



JUNE 2012

The Newsletter of the Pennsylvania Association of Professional Soil Scientists  
PO Box 871, Mechanicsburg, PA 17055

### Inside:

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SEO training update
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New CPSS/CPSC logos

### Nominations for 2013-2015 Board of Directors are now being accepted

## Senate Bill 1506 Introduced - April 18, 2012

Senator Michael Brubaker introduced Senate Bill 1506 on April 18, 2012 to require individuals practicing soil science to be registered by the State. The legislation was cosponsored by Senators Pileggi, Erickson, Rafferty, Greenleaf, Yudichak, Ferlo, Schwank, Wozniak, and Piccola, a bipartisan group, including six members of the Consumer Protection and Professional Licensure Committee, to which the bill was referred.

From the press release for the bill:

Soil scientists help identify, characterize and map soil types to identify and protect against potential public health hazards. The practice is particularly important for land use planning to protect water quality, reduce pollution, ensure safe sewage and waste disposal and treatment, control erosion and preserve land for agricultural use, Brubaker said.

"Soil science helps protect against serious threats to local communities, including water contamination, structural instability of buildings and the loss of prime farmland," said Brubaker, who worked as an agronomist prior to his election to the Senate. "Proper land use planning is vital to build strong, sustainable communities, and that effort starts with ensuring soil scientists meet the highest standards of professional training and education."

Many local, state and federal ordinances require input from qualified soil scientists for a variety of land uses, such as farming, mining and drilling operations, home construction and waste management. However, Pennsylvania currently lacks a clear definition regarding the qualifications of a soil scientist.

SB-1506 would require soil scientists to be licensed and meet necessary education and training guidelines to properly recognize soil types.

Brubaker's bill would add soil scientists to the list of professions that must be licensed and registered under the Engineer, Land Surveyor and Geologist Registration Law. Since the measure would only add members to the existing State Registration Board, the bill would not create any new governmental entity.

If the bill becomes law, Pennsylvania would join 16 other states that require soil scientists to be licensed.

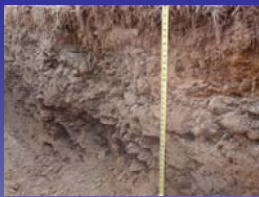
Thank you to all PAPSS members who helped with the drafting and review of the legislation, and to all members who contacted their Senator to solicit support for the bill. In the coming months, we will be continuing our lobbying efforts to move the bill through committee and on to the floor for a vote. ■

View the legislation at the  
PA Senate webpage  
<http://www.pasen.gov/>  
Search for SB1506

Consumer Protection and Professional  
Licensure Committee

Tomlinson, Robert M. , Chair  
Gordner, John R., Vice Chair  
Boscola, Lisa M. , Minority Chair  
Scarnati, Joseph B., III, ex-officio

Erickson, Edwin B.	Greenleaf, Stewart J.
Piccola, Jeffrey E.	Rafferty, John C., Jr.
Ward, Kim L.	White, Mary Jo
Ferlo, Jim	Kasunic, Richard A
Solobay, Timothy J.	Wozniak, John N.



### Upcoming events:

#### July 18, 2012

Marcellus Shale Drilling Tour in cooperation with Keystone Chapter of Soil and Water Conservation Society, Waterville, Lycoming County

#### August 2, 2012

Hydric Soil Training for Wetland Professionals Loyalsock State Forest Laporte, Sullivan County

#### September 28-29, 2012

Annual Meeting and Technical Session – Conewago Watershed, Lebanon and Dauphin Counties, Elizabethtown

### INVITATIONS AND REGISTRATION INFORMATION FORTHCOMING

## USDA Announces Office Closures

On January 9, 2012, US Secretary of Agriculture, Tom Vilsack announced the closing of 259 offices and labs across the country.

“The USDA, like families and businesses across the country, cannot continue to operate like we did 50 years ago,” said Vilsack. “We must innovate, modernize, and be better stewards of the taxpayers’ dollars.”

“The department is finding significant savings by consolidating more than 200 offices across the country,” he said.

The closures are hoped to save \$150 million per year by consolidating staff and making better use of technology to offer the same services. The closures will affect offices in 46 states, including 24 soil survey offices and 131 farm service agency offices.

The soil survey office in Mercer and the Blair, Carbon, Fulton, Mifflin, Perry, Wyoming, and Lebanon County farm service agency offices are all recommended for closure. ■

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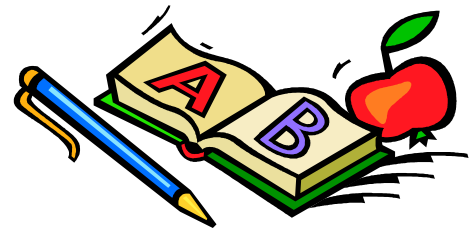
## SEO Training Update

by Chris Whitman

The Pennsylvania State budget cuts have been well documented over the past several years. The first sign of trouble was the inability of the Department to provide timely reimbursement of eligible Act 537 costs. As a result, Local Agencies around the Commonwealth were forced to raise permitting fees in order to cover their operational costs. To be fair, the Department has not completely stopped reimbursement but they are behind based on the number of applications, and there are certainly no guarantees that there will be a future influx of funds to remedy the situation.

