

# Interpreting Water Quality Data from the US Geological Survey

Does the parameter show a seasonal pattern?  
Circle “yes” or “no” on your sheet



**Questions:**



1. Use the interactive graph to examine each of the following seven water quality parameters for Paint Branch for the entire year of 2018 check off all the parameters that clearly show a seasonal pattern:



a. → Discharge (yes/no)

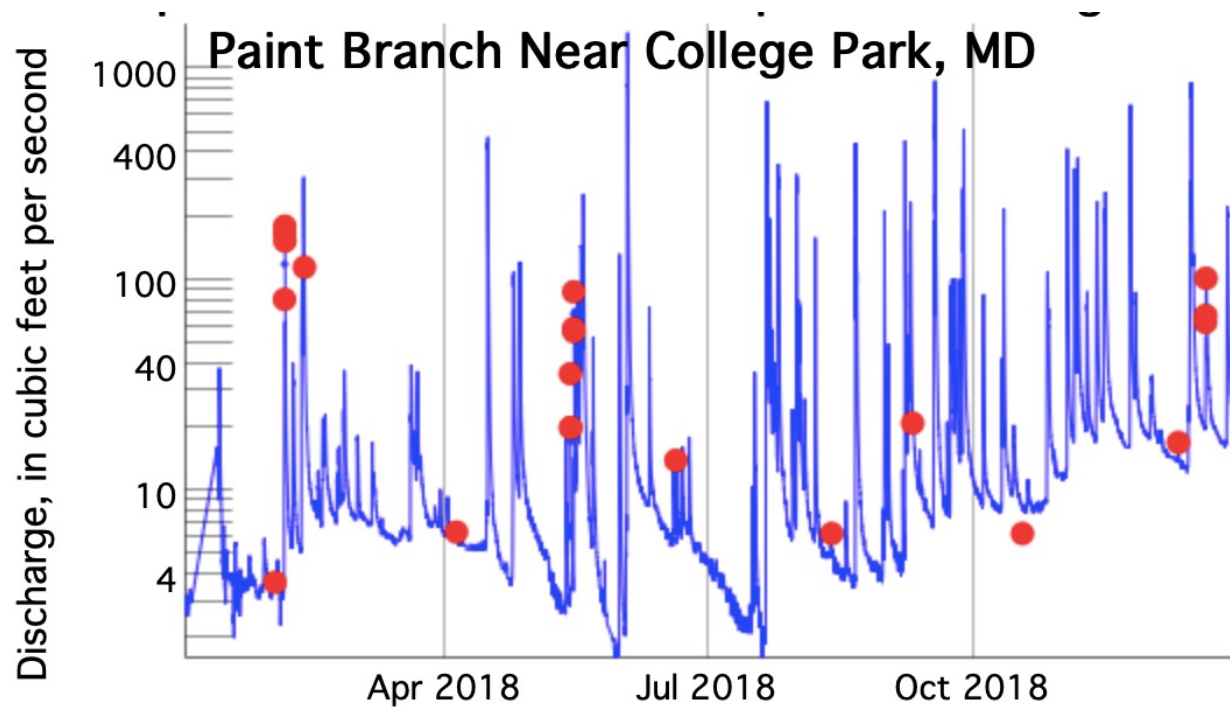


b. → Temperature (yes/no)



c. → Conductance (yes/no)

This parameter (**blue line**) does not show a seasonal pattern



This would be your first answer



**Questions:**



1. Use the interactive graph to examine each of the following seven water quality parameters for Paint Branch for the entire year of 2018 check off all the parameters that clearly show a seasonal pattern:



a. → Discharge (yes/no)

