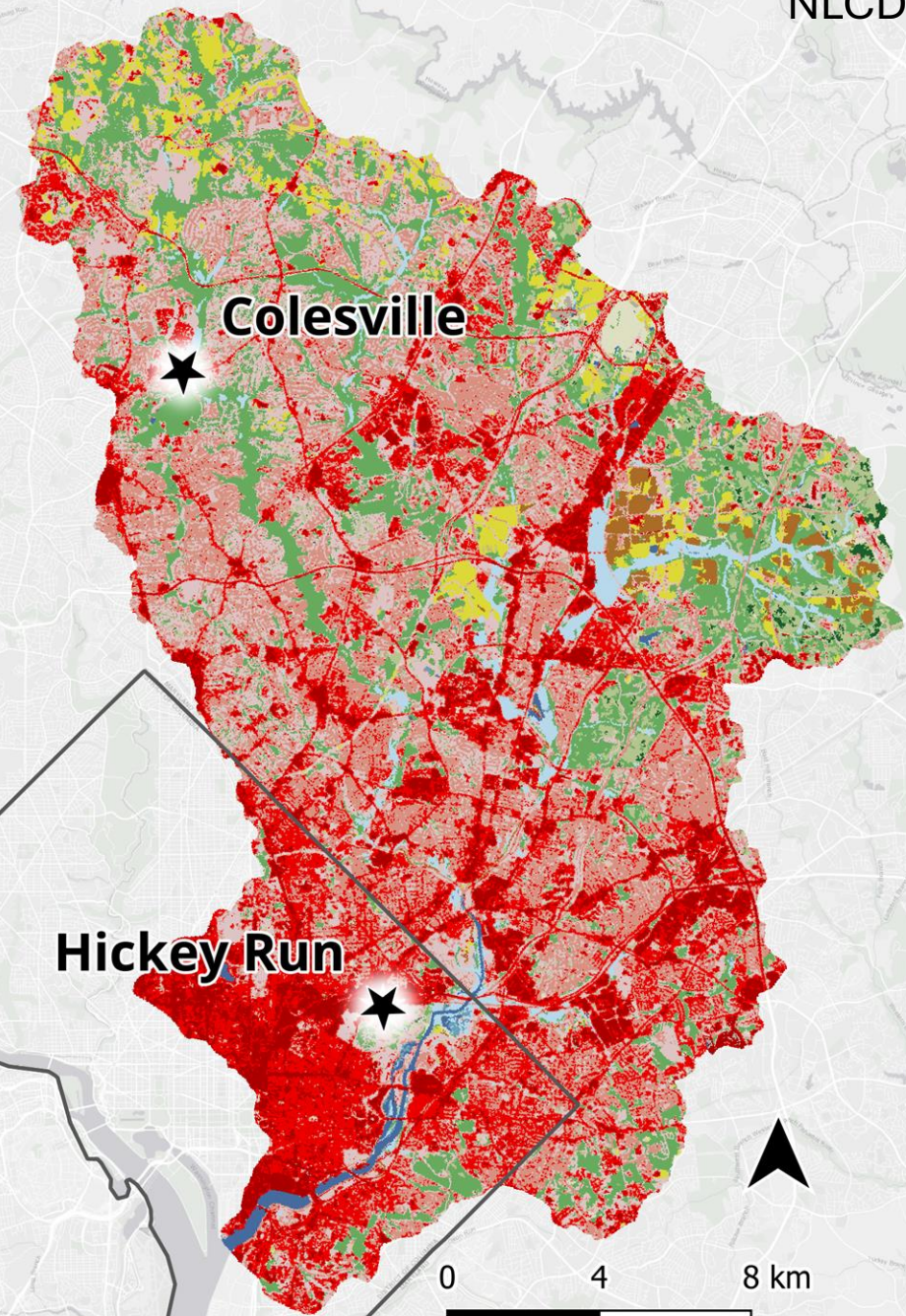


Anacostia River Watershed 6PPD-quinone sampling

Chesapeake Bay Program STAR Team Meeting
August 28, 2025

¹MD-DE-DC Water Science Center
²Kansas Water Science Center

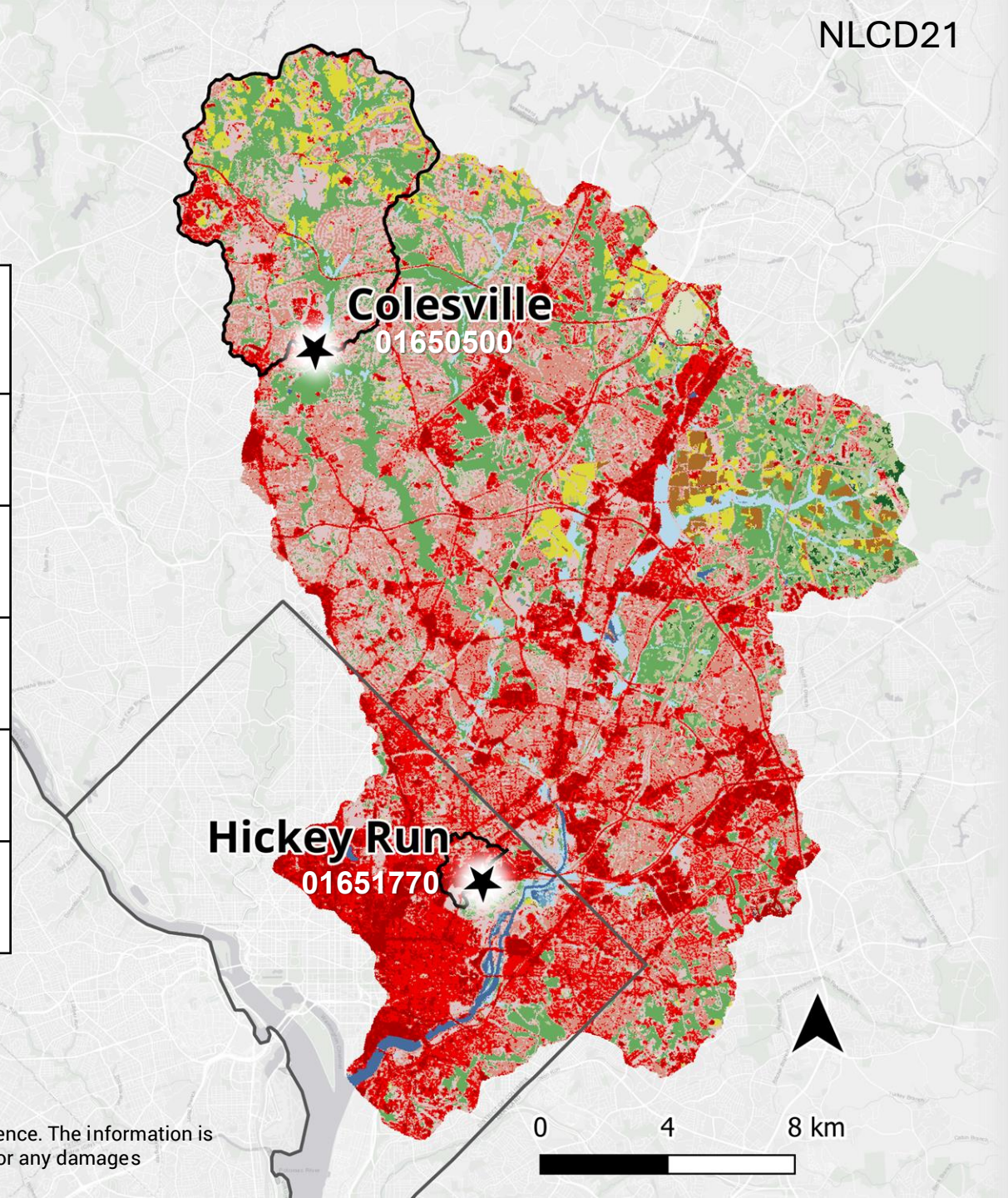
Leah Staub¹
Tyler Bowser¹
Tristan Mohs¹
Rachael Lane²
Adam Mumford¹
Laura Wortman¹
Andrew Sekellick¹



