Green Project in Rock Creek: Rock Creek Project A Completed!

Rock Creek Project A (RC-A):

- Manages 20 Impervious Acres
- Construction Started: 2017
- Construction Completed: 2019



Second Green Project in Rock Creek: Rock Creek Project B

Project	Impervious Acres Managed @ 1.2"	Place in Operation Deadline
Rock Creek Project A	20	2019
Rock Creek Project B	22	2024
Rock Creek Project C	25	2027
Rock Creek Project D	25	2029
Total	92	



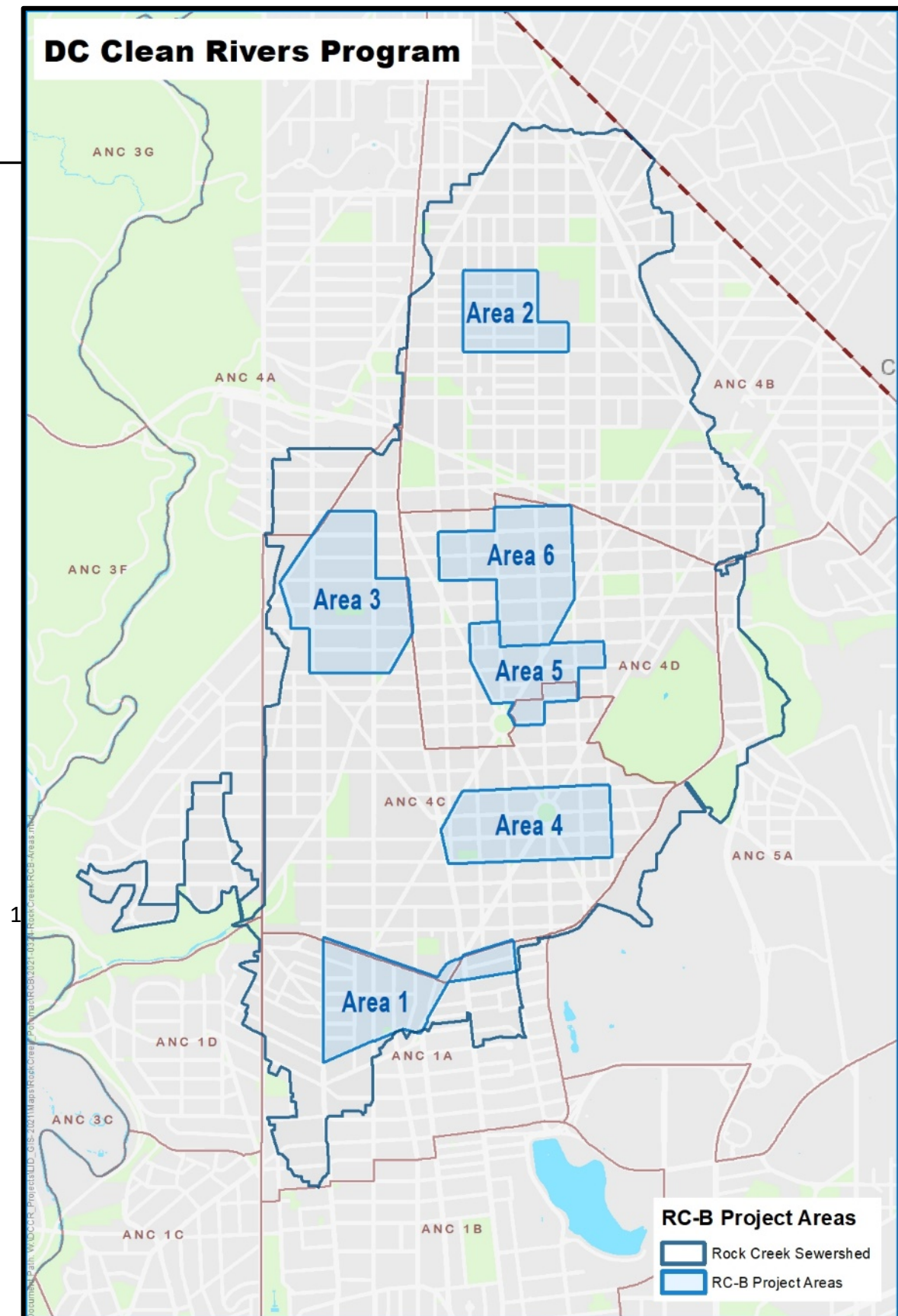
Rock Creek GI Project B (RC-B)

Green Infrastructure: Rock Creek Project B (RC-B)

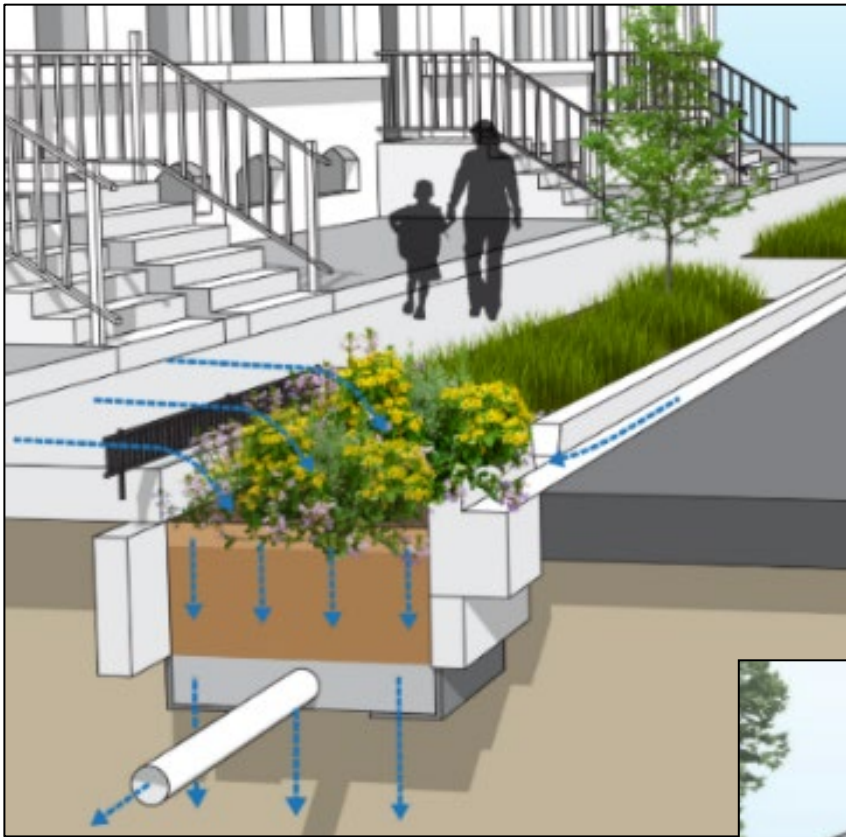
- Manage 22 impervious acres
- Facilities can be anywhere in drainage area
 - Locations selected based on constructability, cost to construct, and limited neighborhood disruption

