

## CIVE 716 EROSION AND SEDIMENTATION

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### **Computer problem #1 Due October 3**

Solve computer problem 3.1 on p. 63 of the text *Erosion and Sedimentation* after considering that a 10 km reach at a bed slope of 0.0005 has been added to the upstream portion of the channel sketched on p. 49. The width of this added segment is twice the width of the lower reach. Assume a constant Manning  $n = 0.02$  throughout the entire reach and use the correct form of the backwater equation to account for the change in channel width. It is fine to assume a wide-rectangular channel for the calculations. Solve the problem in SI and discuss the results of the three main graphs.

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