

Impact of BMPs on Stream Hydrographs

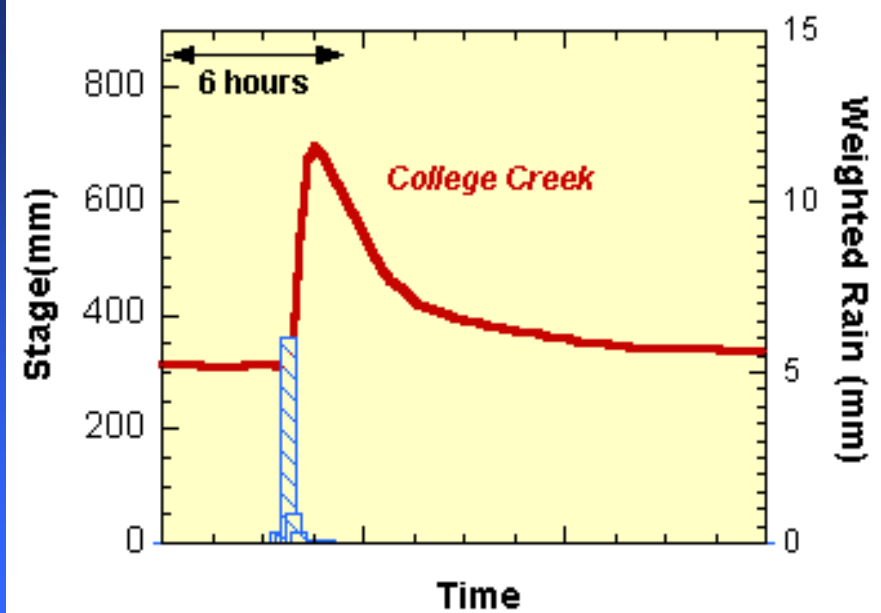
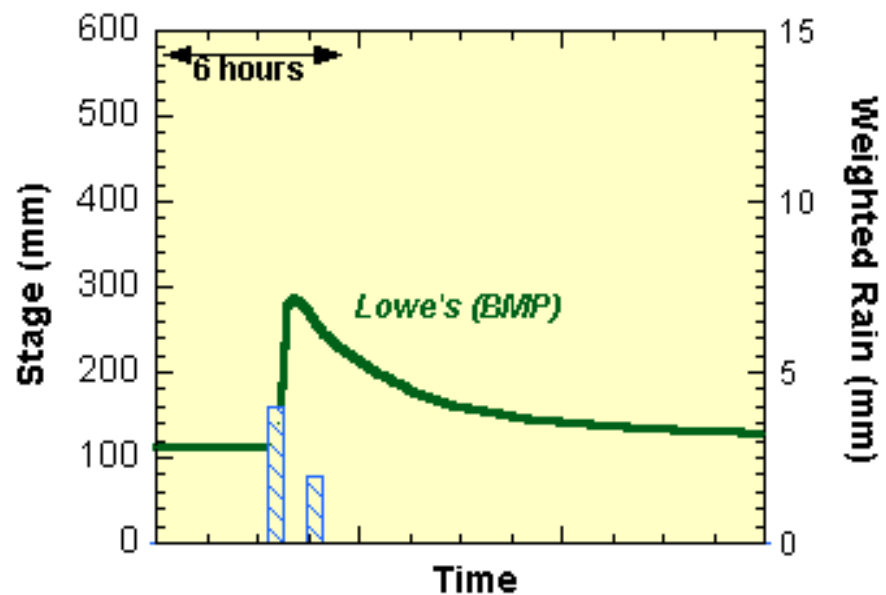
