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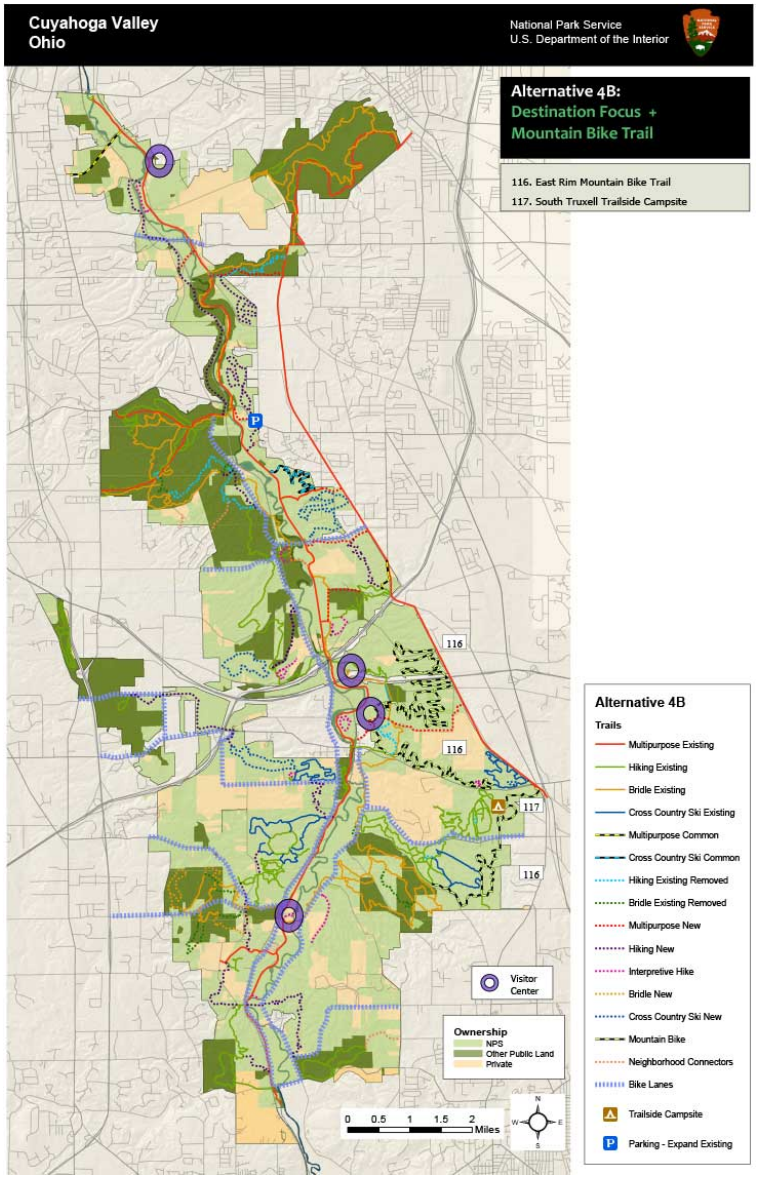
Water Quality Research at Cuyahoga Valley National Park

MOSAICS in Science
The National Park Service
The Geological Society of America®

NATIONAL PARK SERVICE

Cuyahoga Valley National Park



Worksites

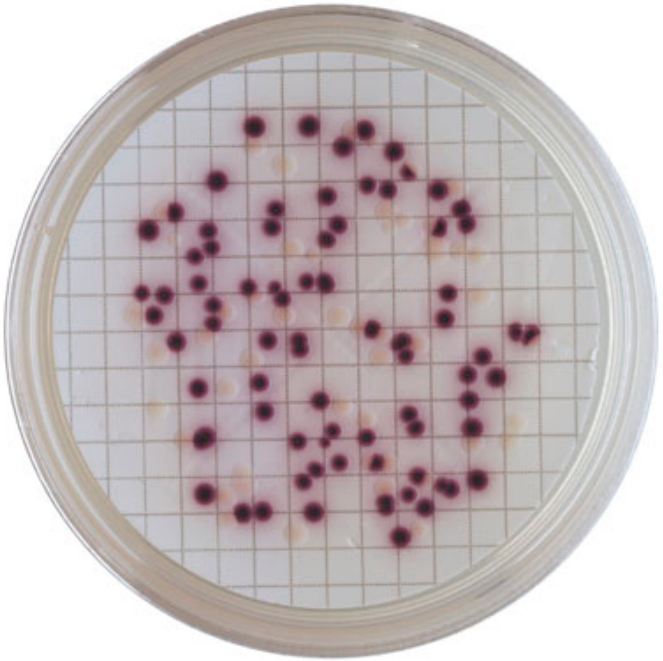
Lock 29

Jaite

Water Quality Analysis (Colilert)

Product	Presence/Absence
Colilert® **Analyte** Total Coliforms and *E. coli* **Time to Result** 24 Hours 	
RESULT: Colorless=Negative; Yellow=Total Coliforms; Yellow/Fluorescent=*E. coli*	**Quantification**