Schedule

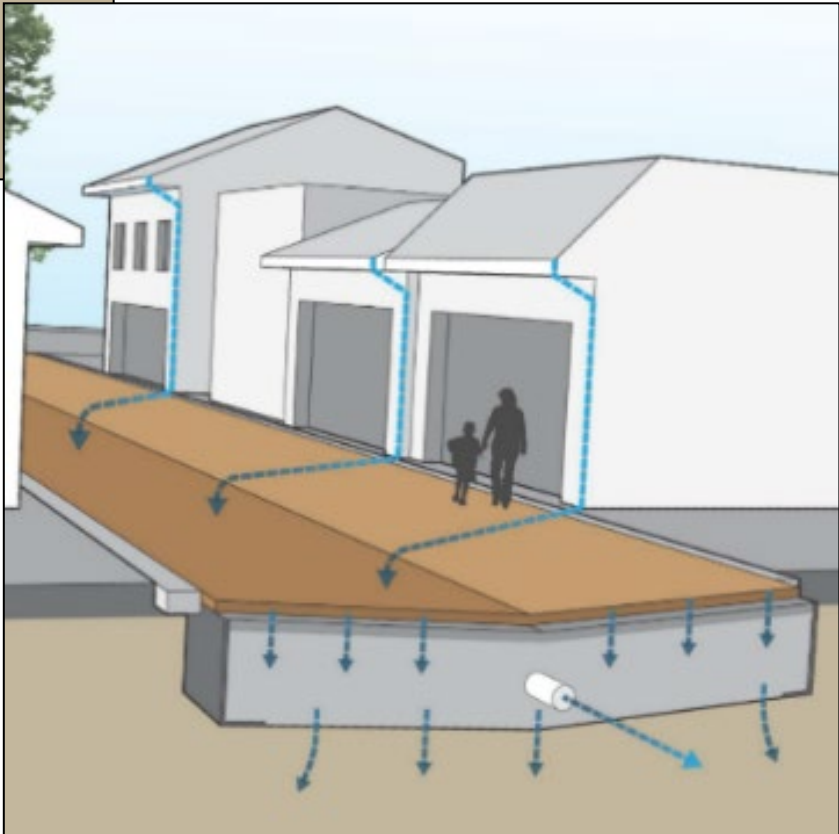
- Public Comment Period: **March 29 – May 7, 2021**
- Design and Permitting: **Summer/Fall 2021**
- Construction Start: **Early 2022**
- Construction Completion: **January 2024**



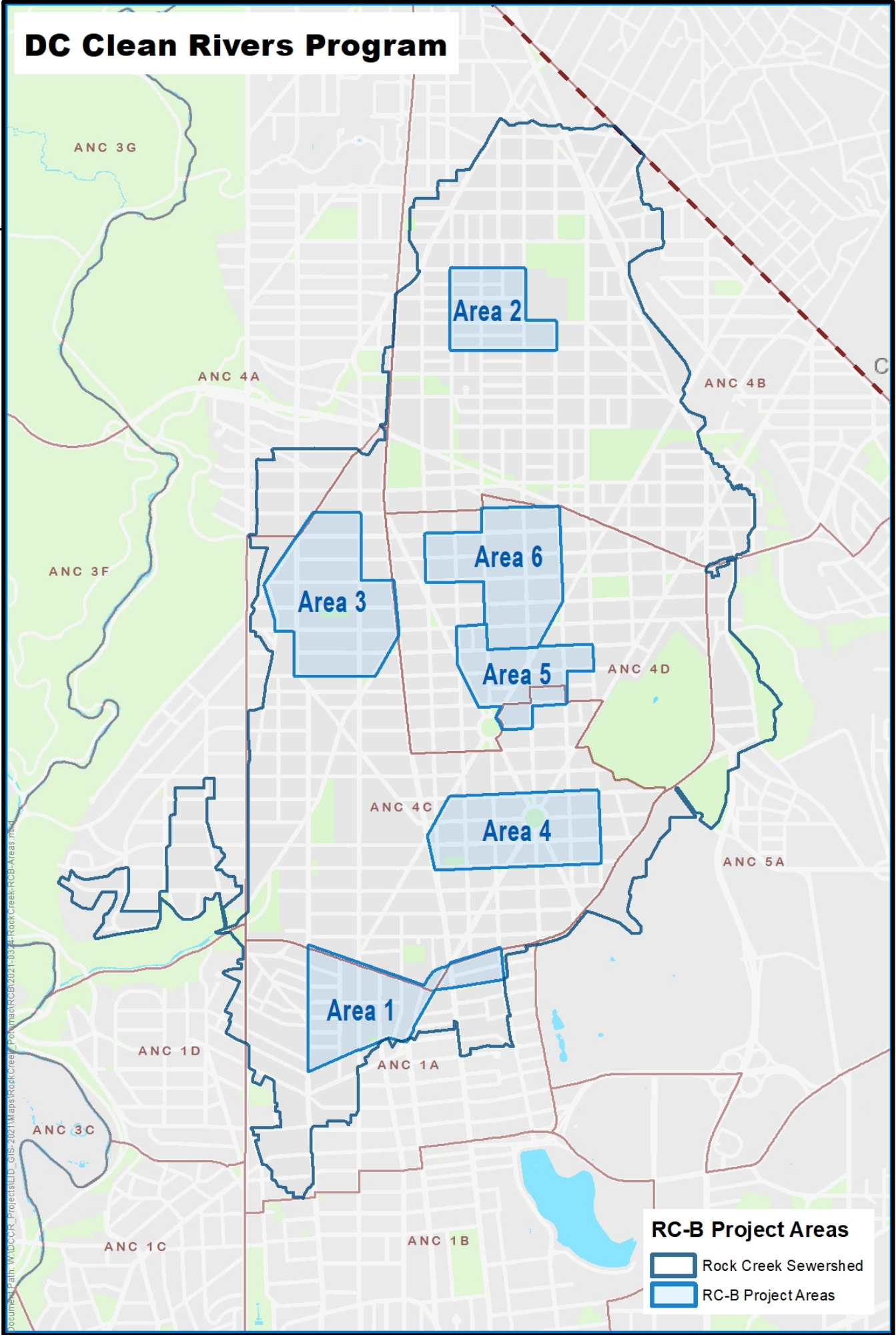
Green Infrastructure: Rock Creek Project B (RC-B)