Watershed Characteristics

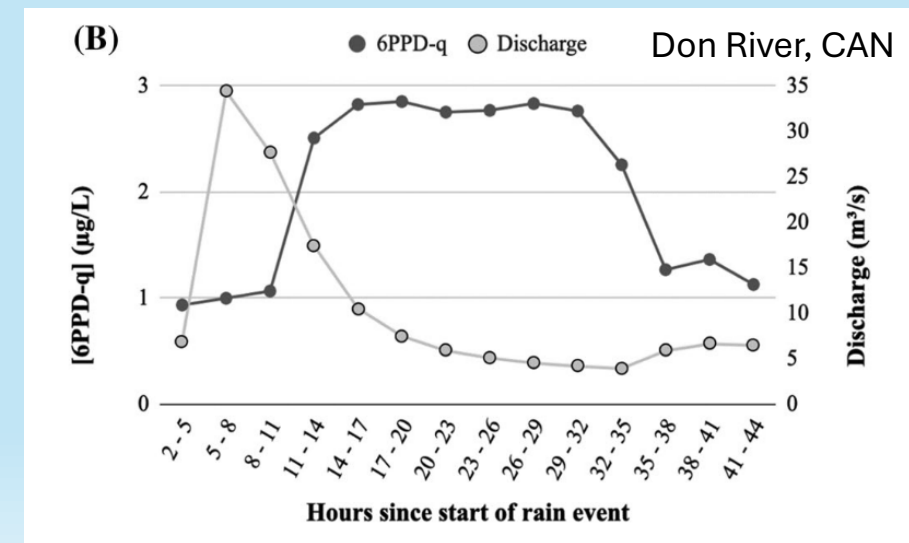
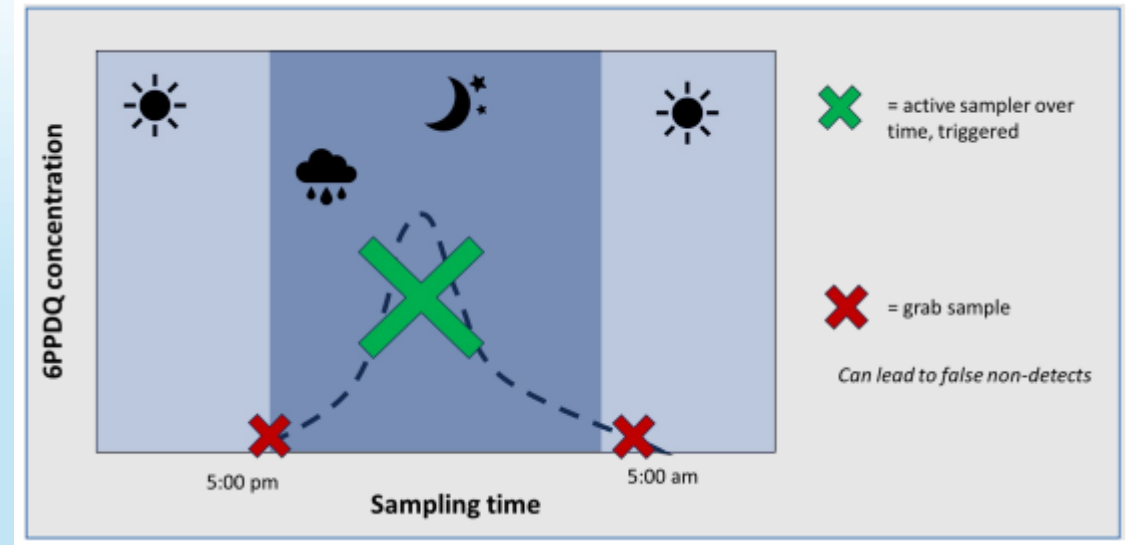
Parameter	Colesville	Hickey Run	Anacostia
Drainage Area	21.1 sq. miles	1.01 sq. miles	174 sq. miles
Forested	24.8 %	1.8 %	20.7 %
Impervious	9.89 %	57.1 %	26.2 %
Developed	55 %	98.5 %	72.2 %
Roads	~ 239 miles	~ 30 miles	~ 3,107 miles

