CHAPTER 2

WEIRS

HOMEWORK ASSIGNMENT 4

Due in Class on Thursday, November 16, 2017

Read Chapter 8 and Chapter 9 in Houghtalen et al (2010). Work problems **9.4.1, 9.4.4, 9.4.6,** and **9.4.7** in Houghtalen et al (2010), in these problems in the textbook, use the equations provided in class.

- As a second part for problem 9.4.1, rework for a case where the flow depth in the channel on the downstream side of the weir is 3.6 m.
- As a second part for problem 9.4.4, rework for a channel flow depth downstream of the weir equal to 1.32 m. Also, weir thickness l_w = 1.5 m for both part.

Also, work and turn in the following problems:

1. Water flows over a 2-m-wide contracted rectangular sharp-crested weir. Determine the flowrate if the weir head is 0.1 m and the water depth upstream is 1 m.
2. The flowrate of water in a 4-m-wide horizontal open channel is being measured with a 0.60-m-high sharp-crested rectangular weir of equal width. If the water depth upstream is 1.5 m, determine the flowrate of water.