

# *The Lay of the Land*

The Newsletter of the Maine Association of Professional Soil Scientists

Volume 21, Issue #2

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

Summer 2017 Edition

## **PRESIDENT'S ADDRESS**

*David L. Marceau, ME CSS #182; MAPSS President  
Gartley & Dorsky Engineering & Surveying*

One of the most difficult things about being president is deciding what priorities are most important to our organization then find ways to take action on those strategies. I ask myself "Is there something I should be doing that I'm not"; "Will this interest our membership"; "Do we have enough time and money to make this work" and so many other questions. Often I think of things that we could do but don't end up doing because it's just not practical. These struggles particularly play an important role in our recent quest to improve the treatment of stormwater runoff.

Soil scientists have an important role to play in improving the treatment of stormwater runoff. We know soils better than anybody, and can provide practical alternatives to the expensive measures that are currently in place. Thus, since our annual meeting in March I have been busy working on issues related to stormwater treatment. My primary focus has been addressing methods to better identify hydrologic soil groups so that the sizing of stormwater treatment measures is performed more accurately. During our fall work shop we will examine soil conditions that will better allow us to make more accurate hydrologic soil group determinations. The idea is to get away from the rut we are in using series and county soil surveys as a way to make these determinations. To my knowledge, we will be the second state in New England (behind Rhode Island) to have addressed this issue. If we are successful, we will utilize morphological conditions found onsite to make hydrologic soil group determinations which we all know are more accurate than relying on soil series. It is my belief that this will garner more work for soil scientists and provide better treatment for stormwater.

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**Note:** Opinions expressed by the authors of articles are not necessarily endorsed by MAPSS

*The Maine Association of Professional Soil Scientists (MAPSS) was formed in 1975. The Mission of MAPSS is to promote soil science through the exchange of technical, political, and regulatory information that influence and guide the profession of soil science. MAPSS members have interdisciplinary professional backgrounds in both the private and public sector, including soil consultants, wetland scientists, site evaluators, state and federal government scientists and regulators, students, and others with an interest in the natural sciences. The organization's goal is to ensure the success and promote the advancement of the soil science profession. MAPSS strives to provide guidance, education, and training to its members and the public on soil science issues of interest and concern.*

*Continued from page 1*

Along these same lines, Albert Frick is working with the NRCS to come up with technical data that will allow vegetative buffers to be reduced in size based upon a more accurate look at slopes, types of vegetation and other onsite conditions rather than relying on the county soil survey. David Rocque is also working on this problem but thinks that he can solve it without the need to come up with statistical data. Either of these approaches need to be put forth to the DEP and convince them that they will work so that the stormwater rules can be modified. In my mind, we may need some case studies to assure the DEP that what we propose will work. If successful this will revolutionize the way stormwater is treated in Maine and provide a lot of work for qualified soil scientists.

I'd like to stop and take a moment to reflect on the passing of Ken LaFlamme, one of three life time members of MAPSS as a gift by our members in honor and recognition of his work in soil science. Ken was instrumental in teaching many soil scientists of my generation in Maine. He, along with John Ferwerda and Bob Rourke spent many hours explaining how best to interpret the landscape and properly map soils. He was a strong advocate for soil scientists and was instrumental in helping us develop the standards for high intensity soil surveys and our drainage class key.



MAPSS should also be proud that we raised \$10,800 for the "Dig It" display which now has a permanent home in St. Louis Mo. This display promotes the soil science profession and showcases the education of soil science that our organization wishes to promote. I bet Ken approved of our work.

**2017-2018 EXECUTIVE COMMITTEE**

**President** – David Marceau  
**Vice President** – Anna Donohue  
**Past President** – Donald Phillips  
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**Director** – Roger St. Amand

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**Technical Chair** – George Bakajza  
**Webmaster** – Matt Dorman  
**Newsletter** – Don Phillips / Kaizad Patel  
**Education** – Vacant  
**State of Maine Liaison** – David Rocque  
**University of Maine, Orono, Liaison** – Ivan Fernandez  
**USDA NRCS Liaison** – Lindsay Hodgman

## KENNETH J LaFLAMME

OLD TOWN - Kenneth J. LaFlamme of Old Town, age 82, peacefully passed away at home on June 17, 2017. He was born August 11, 1934, in Old Town, the son of the late Earl LaFlamme and Mary (Burke) LaFlamme.

He was a 1953 graduate of Old Town High School and the University of Maine, class of 1957. He was employed as a soil scientist in the state of Maine for the U.S. Soil Conservation Service for 38 years, retiring in 1994. He was a communicant of the Parish of the Resurrection of the Lord and a member of the Orono-Old Town Kiwanis Club.