In a similar development, last August the Department announced that it was ceasing the classroom training for SEO's that most of us had become accustomed to since becoming certified. In fact, the bulk of continuing education credits were made available through the classroom courses that were administered through a contract with the Pennsylvania State Association of Township Supervisors (PSATS). This has essentially put all certified SEO's in training limbo while the Department develops and approves a program that will allow for third-party training providers. Because the current cycle ends in June, and there has been no resolution to the situation, the Department is going to automatically extend for another 2 years the certification of all current SEOs. If you are currently certified, you are encouraged to submit your renewal application and fee for the 2012-2014 cycle in order to be eligible for the extension.

Once approved through the Department, attendance at any third-party administered training will supply the needed credits for SEO's to remain certified. In addition, the third-party trainers are expected to assess fees for the development and delivery of said training. As of this writing, Orenco Systems in conjunction with PASEO has the only approved classroom course (#243) for the DEP-approved alternate AdvanTex denitrification unit. If you attended the March 2012 PASEO Conference in Grantville, you should also be eligible for 4 credits.



The Department will also be posting information to their website relating to the transition to third party training.

([http://www.portal.state.pa.us/portal/server.pt/community/sewage\\_and\\_disposal/10583/seo\\_new\\_s\\_items/1107617](http://www.portal.state.pa.us/portal/server.pt/community/sewage_and_disposal/10583/seo_new_s_items/1107617))

SEO's should also be aware that the on-line training courses are still available for credit, available at [www.seotraining.org](http://www.seotraining.org).

It is also interesting to note that by transitioning to the third-party format, the SEO continuing education training will be following the same training that is currently required for Professional Engineers licensed in the Commonwealth. The third-party SEO training would ostensibly follow the approved training for P.E.'s and include lunch seminars, webinars, and traditional classroom training. ■

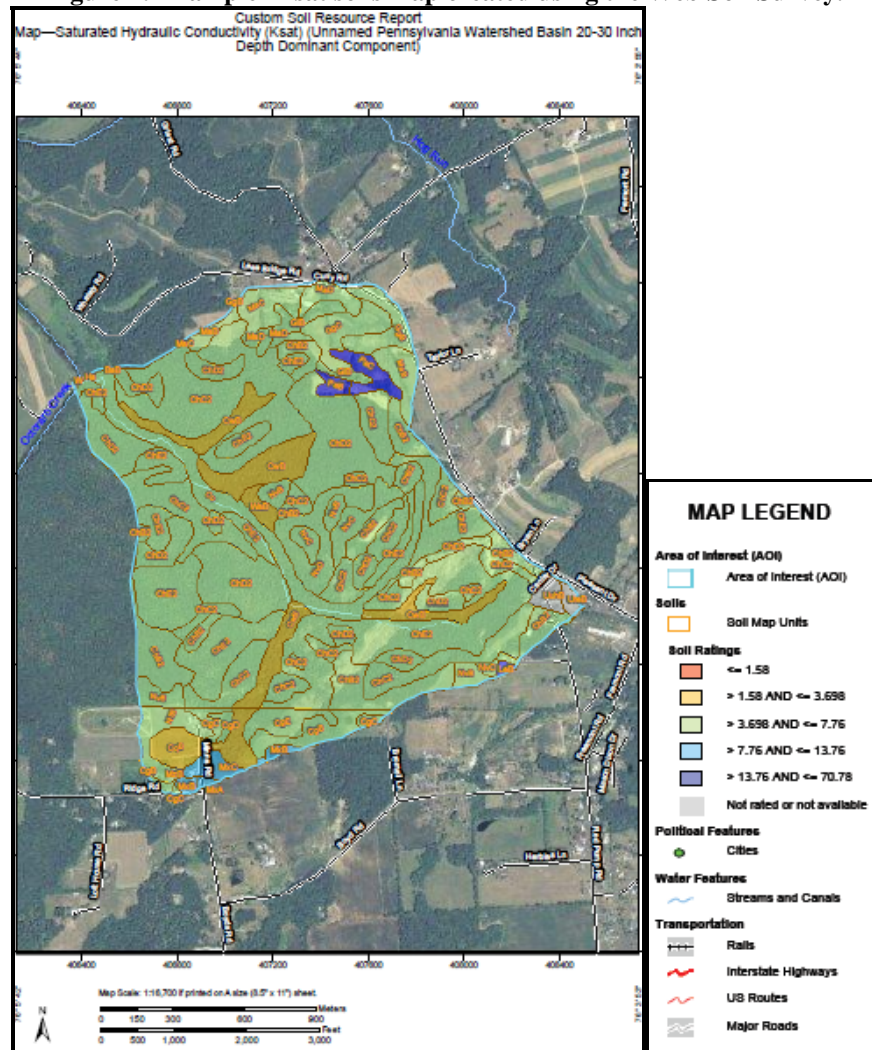
## Soils Data and Geographic Information Systems (GIS)

