CIVE 716 EROSION AND SEDIMENTATION

Pierre Y. Julien, Spring 2023

_____

Computer problem #1 due March 1

Solve computer problem 3.1 on p. 63 of the text *Erosion and Sedimentation* after considering that a 15 km reach at a bed slope of 70 cm/km has been added to the upstream portion of the channel sketched on p. 49. The width of the added segment has the same width as the lower reach. Assume a constant value of the Manning coefficient n = 0.025 throughout the entire reach. It is fine to assume a wide-rectangular channel for the calculations. Solve the problem in English units and discuss the results of the three main graphs: flow depth, velocity and shear stress in ft, ft/s and psf respectively.

_____