

Healthier Soil, Less Waste, Improved Economics, Cleaner Environment

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Here , In Loudoun County...

As part of the county's waste management process, diverting food waste from the county landfill into an active compost creation process will produce compost which can be **returned as a soil amendment to maintain our nutrient-rich soils while reducing emissions of greenhouse gases (methane and carbon dioxide).**

A simple action ...

Importantly, because composting results in less material to bury and manage, **landfill maintenance expenses will be lowered**, and consequently, tax dollars saved. Using compost as a soil amendment will **enable resiliency to flood and drought conditions**, promote better crop yields, and reduce the need for chemical amendments (**synthetic fertilizers and pesticides**), thereby **lowering the risk of water pollution from rainfall and irrigation runoff**.

Leads to a valuable result for soil resources here in Loudoun county

Using compost ...

- *as an organic soil amendment, may lead to improvements in the structure and health of your **soil****
- *may help **soil*** retain moisture and nutrients.*
- *attracts beneficial organisms to the **soil*** and may enable a reduction in the need for pesticides and fertilizers.*
- *may facilitate a reduction in process of **soil*** erosion*

*** Test, Test and Test**

Why

- **Improved plant health and yields:** Nutrient-rich soil helps plants thrive.
- **Increased water infiltration and retention:** Enhanced soil structure improves drought resistance by helping capture and store water.
- **Sequestered carbon and reduced greenhouse gases (GHGs):** Healthy soils act as a carbon sink, mitigating climate change.
- **Reduced sediment erosion and dust:** Conservation practices keep topsoil in place, reducing air pollution.
- **Improved water quality:** Healthy soils aid in filtering pollutants, enhancing water quality.
- **Improved biological diversity and wildlife habitats:** Healthy soils nurture ecosystems, both above and below ground.

What Next (Part1)...

- **Creating Circular Opportunities in Food Waste Recovery**
- **The Impact of Food Waste on Methane Emissions, Reducing Food Loss & Waste, Financing Food Waste Recovery and Organics Recycling, and Mitigating Climate Effects**
- **Solutions for Household Food Waste Reduction – Leveraging Research Data and Consumer Behavior**
- **Engaging Loudoun County Government to Achieve Food Waste Reduction**
- **How Great Partnerships Matter When Executing a Successful Food Waste Diversion Program**
- **Innovative Composting Systems and Technologies**

What Next (Part 2)...

- **Anaerobic Digestion: Technologies, Selection Criteria, Case Studies, and GHG Reduction (*Inspired by John Adams*)**
- **Localizing Food Waste Systems Through Policy, Technology, and Funding**
- **Is There a Gap Between Wasted Food and Food Insecurity?**
- **Using Data & Technology to Optimize Food Waste Prevention**
- **Conduct networking events at partner restaurants**
 - **Cowbell Kitchen, 26 North King Street Suite 110, Leesburg, Virginia 20176**
 - **Farm & Fork Kitchen, 42755 Creek View Plaza Unit #100, Ashburn, Virginia 20147**

Sources

- Regenerative Agriculture and the Soil Carbon Solution: Authors: Jeff Moyer, Andrew Smith PhD., Yichao Rul, PhD., Jennifer Hayden, PhD.
- Loudoun County
- https://www.loudounnow.com/opinion/healthier-soil-less-waste-improved-economics-cleaner-environment/article_453d5fbc-cb7d-11ee-8adc-37282471fbb6.html
- Network of Soil & Water Advocates, Conservationist and Preservationist

Thank You !

Any Questions ?