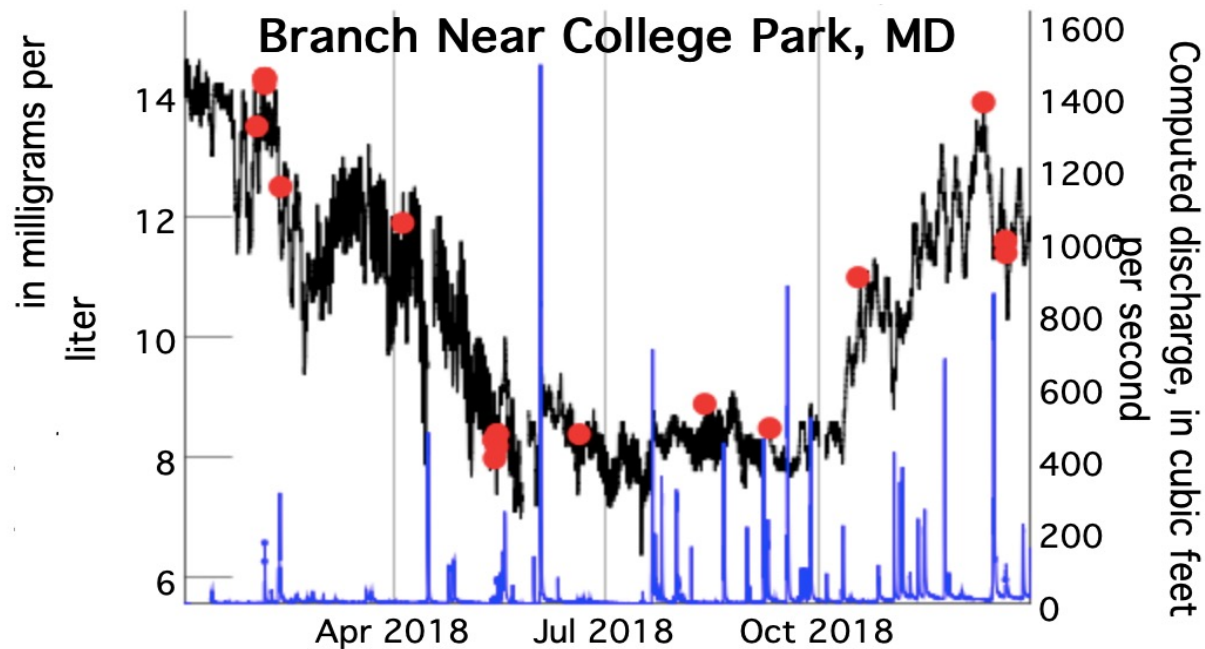


b. → Temperature (yes/no)



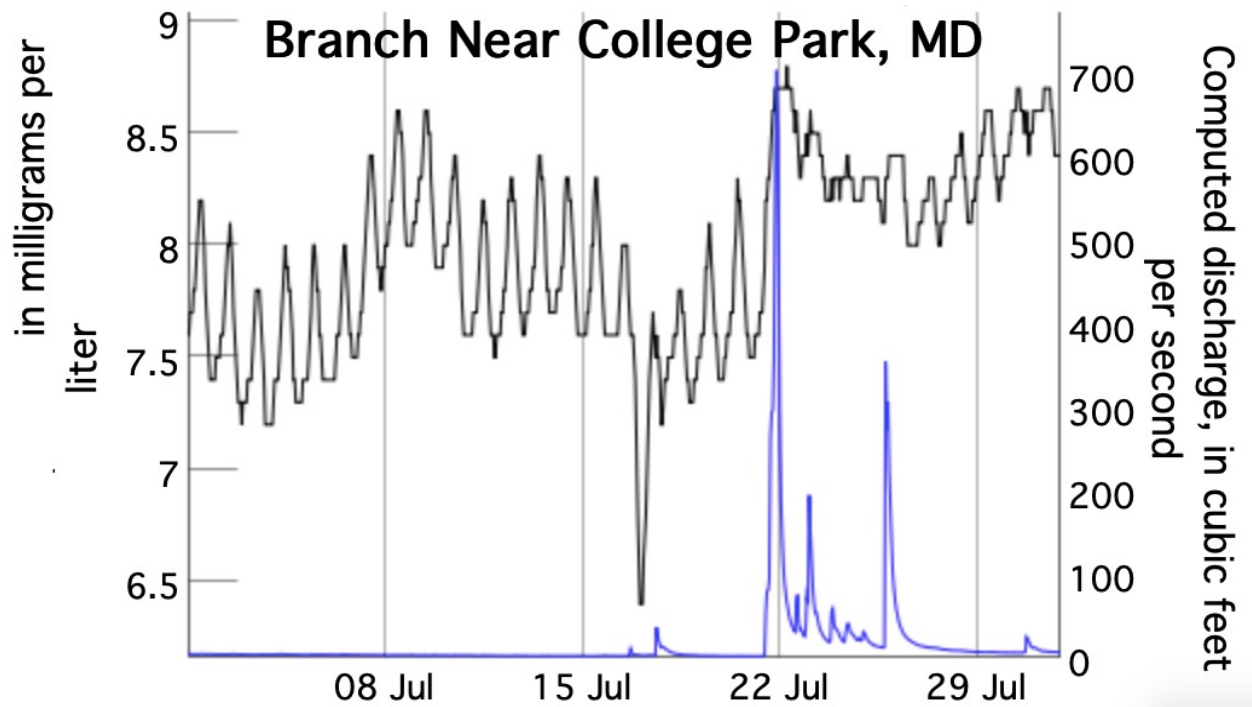
c. → Conductance (yes/no)

This parameter (**black line**) shows a seasonal pattern:  
It stays low throughout the summer

