

In-class Assignment: Water

Monday, November 17th, 2014

5 points

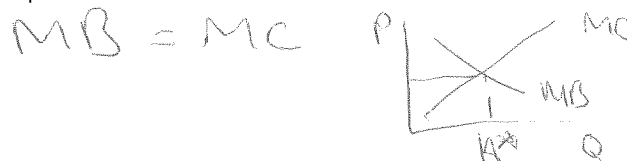
Name: ANSWER KEY

1. What does the hydrologic (water) cycle illustrate?

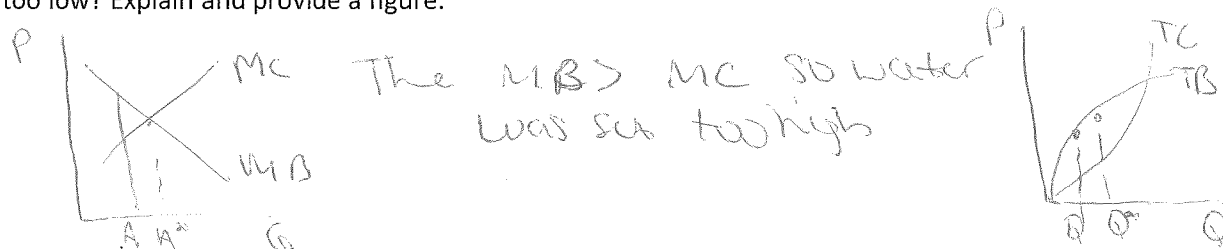
The hydrologic cycle illustrates the movement of H₂O in the atmosphere and the link between surface and ground H₂O.

2. The study by Carson and Mitchell illustrated that there were positive net benefits from the Clean Water Act. However, we also discussed that simple benefit-cost analysis does not imply efficiency.

a. Explain how we would solve for the efficient level of water quality.



b. Using our in-class analysis, did we determine that the water quality set was too high or too low? Explain and provide a figure.



3. True or False and explain why. When polluting sources with different Marginal Abatement Costs (MACs) are faced with a Marginal Effluent Fee (MEF), each abates at a different level, which means that the effluent fee does not achieve a cost-effective solution.

False. The MEF allows firms to abate based on their actual cost structure, which achieves a more efficient solution than a uniform fee.

4. True or False and explain why. A fertilizer tax is the same as an effluent fee

False. The fertilizer tax is for nonpoint pollutants and target quantity, not pollutant output.