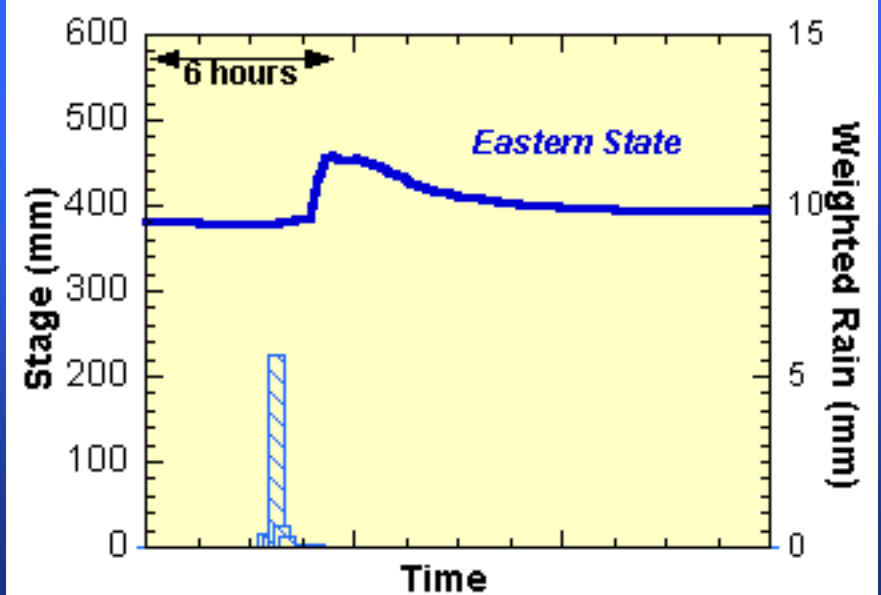
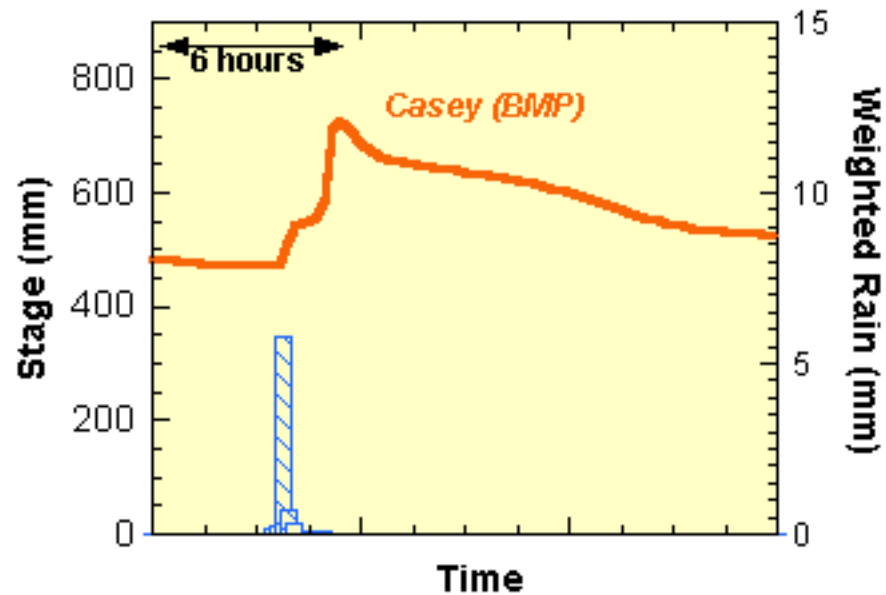
College of William and Mary
Summer REU