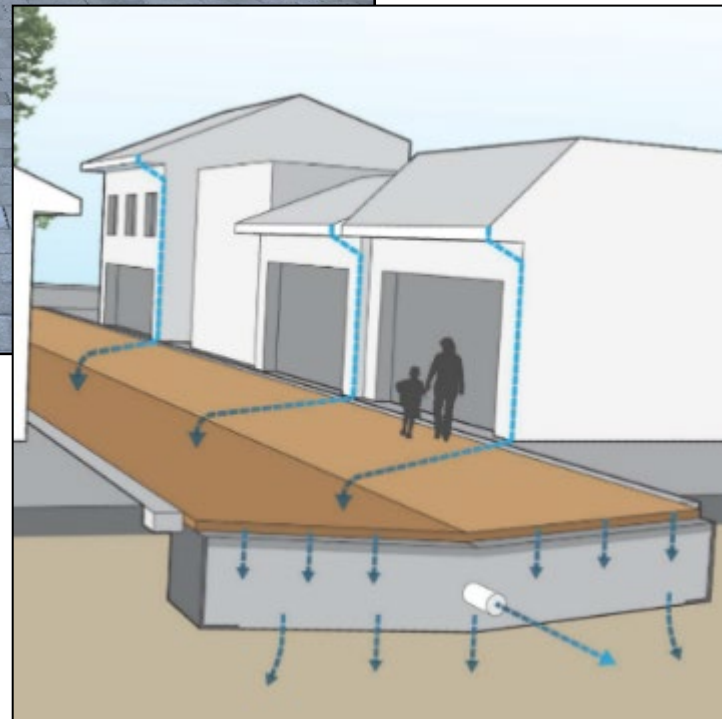
Planter Bioretention



Permeable Alley



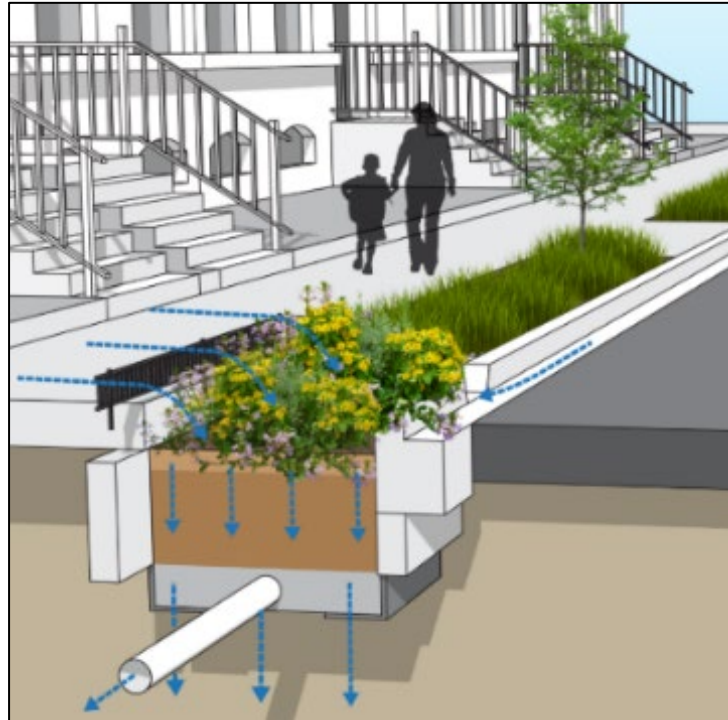
Green Infrastructure: Rock Creek Project B (RC-B)



Permeable Alley



Green Infrastructure: Rock Creek Project B (RC-B)