He is survived by his beloved wife, Corda LaFlamme of Old Town; by two sons, Morris "Moe" LaFlamme and wife, Donna, of Bangor and Thomas "Tom" LaFlamme and his wife, Marcia "Annie," of Apopka, FL; and two daughters, Mary St. Peter and her husband, Arthur "Butch," of Otis and Carol Lowney and her husband, Robert, of Oviedo, FL; two granddaughters, Alicia LaFlamme of Biddeford and Suzette Johnston and her husband, Jason, of Bangor; and great-grandchildren, Bryce, Colby and Kaylee; a special brother-in-law, Bernard A. Lucas Sr. of Old Town; and many nieces and nephews. He was predeceased by his brothers, Earl, Paul and Raymond; and his sister, Joan Lucas.

Kenneth was a man who cherished his family. Corda was the love of his life since the day he laid eyes on her. Dad always said, "It was love at first sight." They shared 56 years of devoted love and a happy marriage together. They enjoyed many happy times at the family camp at Beech Hill Pond with their children. Ken loved walking on his land, planting trees, eating wild blueberries, and bird watching. For many years he was a member of a bird club at Birds Acre in Ellsworth. Ken loved all aspects of nature and the great outdoors. In his younger days many happy memories were shared on coastal picnics watching the kids tire themselves out climbing over rocks. As a young child, Ken enjoyed going on many outings involving the gathering of seasonal foods such as strawberries, apples, clams, and fiddleheads to provide for the family. Ken throughout life has a deep love of music. He played the trombone in high school and was passionate about his children all learning how to play many musical instruments and immensely enjoyed attending all of their band and orchestra concerts. Needless to say, Lawrence Welk was mandatory TV viewing on a Saturday night. Kenneth was an active community member and always looking for opportunities to help out others. Ken enjoyed supporting the University of Maine sports teams and loved watching high school tournament basketball games on TV. Go Old Town! He liked attending his children's various sporting events too. Ken loved the State of Maine and was fortunate enough to see many places throughout his travels as a soil scientist. He always enjoyed teaching and sharing his knowledge of soils and the environment with countless University of Maine college students in the field. Ken instilled a strong work ethic into all four of his children by setting a good example of a hard working father. Often times he would prefer to fix a stone wall or paint at camp instead of swimming. Some of his favorite times were when his father and friends shared beans and donuts together at camp on a Saturday night. He was proud to have grown up in Great Works and grew up in a home filled with love. He will be fondly remembered in the hearts of all that knew him and forever missed.

Published June 20, 2017, Bangor Daily News



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## SOIL CONSERVATION

*George Bakajza, ME CSS #230*

Before I was a soil scientist, I was a soil conservationist. I became and learned to be a soil conservationist when I began working for the Soil Conservation Service (SCS) in 1977. It was while working at the SCS that I became ingrained with a never relenting drive to observe, reduce and prevent soil erosion. It was a mission driven into my head by my fellow SCS colleagues.

I often saw the consequences of soil loss and worked with the land users who suffered those costs. The losses included diminished soil productivity, loss of income, increased costs and the degradation of water quality.

At SCS, I learned that with proper conservation planning and implementation, it was feasible to prevent much of this accelerated soil erosion. If the conservation practices were properly planned and carried out, the effected natural resources protected and the landowner and the public benefited.

At SCS I learned to always keep my eyes open to accelerated soil erosion and work to reduce or eliminate it.

An extremely large issue that I have observed for decades is soil erosion and sedimentation caused by gravel roads. It is an issue in Maine that goes effectively unaddressed.

The road surface is basically impermeable and like any bare soil surface is susceptible to the erosive forces of raindrop impact and flowing water. Most of the rainwater that falls on a gravel road surface runs off. The water flows down the roadbed with the sheet flow quickly accumulating in the wheels ruts. As the water continues down the road bed, its volume and velocity increase and it carries soil particles of various sizes. The larger soil particles drop out when velocities drop and the finer particles, especially the clay sized particles, stay in solution until they reach standing water or the water infiltrates into permeable soil. The clay sized particles take a very long time under very low energy conditions to settle out.

The problem has grown as the miles of both active and abandoned gravel roads have increased. The problem continues to occur basically unabated. The issue seems to be ignored by industrial landowners, towns and for the most part by the Maine Bureau of Park and Lands.

With the regular storm events this year, I have seen muddy water running off roads into Moosehead Lake and its tributaries, the west Branch of the Penobscot River, the upper Kennebec River, Moose River above and below Brassua Lake, the Piscataquis River, the Roach River and numerous other water bodies.

It is an especially big problem on industrial forestland, town roads and roads/driveways that lead to waterfront dwellings. A client at Pleasant Pond in Caratunk recently lamented to me, unsolicited, about the sediment plumes dumped into the spring fed, historically extremely clear pond by the surrounding gravel roads.

