Freshwater Ecology (BIOE 155) Assignment #1

Flow regimes

The objective of this homework is to get you thinking about the importance of the natural flow regime through this review paper by Dr. Bayley. The material in this homework is likely to be on the mid-term exam.

I. Please read the following paper. The PDF is on the class website.

Bayley, P.B. 1995. Understanding large river-floodplain ecosystems. BioScience 45: 153-158.

- II. Please answer the following questions:
 - 1. List 3 adaptations of organisms to flood pulses.
 - 2. Figure 2 is central to the thesis of the paper.
 - a. How were the data points generated for Figure 2?
 - b. What does Figure 2 communicate in terms of the influence of floods on fish production?
 - c. What mechanisms could drive this pattern?
 - 3. What is meant by the phrase "moving littoral"?
 - 4. Write a question you have about the work presented in the papers.

WHEN AND HOW TO SUBMIT YOUR ANSWERS

When: Oct 7, at the beginning of class.

Where: At the classroom.

How: Bring a hard copy of your answers. Please don't forget to write your name at the top the first page.

This assignment is worth 2.5% of final grade.

Let us know if you have any questions.

jwmoore@biology.ucsc.edu; heady@biology.ucsc.edu