by Nancy Sansoni

About six or so years ago, printed Soil Survey books became obsolete and soils data went digital. The previously printed survey books contained maps that showed the geographic location of soils and a look-up table with properties for each soil. In the digital soils world these same features exist in spatial and tabular data files in the USDA NRCS Soils Data Mart. While all soil scientists have GIS skills of some level, it appears as though training specific to soils in GIS is very difficult to find. As soil scientists, we should be knowledgeable of soils data used and the products available for use in this new digital survey world. Therefore, the purpose of this article is to open the subject of soils and GIS in hopes of starting a dialogue between PAPSS members with interest in training.

Soil scientists should be familiar with the United States Department of Agriculture Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS), which accesses data from the Soil Data Mart. Training for the WSS application has been offered at various events in Pennsylvania for several years and we all have access to this service to get soils information. However, the WSS has limited capabilities. For example, a user cannot download the soil properties table for use in GIS analysis or add other data to the map.

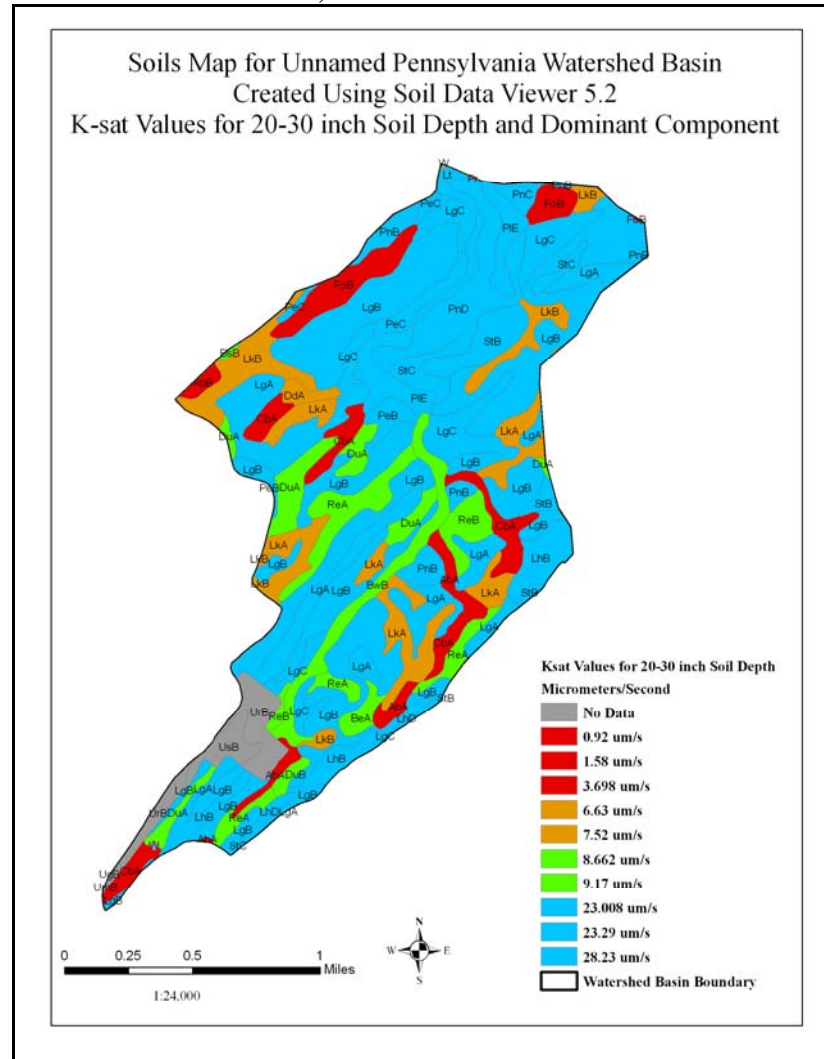
**Figure 1: Example K-sat soils map created using the Web Soil Survey.**



More advanced soils GIS analyses can be conducted using SSURGO data, available for all of Pennsylvania. SSURGO stands for Soil Survey Geospatial data. Both spatial and tabular data for a survey area can be requested through the Soil Data Mart (<http://soildatamart.nrcs.usda.gov/>). SSURGO is a complex database and SSURGO training would be beneficial as we continue to progress in the soils digital world. ↗

To assist users with soils data, NRCS developed the Soil Data Viewer (SDV) (<http://soils.usda.gov/sdv/>). The SDV is a tool built as an extension to ESRI Arc Map (<http://www.esri.com/>) that allows users to conduct data queries and produce soils-based thematic maps. The following map was produced using the SDV. It is much different than a map produced by WSS in that areas outside the project boundary can be removed, data can be presented per the user's needs and other layers can be added to the map for combined analysis.

