



2025 Virginia Dominion Energy Envirothon Oral Presentation Scenario

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

The Monacan Indian Nation (MIN) is descended from a confederacy of Eastern Siouan-speaking peoples and has resided in the Piedmont Region now known as central Virginia for over 10,000 years. In 2018, they received federal recognition status, and since then, have been developing their environmental program, including creating a climate action plan to ensure a sustainable future for their land and community.

Currently, the Monacan tribe owns 1,494 acres of land, 73% of which is forested, in Amherst County, VA. A significant part of this land is the recently acquired or rematriated Laurel Cliff property, which spans 1,294 acres. The tribe's goals for Laurel Cliff are to foster a strong connection between the people and the forest, ensuring its' sustainability for future generations. However, Laurel Cliff faces forest health challenges due to climate change, including invasive species, wildfire risk, soil health concerns, and water quality issues.

Your consulting firm has been enlisted to help the Monacan Indian Nation create a **comprehensive management plan for Laurel Cliff**. Your presentation to the Monacan Indian Nation members should include the following –

1. **Impact of Climate Change:** Explain how climate change is affecting forest health in the context of the Laurel Cliff property and Piedmont region.
2. **Management Plan:** Develop a management plan that addresses the following areas of importance for MIN:
 - **Soil Health:** Laurel Cliff has agricultural areas that were previously used for dairy and beef cattle grazing. The MIN have been haying the area for the last several years but would like suggestions for land use that focus on improving soil health and carbon sequestration.
 - **Post-Timber Harvest Land Usage:** The Northern section of Laurel Cliff holds clear cut loblolly pine that will be market ready in the next five years. The Monacan tribe aims to harvest the timber and then implement strategies to support a healthy and diverse forest ecosystem. Discuss potential uses or replanting strategies for this land after the timber is harvested.

Choose *at least two* of the following six options to discuss in your management plan *in addition to Soil Health and Post-Timber Harvest Land Usage*. You may choose to address more than two options, but be sure to articulate the reasoning for selecting each option and its significance:

- **Hunting and Fishing:** The Monacan tribe values hunting and fishing on their land. Discuss forest management techniques or ideas for land usage that maintain sustainable hunting of species like deer, turkey, groundhog, and squirrels, protect and maintain populations of

culturally important species like black bear and bald eagle, and manage fish populations in streams.

- **Cultural Practices:** Basket weaving from honeysuckle vines is an important cultural practice completed by tribal elders. Discuss forest management techniques or ideas for land usage that provide accessible and plentiful access to honeysuckle plants and may include other multi-use forest species like sweetgrass, medicinals, etc. Note that many common honeysuckle species are not native to Virginia. Basketmakers prefer honeysuckle vines that grow along the ground, as those growing up trees can be more brittle and difficult to weave.
 - **Wildfire Management:** With recent fires in nearby areas raising concerns, suggest strategies to prevent and manage wildfires in Laurel Cliff, including the usage of prescribed burns.
 - **Food Sovereignty:** The MIN food bank serves approximately 2,500 households and 5,500 individuals annually and are seeking ways to incorporate Indigenous crops. Explore ways to enhance food sovereignty through agroforestry practices.
 - **Invasive Species:** Address the increasing invasive population of *Ailanthus altissima* (tree-of-heaven) and *Lycorma delicatula* (Spotted lanternfly) and propose management strategies.
 - **Community Spaces:** The MIN greatly values their community and would like to create new gathering spaces in Laurel Cliff to encourage intergenerational knowledge sharing and environmental stewardship. The Annual Powwow is already held on Laurel Cliff land, serving as a model for cultural engagement. Propose an idea for a community space that emphasizes cultural significance and integrates with the surrounding forest ecosystem.
3. **Develop a Timeline:** Propose a general timeline for your management plan.
 4. **Anticipated Challenges:** Address any potential challenges including environmental, social, legislation/regulation, and economic impacts.
 5. **Cost and Financing Options:** Include an anticipated budget of your monitoring and management plan as well as potential funding sources.

You should NOT contact Monacan Indian Nation members, employees, or any other connected agencies for the purpose of this scenario. You ARE encouraged to visit the [Monacan Ancestral Museum](#), contact the phone number on the listed website, and learn all about the Monacan peoples.

The only visual aids allowed will be Microsoft Powerpoint (PPT). Google Slides may be used in creating the presentation but should be downloaded to a PPT file for competitions.