# Harpeth Conservancy's TN Water Watch Report

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Tennessee Water Watch is a predictive river advisory tool that Harpeth Conservancy developed and launched for public use in June 2024. This tool forecasts the levels of *E. coli* at select, highly recreated river access points and compares it to thresholds set by the Environmental Protection Agency(EPA) in order to provide insight into the relative health risks of the water.

In 2012 the EPA published recreational water quality criteria(RWQC) recommendations in order to protect human health in coastal and non-coastal waters designated for primary contact (swimming, wading, *etc.*). These recommendations can be used as precautionary criteria to make recreation decisions based on the densities of *E. coli* in the water. The recommended threshold for individual freshwater samples is 235 colony forming units(CFUs)/100 mL. EPA recommends this threshold can be used for notification purposes to protect human health when participating in primary contact activities - 235 CFUs/100 mL equates to an human estimated illness rate of 36 out of 1000 primary contact recreators. To learn more about the EPA's recreational water quality criteria and estimated illness rates, feel free to explore the guidance documents found on their webpage.

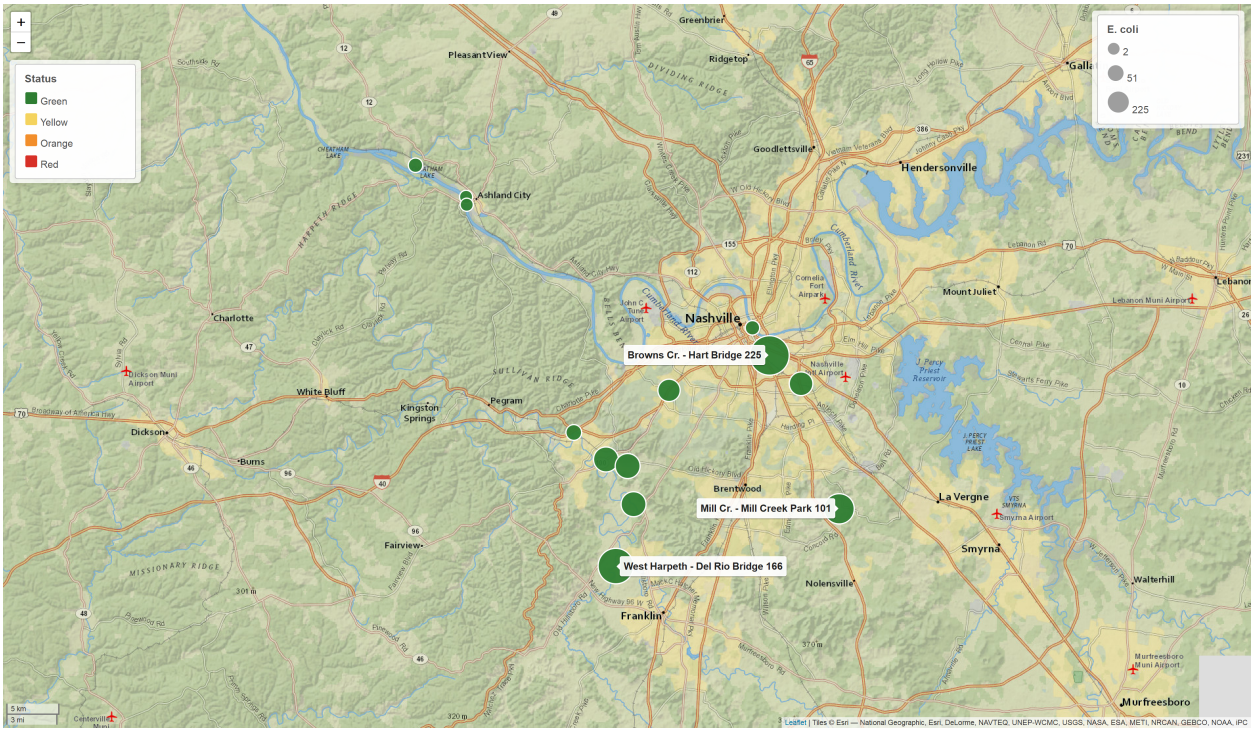
As people make recreation plans, they can use this tool to make informed decisions about when and where to recreate and to gauge safety precautions.

"Before you play, check the water for the day!"

TN Water Watch sampling began in June 2020. Since then Harpeth Conservancy has collected 1208 samples from 25 different locations. Samples were collected on a weekly basis and analyzed for *E. coli* between June and October each year. We focus on the recreational season to help inform and protect human health risks during recreational activities along our rivers.

TN Water Watch is Harpeth Conservancy's *E. coli* forecast tool. You can access the TN Water Watch tool by visiting TNWaterWatch.org.

So far this year, 2026, volunteers have collected 322 samples.




Values are the most recent result at each site from the last 10 days. Bubble size shows *E. coli* magnitude; bubble color shows status. The highest current values are labeled.

Table 1: Weekly Round-up

| Date | Location | River | Turbidity (NTUs) | E. coli (CFUs/100 mL) |
|---|---|---|---|---|
| **2026-09-29** | Hart Bridge | Browns Creek | 1.37 | 224.7 |
| **2026-09-28** | Ashland City Marina | Cumberland River | 6.02 | 2.0 |
| **2026-09-28** | Downtown Access | Cumberland River | 6.67 | 3.1 |
| **2026-09-28** | Riverbluff Park | Cumberland River | 10.12 | 3.0 |
| **2026-09-28** | Coley Davis Access | Harpeth River | 6.63 | 8.5 |
| **2026-09-28** | Hwy 100 Boat Launch | Harpeth River | 22.80 | 57.1 |
| **2026-09-28** | Moran Road | Harpeth River | 12.25 | 57.6 |
| **2026-09-28** | Warner Park | Little Harpeth River | 2.64 | 56.3 |
| **2026-09-30** | Mill Creek Park | Mill Creek | 2.05 | 101.0 |
| **2026-09-29** | Whitsett Park | Mill Creek | 3.73 | 51.2 |
| **2026-09-28** | Jackson Blvd | Richland Creek | 1.38 | 40.5 |
| **2026-09-28** | Recreation Area | Sycamore Creek | 11.24 | 4.1 |
| **2026-09-29** | Del Rio Bridge | West Harpeth River | 5.27 | 166.4 |

-Rows and map bubbles are colored by *E. coli* status: green <235, yellow 235-349, orange 350-749, and red >=750 CFUs/100 mL.