StreamStats Services Version: 1.2.22 & NLCD 2021 & TIGER line roads 2020



Storm Sampling

- Determine concentration patterns on Rise, Peak, and Fall of storms
- Grab Sampling vs. Autosampling
- Center of Flow vs. Point Sampling
- Less time waiting in person for storm events to progress



[1] SOP EAP093, Version 1.0

[2] Johannessen and Others, 2021

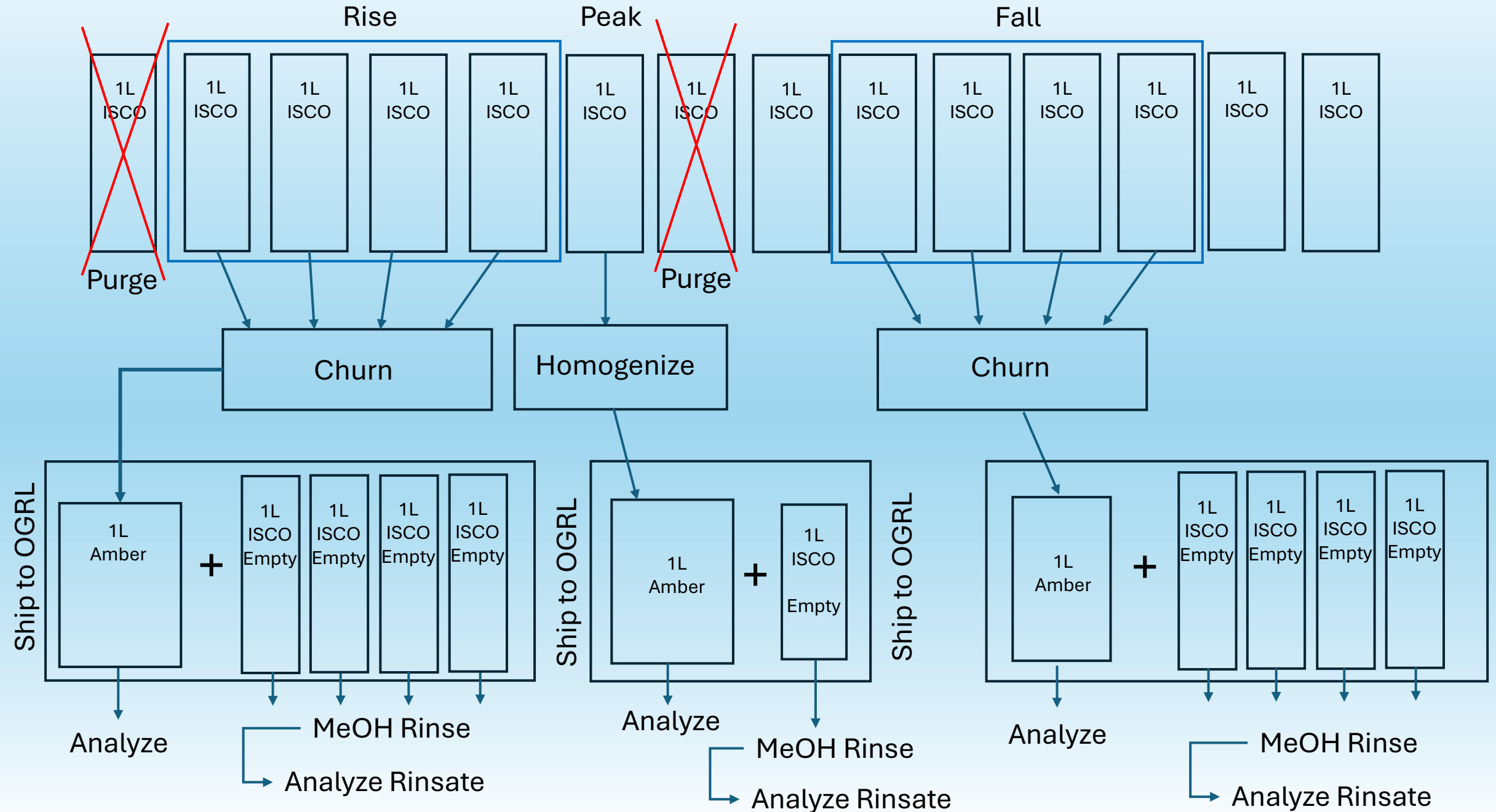
Set-up

- Teledyne ISCO Avalanche
- Sampling materials and QA/QC
- Site specific programming
- Refrigeration after sampling



