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Planned Developmental Districts and its Consequences on the Surrounding Environment

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Controversy and Consequences of the Planned Development District at Bunn Hill Road



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BACKGROUND:

The proposed development for housing at Bunn Hill is in process in Vestal. The design would put the homes directly next to Nuthatch Hollow which is west of Bunn Hill Road. Residents have endlessly voiced concerns for a variety of reasons. Most notably the change from a Rural Residential (RR) district to a Planned Development District (PDD). Furthermore, Bunn Hill Creek serves as a vital source of protecting the watershed of Nuthatch Hollow. This research heightens how the development of Bunn Hill Road will affect the stream quality and the species that inhabit it. In advancing to see if building these homes is ethical, I constructed a sense of how current PDDs operate like University Plaza as Fuller Hollow Creek neighbors in this area by comparing the two creeks with a pocket tester to find if development creates a negative impact on the environment.

METHODS

- I used a LaMotte Tracer Pocket Tester to examine the stream quality between Bunn Hill Creek and Fuller Hollow Creek
- The water was tested at a site on Bunn Hill Creek where the Nuthatch Hollow lies where homes would be built in the future
- Data was recorded at two sites off Fuller Hollow Creek of Old Vestal Road and Stair Park to see if the current PPD with its higher traffic flow and volume influenced the stream quality
- Every day for seven days conductivity, salinity, and total dissolved solids (TDS) was recorded at both streams and all three sites

A planned development district with student housing will harm the watershed and environment at Bunn Hill



