



2025 Oral Component Scenario

Roots & Resiliency: Fostering Forest Stewardship in a Canopy of Change

The Scenario:

Pennsylvania's 17 million acres of forest provide a vast array of values, including clean air and water, recreation opportunities, wood products, and habitats for thousands of plants and animals. Understanding the status and condition of the forests, especially amongst challenges such as climate change, is necessary to conserve them for future generations.

A Forest Action Plan describes the current conditions, trends, and priority issues of Pennsylvania's forests across all ownerships and establishes a framework for developing long-term management strategies to achieve forest resiliency.

The Presentation:

As an Envirothon team, you are experts from various fields of natural resource management (wildlife biologist, silviculturists, soil scientist, wildland fire ecologist, etc.); hired by the Commonwealth of Pennsylvania to give a presentation proposing this year's Forest Action Plan to the Board of Directors of the National Association of State Foresters. Develop a 12-minute presentation to describe how you will manage PA's forest in a changing climate.

Develop a 12-minute presentation that addresses the following tasks:

- I. **Task 1: Climate Change Projections** – Define and explain climate change and its impacts on the local and global environment, economy, and society.
- II. **Task 2: Forest Health in a Changing Climate** - Using examples, describe the potential impacts of climate change on Pennsylvania's forests with respect to biodiversity and sustainability.
- III. **Task 3: Comparison of Forest Vulnerability**- Compare the temperate forests of Pennsylvania to the Canadian Boreal forests, and how they might be affected differently & similarly by climate change. How will changing climates and forests affect or put pressure on the forest-product industry here in PA?
- IV. **Task 4: Sustainable Adaptation Strategies & Management**– Explain which climate change adaptation strategies best support sustainable forest management in Canadian forests and have the potential to work in Pennsylvania. Explain how forests can be a tool to combat climate change.
- V. **Task 5: -Taking Action to Manage Forests Sustainably**-Explain how community members, indigenous people, scientists, and government officials can work together to protect and manage our forest resources. As community members, identify actions that can be taken on an individual and local level to support sustainable forest management. **Each member must briefly mention a personal sustainable forest action and how to reduce obstacles to that action. Students may select similar actions to each other without penalty.**

References:

Be sure to incorporate/cite at least three (3) spoken, relevant, and reputable references as you present, such as a formal publication or information provided in the 2025 Current Issue Resources.

Examples of references:

1. "According to _____'s publication entitled _____, [fact that supports scenario]."
2. "Research from [organization/agency/etc.] outlined in their article _____, suggests [fact that supports scenario]."
3. "An article entitled _____, on _____'s website, says [fact that supports scenario]."

Final Notes:

While preparing, teams should feel free to include details of their choosing, not specifically referenced in the scenario, to aid the presentation. **The Pennsylvania Envirothon will not answer any questions regarding the scenario – the team must interpret and respond as it sees fit.** There is a maximum of 20 slides allowed in your PowerPoint. The video submitted should mimic as closely as possible the team standing in front of a panel and presenting it to them in person. The entire team should be present and using its developed PowerPoint as a visual aid. The only visual aid acceptable is a PowerPoint presentation that the team develops. No video editing, animation, etc., is allowed. The goal of the video is to be a single take of the team using its PowerPoint as a visual aid and presenting its information addressing the points of the scenario to the panel of judges. The team will lose points if it edits its video and may be subject to disqualification. Note cards or cue cards are acceptable for use, however students will be judged on their delivery and style. Please read the full Oral Component Rules on our website.