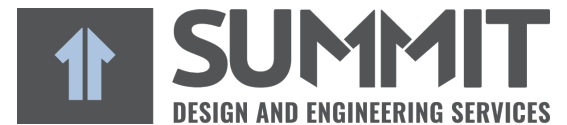




More Information on Compost Blanket/Seeding

Donald Pearson EI, CPESC





POSITIVES

- // Cost
- // Desired pH and fertility w/o adding amendments
- // Improve soil structure (biologically, chemically, physically)
- // Direct placement
- // Groundcover *
- // Assures vegetation development

* Check with State Regulatory Authority for clarification

NEGATIVES

- // Cost
- // Stockpile location needed
- // Specialty work
- // Requires some handwork
- // Traffic control in Urban Areas

** Quantity to apply will determine

COMPOST BLANKET/SEEDING BENEFITS

PHYSICAL

- // Improves soil structure
- // Moisture management

CHEMICAL

- // Modifies and stabilizes pH
- // Supplies nutrients

BIOLOGICAL

- // Supplies soil with environment for beneficial organisms
- // Suppresses plant diseases

OTHER

- // Binds/degrades contaminants
- // Binds nutrients

GREENSBORO, NORTH CAROLINA



Stream Relocation/Restoration

- // Subsoil with poor pH and fertility
- // Permit requires permanent vegetation prior to returning flow
- // Compost Blanket applied directly from pneumatic blower truck

- // Compost Blanket applied at 1 inch
- // Native grass seed applied post Compost material application



OAK ISLAND, NORTH CAROLINA

Kureb – Wando Soil

- // Excessively drained
- // Fine Sand
- // Subject to...
 - Drought
 - Plant nutrient leaching
 - Soil blowing
- // Traction limitations (equipment)
- // Compost Blanket applied at 1 inch provided best results
- // Compost material absorbed and held moisture from rainfall



MAYSVILLE, NORTH CAROLINA

Onslow fine sandy loam (Borrow)

- // Not well drained
- // Some organic matter
- // Light soil texture



- // Compost Blanket applied at 1 inch
- // Compost material absorbed and held moisture from rainfall

COMPOST EROSION CONTROL BLANKETS

Advantages

- Intimate contact allows nearly 100% ground contact, eliminating puckering of other blankets
- Intimate contact reduces sediment loss
- Water infiltration increases, increasing germination from seed
- Water discharge from slopes decreases, reduces potential sediment loss (Iowa State Study 2003)
- Addition of organic matter improves slope ability to revegetate and establish a permanent erosion system

From - Novozymes presentation

COMPOST BLANKET VS. HYDRAULIC-SEEDING



Hydro-seed

Compost





- Pneumatic Blower Truck**
- // 30-40 CY Capacity
 - // Discharge Hose allows for precision location
 - // Accurate product depth





Donald retired with 30 years of service to the NC Department of Transportation where he worked in Highway Infrastructure development in Central and Eastern North Carolina. His responsibilities centered around helping the Department maintain environmental compliance with State and Federal Environmental Regulations. Over a decade ago, he connected with US Composting Council's Frank Franciosi and local compost applicators to give compost a try on highway roadsides to help improve establishment of permanent vegetation. Those early trials turned into NCDOT recognizing compost blanket/seeding as a tool for stabilizing soils along the Interstate.

Donald came to work with Summit Design and Engineering Services in the summer of 2021 to continue pursuing his interests in Environmental Compliance/Stewardship. He currently serves on the NC Sediment Commission's Technical Committee and co teaches Erosion/Stormwater Control Certification classes with North Carolina State University's Crop and Soil Sciences Department for those involved in Erosion and Sediment control on NCDOT Highway projects.

Donald Pearson EI, CPESC

Regional Environmental Engineering Manager/Assistant Resident Engineer

2208 Associate Drive Suite C

Raleigh, NC 27603

donald.pearson@summitde.com

919-208-5731 (text/call)