Planter Bioretention

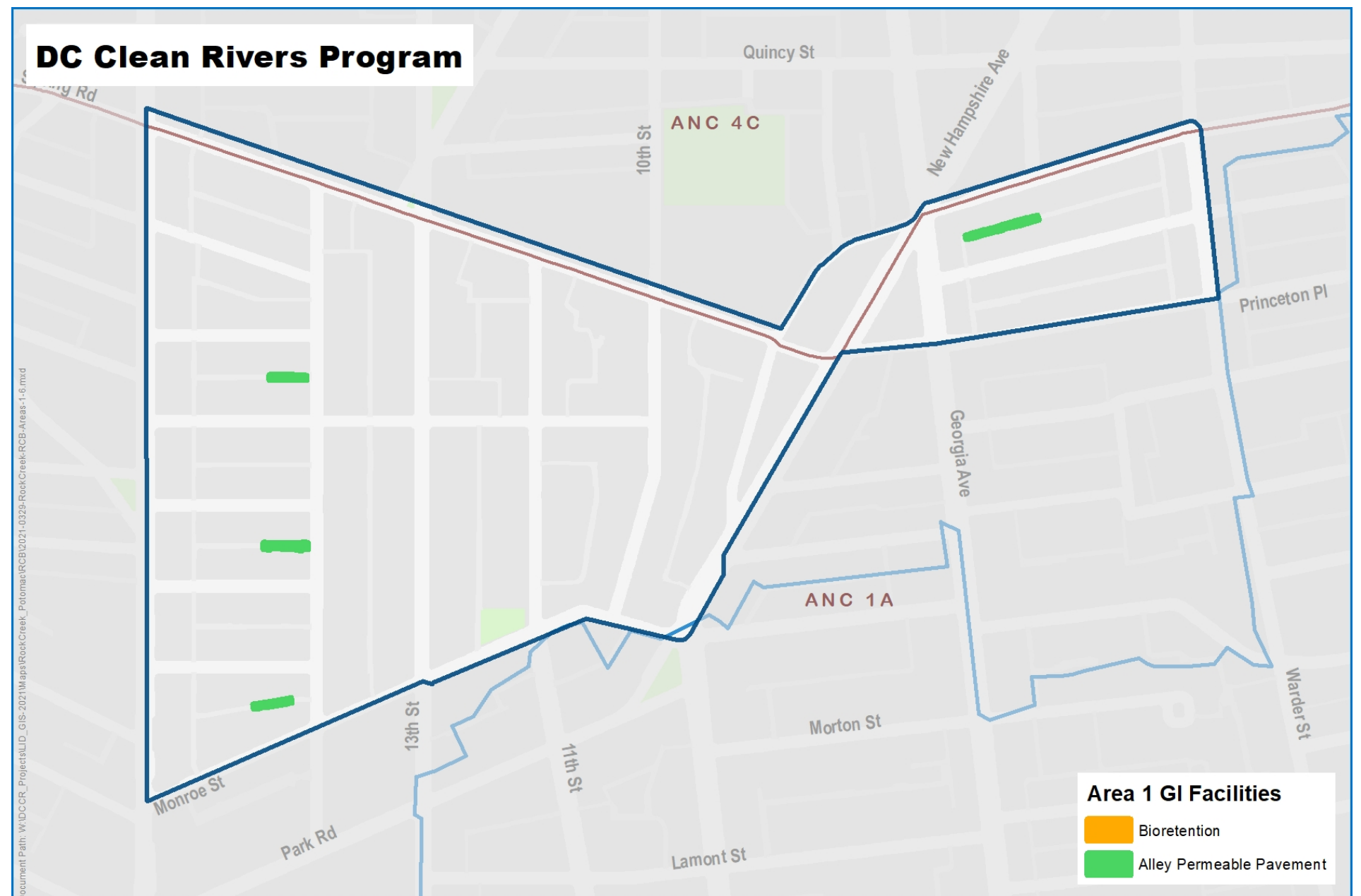


Rock Creek Project B (RC-B): Project Area 1

- ANC 1A
- Columbia Heights
- Mixture of residential row houses and low-density commercial properties

Proposed Green Infrastructure:

- Four (4) Permeable Alleys



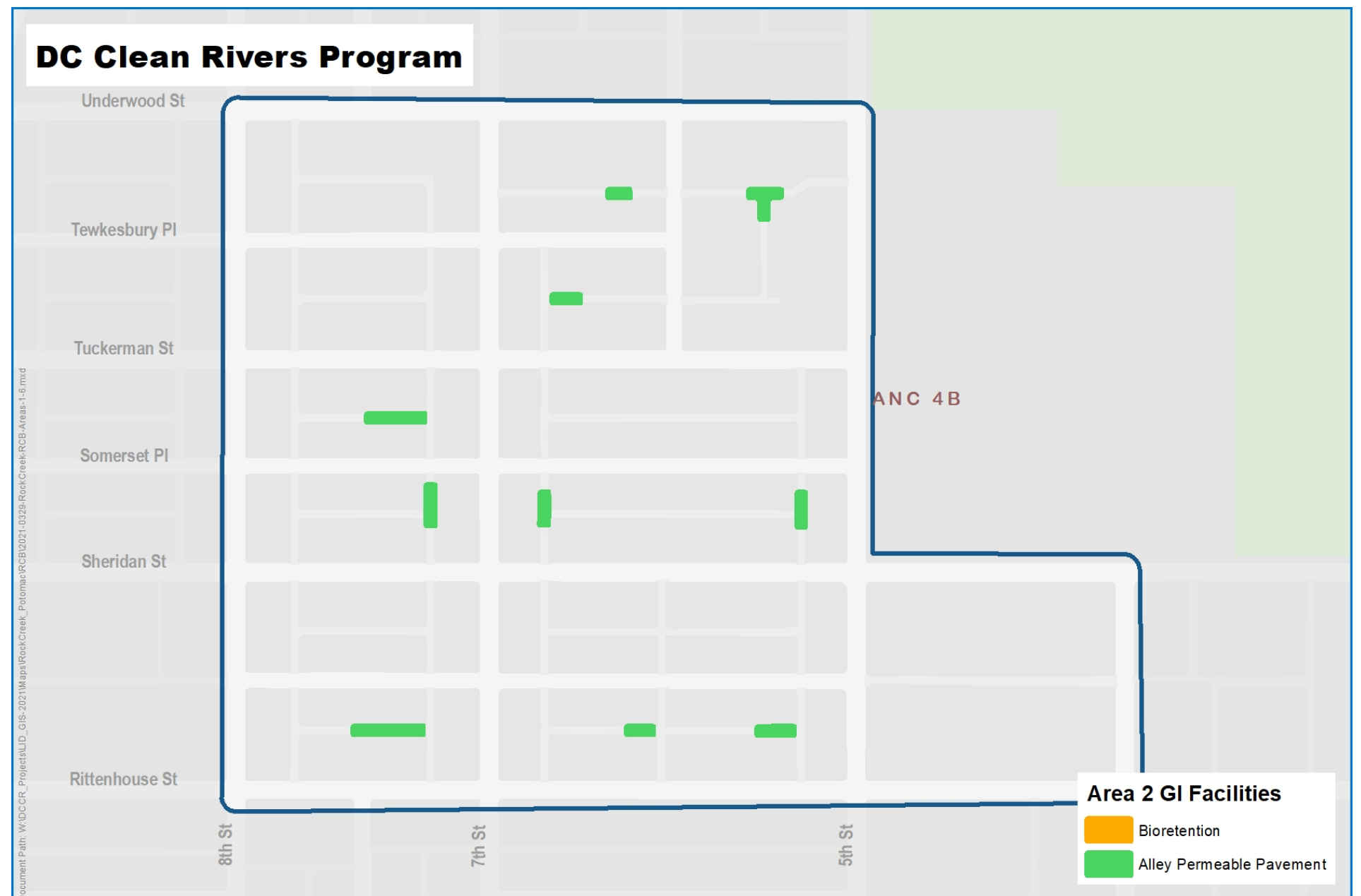
Project Area 1: 76 acres

Rock Creek Project B (RC-B): Project Area 2

- ANC 4B
- Takoma
- Mostly residential row houses

Proposed Green Infrastructure:

- Eleven (11) Permeable Alleys



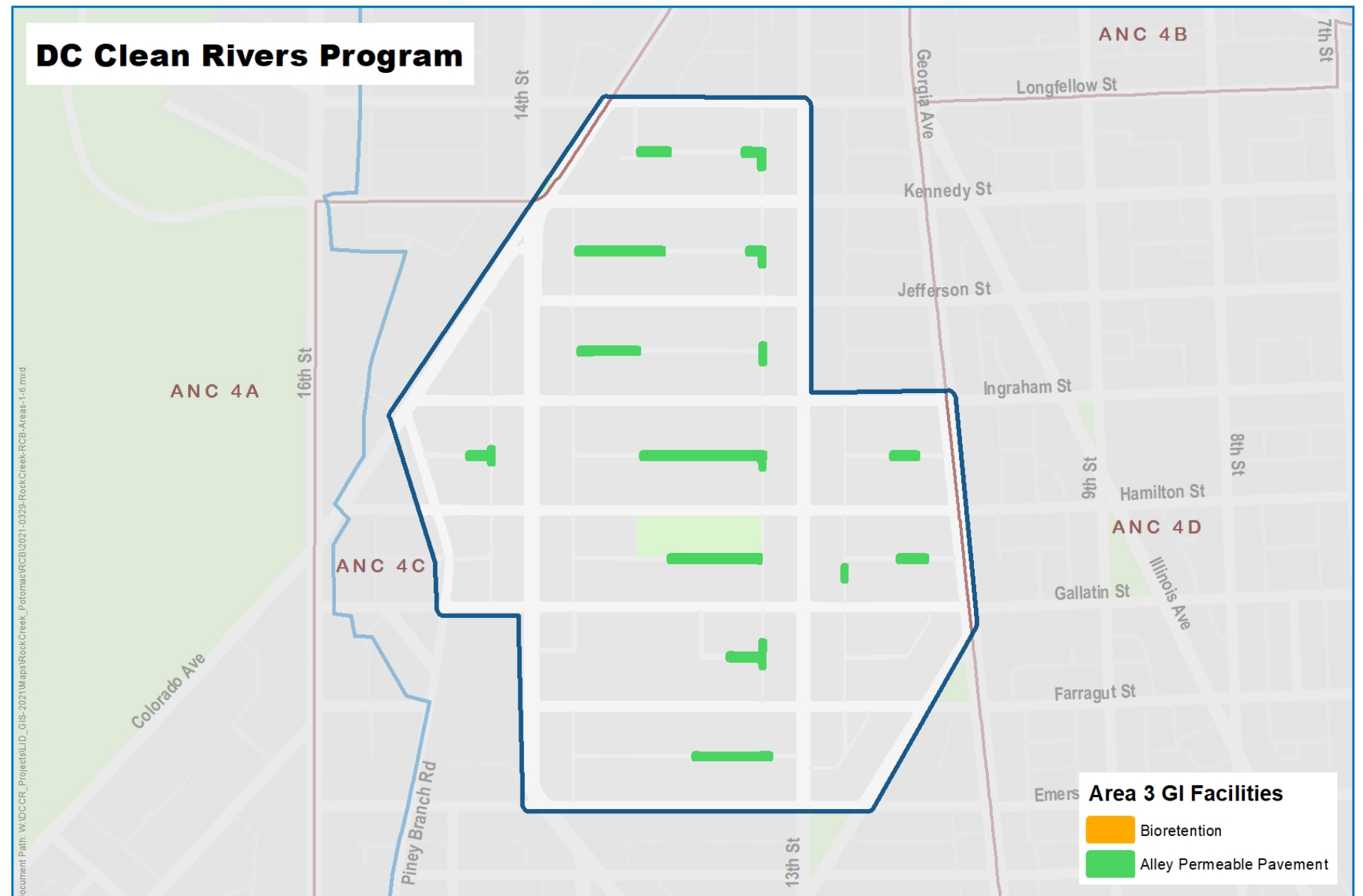
Project Area 2: 43 acres

Rock Creek Project B (RC-B): Project Area 3

- ANC 4C
- Sixteen Street Heights
- Mostly single family detached houses

Proposed Green Infrastructure:

- Ten (10) Permeable Alleys



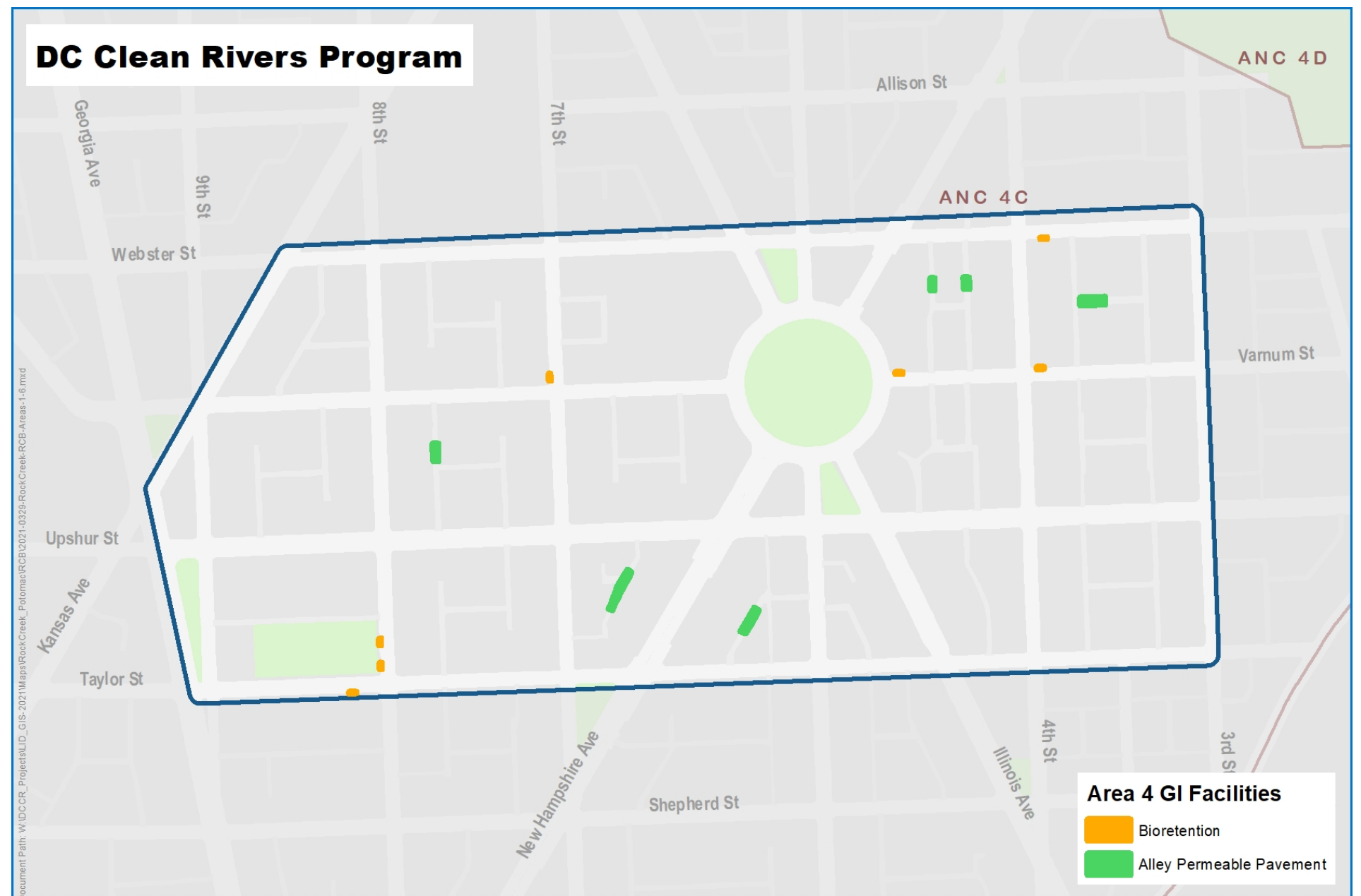
Project Area 3: 93 acres

Rock Creek Project B (RC-B): Project Area 4

- ANC 4C
- Grant Circle
- Mostly residential row houses

Proposed Green Infrastructure:

- Six (6) Permeable Alleys
- Seven (7) Planter Bioretentions



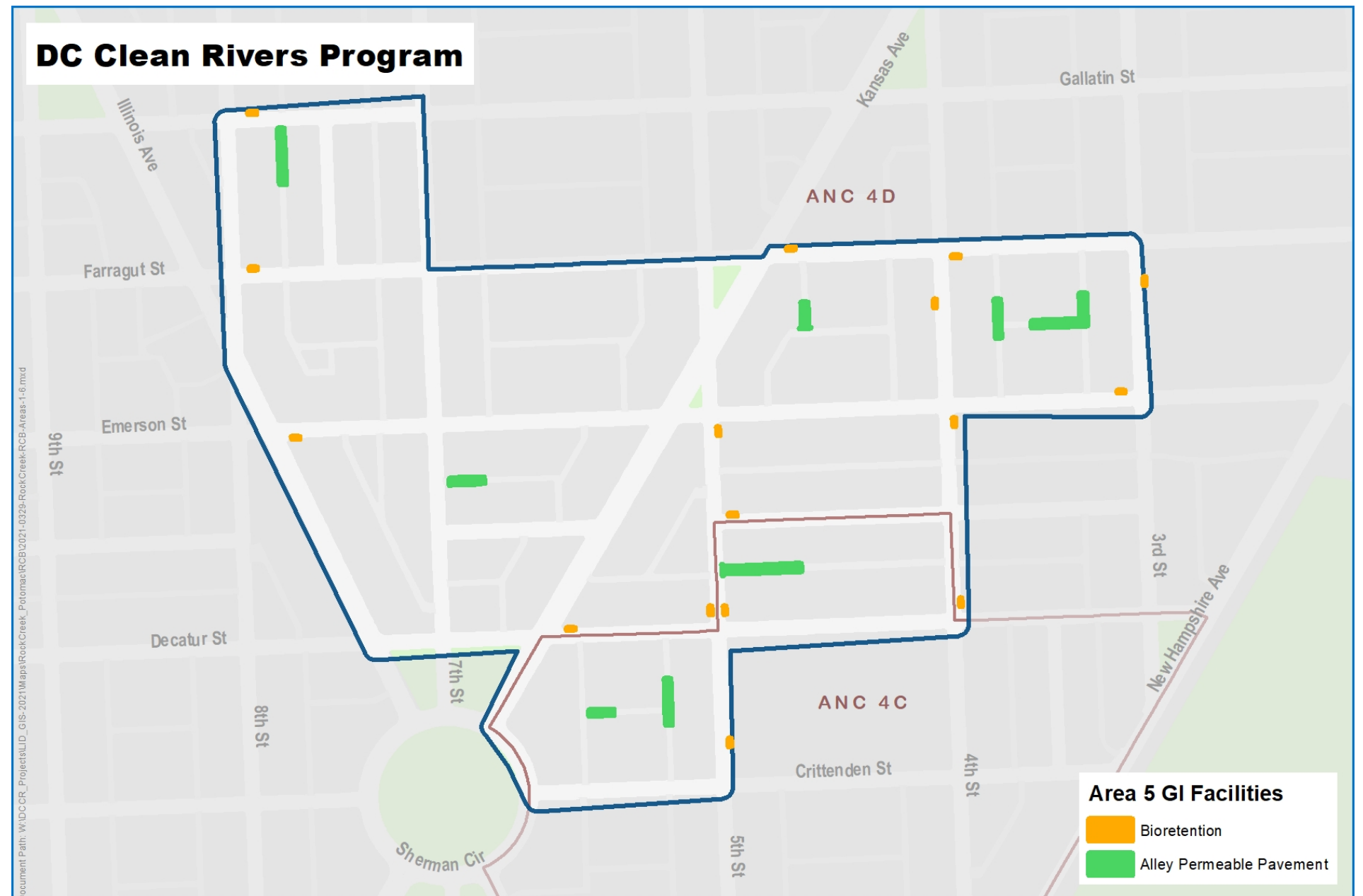
Project Area 4: 75 acres

Rock Creek Project B (RC-B): Project Area 5

- ANC 4C & 4D
- Sherman Circle
- Mostly residential row houses

Proposed Green Infrastructure:

- Eight (8) Permeable Alleys
- Fourteen (14) Planter Bioretentions



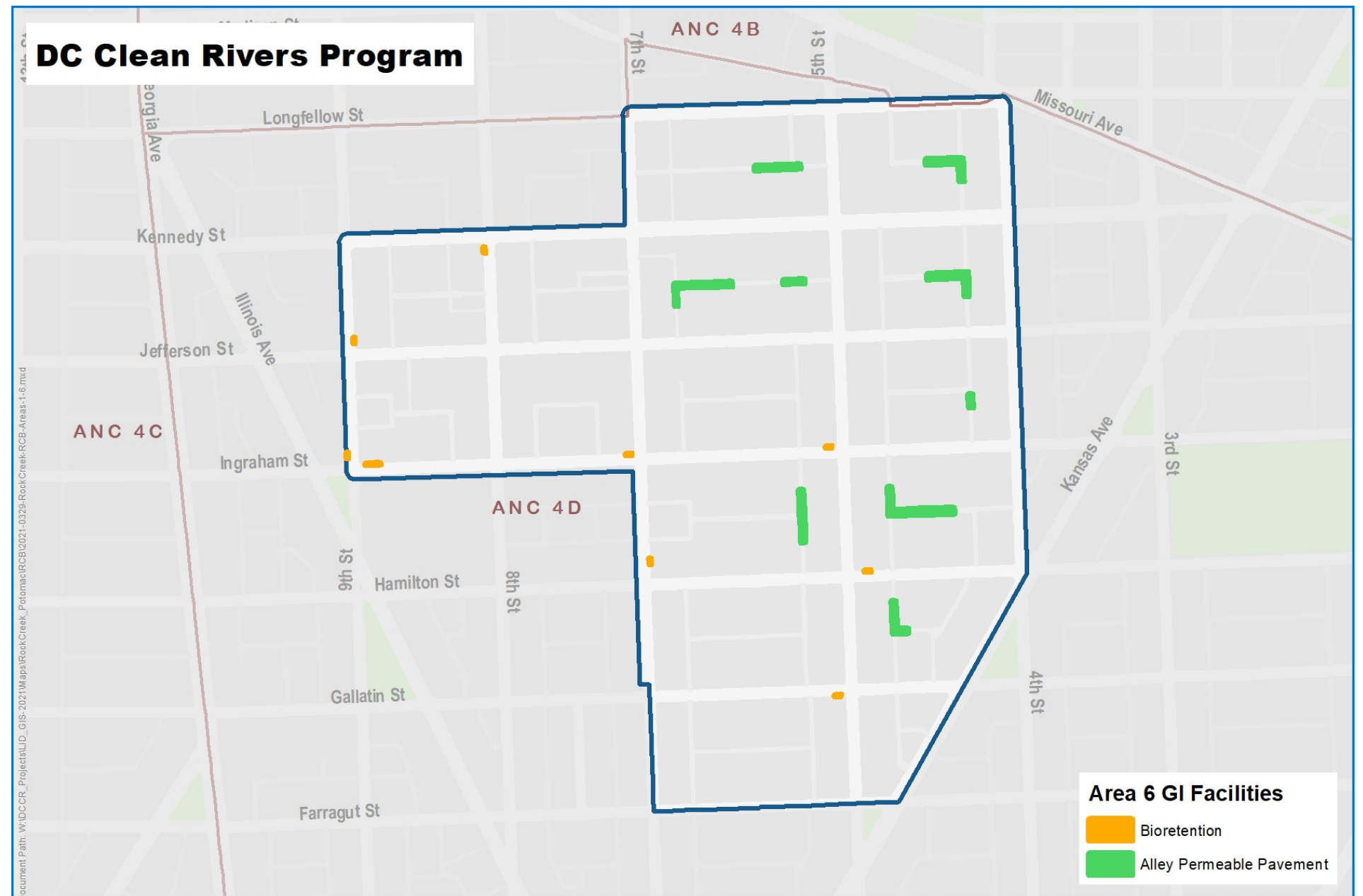
Project Area 5: 42 acres

Rock Creek Project B (RC-B): Project Area 6

- ANC 4D
- Brightwood Park
- Mostly residential row houses

Proposed Green Infrastructure:

- Nine (9) Permeable Alleys
- Seven (7) Planter Bioretentions



Project Area 6: 82 acres

Construction Process

General Construction

- 24/7 Project Hotline
- Work Hours
 - Anticipated Weekdays: 7:00am – 7:00pm
 - Weekend work may be considered
- Water and sewer services
 - Continued service anticipated
- Site conditions
 - Site secured at the end of each workday
 - Site restored in kind per DDOT requirements at construction completion
- Site Security
 - Signage
 - Barriers or fencing
- Vibration and noise monitoring and mitigation, dust control, and rodent control will be in place throughout project.
- Access for garbage collection, other contractors, handicap access, home health care needs, etc. to be provided as needed
- Tree Protection
 - Tree protection will be provided as necessary and as required by Urban Forestry Administration permit

Outreach Efforts and Agency Coordination

- DC Water continues to present at meetings to inform residents and stakeholders about the upcoming project.
 - Mayor's Office (Wards 1 & 4 MOCRs)
 - Councilmember's Office (Wards 1 & 4 Representatives)
 - ANCs 1A, 4B, 4C, 4D
 - Local businesses and residents
- DC Water will provide project information to properties adjacent to sites.
- DC Water will analyze potential impacts due to construction and coordinate appropriate mitigation requirements with:
 - DDOT – Traffic, Pedestrian and Bicycle Impacts
 - WMATA – Transit Impacts
 - DOEE – Environmental Impacts
 - FEMS – Fire and Emergency Services
 - DPW – Garbage Collection
- DC Water will notify the community and post signage regarding any alley closures, traffic, pedestrian, bike and scooter, parking, and public transport impacts.



GI Maintenance: Typical Maintenance Activities

dc **dc** clean
water is life **RIVERS**
PROJECT
Green Infrastructure Program

BIORETENTION

report issues: 202-354-3600
or custserv@dcwater.com
learn more:
dcwater.com/green

BR000

dc **dc** clean
water is life **RIVERS**
PROJECT
Green Infrastructure Program

PERMEABLE PAVEMENT

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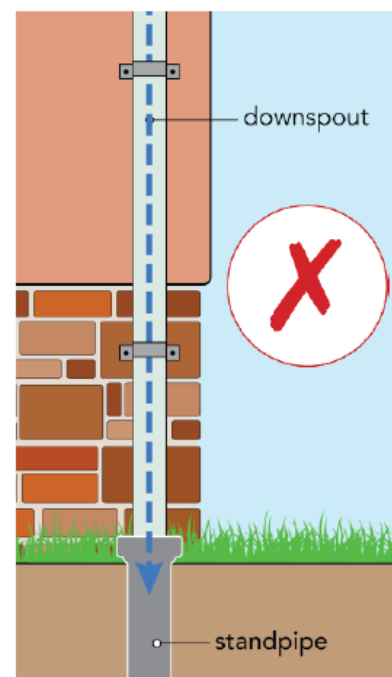
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- DC Water is responsible for maintenance of all DC Water GI facilities.
- Bioretention
 - Monthly removal of trash, leaves, weeds, debris, sediment and animal waste
 - Other activities may include (as needed):
 - Cleaning of system and inspections
 - Inspections for disease/pests and treatment
 - Trimming of vegetation and plants
 - Watering of vegetation
 - Replacement of mulch, rocks and gravel
- Permeable Pavement
 - Vacuum sweeping- once per month (March-December)
 - Other activities may include (as needed):
 - Removal of leaves, weeds and sediments
 - Cleaning of underdrains and inspections