Table 2: Summary of All Water Quality Data since 2020

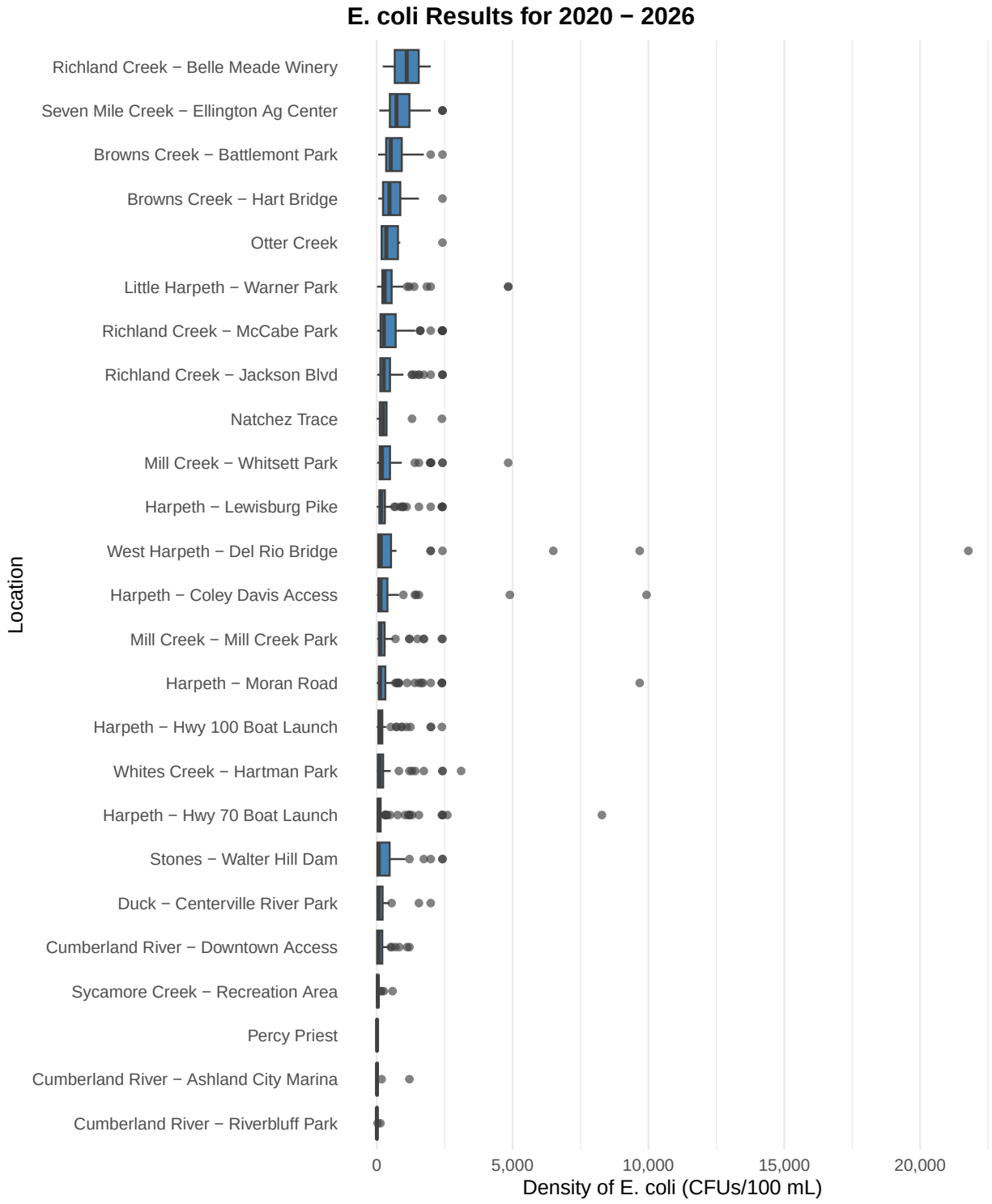
| Location | Total Number of Samples | Samples Above EPA Threshold | Green Status | Yellow Status | Orange Status | Red Status | Percent Advisory |
|---|---|---|---|---|---|---|---|
| **Browns Creek - Battlemont Park** | 73 | 65 | 8 | 12 | 28 | 25 | 89.0 |
| **Browns Creek - Hart Bridge** | 18 | 13 | 5 | 1 | 6 | 6 | 72.2 |
| **Cumberland River - Ashland City Marina** | 18 | 1 | 17 | 0 | 0 | 1 | 5.6 |
| **Cumberland River - Downtown Access** | 59 | 11 | 48 | 3 | 5 | 3 | 18.6 |
| **Cumberland River - Riverbluff Park** | 17 | 0 | 17 | 0 | 0 | 0 | 0.0 |
| **Duck - Centerville River Park** | 27 | 7 | 20 | 3 | 2 | 2 | 25.9 |
| **Harpeth - Coley Davis Access** | 54 | 21 | 33 | 7 | 7 | 7 | 38.9 |
| **Harpeth - Hwy 100 Boat Launch** | 74 | 17 | 57 | 7 | 3 | 7 | 23.0 |
| **Harpeth - Hwy 70 Boat Launch** | 93 | 18 | 75 | 4 | 2 | 12 | 19.4 |
| **Harpeth - Lewisburg Pike** | 92 | 27 | 65 | 5 | 11 | 11 | 29.3 |
| **Harpeth - Moran Road** | 98 | 31 | 67 | 7 | 11 | 13 | 31.6 |
| **Little Harpeth - Warner Park** | 56 | 39 | 17 | 15 | 14 | 10 | 69.6 |
| **Mill Creek - Mill Creek Park** | 82 | 30 | 52 | 16 | 7 | 7 | 36.6 |
| **Mill Creek - Whitsett Park** | 69 | 30 | 39 | 6 | 12 | 12 | 43.5 |
| **Richland Creek - Jackson Blvd** | 86 | 50 | 36 | 20 | 16 | 14 | 58.1 |
| **Richland Creek - McCabe Park** | 84 | 46 | 38 | 11 | 15 | 20 | 54.8 |
| **Seven Mile Creek - Ellington Ag Center** | 31 | 28 | 3 | 2 | 11 | 15 | 90.3 |
| **Stones - Walter Hill Dam** | 40 | 13 | 27 | 1 | 5 | 7 | 32.5 |
| **Sycamore Creek - Recreation Area** | 18 | 2 | 16 | 1 | 1 | 0 | 11.1 |
| **West Harpeth - Del Rio Bridge** | 34 | 14 | 20 | 4 | 4 | 6 | 41.2 |
| **Whites Creek - Hartman Park** | 64 | 16 | 48 | 3 | 5 | 8 | 25.0 |

**Table Explanation:**

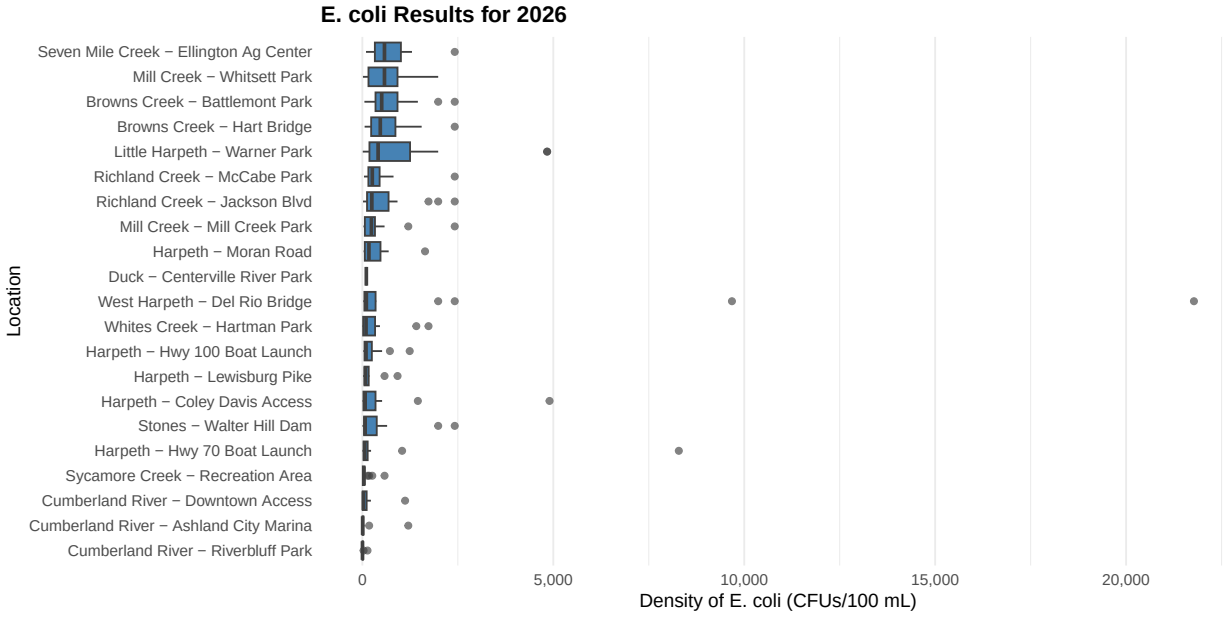
- Number of Samples = Total number of sampling days for the specified location
- Samples Above EPA Threshold = Number of samples that were above the EPA advisory threshold of 235 colony forming units (CFUs) per 100 mL
- Green Status = Number of samples that were below the EPA threshold - Green results are equivalent to a "Safe" status
- Yellow Status = Number of samples that were at or above the EPA threshold of 235 CFUs/100 mL but below 350 CFUs/100 mL - Yellow results are equivalent to an "Advisory" status
- Orange Status = Number of samples that were at or above 350 CFUs/100 mL and below 750 CFUs/100 mL - Orange results are equivalent to a "Caution" status
- Red Status = Number of samples that were at or above 750 CFUs/100 mL - Red results are equivalent to a "Warning" status
- Percent Advisory = Percentage of samples that were above 235 CFUs/100 mL

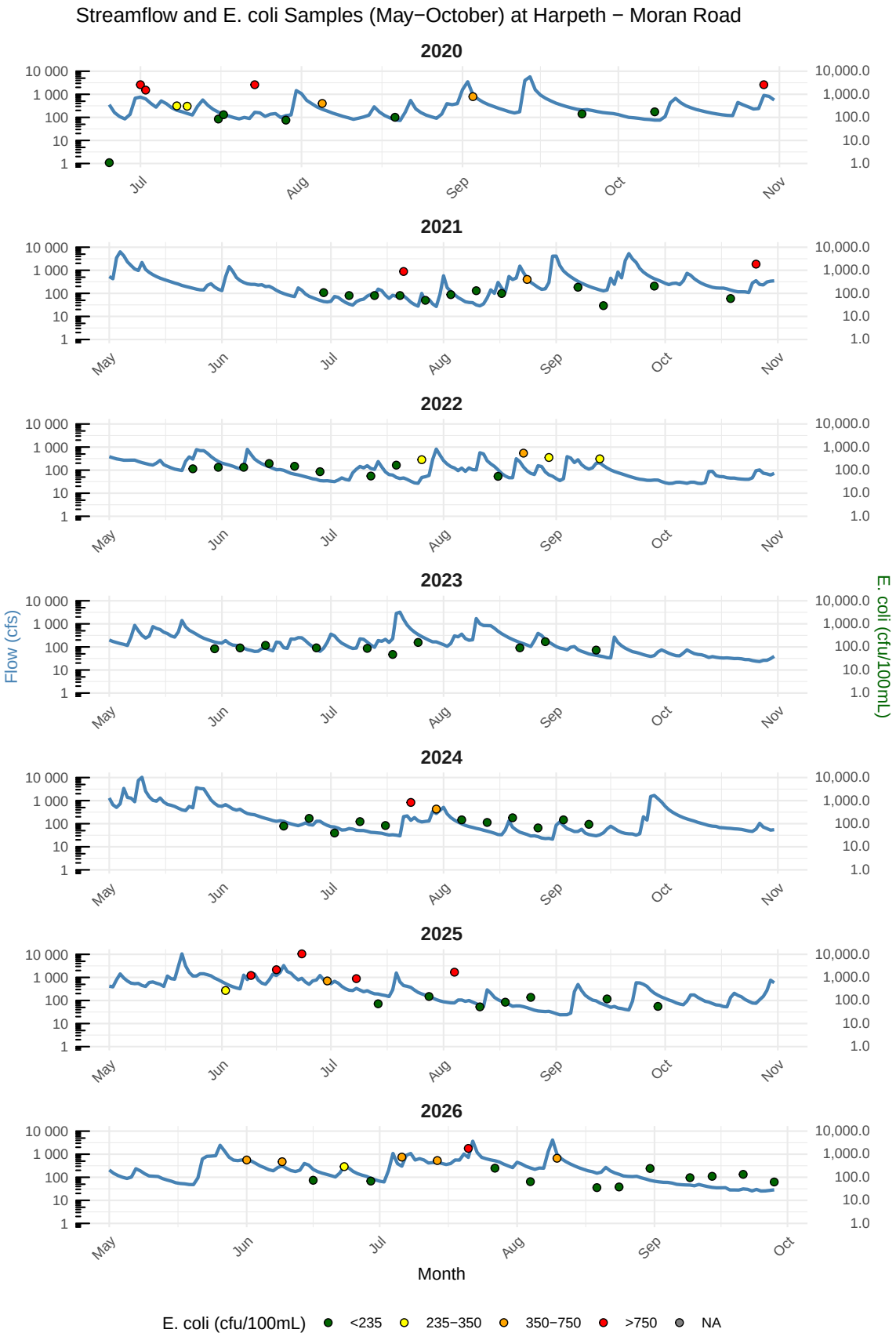
***E. coli* Boxplots:** Below is a boxplot that represents all of the *E. coli* samples collected by the Harpeth Conservancy. Here is a brief summary to understand how to read a boxplot:

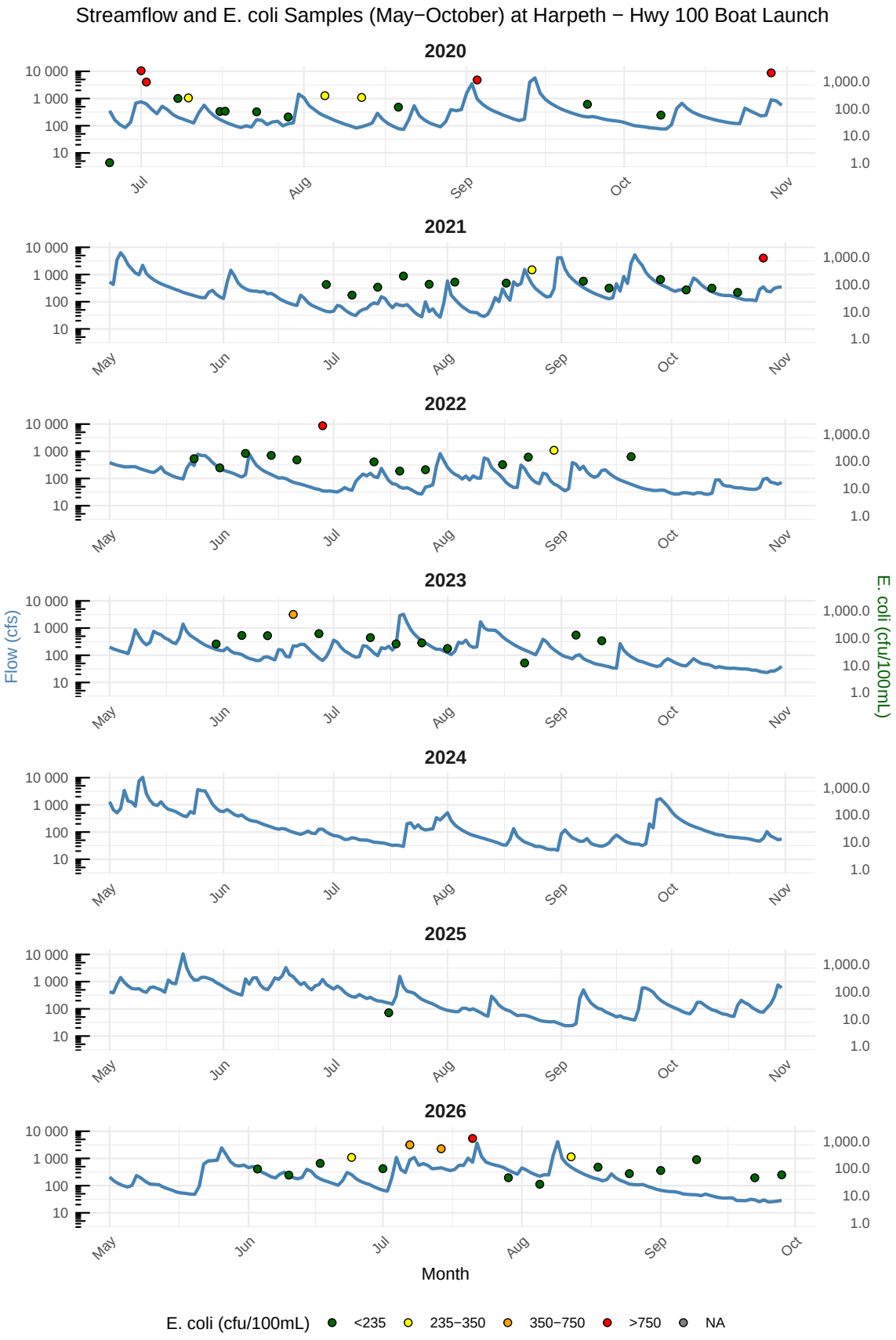
- Box: Represents the middle 50% of the data, from the 1st quartile (Q1) to the 3rd quartile (Q3).
- Median Line: Inside the box, shows the median value (50th percentile) of the data.
- Whiskers: Extend from the box to the smallest and largest values within 1.5 times the interquartile range (IQR) from Q1 and Q3.
- Outliers: Data points outside the whiskers are considered outliers and are plotted individually.

