# RIVANNA
CONSERVATION ALLIANCE

Biological Health of the Rivanna River Watershed

C

- Data collected from 2019 to 2024 at RCA's 50 long-term monitoring sites.
- RCA's volunteer stream monitors sample each site every spring and fall.
- Streams that score 60.0 or higher meet Virginia's water quality standard.

Meets water quality standards

A	B	C	D	E
100	70	60	40	25	0

Healthy — *Unhealthy*

● = **Monitoring Site**

South Fork Rivanna subwatershed 2
C 57.2

South Fork Rivanna subwatershed 1
B 60.7

North Fork Rivanna
C 53.8

Middle Rivanna
C 51.8

Lower Rivanna
B 60.8

Greene

Orange

Albemarle

Charlottesville

Louisa

Fluvanna
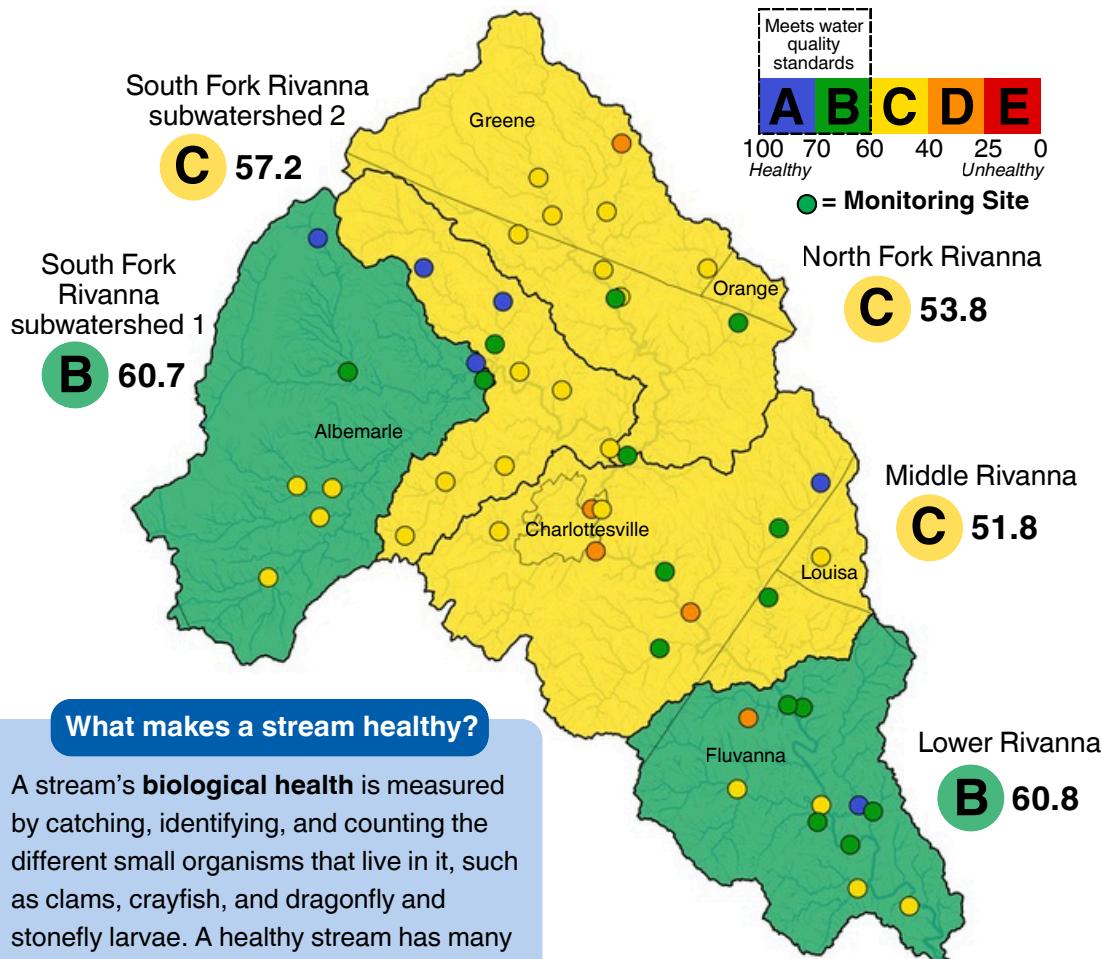
What makes a stream healthy?

A stream's **biological health** is measured by catching, identifying, and counting the different small organisms that live in it, such as clams, crayfish, and dragonfly and stonefly larvae. A healthy stream has many different types of organisms living in it (high diversity). It also has organisms that need clean water to survive.

Dragonfly larva

Stonefly larva

Why are healthy streams important?

Stream health is connected to overall ecosystem health. Organisms in streams help keep our water clean by eating algae, fallen leaves, and debris. They are also an important food source for a wide range of animals, including fish, birds, and otters.

**Learn more:** rivannariver.org/long-term-monitoring-program/

Recreational Health of the Rivanna River

- In 2024, RCA's volunteer stream monitors sampled for *E. coli* bacteria weekly at three recreational sites along the Rivanna from Memorial Day to Labor Day.
- Sites meet Virginia's water quality standard for recreation if at least 90% of samples have *E. coli* levels lower than 410 colonies per 100mL of water.

86.7% of water samples met standard

Darden Towe Park

Percent of Rivanna River samples meeting water quality standard

70% 80%

60% 90%

0% (Very Poor) (Very Good) 100%

Charlottesville

Rivanna River

80.0% of water samples met standard

Riverview Park

Albemarle County
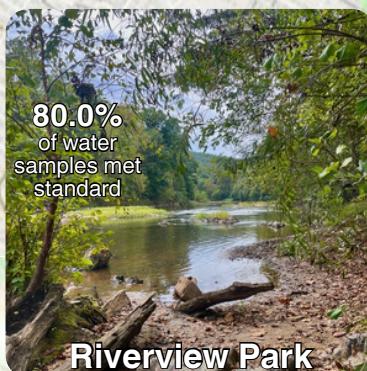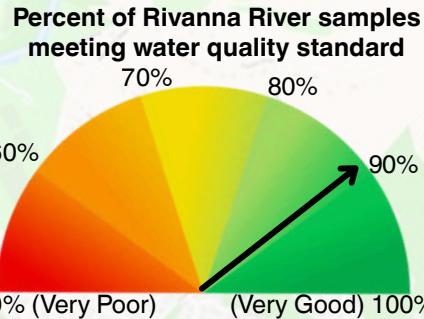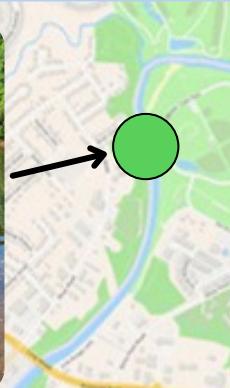
How do *E. coli* enter our streams?

E. coli bacteria are present in human and animal waste and may enter streams through stormwater runoff, leaking sewer pipes and septic systems, and animals in and around waterways.

Heavy rainfall can temporarily elevate *E. coli* levels. When *E. coli* levels are high, people should avoid contact with the water (e.g., swimming and wading) to prevent potentially dangerous illnesses and infections.

Fluvanna County

100.0% of water samples met standard

Rivanna River

Palmyra Boat Launch

How can we reduce *E. coli* in our streams?

- Pick up and dispose of pet waste properly.
- Fix leaking sewer pipes and maintain septic systems.
- Fence livestock out of streamside areas.
- Plant trees near streams to filter runoff.
- Help educate your neighbors.

Learn more: rivannariver.org/bacteria/
Volunteer with us: rivannariver.org/volunteer/