Sampler Settings	Hickey Run	Colesville
Trigger stage	1.58ft Above Baseflow	0.65 ft Above Baseflow
Program run time	1.5 Hours	14.5 Hours

Storm Event Sampling Plan





01650500

Northwest Branch
Anacostia River Near
Colesville, MD

4 Storm Events

<i>Rise-Peak-Fall</i>	<i>Precipitation</i>
• 05/13/2025	1.58 in
• 07/09/2025	1.16 in
• 07/27/2025	0.73 in
• ??/??/2025	----



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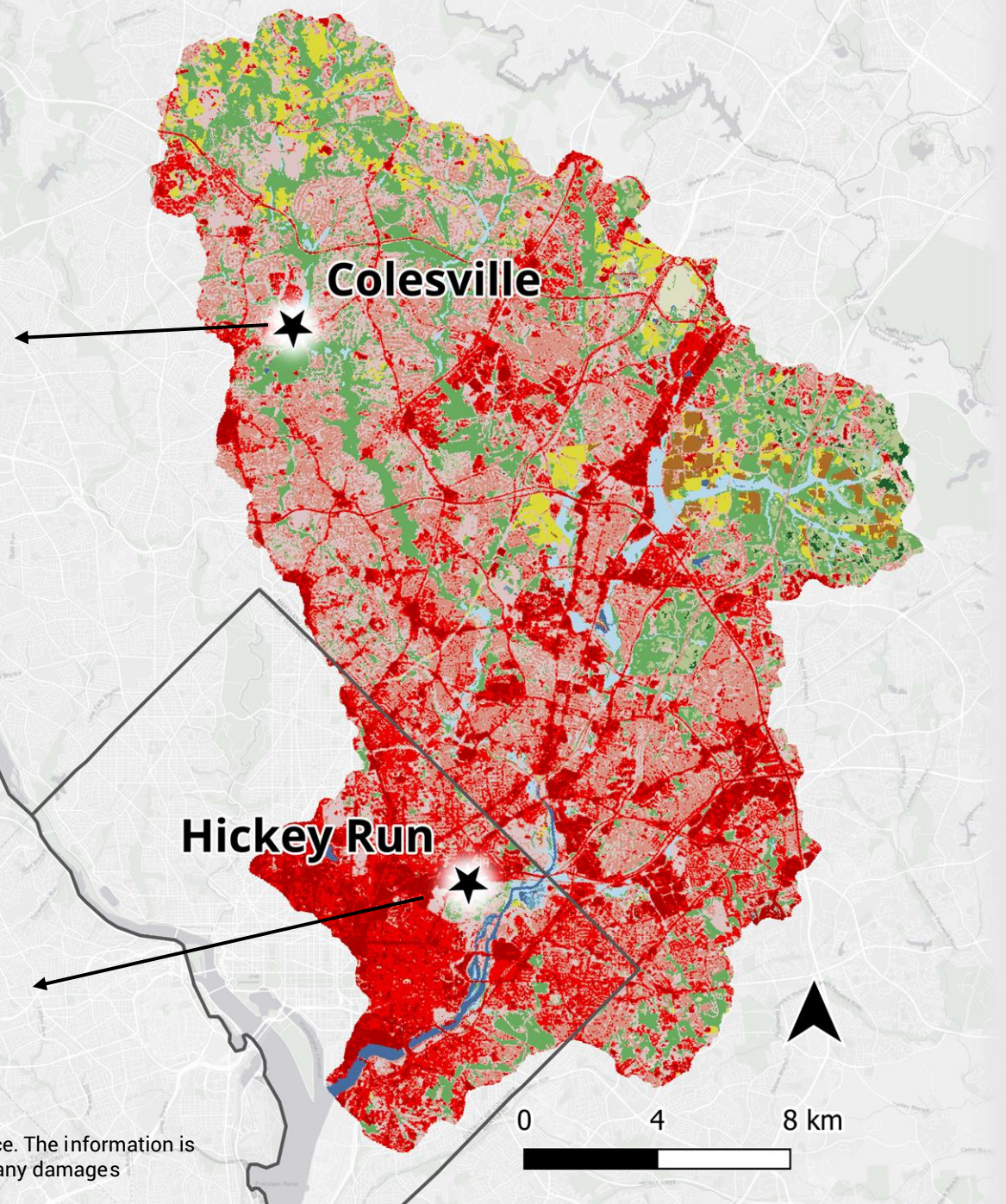
Hickey Run at
National Arboretum,
DC

3 Storm Events

<i>Rise-Peak-Fall</i>	<i>Precipitation</i>
• 05/09/2025	0.99 in
• 05/13/2025	1.58 in
• 07/01/2025	0.42 in