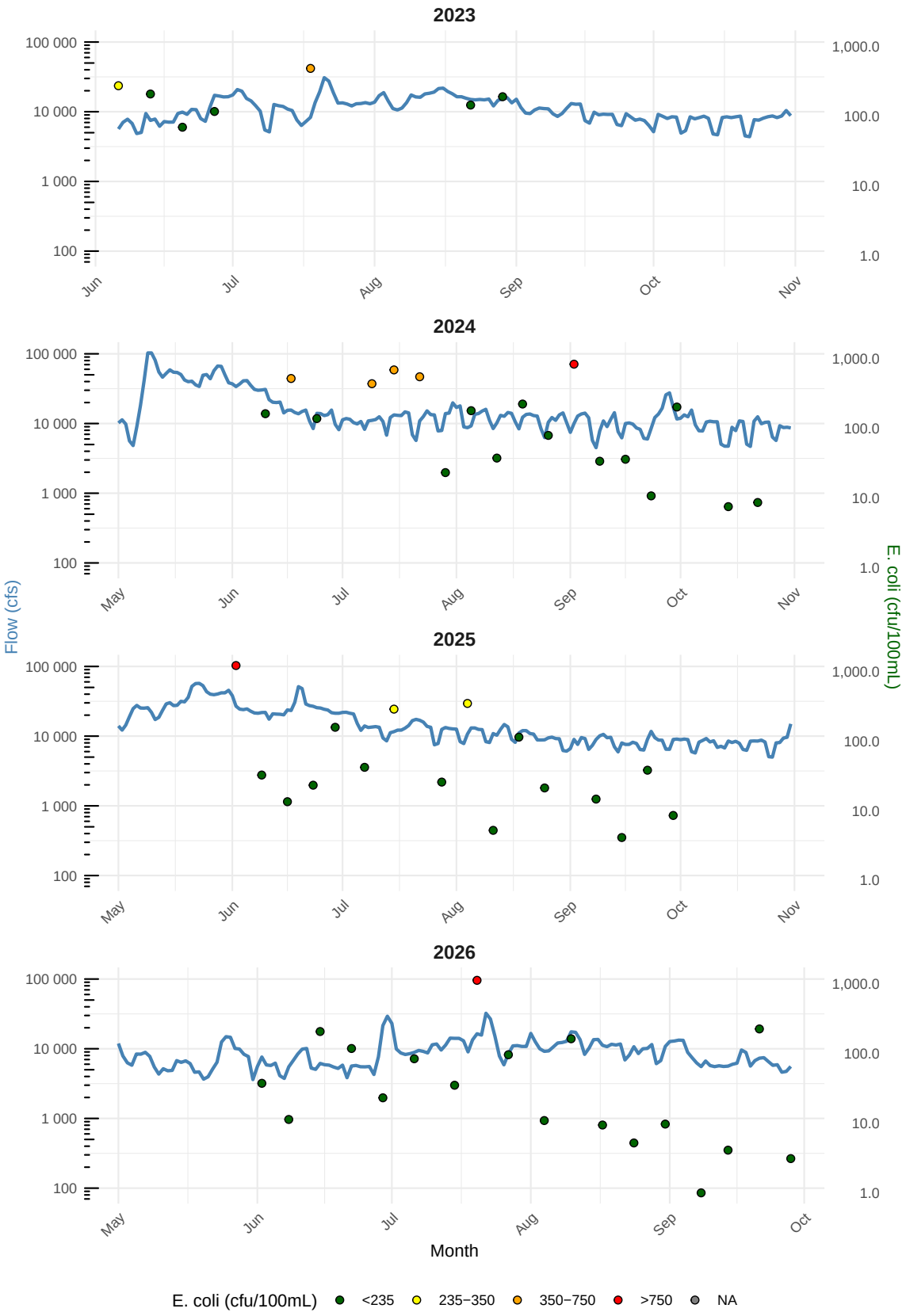

E. coli Results for 2020 − 2026
Richland Creek − Belle Meade Winery
Seven Mile Creek − Ellington Ag Center
Browns Creek − Battlemont Park
Browns Creek − Hart Bridge
Otter Creek
Little Harpeth − Warner Park
Richland Creek − McCabe Park
Richland Creek − Jackson Blvd
Natchez Trace
Mill Creek − Whitsett Park
Harpeth − Lewisburg Pike
West Harpeth − Del Rio Bridge
Harpeth − Coley Davis Access
Mill Creek − Mill Creek Park
Harpeth − Moran Road
Harpeth − Hwy 100 Boat Launch
Whites Creek − Hartman Park
Harpeth − Hwy 70 Boat Launch
Stones − Walter Hill Dam
Duck − Centerville River Park
Cumberland River − Downtown Access
Sycamore Creek − Recreation Area
Percy Priest
Cumberland River − Ashland City Marina
Cumberland River − Riverbluff Park
Location
0
5,000
10,000
15,000
20,000
Density of E. coli (CFUs/100 mL)

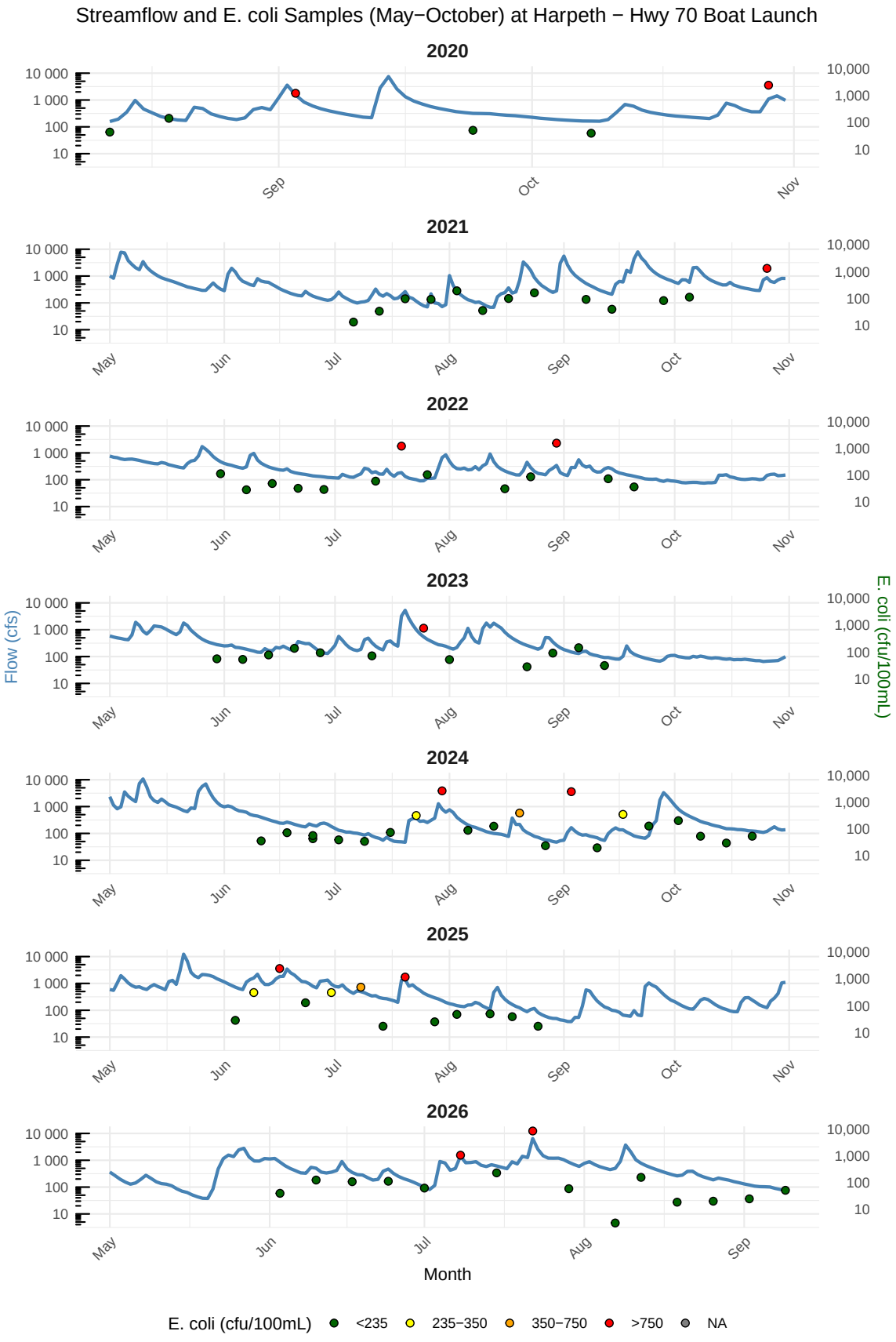
Below is a boxplot that displays *E. coli* samples collected so far this year (2026) by the Harpeth Conservancy.