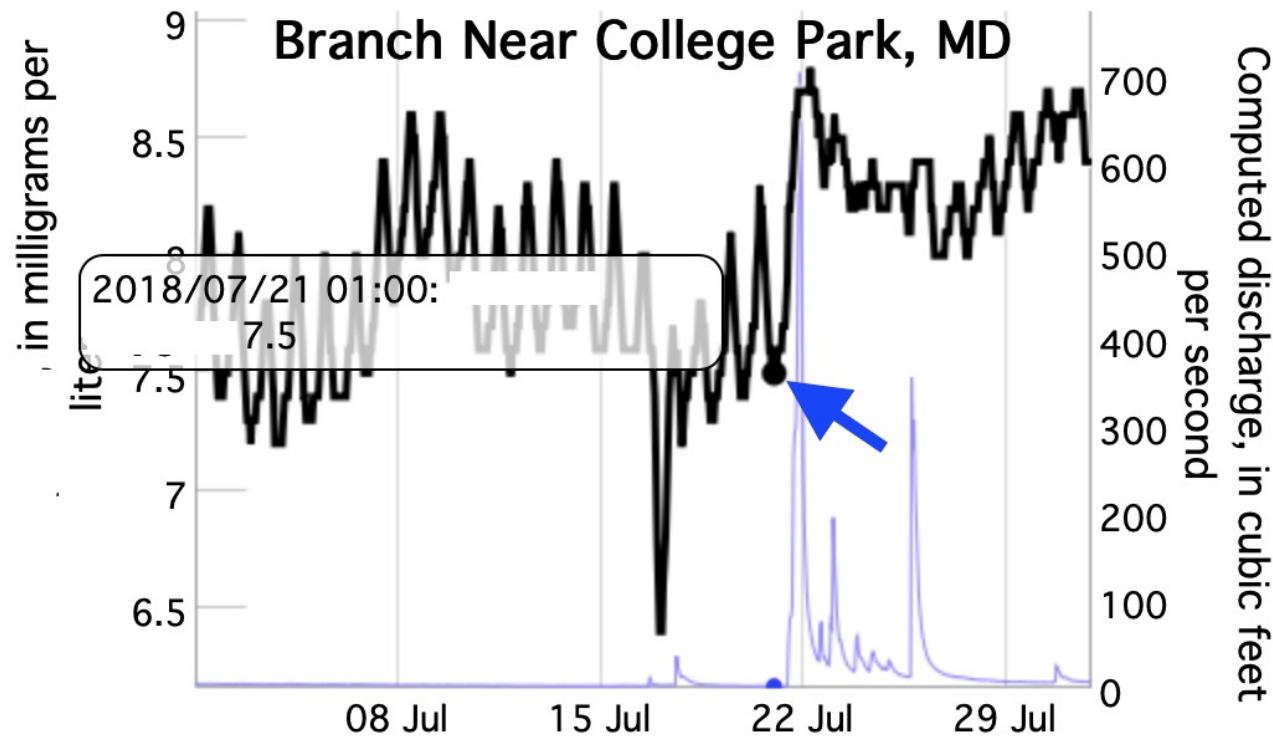


It is also not correlated with discharge (**blue line**)

This same parameter (**black line**) shows a diurnal pattern

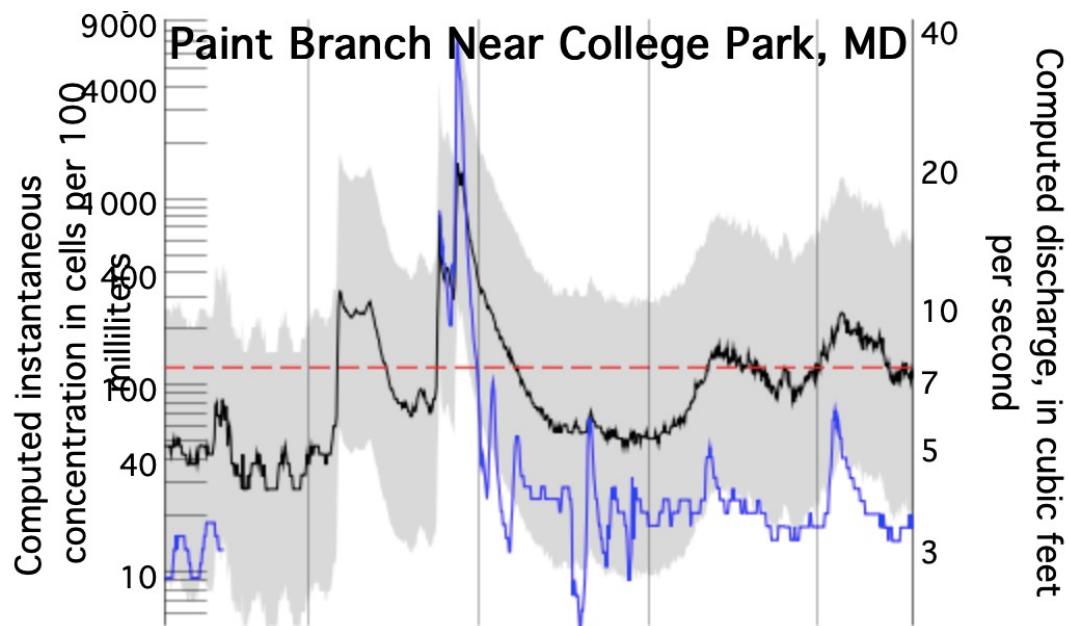


The lowest point regularly occurs at night:  
This point represents 1 AM



You find this out  
by touching the  
cursor to the  
lowest point

This parameter (**black line**) is correlated with discharge (**blue line**)



Both lines increase and decrease at the same time.