1 Storm Event

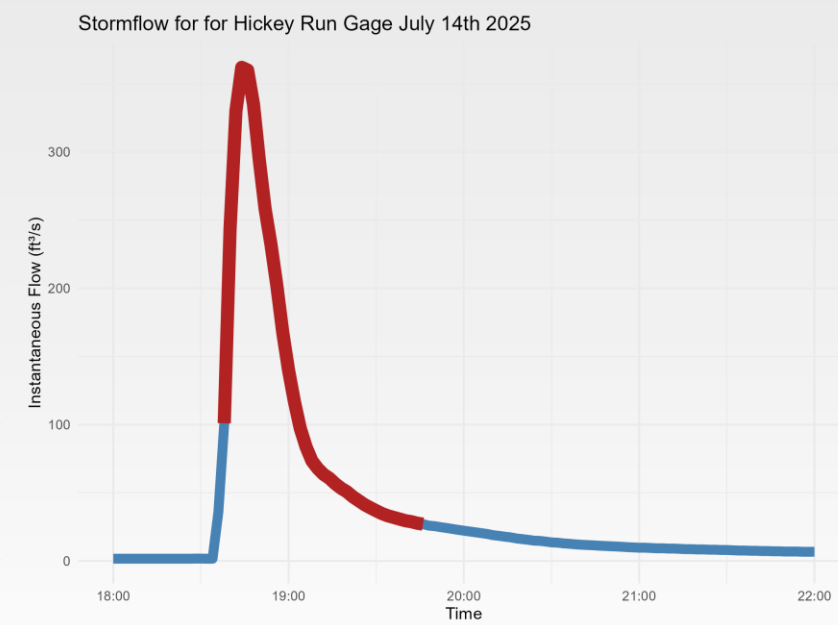
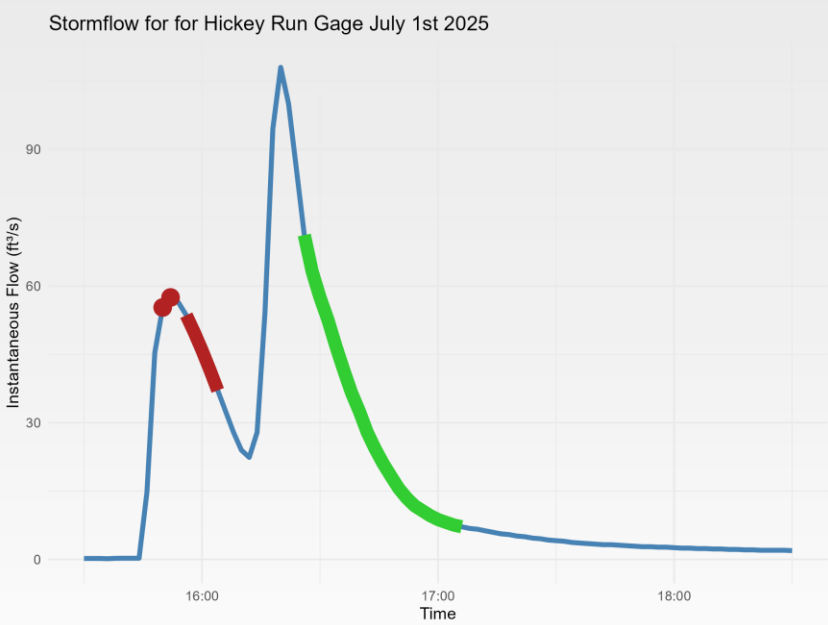
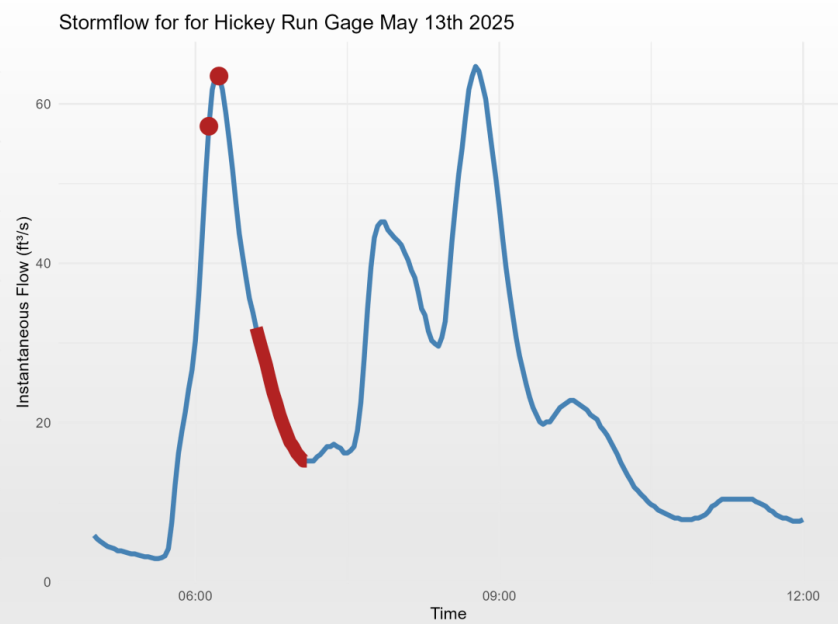
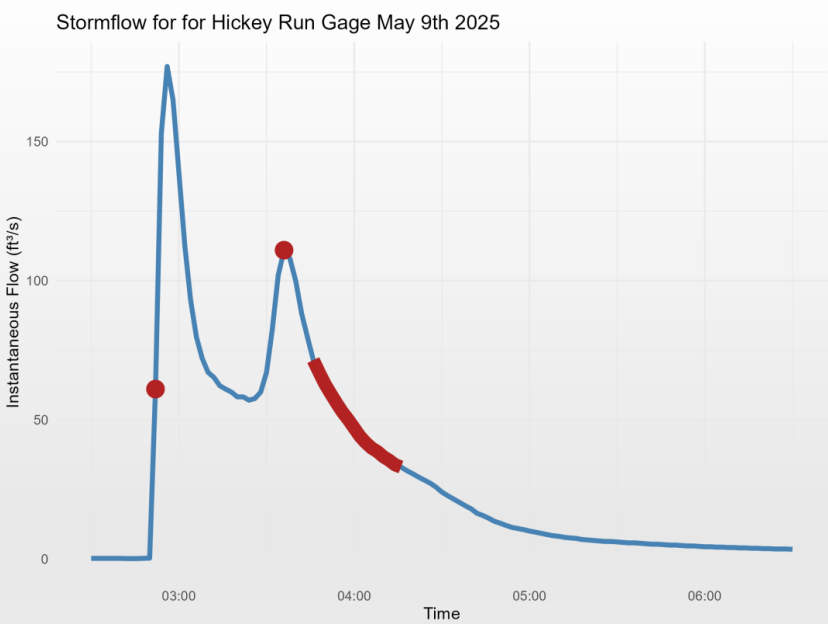
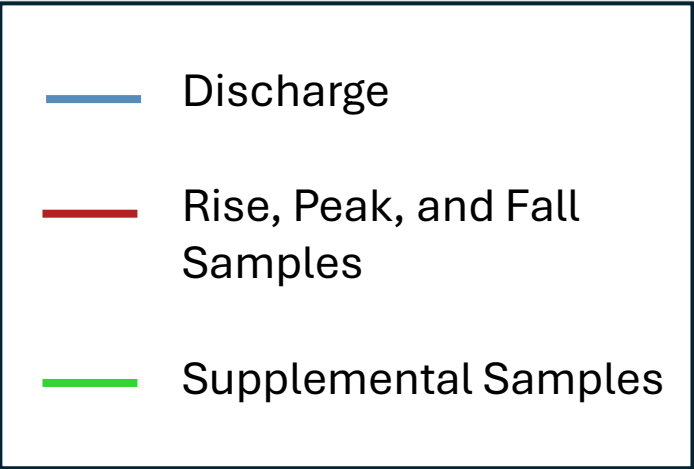
<i>Full Suite</i>	
• 07/14/2025	0.26 in



