

## Oxygen Sag Curve Analysis Questions

Use the graphs below to answer the questions on the next page.  
Figure 1.

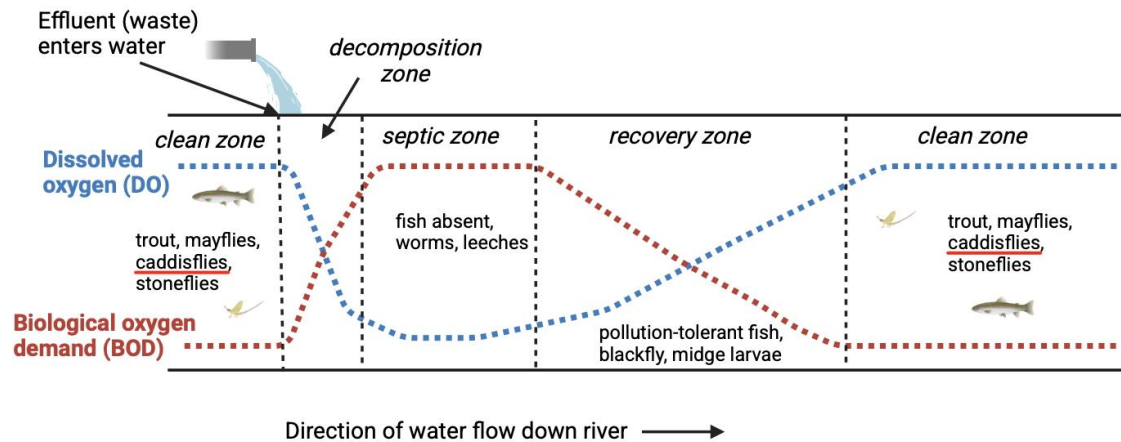


Figure 2. Dissolved oxygen and biological oxygen demand in a river receiving effluent.

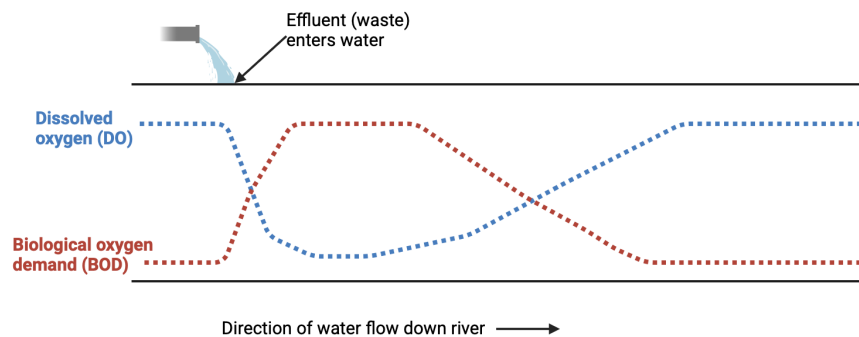
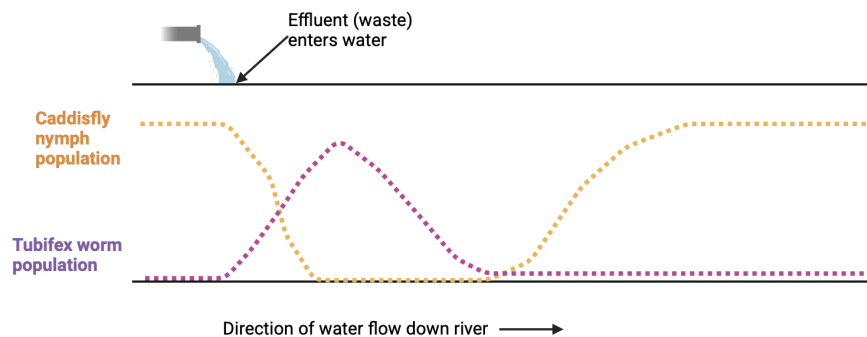


Figure 3. Population of two macroinvertebrates in a river receiving effluent.



Note: **effluent** means liquid waste or sewage.



1. Where will the effluent be most concentrated in the river?
  
2. Provide two pieces of evidence from the graphs to support this.
  - a.
  
  
  - b.
  
3. Why is oxygen concentration low when BOD is high?
  
  
  
  
  
  
  
4. Why do you think the population of tubifex worms is high when the caddisfly nymph population is low?
  
  
  
  
  
  
  
5. Why do you think BOD eventually decreases as you move downstream?