**Figure 2: Example K-sat soils map created using ESRI ArcMap program, SSURGO soils data, and Soil Data Viewer.**



*Ksat values are shown individually in the legend and in groups on the map to demonstrate that the user has more map options using ArcMap and Soil Data Viewer than the Web Soil Survey.*

It was stated earlier that the purpose of this article is to start a dialogue on soils and GIS between PAPSS members and to spark interest in the subject. Soil scientists do not need to be GIS specialists, but we should be informed of the various applications and how soils data are being used. Keeping up with this technology can be challenging. If there are training opportunities available specific to soils data, *Pennsoil* would be a good place to exchange this information. This type of information can also be included in future technical sessions. The Soil Science Society of America's Professional Practice exam includes geospatial information in their performance objectives. It is likely that the list of objectives in that subject will only continue to grow. ■

## **Alternate Onlot Sewage System Installations**

### **POWRA Field Tour**

by Laurel Mueller

On May 18, 2012, the Pennsylvania Onsite Wastewater Recycling Association (POWRA) ran a Spring Field Trip / Technical Session. The topic was "Alternate Installations in Southcentral PA." The base for the tour was the Gifford Pinchot State Park in York County. The all-day event was largely organized and lead by Mark Mills, Scott Houser, and Brad Hengst.



The day began with a presentation on ultraviolet disinfection by Ed Schloss of Jet, Inc. Participants from Maryland and Delaware had many questions about Pennsylvania's design options, site characteristics, and O&M requirements. Our first stop was at an Ecoflo peat biofilter with UV disinfection, discharged to an at-grade bed. The next stop was at a Puraflo peat biofilter with UV. Our discussion focused on required biannual maintenance of all components and the current water sampling and lab testing requirements.

The third stop was a drip micromound. Lunch at the state park was followed by a presentation by Duane Mowery of Expert Septic on the new Eljen GSF system. After lunch, I saw my first no-discharge Sun Drive Green House system, which provided commercial flower-growing opportunities to a youth services agency. Next on our tour were two adjacent IRSIS systems, one with Orenco AdvanTex and chlorination pre-treatment, and the other with a BioMicrobics ATU, free-access sand filter, and chlorinator. The sand filter was decoratively fit into the



landscaping, and being maintained. The spray fields were attractive hay fields in large lots. This opened my eyes up to the reality that some folks might actually choose to install and like an IRSIS!

PAPSS, PSMA, and PASEO members were invited to this POWRA event at member rates, which was a welcome step toward bringing all in the wastewater disposal industry together to share. Thank you, POWRA! And special thanks to Mark Mills. Mark's many years of running PAPSS soil tours has made him a pro at the guide business! ■



## SSSA "I ♥ Soil"

As part of its 75th anniversary last year, the Soil Science Society of America launched the "I Heart Soil" campaign, which aims to educate the public about soil resources and the soil profession.

What's been done so far?

- Distributed thousands of free "I Heart Soil" stickers and flash drives
- Launched the "I Heart Soil" Facebook page and website ( [www.iheartsoil.org](http://www.iheartsoil.org))
- Produced and distributed three public service announcements (PSAs) in English and Spanish
- Received and responded to hundreds of inquiries for "I Heart Soil" material

What is in store for 2012?

- Official relaunch of the "I Heart Soil" campaign on Earth Day 2012
- Increasing media coverage of PSAs and campaign message
- A dedicated "I Heart Soil" website and Facebook page with frequently updated content

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## New Logos >>> New Stamps for Certified Professional Soil Scientists and Soil Classifiers

The Soil Science Society of America has approved the use of new logos for Certified Professional Soil Scientists and Certified Professional Soil Classifiers.

New stamps and embossers are now available through:

Fox Valley Stamp  
618 Airport Rd  
P.O. Box 490  
Menasha, WI 54952  
920-725-2683  
[office@foxstamp.com](mailto:office@foxstamp.com)



Certified Professional  
Soil Scientist



Certified Professional  
Soil Classifier

Be prepared to provide your certification as CPSS or CPSC and your certification number. The rubber stamp price is \$25.50, and the embosser is \$36.50, plus tax, shipping, and handling.

The new logos are also available for use in promoting yourself, your business, or the certification program on business cards, stationary, advertisements, or promotional items. You can view the Logo Use Guidelines at <https://www.soils.org/certifications/logo>. ■

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[www.papss.org](http://www.papss.org)