

LESSON LEARNED – EROSION AND SEDIMENT CONTROL PART 2 E&S 101

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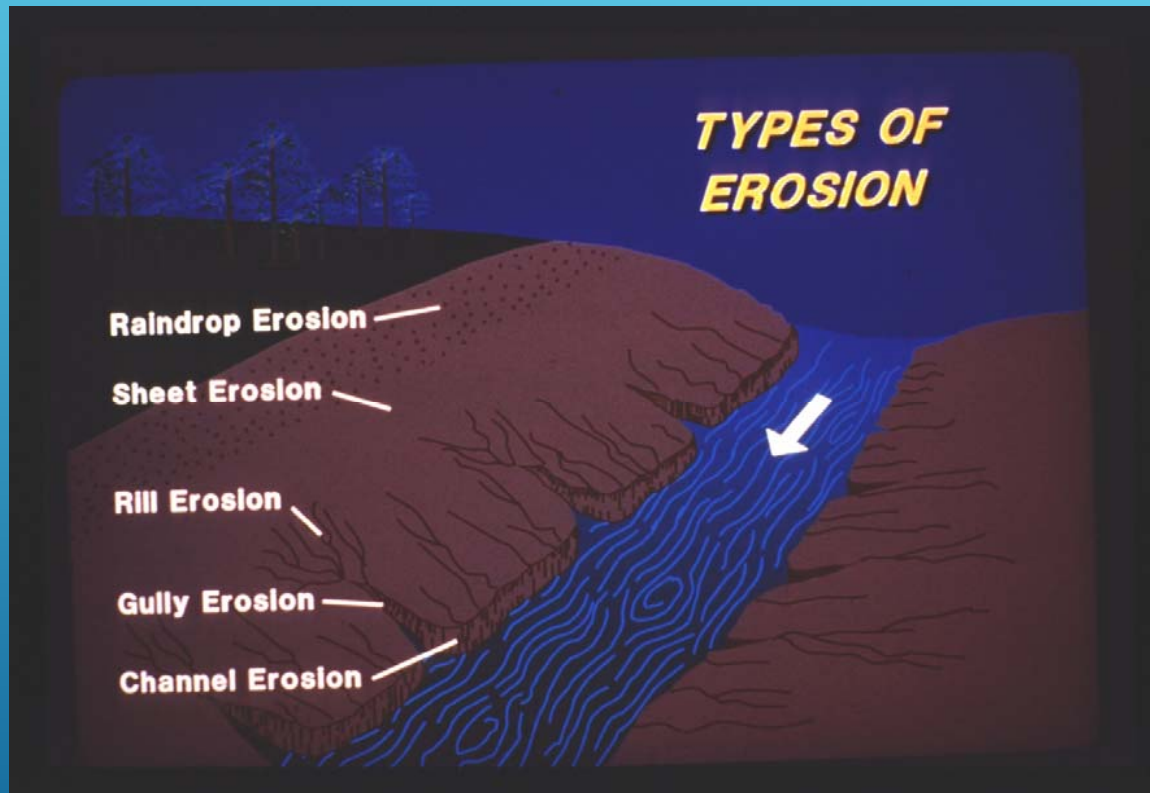
March 10, 2020

EROSION & SEDIMENT CONTROL


- ▶ Erosion Control is soil stabilization
- ▶ Sediment Control is after soil moves



TYPES OF EROSION



POLLUTION PREVENTION PRACTICES

- Construction site waste management & spill control
 - Concrete washout
 - Concrete mixing operation
 - Soil Stockpile
 - Sensitive Area Protection
- 
- A decorative graphic consisting of several parallel white lines of varying lengths, slanted diagonally from the bottom right towards the top right, set against the blue background.

SEDIMENT TRAPPING PRACTICES

- **Silt Fence**
 - Reinforced Silt Fence
 - Super Silt Fence
- **Sediment Trap**
 - Pipe Outlet
 - Stone Outlet
 - Riprap Outlet
 - Compost Log
- Temporary Sediment Basin
- **Storm Drain Inlet Protection**
- **Culvert Inlet Protection**
- Flocculation



FLOCCULANTS

- ▶ A substance that promotes the clumping of particles.
 - ▶ PAM (polyacrylamide)
- ▶ Many products available



DEWATERING PRACTICES

- Portable dewatering practices
 - Portable sediment tank
 - Geotextile dewatering bag
- Pumping pit
- Skimmer dewatering device
- Dewatering basins



WATER CONTROL PRACTICES

- Temporary Swale
- Temporary Earth Berm
- Vegetated Channel
- Lined Channel
- Diversion
- **Stone Check Dam**
- **Compost Filter Log**
- Subsurface Drain
- **Pipe Slope Drain**
- Chute
- Riprap Outlet Protection
- Riprap Stilling Basin



SOIL STABILIZATION PRACTICES

- Topsoiling
- Slope Treatment
 - Benching
 - Grooving
 - Serrating
 - EC Log
- Vegetative Stabilization
- Streambank & Shoreline Stabilization
- Mulching
- Stabilization Matting (Approved Product List)
 - Slope
 - Channel
- Stabilized Construction Entrance
- Dust Control



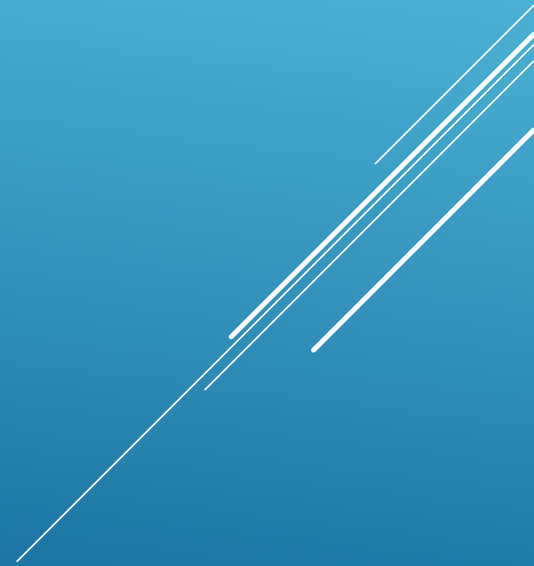
MULCHING APPLICATIONS

- ▶ Straw Mulch
- ▶ Hydromulch
- ▶ Erosion Control Blanket Mulch
- ▶ Turf Reinforcement Mat



TYPES OF BLANKETS

- Erosion Control Blanket Mulch (ECBM)
- 100% Biodegradable, temporary
- Turf Reinforcement Mats (TRM)
 - Mostly Biodegradable, permanent



EROSION CONTROL BLANKET MULCH (ECBM)

- 100% biodegradable, that means **NO** plastic netting.
- Remember you may see plastic netting elsewhere, DNREC may allow it, but DeIDOT does not.



TURF REINFORCEMENT MATS (TRM)

TRMs are a permanent measure to prevent erosion in a swale. TRMs generally have a non-biodegradable netting that will stay in place and prevent erosion – even after a full stand of grass is established.



WATERWAY CONSTRUCTION PRACTICES

- Temporary Waterway Crossings
- Stream Diversion
- Turbidity Curtain



Geotextile Lined Channel Diversion (E-17)



Turbidity Curtain (E-18)



Steel Pipe As Temporary Diversion Pipe



Steel Sheet Pile as Stream Diversion

??? QUESTIONS ???