Hickey Run

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Hickey Run at National
Arboretum, DC

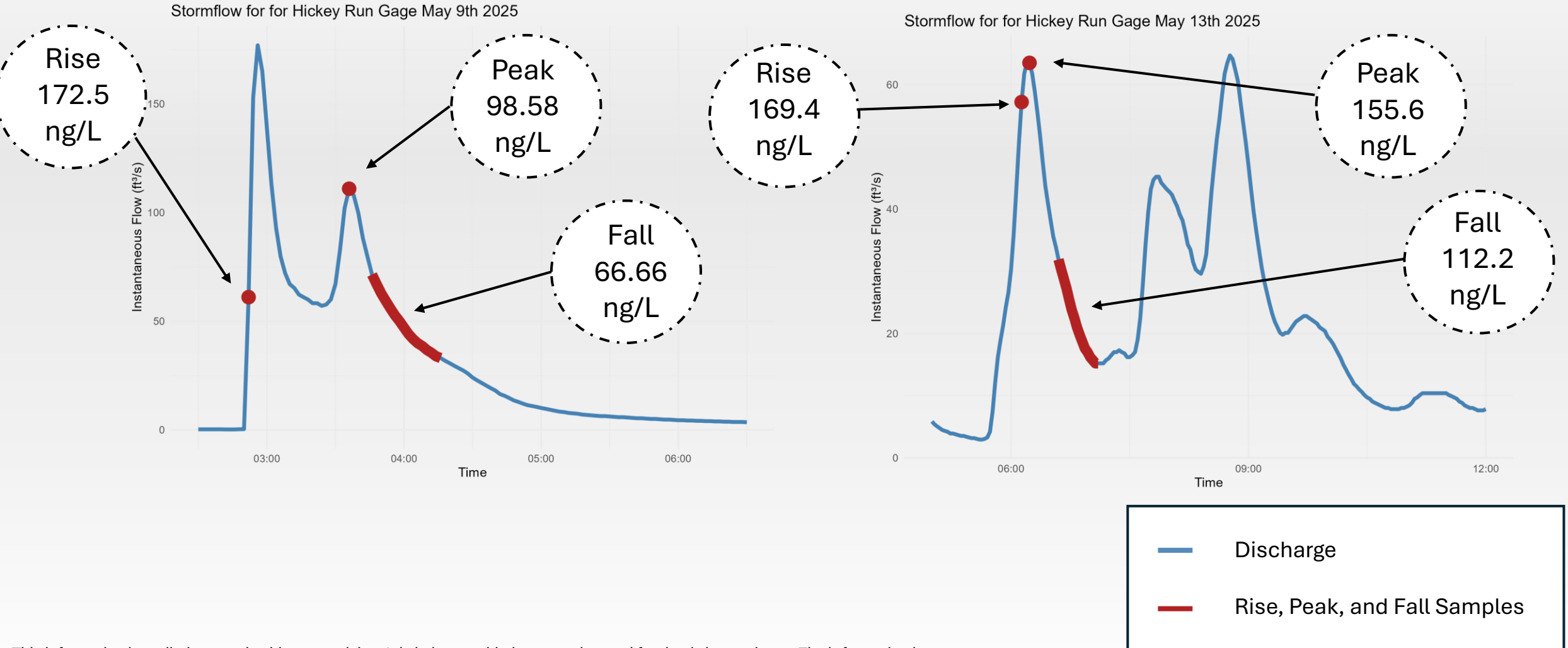


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Hickey Run

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Hickey Run at National
Arboretum, DC

