Impact of BMPs on Stream Hydrographs

College of William and Mary
Summer REU

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College Creek Rating Curve

Discharge (m3/sec) vs. Stage (cm)

- Linear regression equation: $y = 1E-10x^{5.445}$
- $R^2 = 0.9801$
Discharge Comparison between Casey and College Creek

Discharge (m³/sec) vs. Time

College Creek

Casey

Rainfall (mm)
Conclusions

• Lag times are significantly shorter in the most developed basins.
• Lowe’s BMP is not successful in increasing lag times.
• Discharge is significantly larger in the most developed basins.
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