

## **APES Unit 4 Exam: Common Study Guide**

### **Water**

You should know the following topics thoroughly. Be able to describe, explain, and/or give examples. You MAY NOT use a calculator on the exam.

#### **Chapter 15: Freshwater Resources**

- Freshwater vs. Ocean Water – percentages, where is most freshwater located?
- River Vocabulary (watershed, oxbow, oxbow lake, floodplain, riparian)
- Types of Lakes (oligotrophic vs. eutrophic)
- Eutrophication vs. Cultural Eutrophication
- Groundwater Vocabulary (aquifer, water table, confined vs. unconfined)
- Benefits and costs of damming rivers
- Inefficient vs. efficient irrigation methods
- Problems with depleting groundwater resources
- Sources of water pollution (nutrient pollution, pathogens, toxic chemicals, sediment, thermal pollution)
- Point vs. non-point source pollution
- Water Quality Testing – Types of tests performed – What do they indicate?
- Drinking water treatment, Waste water treatment
- Functions of wetlands
- Floodplains
- Clean Water Act vs. Safe Drinking Water Act
- Water Conservation Practices

#### **Chapter 16: Marine and Coastal Systems**

- Ocean currents and upwelling
- Coral Bleaching - Zooxanthellae
- Oil Spill Clean-Up Technology
- Over-Fishing – Methods of Fishing (driftnets, long line, bottom-trawling, purse seine), by-catch
- Marine Protected Areas vs. Marine Reserves
- Legislation (Marine Sanctuaries Act, The Oceans Act of 2000, Magnuson Act, Ocean Dumping Act, Marine Mammal Protection Act)
- Converting Salt Water to Freshwater (distillation, reverse osmosis, problems)