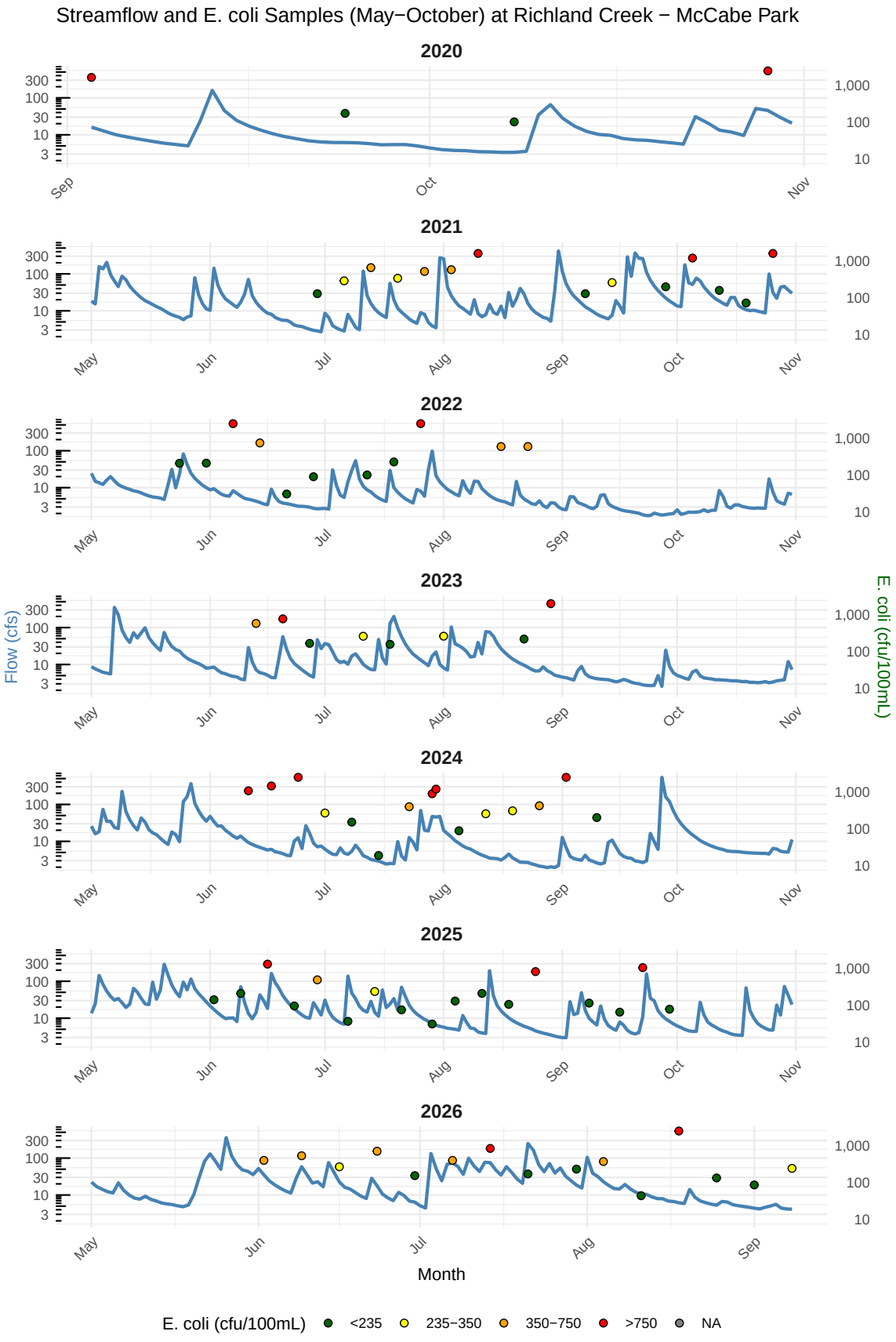


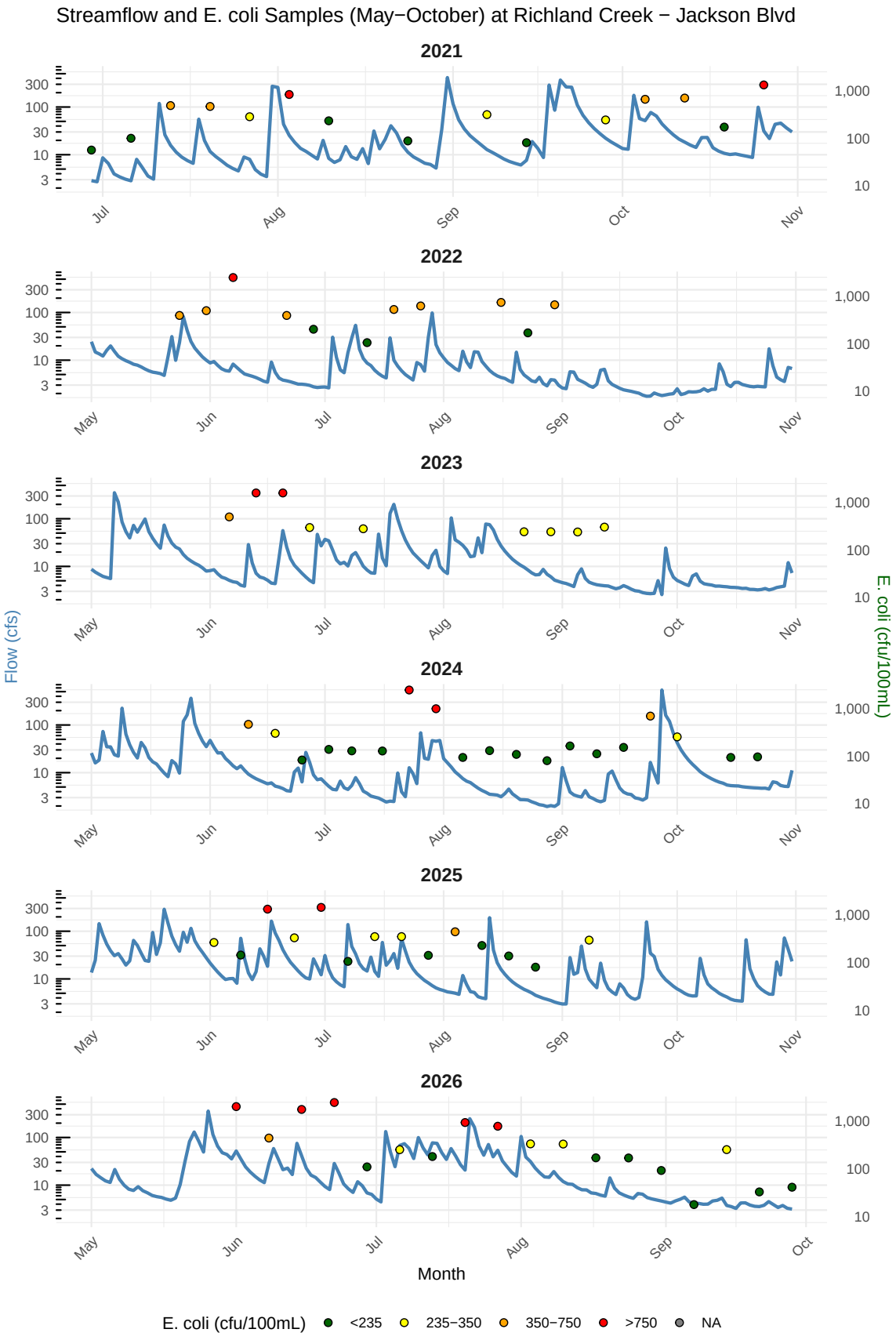

Streamflow and E. coli Samples (May−October) at Harpeth − Moran Road
2020
2021
2022
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
10 000
1 000
100
10
1
10,000.0
1,000.0
100.0
10.0
1.0
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA

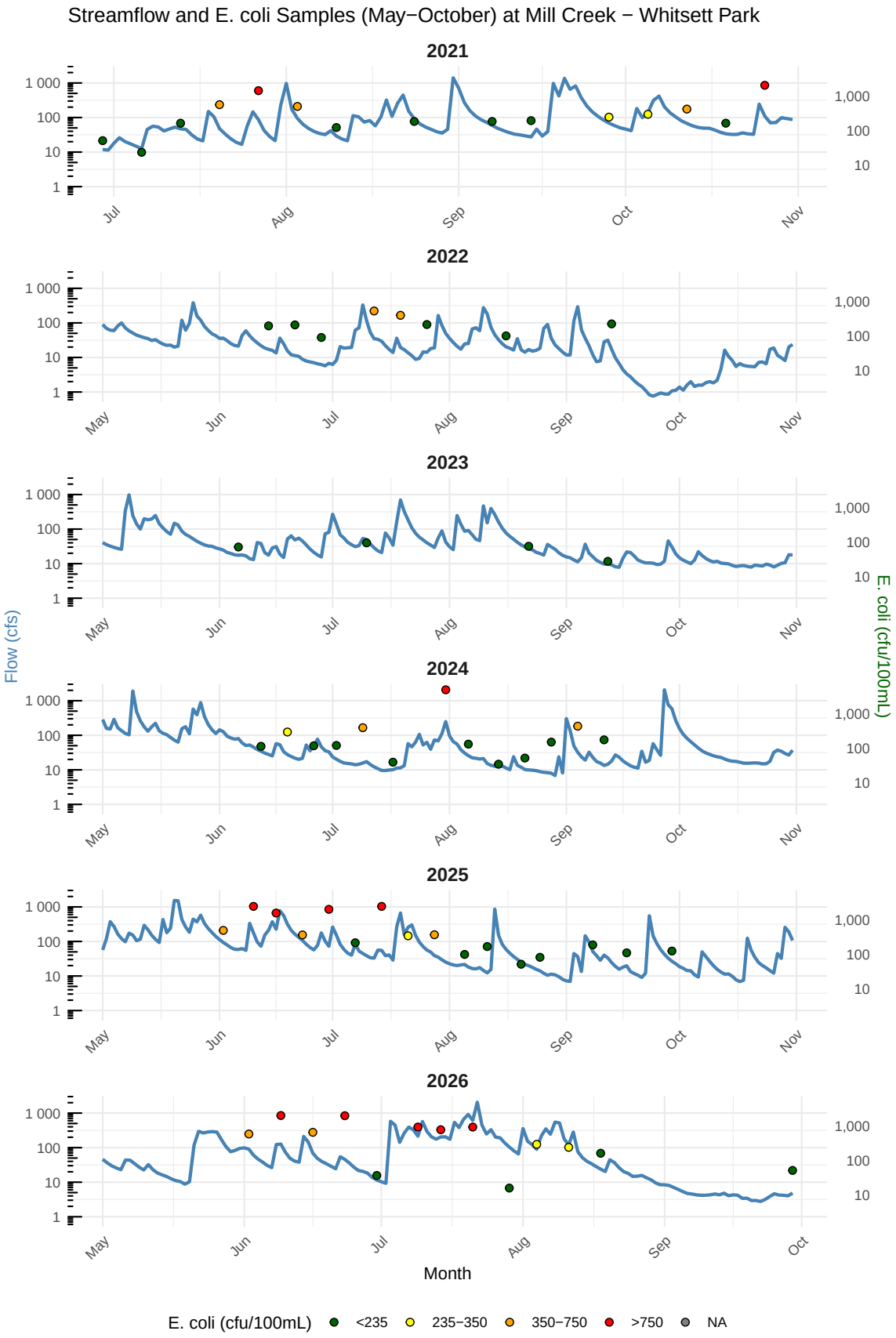

Streamflow and E. coli Samples (May−October) at Harpeth − Hwy 100 Boat Launch
2020
2021
2022
2023
2024
2025
2026
10 000
1 000
100
10
1,000.0
100.0
10.0
1.0
May
Jun
Jul
Aug
Sep
Oct
Nov
Flow (cfs)
E. coli (cfu/100mL)
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA

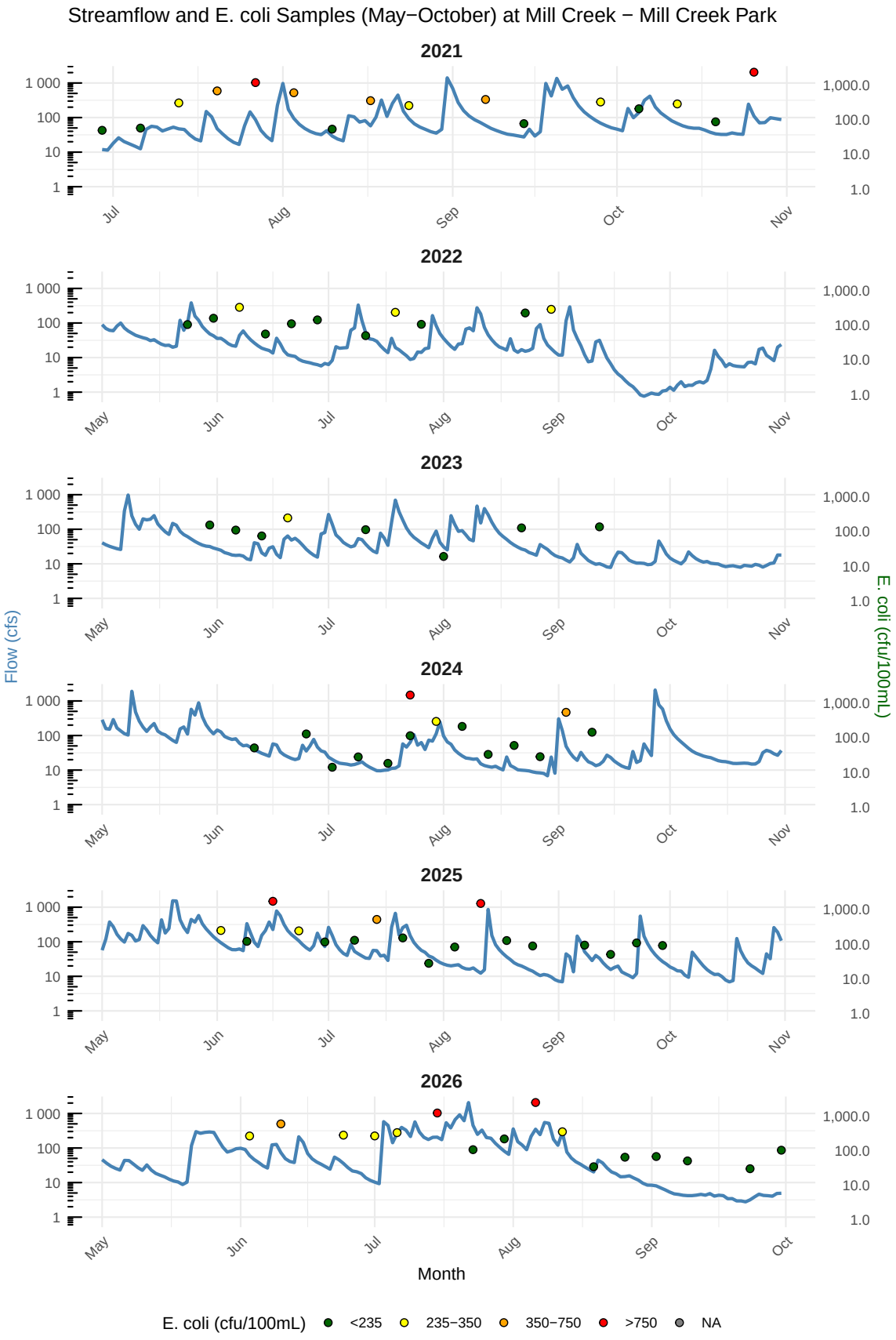

Streamflow and E. coli Samples (May−October) at Cumberland River − Downtown Access
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
100 000
10 000
1 000
100
1,000.0
100.0
10.0
1.0
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA

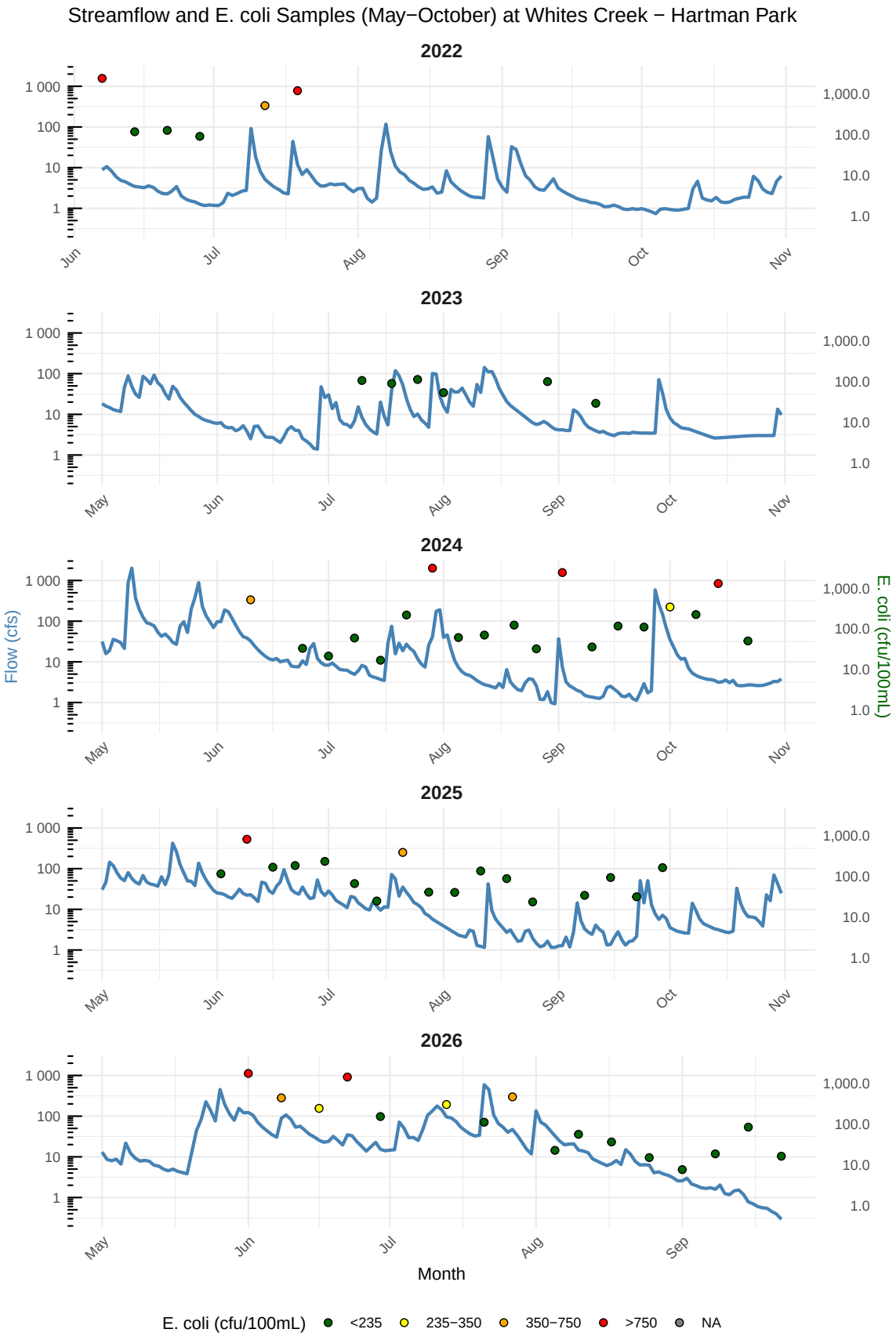

Streamflow and E. coli Samples (May−October) at Harpeth − Hwy 70 Boat Launch
2020
2021
2022
2023
2024
2025
2026
10 000
1 000
100
10
10,000
1,000
100
10
May
Jun
Jul
Aug
Sep
Oct
Nov
Flow (cfs)
E. coli (cfu/100mL)
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA

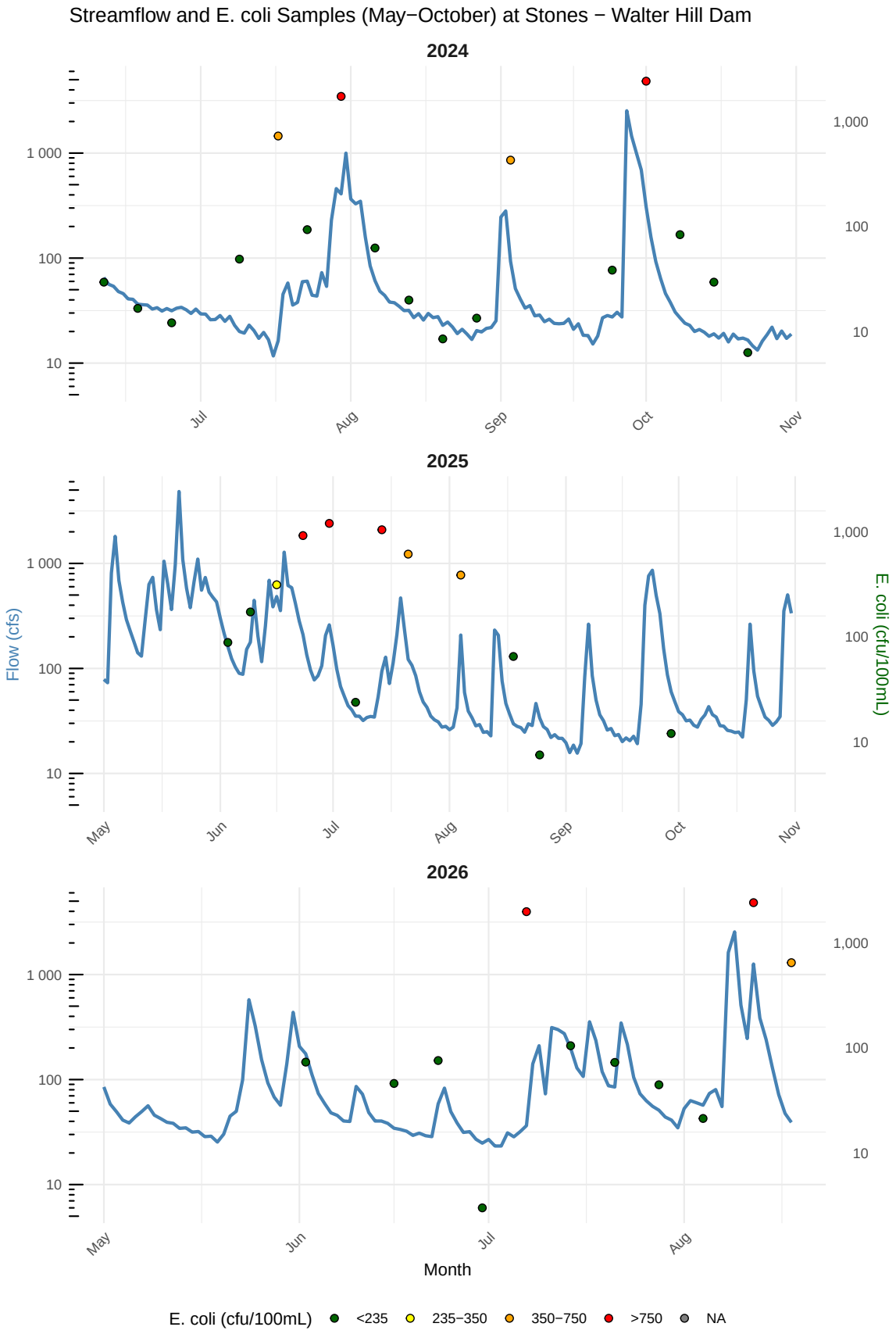

Streamflow and E. coli Samples (May−October) at Richland Creek − McCabe Park
2020
2021
2022
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
300
100
30
10
3
1,000
100
10
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA

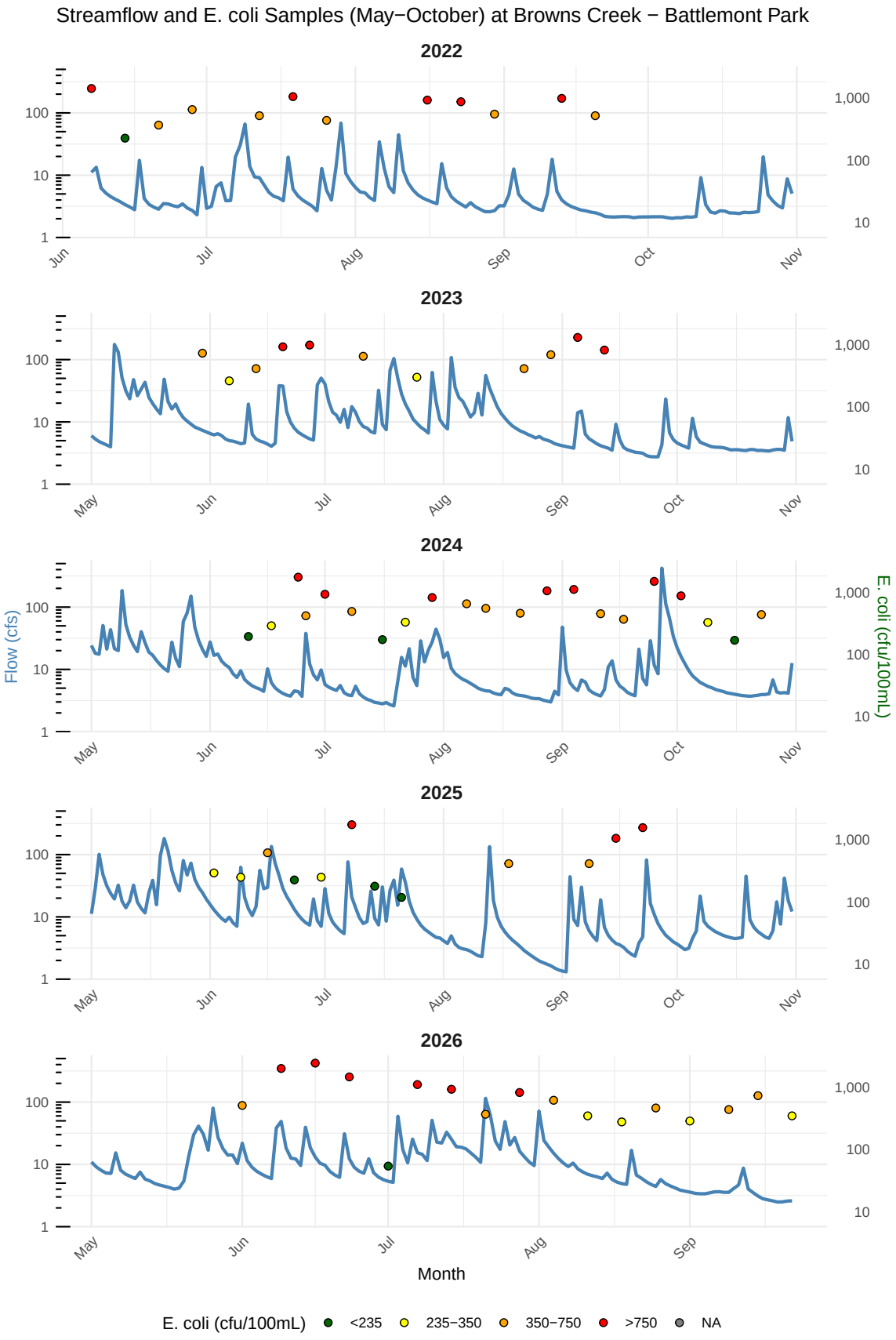

Streamflow and E. coli Samples (May−October) at Richland Creek − Jackson Blvd
2021
2022
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
300
100
30
10
3
1,000
100
10
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL) <235 235−350 350−750 >750 NA

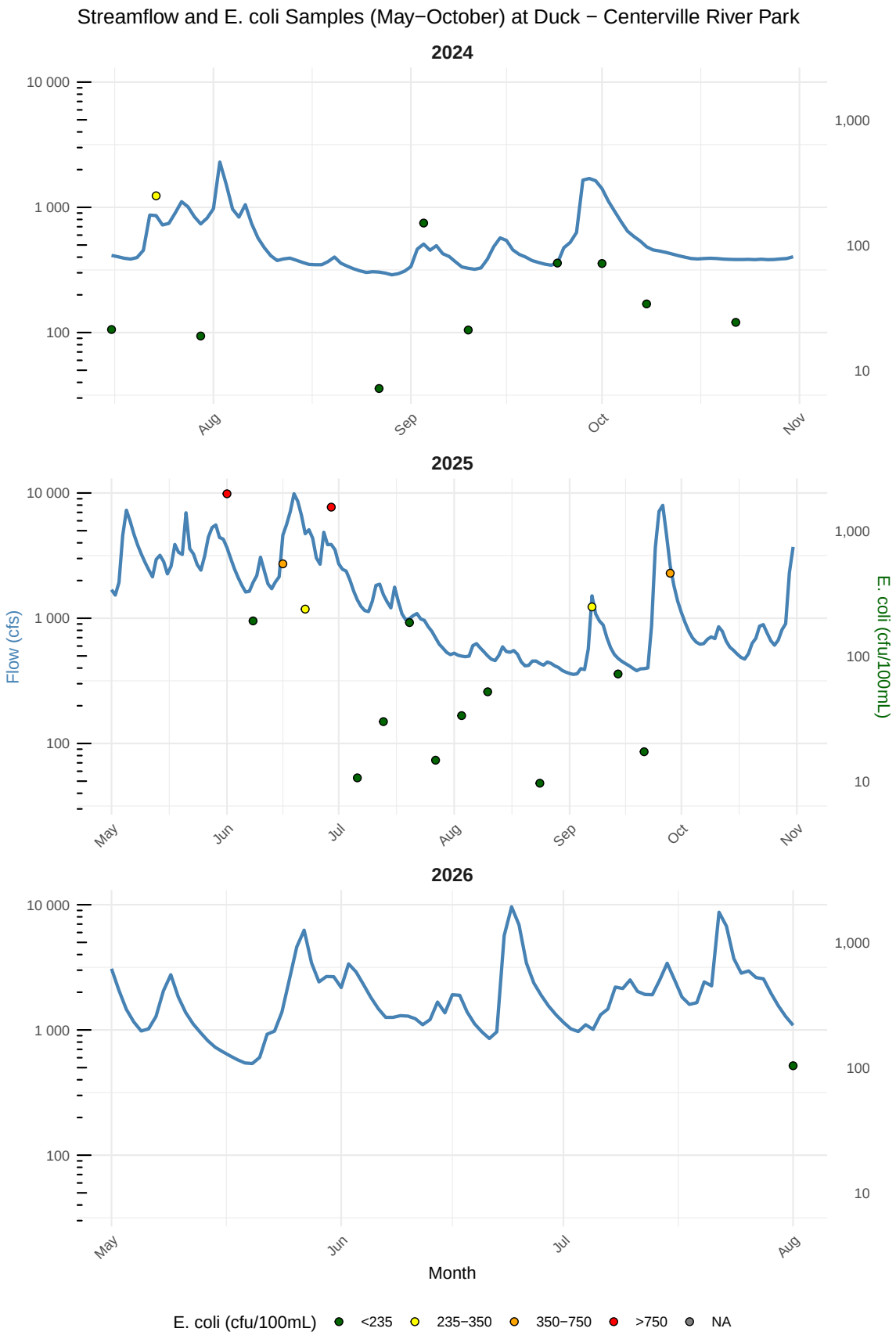

Streamflow and E. coli Samples (May−October) at Mill Creek − Whitsett Park
2021
2022
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
Month
E. coli (cfu/100mL) <235 235−350 350−750 >750 NA

