



2022 Oral Presentation Topic- *Waste to Resources*

Residents in a suburban housing subdivision, composed of 125 single-family homes, have been spending more time at home during the COVID-19 Pandemic. The Homeowners Association (HOA) has identified an overwhelming increase in waste ending up in trash and recycling receptacles because of residents spending more time at home. The trash and recycling services need to be reevaluated, which presents an opportunity to change the way waste is viewed and discarded. Your group has been tasked to educate and inform the HOA on how to take a conservation-focused approach to managing waste. **Develop a specific, holistic plan to present to the HOA with a primary focus on to reducing household waste in the subdivision, including but not limited to food waste, recyclable items, household hazardous waste, and any other waste that would end up in a landfill or the environment.** The subdivision's wastewater is treated using a cluster septic system and should be taken into consideration as a part of the larger plan.

Ensure you include the following in your plan:

- Detailed recycling plan, including what materials will be able to be recycled and how it will be sorted
- Methods for composting food and yard waste
- Procedures for proper disposal of hazardous household waste
- Impacts of animal waste and untreated wastewater on local waterways
- Any other initiatives to reduce the quantity of waste leaving the subdivision

Think critically about the ways each type of waste leaves an impact on our environment, and what groups have been historically impacted by landfills and waste disposal in general. **During your presentation ensure you answer the following questions:**

1. What are the different methods for reducing, reusing and repurposing waste? Which methods are most appropriate for the HOA to adopt and why?
2. How do landfills operate in Virginia and what are the impacts of waste that ends up there?
3. What are the ecological and environmental benefits of the plan? Including impacts on the soil health, land use, water quality, stormwater runoff, forestry, wildlife, human health, etc. Consider other environmental benefits such as carbon sequestration.
4. What financial costs would these waste management methods require? How could these costs be handled?
5. How would you engage community members and residents in the HOA to participate in these initiatives?
6. What policy recommendations would you make at the local and state level to further reduce waste as addressed in your proposal? Why?

In your presentation, be sure to share how your proposed methods of waste management impact global sustainability if taken to scale. Recognize and assess the impact this plan could have on various stakeholders in the community.

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 competition day.