Jerod Randall

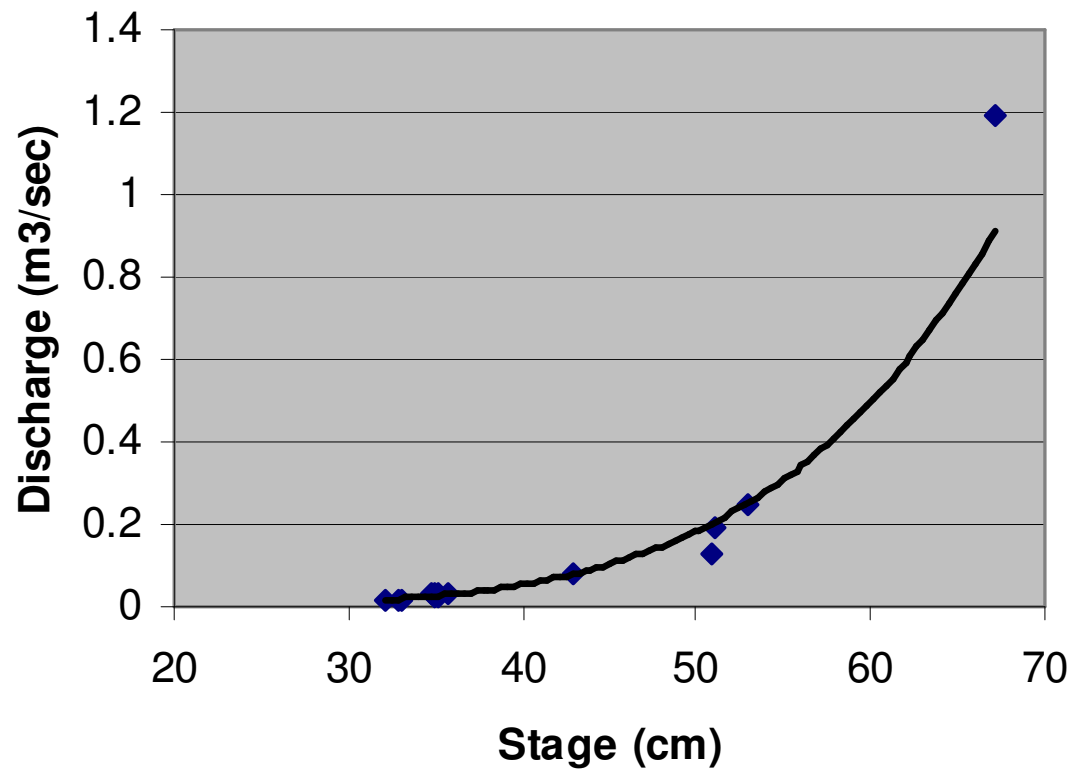
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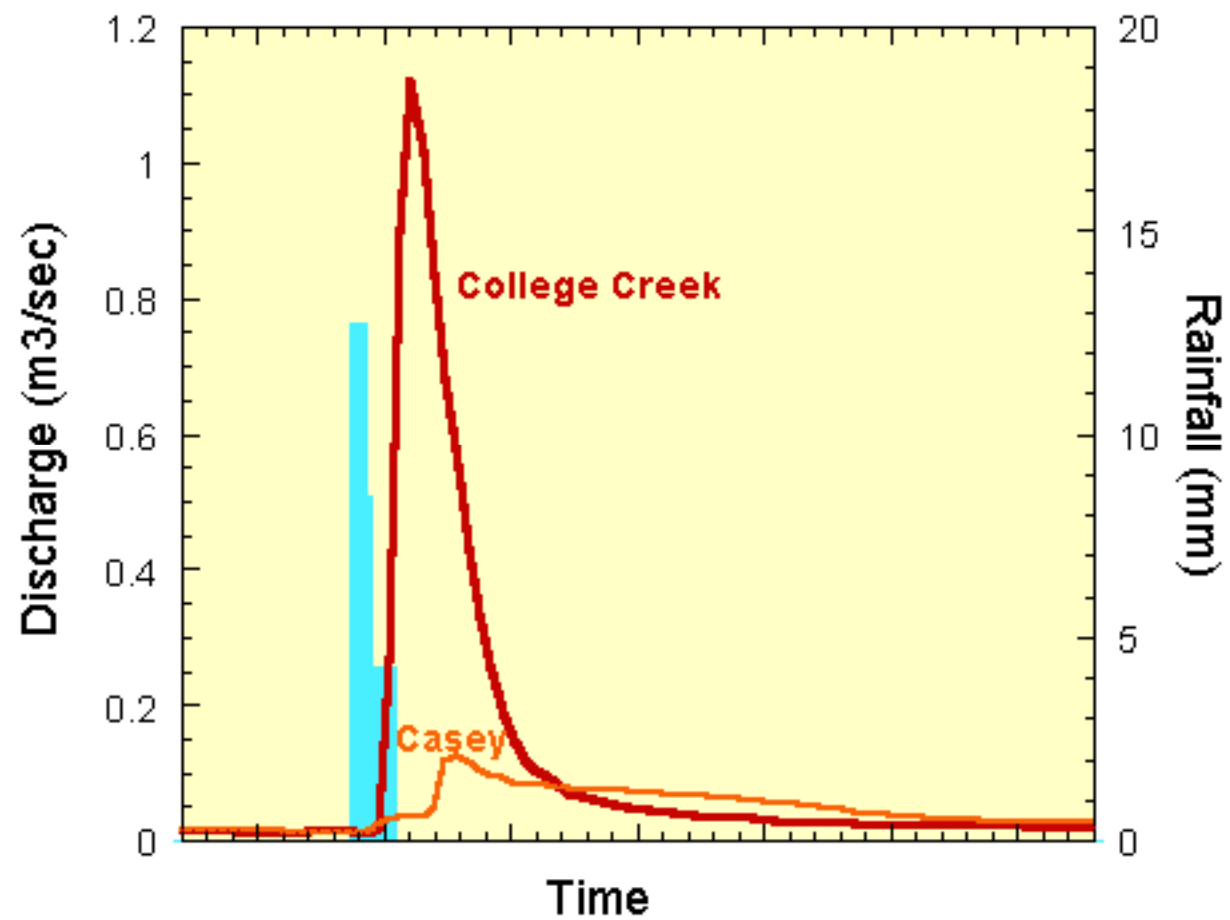