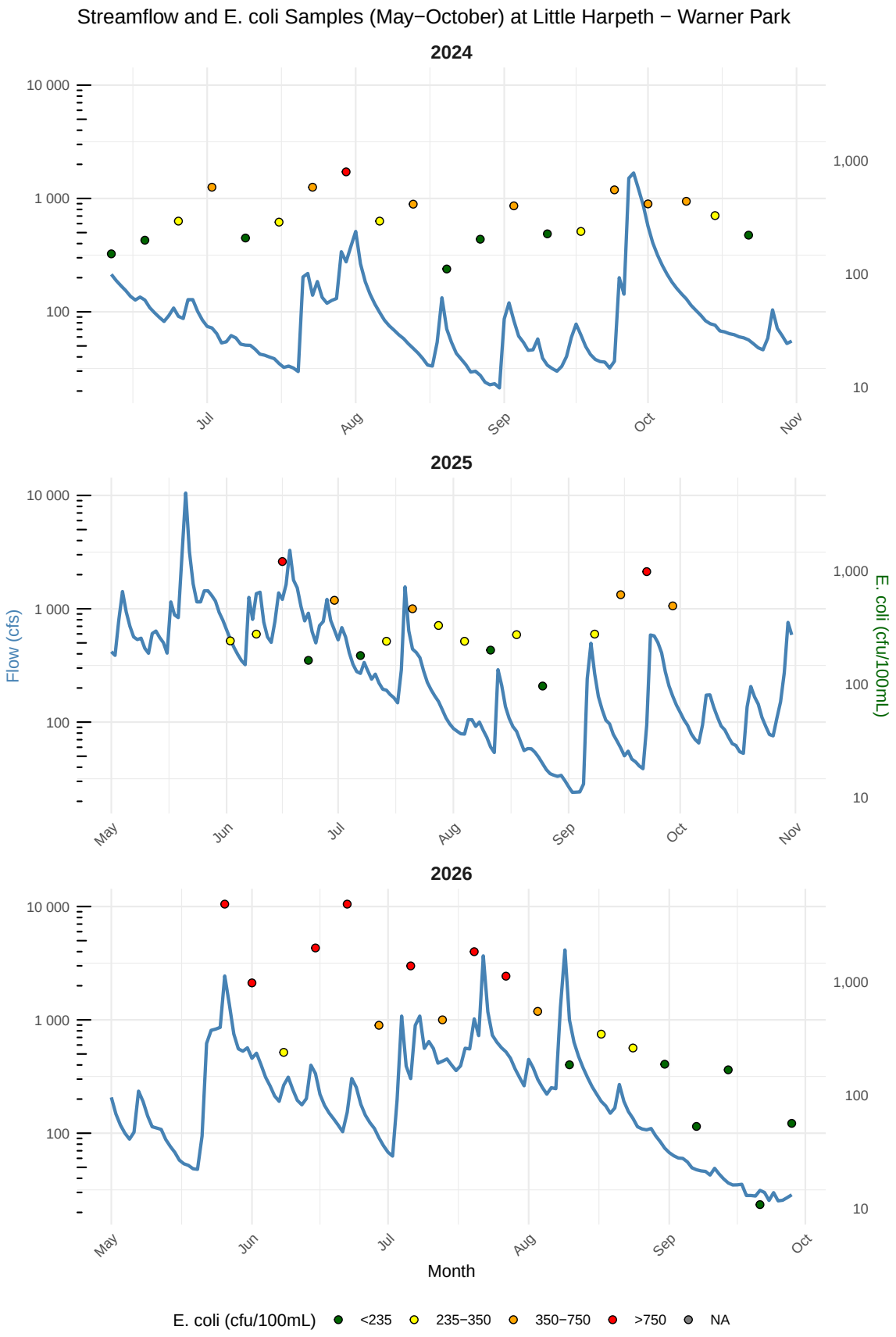

Streamflow and E. coli Samples (May−October) at Mill Creek − Mill Creek Park
2021
2022
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
1 000
100
10
1
1,000.0
100.0
10.0
1.0
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA

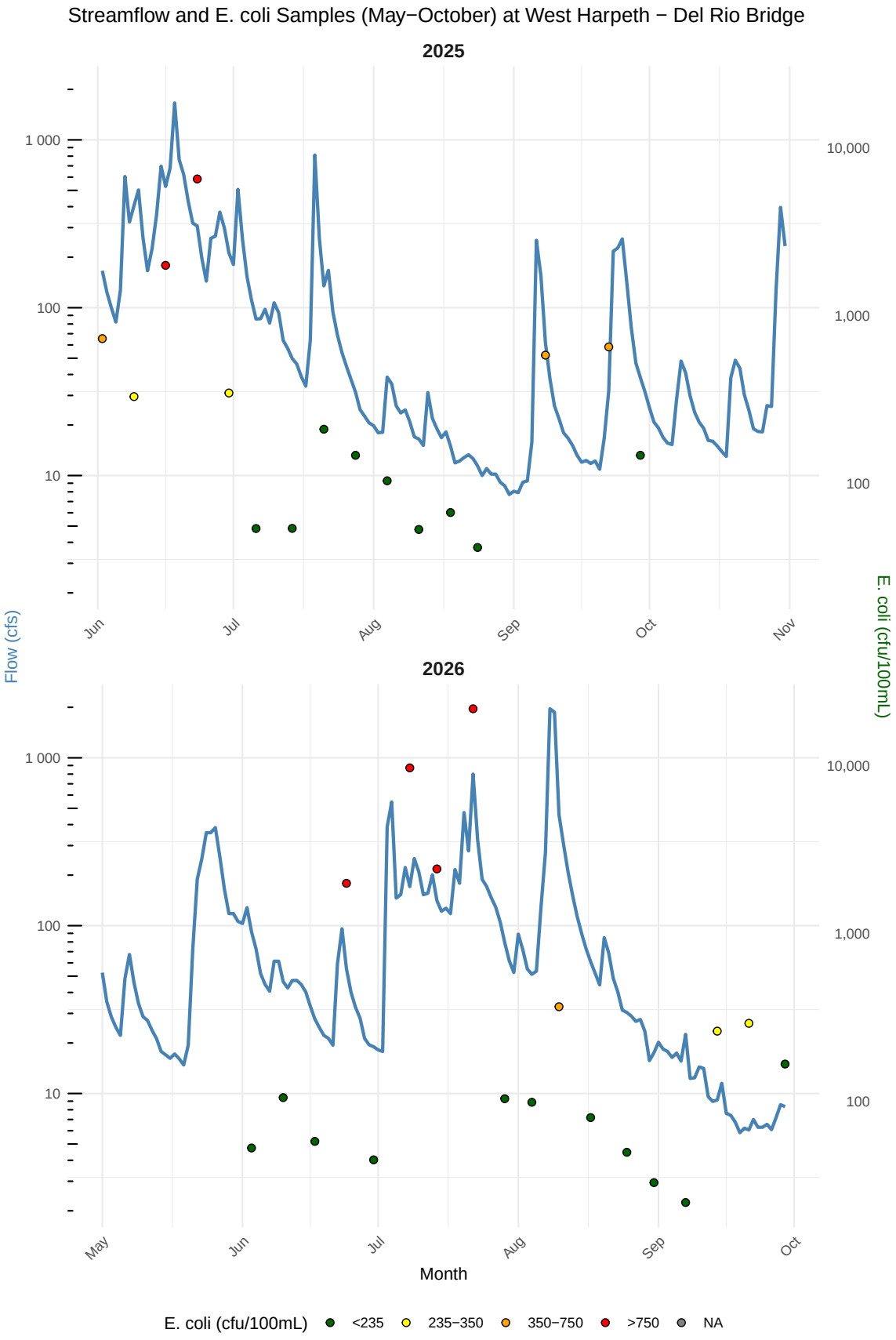

Streamflow and E. coli Samples (May−October) at Whites Creek − Hartman Park
2022
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
1 000
100
10
1
1,000.0
100.0
10.0
1.0
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA


Streamflow and E. coli Samples (May−October) at Stones − Walter Hill Dam
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
1 000
100
10
1,000
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA


Streamflow and E. coli Samples (May−October) at Browns Creek − Battlemont Park
2022
2023
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
1
10
100
1,000
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL) <235 235−350 350−750 >750 NA


Streamflow and E. coli Samples (May−October) at Duck − Centerville River Park
2024
2025
2026
10 000
1 000
100
1,000
100
10
Aug
Sep
Oct
Nov
May
Jun
Jul
Flow (cfs)
E. coli (cfu/100mL)
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA


Streamflow and E. coli Samples (May−October) at Little Harpeth − Warner Park
2024
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
10 000
1 000
100
1,000
10
May
Jun
Jul
Aug
Sep
Oct
Nov
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA


Streamflow and E. coli Samples (May−October) at West Harpeth − Del Rio Bridge
2025
2026
Flow (cfs)
E. coli (cfu/100mL)
1 000
100
10
10,000
1,000
100
Jun
Jul
Aug
Sep
Oct
Nov
May
Month
E. coli (cfu/100mL)
<235
235−350
350−750
>750
NA