

Professional Licensure Committee  
House of Representatives  
Commonwealth of Pennsylvania  
Hearing on House Bill 997  
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Testimony of  
Edgar A. White, Jr.  
Retired State Soil Scientist  
USDA-Natural Resources Conservation Service, Harrisburg, PA

My name is Edgar A. White, Jr. I am a Certified Professional Soil Scientist with Soil Science Society of America and a member of the Pennsylvania Association of Professional Soil Scientists. I retired from USDA-NRCS as the State Soil Scientist in Pennsylvania in 2011 after 37 years as a Soil Scientist, 27 of them in Pennsylvania.

Pennsylvania has extremely diverse and complex soil types due to our geographic, geologic and geomorphic diversity. We also have many diverse and intensive land uses within Pennsylvania, that put a lot of pressure on our soil resources. There is a large demand for soil information in Pennsylvania. In Pennsylvania, during 2013, the Web Soil Survey (a NRCS online application that shows Soil maps with Soil types, soil properties, limitations, and interpretations) was used more than 98,500 times (270 times a day), by people that needed to find out the nature and properties of the soils for a particular area. Some of the most requested information was for the location of Hydric (wetland) Soils, Hydrologic Soil Groups, Prime and Important Farmlands, Soil Ratings for Homes with Basements, Depth to Water Tables, Soil Drainage Classes, Land Capability Class, Ratings for Shallow Excavations, Ratings for Local Roads and Streets, and Ratings for Septic Tank Absorption Fields

Most of our soil problems are not catastrophic, so some may wonder why we need to license Soil Scientists, but they are problems that cause a drain on our citizens, our economy, our health and our environment. Is it for the person who buys a building lot, only to find they cannot build or develop it? Or for the person who owns the house that gets water in the basement every winter and spring because it was built on soils with seasonally high water tables? Is it for the one who owns the house or building with the collapsing wall or the sinking foundation and cracking walls, because it was built on a high shrink-swell soil or a low strength soil? Or is it to prevent the roads that need costly repairs every year because they were built on low strength soil or soils with high water tables, and not properly designed for these conditions? Is it to prevent the pollution or health issues caused by wastes applied to soils that are not suited for it? Or to prevent the Storm water Infiltration basin that does not infiltrate water because of slow soil permeability? Is it to help prevent the nitrates that get into our ground water because of excess nutrient application on easily leached soils? Or to prevent the sediment and phosphorus that enters our waterways?

All of these problems, and many others can be prevented and solved with the proper understanding of soils and the proper design and construction based on the soil.