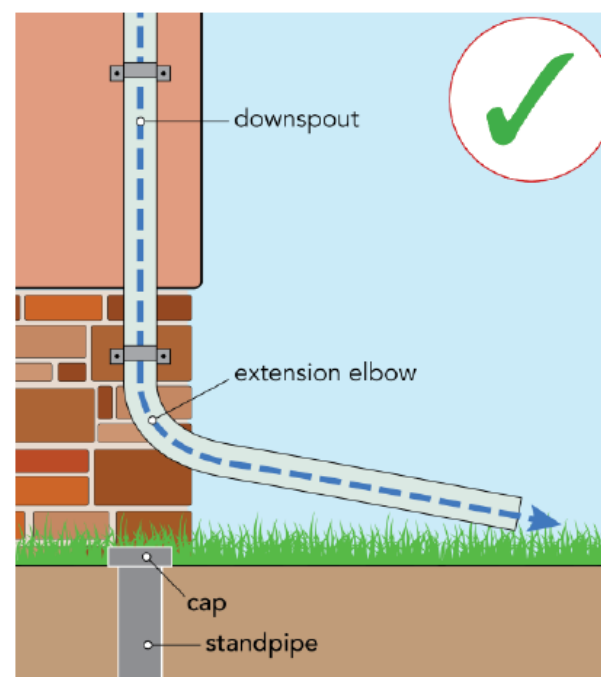


Downspout Disconnection Program: DC Water's GI for Private Property

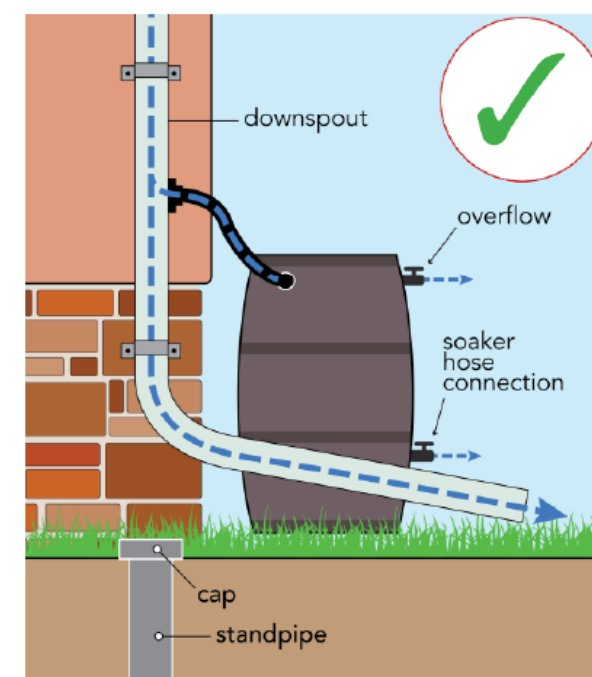
- Implemented to complement the GI projects and outreach efforts in the right-of-way
 - Accepted GI practice in the reduction of rainfall runoff contributions to the combined sewer system
 - Quick, convenient, cost-effective
 - Engages community
- **Voluntary** program providing free downspout disconnection and option for a free rain barrel for eligible participants
- Follows criteria in the District's Department of Energy & Environment Stormwater Guidebook



DOWNSPOUT CONNECTED
TO SEWER SYSTEM



DOWNSPOUT DISCONNECTED
FROM SEWER SYSTEM



DOWNSPOUT CONNECTED TO
RAIN BARREL

Downspout Disconnection Program: Process



**Downspout Connected to
Combined Sewer System**

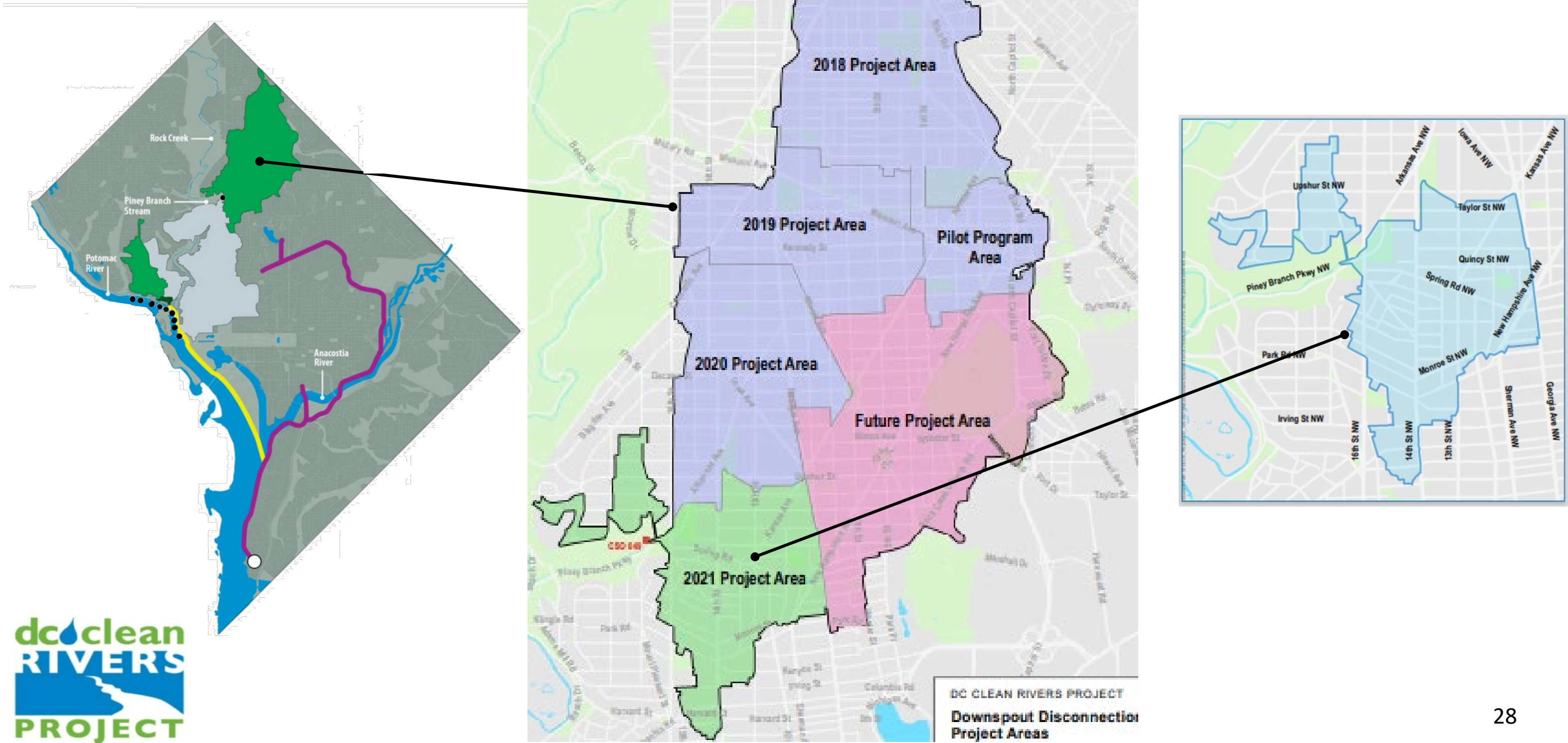


Disconnected Downspout



**Downspout Connected
to Rain Barrel**

Downspout Disconnection Program: Rock Creek Project Areas



THANK YOU!

- Draft Project Description Rock Creek Project B published on March 29, 2021
- Draft Project Description for RC-B is available on DC Water's website: www.dewater.com/green
- Public Comment Period closes on May 7, 2021
- Comments can be sent by e-mail to: cleanriversgi@dewater.com