

We understand that studying for Envirothon on top of doing school work, finishing up AP tests and finals and whatever else you have on your plate can be overwhelming. With that in mind, we created a study guide to help narrow down the most commonly asked topics for each category. It is in no way comprehensive, but it is meant to be a starting point. We hope this is helpful!

# Aquatic Ecology If you have 1 hour to study

- What is a Watershed?
  - Video
  - o <u>Influences in the Watershed</u>
- Water Quality Parameters and How to Measure Them
  - o pH, turbidity, temperature, dissolved oxygen (DO), flow
    - Water Quality Parameters
  - Dissolved Oxygen as a Function of Temperature
    - Factors That Affect DO Levels
- Macroinvertebrates
  - Anatomy, tolerance levels, adaptations, roles, sediment sensitivity
  - Identification: pay attention to number of legs and tails and which species are sensitive, somewhat tolerant and tolerant to pollution
  - What does the number of sensitive or tolerant samples say about stream health?
    - Presentation
    - What are macros?
    - Visual Guide to Common Macroinvertebrates
    - <u>Macroinvertebrate ID</u>
    - <u>Adaptations for Aquatic Life Video</u>
    - Flashcards
- Salmon
  - Vocabulary: anadromous and kype
    - Salmon Facts
    - How to Remember Them?
    - The 7 Species of Pacific Salmonoids
    - Salmon Anatomy
    - Salmon Lifecycle
    - <u>Lifecycle Video</u>
    - Snohomish Salmon Story Map

# If you have 2 hours to study

- Habitat Restoration: Riparian Plants
  - ID and benefits pages 1-13
  - o Buffer Zones
- Stormwater Pollution
  - Vocabulary: Agricultural runoff, point source and non-point source pollution, algae blooms
  - Protecting Water Quality from Agricultural Runoff
  - Point Source vs. Nonpoint Source Pollution



This category has a greater number of topics and you will probably spend more

than the estimated time. They're all important









- Invasive Species
  - Aquatic Invasive Species of Greatest
     Concern
- Wetlands
  - Wetland Functions and Values

## If you have 3 hours to study

- Signs of a Healthy River, Stream or Lake
  - State of Our Waters
- Meandering stream v channelized stream: effects of channelization and benefits of meandering streams
  - o Shape of Healthy Streams
- How much of Earth's water is available for our uses?
  - Water Distribution
- What is Groundwater?
  - Video
- Aquatic Ecology Vocabulary
  - We recommend to break up into sections to study





### Review

- Aquatic Ecology Overview
- Envirothon Aquatic Ecology Online Course



Was this helpful? Were some resources not so helpful? Did you find an awesome resource you want others to know about? Let us know!
Send us an email at washington.envirothon@gmail.com

