SUSSEX CONSERVATION DISTRICT PRIVATE DRAINAGE PROGRAM

Matthew Messina
Sussex Conservation District
Project Manager
PURPOSE:

- To alleviate drainage problems occurring in Sussex County
- Provide assistance to property owners, HOAs, public and private entities needing to address serious drainage issues.
- Assist in design and implementation of BMPs to solve various drainage issues.
WHO IS ELIGIBLE?

- Individuals
- Homeowner’s Associations
- Municipalities
- Financial Assistance and Cost Share Funds may be available for eligible projects. Funds are used for design, construction and/or repair costs.
- Projects located within the DelDOT right-of-way are not eligible.
COMMON DRAINAGE ISSUES

- Sinkholes – Failing drainage pipes
- 3 types of pipes commonly used in sub-divisions are RCP (reinforced concrete pipes), Corrugated metal pipes (galvanized or aluminum), and HDPE pipes (High-Density Polyethylene).
- Concrete pipes usually fail at the joints – most cases can be easily fixed by patching joint failures
- Metal pipes have a life span, usually within 20-30 years depending on environmental factors. Typically failed metal pipes need to be replaced.
- HDPE pipe (plastic) last a long time. HDPE pipe failures are typically due to installer error.
COMMON DRAINAGE ISSUES - CONTINUED

- Standing water
- Water standing over 72 hours after normal rain event (1 inch or less)
- Caused by poor grading, poor soils, and/or inadequate drainage system.
- Typically can be corrected by regrading, installing infiltration systems, or conveying water via catch basins/pipes.
Erosion and Embankment Stabilization

Caused by surface runoff, channelized water flow, inadequate embankment protection (stone or vegetation).

Can be corrected by installing proper embankment protection.

Rip Rap (large stone) with proper underlayment fabric.

Vegetation stabilization (using plants to hold soils in place).

Bio-degradable products (coconut bio-logs, filter socks, matting, etc.)
TAX DITCHES
WHAT ARE TAX DITCHES

- Tax Ditches are maintained by Tax Ditch Organizations (Property owners within the Tax Ditch Watershed)

- Landowners within the Tax Ditch Watershed contribute money (from their taxes) to provide budgets for Tax Ditch maintenance. Amount of money contributed is based on location and size of property.

- Tax Ditch Organizations can receive Cost Share money from the State and County to assist with maintenance costs
All Tax Ditches have maintenance right-a-ways (sizes vary)

These Right-a-Ways can extend into private or HOA property and should be kept free of obstacles (fences, sheds, gardens, decks, trees, etc.)
HOW TO IDENTIFY TAX DITCHES

- DNREC online Tax Ditch Map

- www.dnrec.delaware.gov/swc/Pages/DrainageTaxDitchWaterMgt.aspx

- https://www.arcgis.com/apps/webappviewer/index.html?id=8a2a0588b1604d38b878367ceb189370

- Contact DNREC Drainage Section - Melissa Hubert
  melissa.hubert@delaware.gov
DRAINAGE ISSUES IN TAX DITCHES

- Please contact Jason Strauss with SCD
- 302.396.7620
- jason.strauss@sussexconservation.org
PROJECTS
TOWN OF FENWICK
WOODS ON HERRING CREEK
PRIVATE LANDOWNER
ALTERNATIVE DRAINAGE SYSTEMS
CONTACT

- Matt Messina – SCD Project Manager
  Cell: 302-500-1103

matt.messina@sussexconservation.org