College Creek Rating Curve

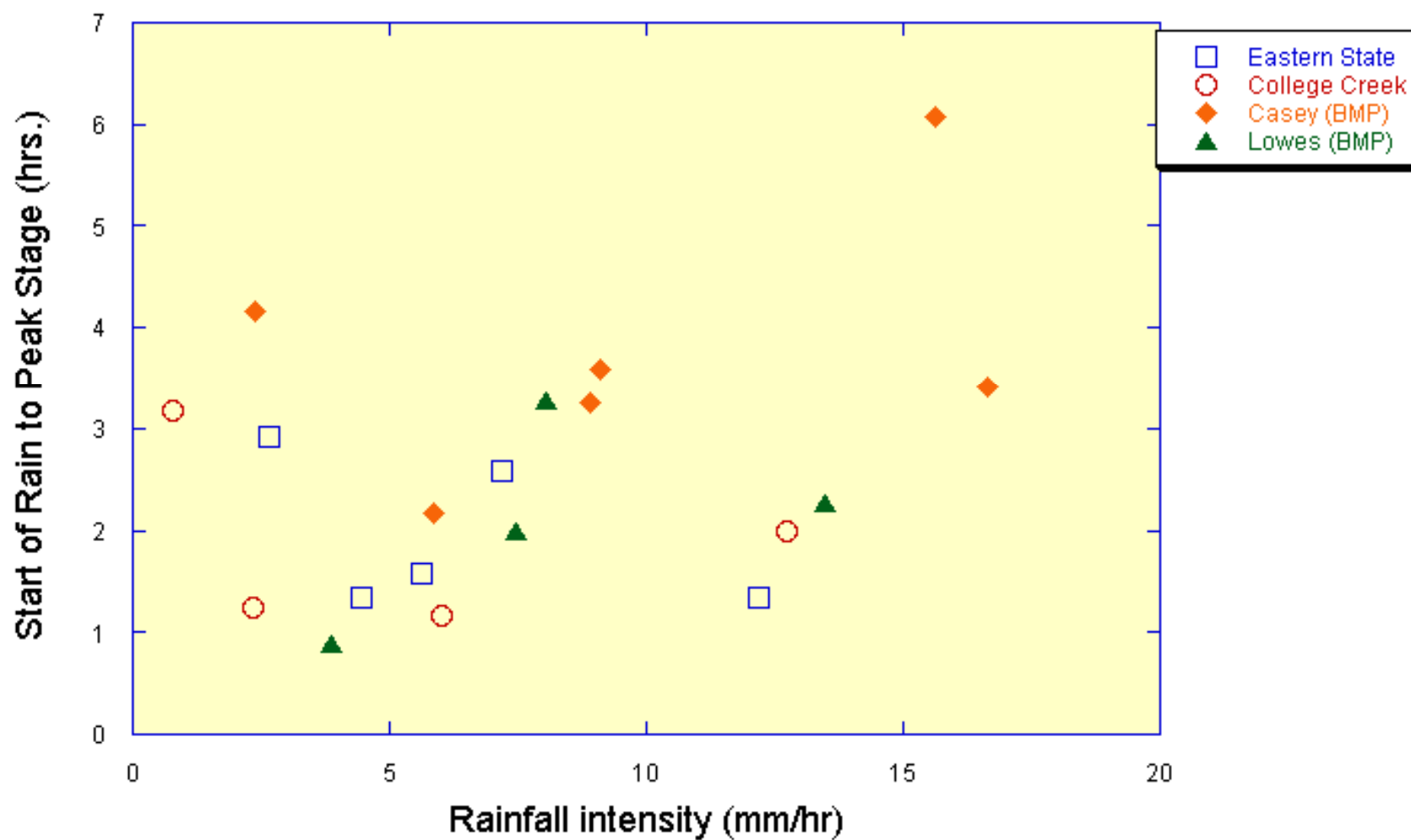


$$y = 1E-10x^{5.445}$$
$$R^2 = 0.9801$$

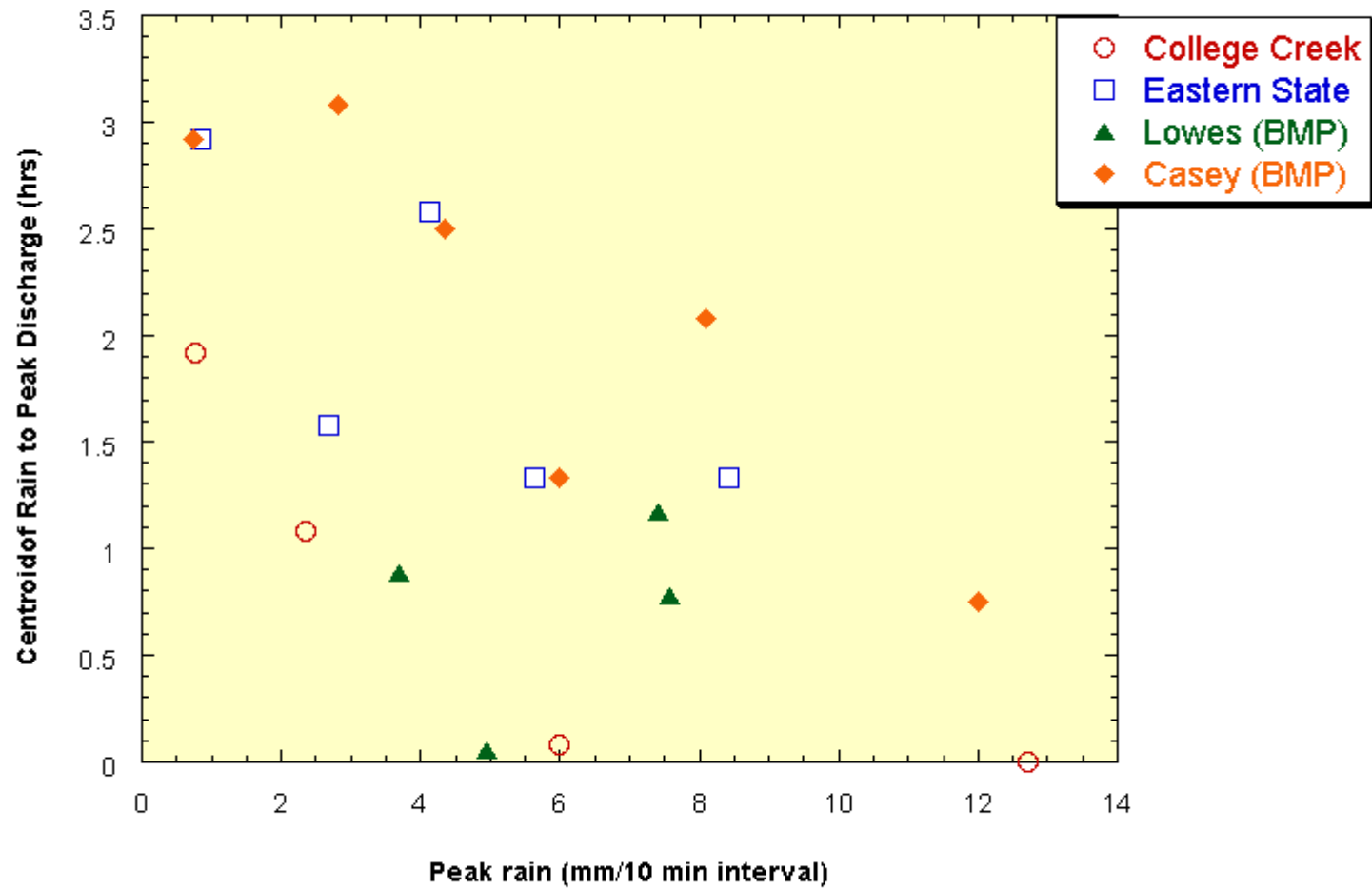
Discharge Comparison between Casey and College Creek



Intensity vs Start of Rain to Peak Stage



Rain Intensity vs. Centroid of Rain to Peak Discharge



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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