To: Bryan Chrisman
From: Summer Merica

Spring 2018 Summary

Luray High School Water Testing
Water Source: Hawskbill Creek
Location: Ruffner Plaza, Luray VA

Class All Earth Science classes
School Luray High
Date 4/10/2018

Testing Equipment: Low-Cost Water Monitoring Kit LaMotte (tab tests)

I. Data

Dissolved Oxygen (ppm)	Nitrate (ppm)	Phosphate (ppm)	pH	Coliform (positive or negative)
4ppm	5ppm	1ppm	7.5	positive

35% saturation

Water Temperature 10 DEG C

II. Rate The Following Parameter Concentrations Below.

DO (Dissolved Oxygen)

1 (poor) 2 (fair) 3 (good) 4 (excellent)

Nitrate

1 (poor) (2) (fair) 3 (good) 4 (excellent)

Phosphorus

1 (poor) 2 (fair) (3) (good) 4 (excellent)

pH

1 (poor) 2 (fair) (3) (good) 4 (excellent)

Fecal Coliform *(check which one applies)*

✓ positive _____ negative

The Water Is Safe (check all that apply):

_____ for drinking
✓ for swimming

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III. Using the data collected above, assess the overall stream health of the Hawksbill Creek at Ruffner Plaza, Luray; va.

our discussion revolved around animal waste that seeped/ seeps into The Hawksbill Creek. Our students see that it is not surprising the town has had positive coliform readings each year. We propose a community action between kids and their town to protect the waterways in Luray, starting with The Hawksbill creek.

To reduce coliform colony levels, students and community leaders can plant shrubs and trees along the Hawksbill Creek (in areas of wide open fields with animals and agricultural activity) to act as a buffer to prevent pollution easily running off into our creek.

Overall, the health of the creek is in fair condition. We'd like to see higher dissolved oxygen levels for aquatic life to thrive.

A community "Earth Day"/water conservation day would be a great ~~way to~~ place to start!!

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