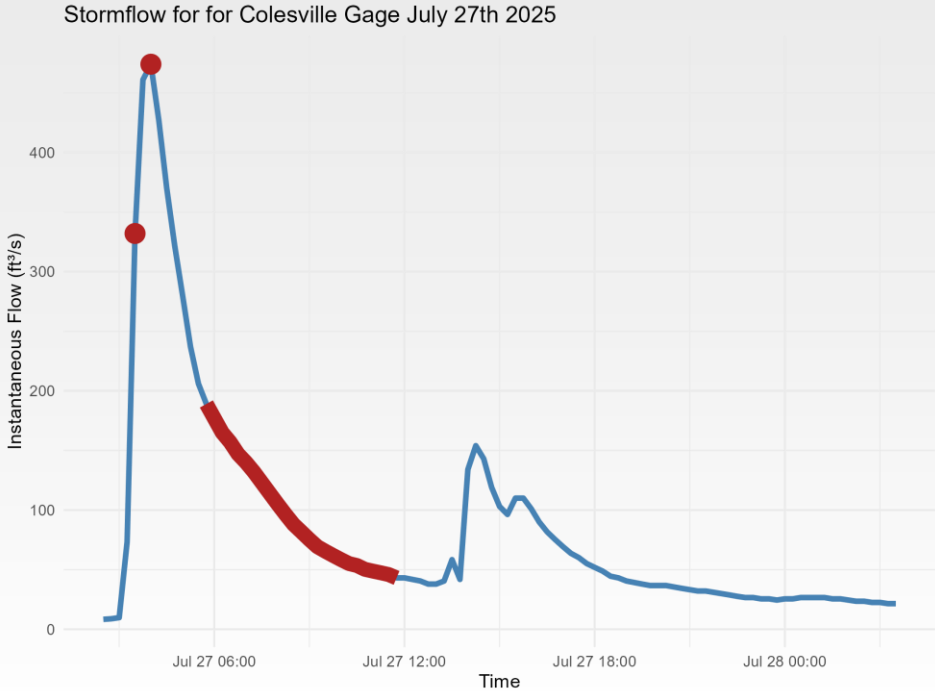
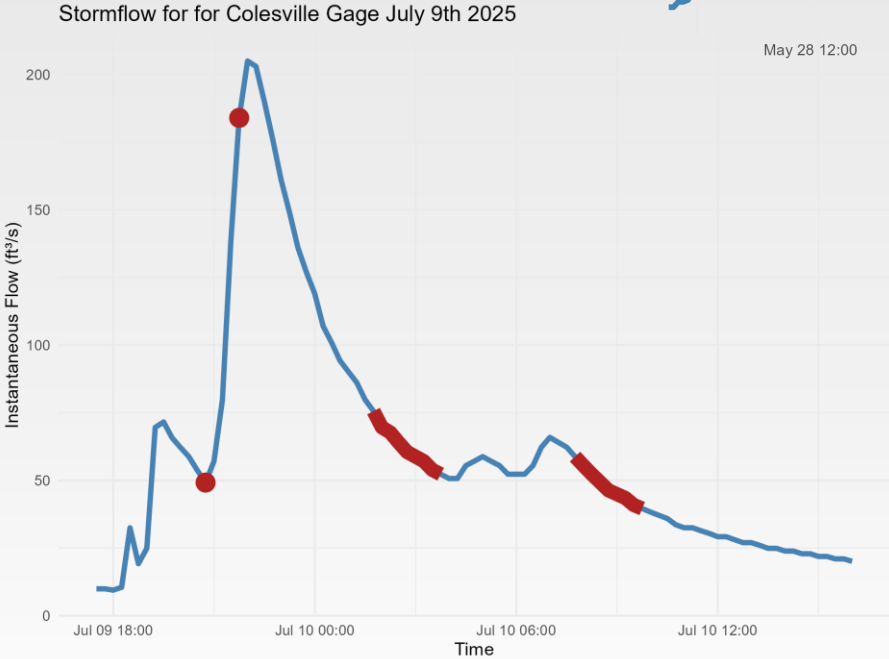
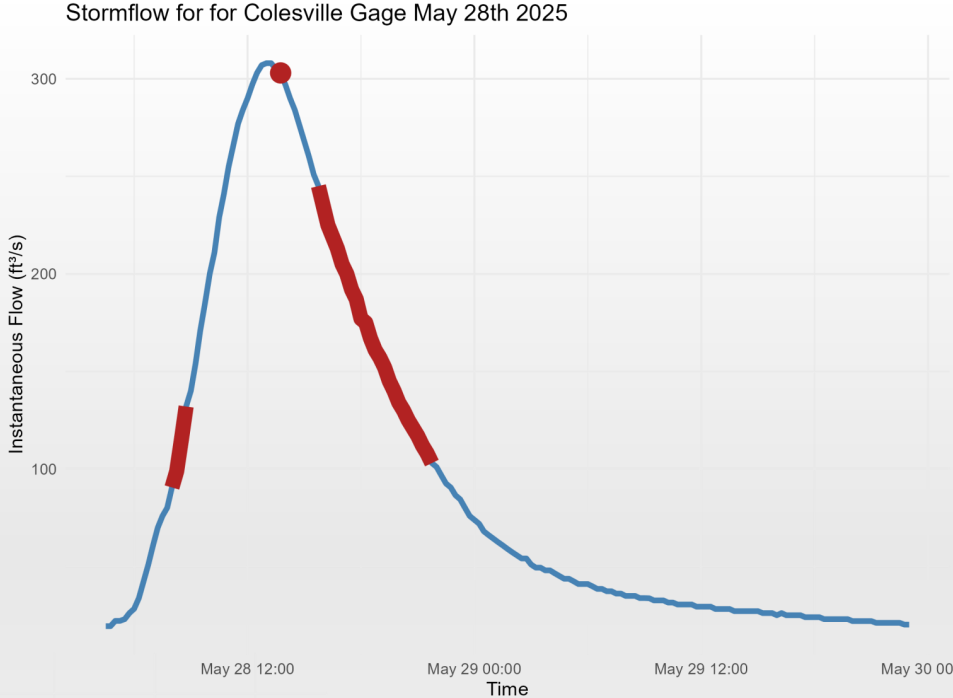