Figure 1

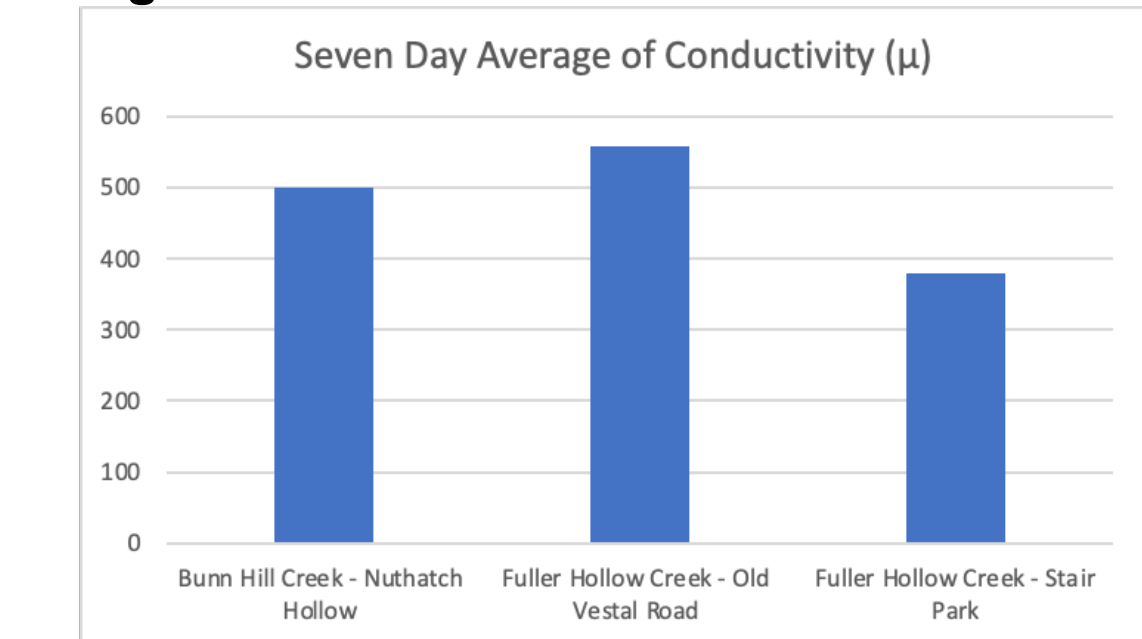


Figure 2

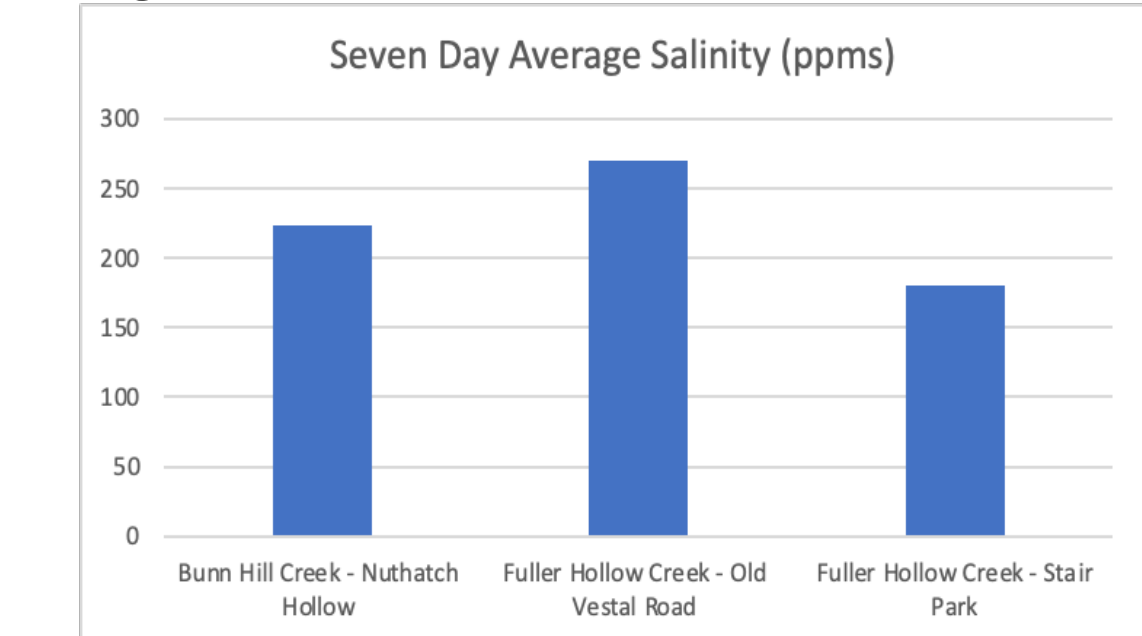


Figure 3

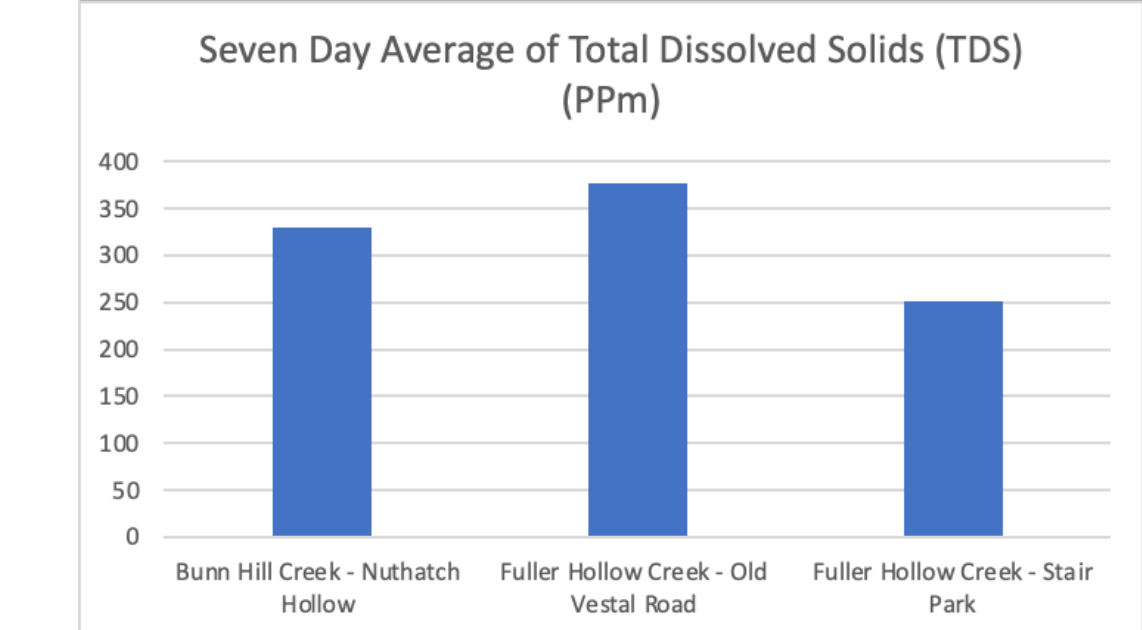


Figure 4

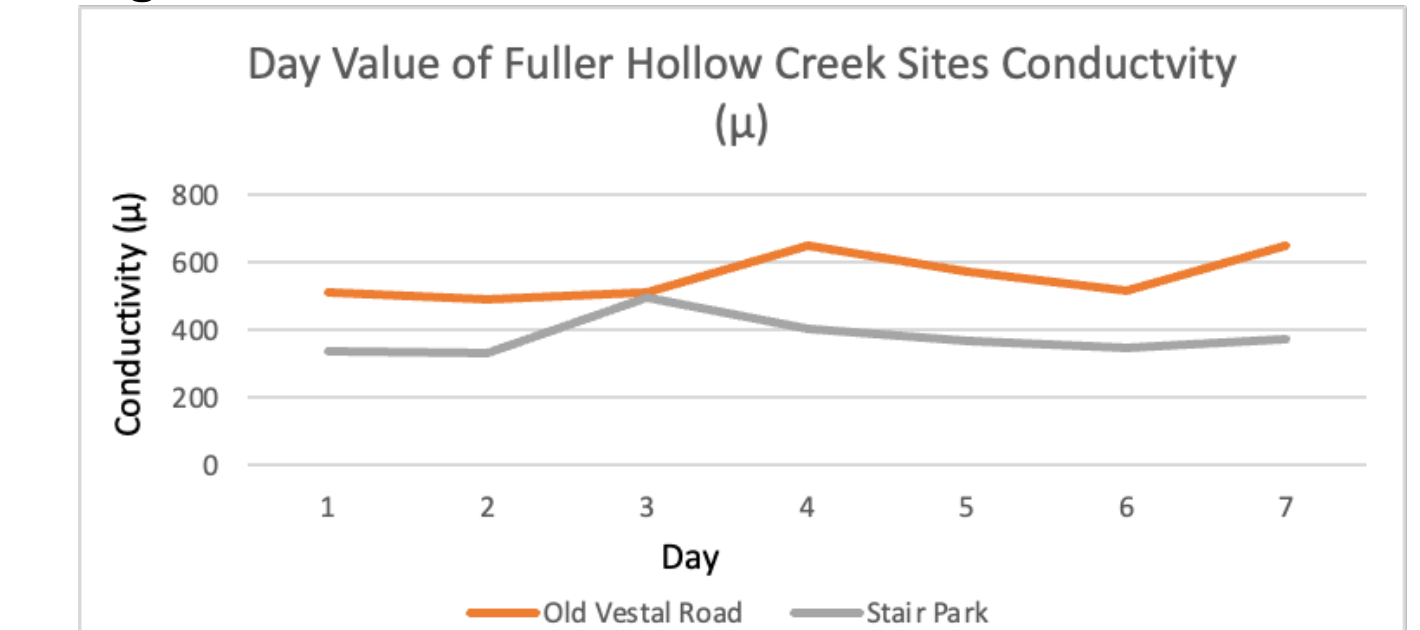


Figure 5

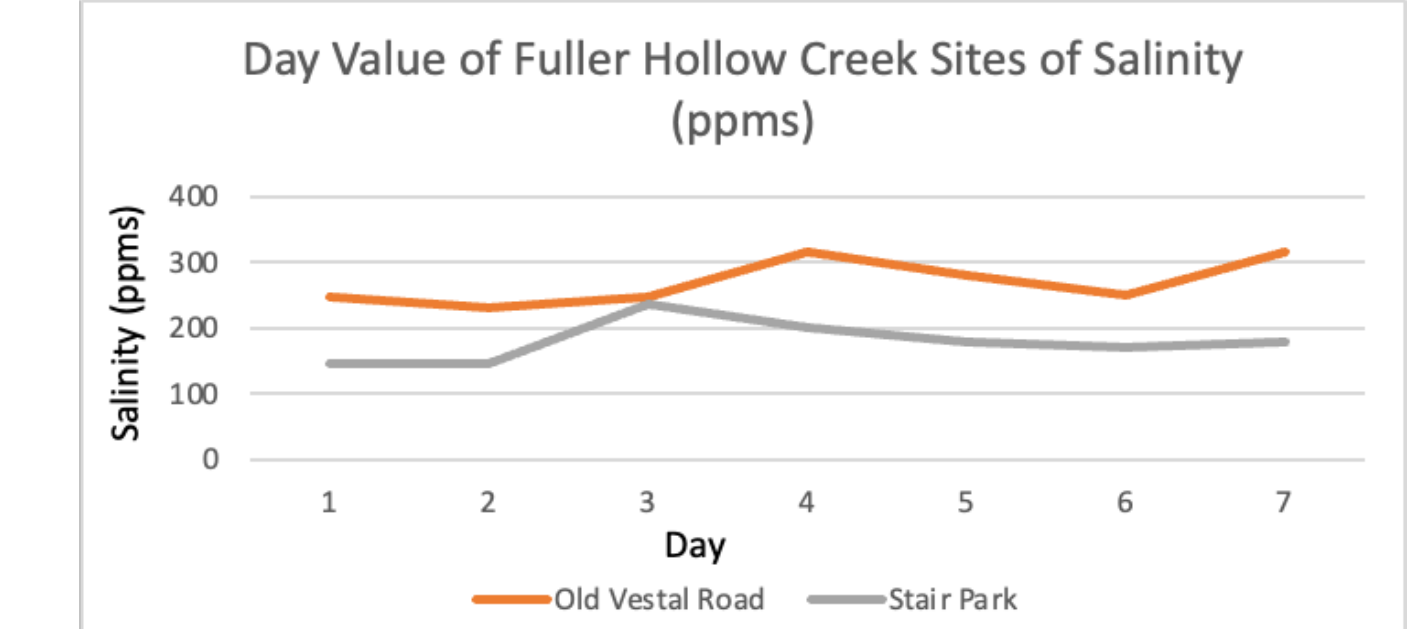
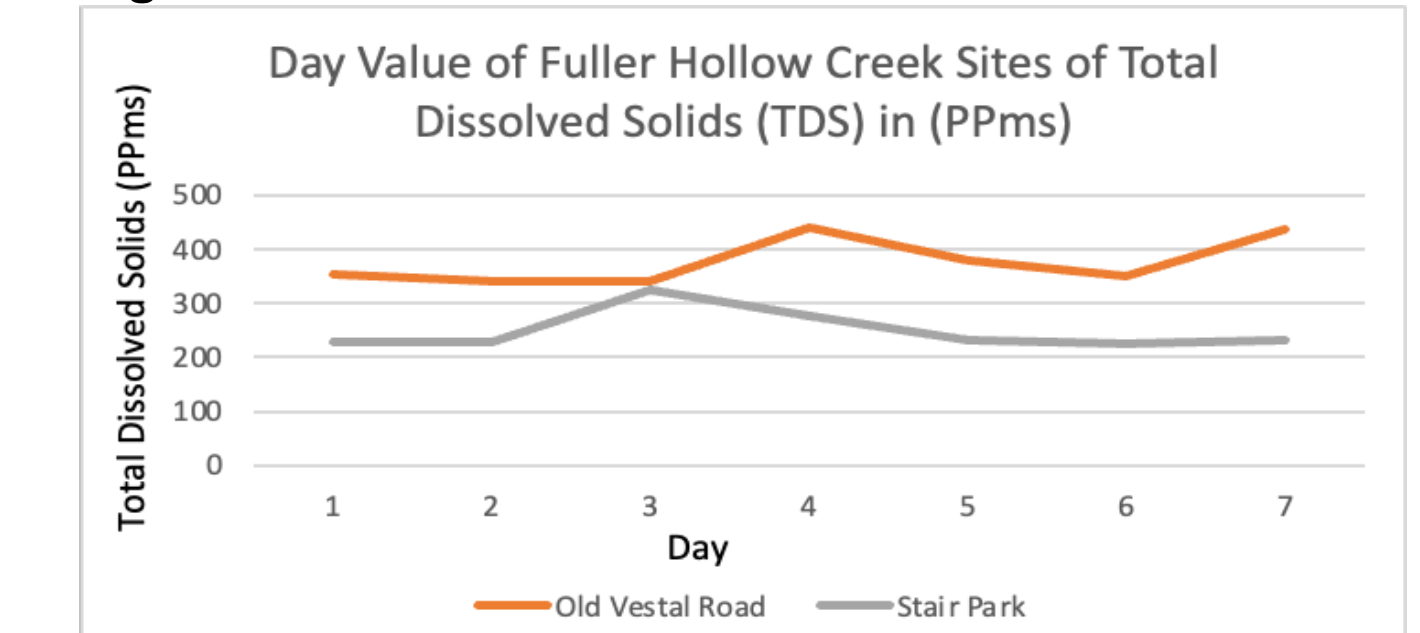


Figure 6



RESULTS

- Fuller Hollow Creek exhibited higher levels of conductivity, salinity, and TDS at Old Vestal Road where the current PPD lies in comparison to Stair Park where there is less development in its seven-day averages and day values
- Bunn Hill Creek displayed lower levels of conductivity, salinity, and TDS than the Old Vestal Road site, but higher levels than Stair Park

CONCLUSIONS

- Seeing the impact of a PPD on Fuller Hollow Creek, we can be expected to see the same progression of Bunn Hill Creek with its stream quality lowering and its potential negative consequences on the environment.
- As shown in the results it portrays that development had worsened the stream quality.
- Testing the different components of stream quality is just a start to seeing if constructing a PPD at Nuthatch Hollow is beneficial for the area.
- Plenty of other testing and waiting for the development's completion will also lead to more results if the building was ethical.

REFERENCES

