

Running the STREAM Model for Projection Analysis

1. Start with a CBOD_u loading rate of 400 lb/day for the Troy wastewater treatment plant.
2. Start with a $K_r = K_d = 0.05 \text{ day}^{-1}$
3. If the calculated allowable CBOD load is still low, what could you do from the treatment plant standpoint? Think about this and let's discuss options to improve this on Monday (Sept. 24).

A file called OCT91C.dat has been uploaded to the folder PROJECT1. When you are prompted for a file for plotting the data, enter this file name. You will then see the model results (CBOD_u , NBOD, and DO) plotted on screen along with the data points (from OCT91C.dat). These data points are the actual field data measured during the October 1991 survey. For now, they are only used for display purpose. You don't try to match your model results with these data points. **Do not mess around with this file!**

After the screen plots are viewed, you may hit the return key and then open the file PLOT. The columns in that file are: mile point, CBOD_u , NBOD, DO, and accumulated time-of-travel (in days), respectively. Make sure that the DO level is above 5.0 mg/L along the entire length of the creek modeled. Decrease the CBOD_u loading rate if this DO standard is violated.

Remember, all files must reside in the same folder to run the model.