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Colesville

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Northwest Branch Anacostia
River Near Colesville, MD

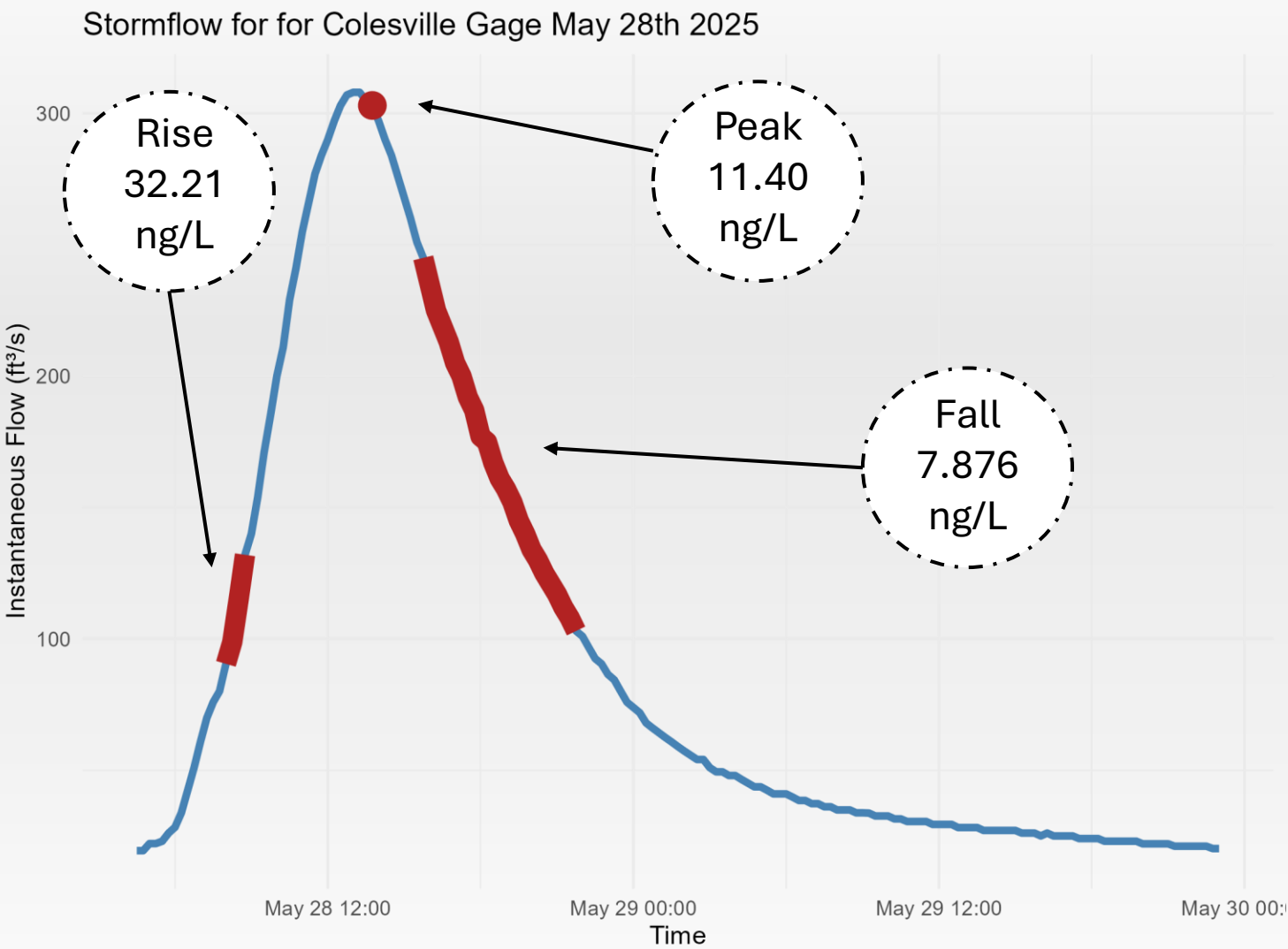
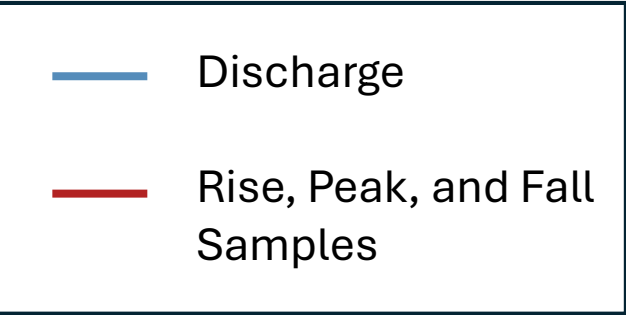


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Colesville

01650500

Northwest Branch Anacostia
River Near Colesville, MD



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