

2000 Wisconsin Envirothon
Oral Presentation Topic - Wetlands

The Hypothetical Situation

Your ecological consulting firm has been asked to develop a watershed plan that will protect and enhance wetlands and their associated water resources within a 20 square mile watershed. The goal is to ensure that the functional values of the wetlands occurring within the watershed are preserved or enhanced for this and future generations.

Wetlands are important features on the landscape from a water quality, groundwater, fisheries, and wildlife perspective. Although protected by various federal, state, and local (city, town, village) regulations, their values are often compromised by our activities on the landscape.

Land use within the watershed consists of 30% urban, 10% new developing residential, 30% agricultural, 15% forest, and 15% wetland habitat. Wetland types range from forested wetlands and sedge meadows along small navigable streams to headwater wet meadow and scrub shrub wetlands. Approximately 5% of the agricultural area consists of formerly drained (ditched or tiled) wetlands. Degradation of wetlands and associated streams, is already occurring within the watershed. Efforts to approach the problem cross social, economic, and environmental aspects.

You have been hired to formulate a comprehensive watershed approach to address this important issue, insuring improved and continued wetland and water resource health. Your presentation should include: 1) an explanation of the values of the wetlands that your plan seeks to protect and enhance; 2) wetland definitions (i.e. types and delineation), functions, and benefits; 3) discussion of the local and global impacts of land uses such as urbanization, forestry, agriculture, development or alteration, planning and stewardship, and techniques for avoidance, minimization and restoration.

Your firm will have 10 minutes to present your watershed plan to preserve and enhance the functional values of the wetlands within the watershed for this and future generations. You may include maps, posters, or other visuals; however, you will not have access to audiovisual equipment (or electricity). The entire team must take part in the oral presentation and your presentation is limited to 10 minutes. You may use any outside reference materials you wish. The score sheet that will be used by the judges is attached.