Water Quality Analysis (Membrane Filtration)



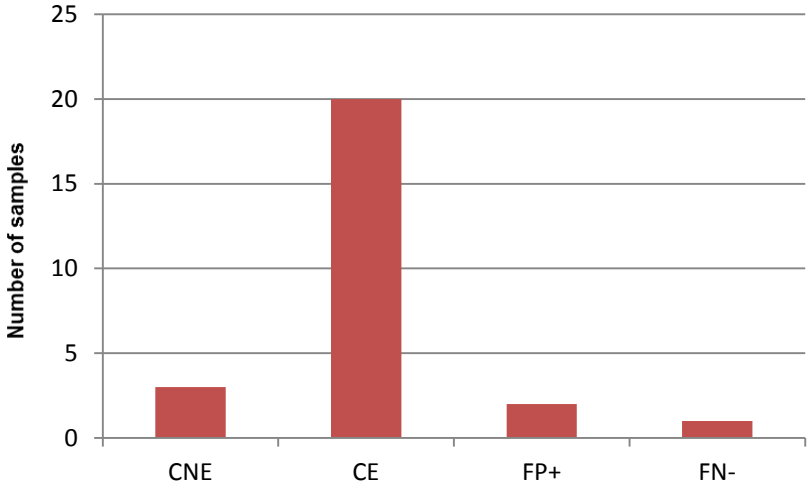
Ohio NowCast

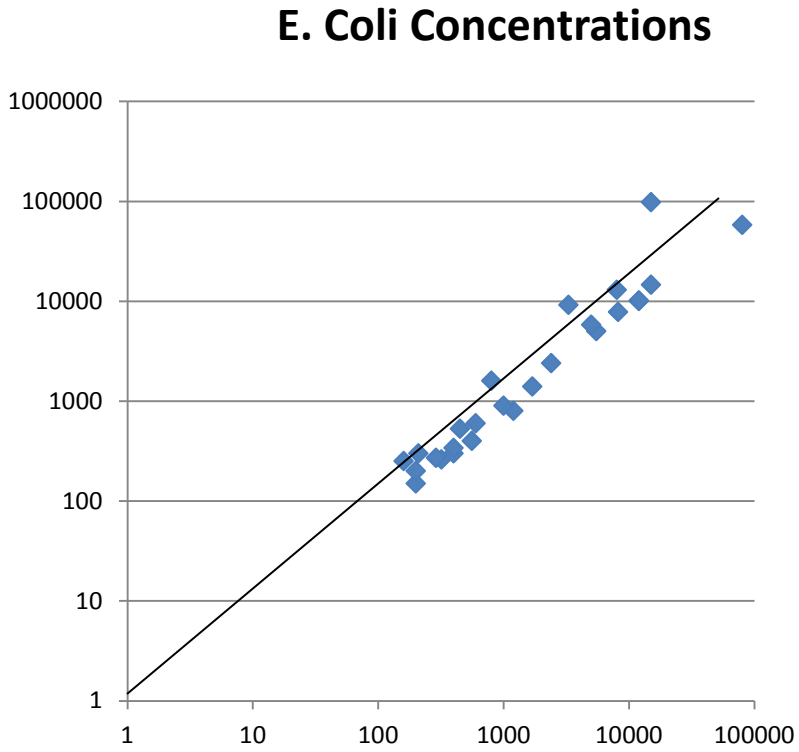
Green – E. coli numbers are below 298 colony-forming units per 100 milliliters (CFU/ 100 mL); good for swimming, recreation, etc.

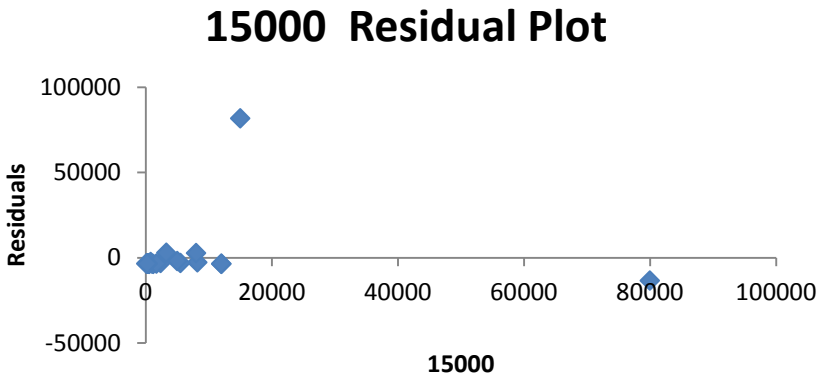
Red – E coli numbers exceed 298 CFU; poor quality

Black – Inactive water sites

Results


Predictive Model Category
Number of samples
25
20
15
10
5
0
CNE
CE
FP+
FN-


E. Coli Concentrations
1000000
100000
10000
1000
100
10
1
1
10
100
1000
10000
100000


15000 Residual Plot
Residuals
100000
50000
0
-50000
0
20000
40000
60000
80000
100000
15000

ANY QUESTIONS?