



Image credit: Lucasfilm



Caitlin Stewart, MS

Manager, Hamilton County Soil and Water Conservation District

# Lake Monitoring *the hyperdrive version!*





A long time ago in a galaxy far,  
far away....

# A Brief History of the LMP

Program established

Lab analysis

1996

2019

1993

2008

FLLOWPA

ELAP



Technician  
Katie WhitKovits  
takes a chlorophyll sample.

# Fleeing Tatooine: Procedure

- 19 lakes, May – October, deepest
- Field data
  - Weather trends
  - YSI Pro DSS
- Water sample collection
- Analytical parameters



Verification Process	Complete	Notes/Comments
<b>Field Data</b>		
Are all field visits recorded with sites, dates, times, and analyst properly identified?	<input checked="" type="checkbox"/>	
Are all photos and other data properly linked to field visit records?	<input checked="" type="checkbox"/>	
Are field visits properly linked to field data from instrumentation (example, multi-parameter probes)?	<input checked="" type="checkbox"/>	
Are field measurements be linked to a recorded calibration record or quality control check?	<input checked="" type="checkbox"/>	
Are all field visits, environmental observations, and instrument data accounted for?	<input checked="" type="checkbox"/>	
Are the field data file finalized with appropriate notes/qualifications?	<input checked="" type="checkbox"/>	
<b>Analytical Data</b>		
Are sample collections cross-linked to field site visits by site, date, time, and sampler?	<input checked="" type="checkbox"/>	
Did the laboratory provide all expected data in laboratory reports (with lab quality control samples and data flags)?	<input checked="" type="checkbox"/>	

# The force is strong with QAQC

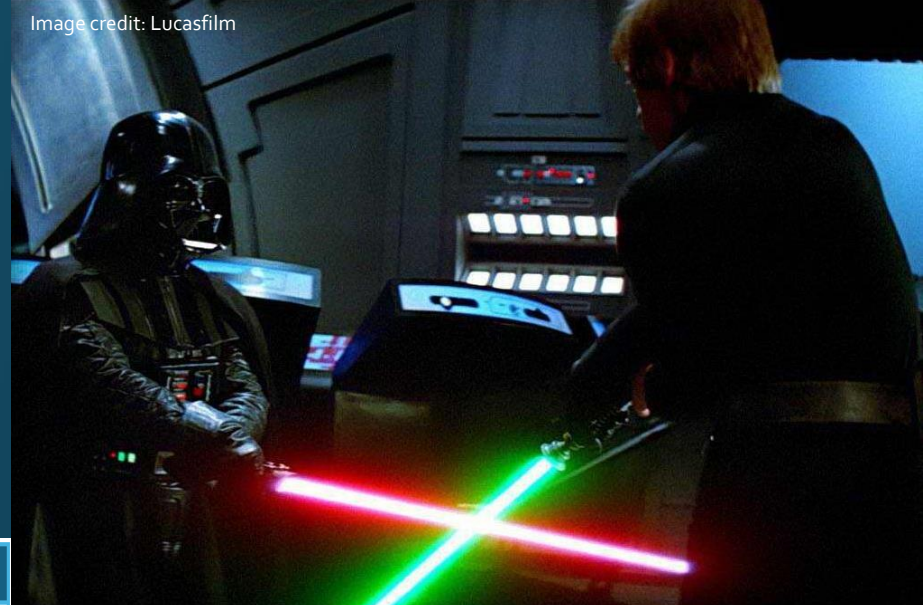
- QAPP
- ELAP
- SOPs
- DUAR



Image credit: Lucasfilm



# Return of the Jedi: Black River Watershed Lake Results



Lake	pH Condition	Alkalinity	Transparency	Chlorophyll-a
Fourth	Circumneutral	Increase	Decrease	Moderate
Fifth	Slightly acidic to circumneutral	Low sensitivity	Decrease	Moderate
Sixth	Circumneutral	Increase	Decrease	Moderate
Seventh	Circumneutral	Increase	Decrease	Low
Eighth	Circumneutral to slightly alkaline	Increase	No trend	Low
LimeKiln	Slightly acidic to circumneutral	Increase	Decrease	Moderate

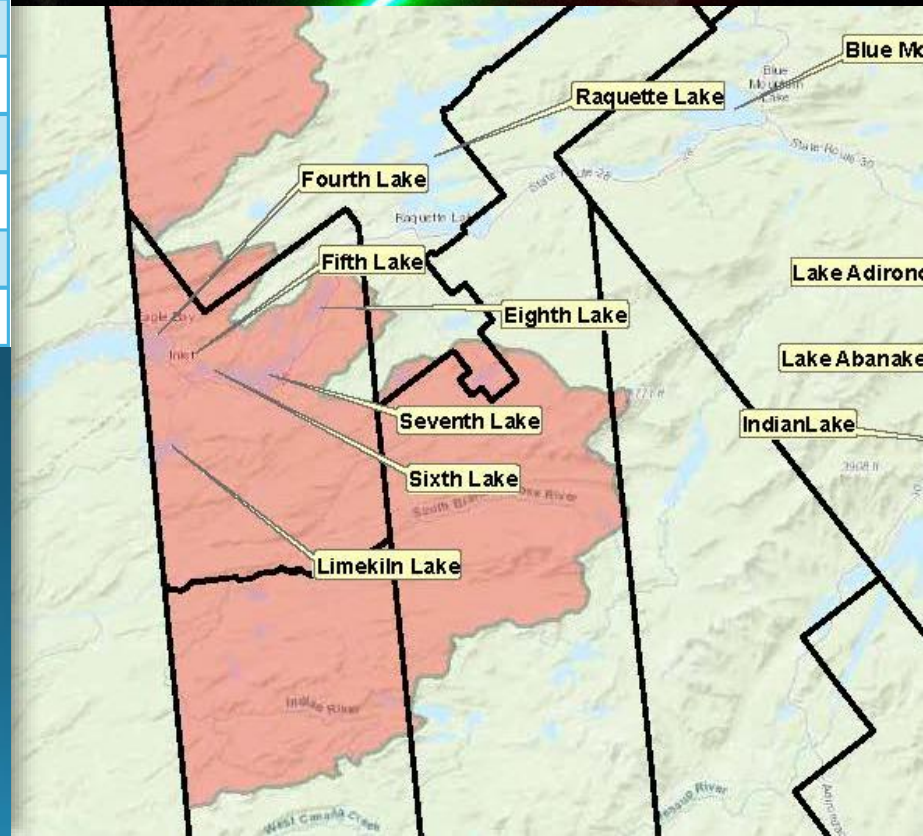




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# Do or do not. There is no try Conclusions

- Circumneutral pH
- Increasing alkalinity
- Decreasing transparency
- Variable chlorophyll  $\alpha$

# Working to manage and promote the wise use of natural resources in Hamilton County since 1965



## Staff

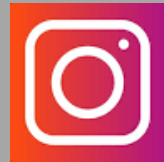
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Katie Whitkovits, Technician  
Marj Remias, Clerk and Secretary to the Board

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Associate Environmental Analyst,  
Soil and Water Conservation Committee  
Vacant, District Conservationist,  
Natural Resources Conservation Service



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