NH Envirothon Aquatic Ecology Resources 2024

These resources are meant to be helpful places to start student studying efforts. This should not be used as an exclusive list but more as a guide. In addition, there may be topics on this list that are not directly tested on but are there to build your basic understanding for more complex questions.

Hydrosphere

- The Water Cycle | U.S. Geological Survey (usgs.gov) (information about water cycle)
- Water Basics Information by Topic | U.S. Geological Survey (usgs.gov) (basic information about Earth's water resources)

Aquatic Ecosystems

- Slide 1 (wordpress.com) (how to delineate watersheds and understand topographic maps)
- <u>How to Read a Topographic Map and Delineate a Watershed (state.mn.us)</u> (how to determine stream flow from a topographic map)
- https://www.youtube.com/watch?v=yyvT0wOuS2c (video on sediment and streamflow)

Organisms

- "An Image-Based Key To Stream Insects", University of New Hampshire Center for Freshwater Biology": http://cfb.unh.edu/StreamKey/html/index.html
- Macroinvertebrate ID Resources Virginia Save Our Streams (vasos.org) (specifically the macroinvertebrate pollution sensitivities)
- https://dnr.maryland.gov/education/Documents/Aquatic%20Insect%20Ecology.pdf
- Fish Species of NH | State of New Hampshire Fish and Game (species of fish found in NH)

Aquatics and Society

- ASDSO Dam Safety Toolbox (damtoolbox.org)
- Dam Removal and River Restoration
- Dams the Advantages and Disadvantages
- Climate Change Complicates the Whole Dam Debate
- Climate Impacts of Hydropower: Enormous Differences among Facilities and over Time (fomb.org) (Research paper on the climate impacts of hydropower)
- es-2016-04447e 1..8 (vt.edu) (research paper concerning Hydroelectric Power/Methylmercury-2016)
- Benefits of Hydropower | Department of Energy
- Best Management Wetlands Practices (BMWP's) for Agriculture

Field Skills

• Interpreting VRAP Water Quality Monitoring Chemical Parameters