#### RiverWeb Test Rubric

## **Question #1: (5 points)**

<u>Acceptable answers</u> (1 point each – total of 5 points possible)

-Runoff

-Famland/fertilizer

-Houses/residential/fertilizer OR "people that live by where the river flows" -Sewer/sewage

-Sense of nutrients being washed down into the river from somewhere else in the watershed.

<u>Unacceptable answers</u> -From rain -From the bottom of the water -From animals living in the water or forest -From drainpipe

## **Question #2: (6 points)**

Importance of trees as a stream buffer to protect against

-runoff (1 pt.)
-sedimentation (1 pt.)
-flooding (1 pt.)
-shade/temperature (of water???? Or land??) (1 pt.)

Type of damage that could result

-oils, toxins, other sediments- source must be correct (up to 2 pts.)

# **Question #3: (6 points)**

-3 indicators: sediments, heavy metals, toxins (1 pt. each = 3 pts total)
-Giving correct source of one or more indicators (1pt.)
-Explaining why (runoff) (1pt.)
-Sense of "over time" or "over the years" (1 pt.)

### **Question #4: (6 points)**

- A) No (1 pt.)
- B) Yes (1 pt.)
- C) If the shape is described "up down" inconsistency = 1 pt.If further explanation about the connection between shape and season is given (i.e. in summer the D.O. or graph is lower) = 1 pt.
- D) If mere seasonal events such as heat, cold, rain, snow mentioned = 1pt. If more description or explanation of why this might cause seasonal variation = 1 pt.

### **Question #5 (9 points)**

- A)  $PF = S (1 \text{ pt.}; \frac{1}{2} \text{ pt for } S \text{ only or only})$  Sub = S + (") RM = W + (")
  - Explaining in words the relationship between N and S (1 pt. for each land use, up to 3 points)
- B) Explanation of each land use and why diff. N-S relationship (1 pt. for each land use.)

### **Question #6 (8 points)**

A) Similarities: (up to 2 pts.)

- Both strong (1 pt.)
- Both + (1 pt.)
- X-axis scale is the same (1 pt.)
- Both are measuring runoff and precip. (1 pt.)

B) Differences: (up to 2 pts.)

- Runoff in PF begins later with precip than in urban (1 pt.)
- The numbers on axes are different (1 pt.)
- Two different areas (1 pt.)
- "One goes up faster than the other" (1 pt.)

C) "As precipitation increases, runoff increases" (2 points)

D)

- Describe why PF has less runoff (trees) (1 pt.)
- Describe why urban area has more runoff (no trees, parking lots, etc.) (1 pt.)