A consequence of road bed erosion is sedimentation in adjacent road ditches. Sediment drops out at culvert inlets, leading to decrease flow capacity for the cross drain. The partially clogged culvert leads to water backing up and spilling over the culvert headwall, further eroding the roadbed and ditches



downslope. This leads to a cascading failure of more culverts downslope, at times with catastrophic effects.

The repair of this damage calls for more gravel to be hauled in to replace the material lost to erosion. This gravel replacement may be good for those in the business of selling and hauling gravel, but gravel is a finite resource, energy intensive to mine and transport and the mining has other ecological costs. There is also the cost to whoever is paying for the repairs.

One very effective way to prevent roadbed erosion is earthen water control structures (water-bars and drainage dips) incorporated into the surface of the road bed. The structures are relatively cheap and very effective in minimizing or eliminating the problem. When properly planned and installed, the structures decrease road maintenance costs.

Soils higher in clay inherently have a higher sedimentation and turbidity hazard. Likewise, somewhat poorly drained soil on sloping landscapes with dense basal till parent material can be expected to feed a lot of water into road ditches.

Soil Scientists understand how soils differ and what to expect when activities such as road building alter landscapes. Knowledge of soil allows one to look at various situations where erosion and sedimentation is taking place and come up with ways to correct the issue.

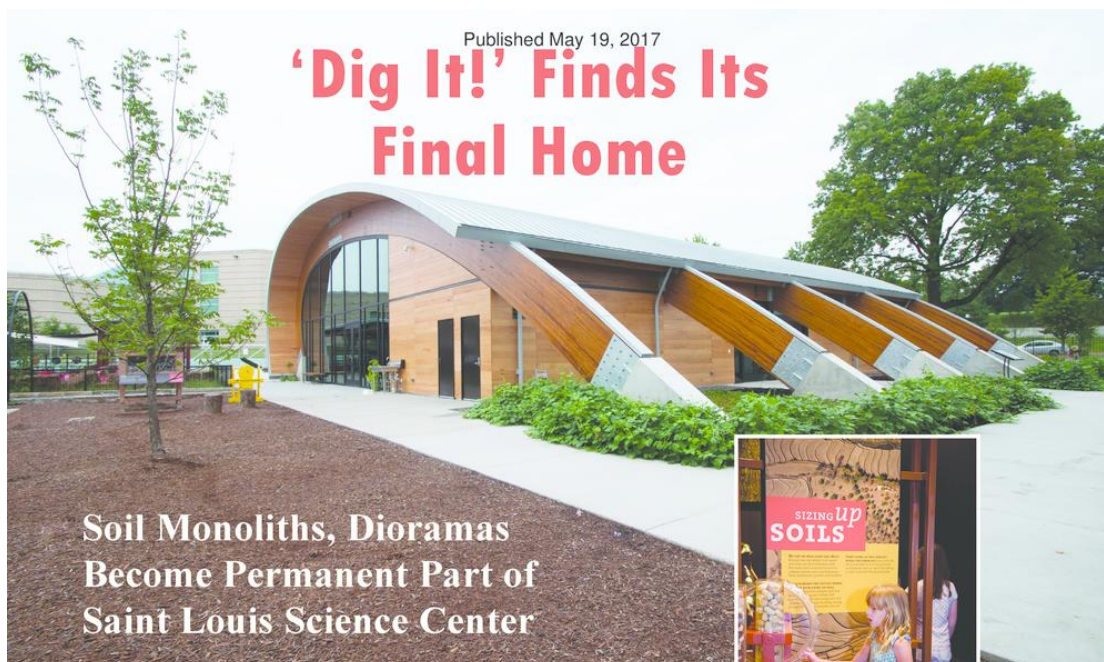
There is a professional opportunity here, but I believe Soil Scientists also have a moral obligation to speak out about this and all sources of soil and water degradation. As soil scientists, we also all need to be soil conservationists. Soil Scientists can help solve the problems created by accelerated soil erosion, while becoming more relevant in a world that depends wholly on healthy, productive soil and water.

Also drilled in to my head by SCS is that if you protect and enhance the natural resource base you also protect and benefit the communities that rely on those resources for their quality of life.



**Figure 1:** Sheet, rill and gully soil erosion that could have been prevented with adequate cross drainage, vegetation and a soil scientist's understanding of soil and water.

## IT TOOK LONG ENOUGH FOR THIS TO HAPPEN, DON'T YOU THINK?



by Susan V. Fisk

**D**ig It! The Secrets of Soil will settle down in St. Louis, MO, opening 22 Apr. 2017. This final home for Dig It! at the Saint Louis Science Center comes after years of traveling around the country, informing the general public about soil science. The Smithsonian National Museum of Natural History developed the display in 2006, and SSSA was its founding sponsor. Several SSSA members served on the developing committee and published articles in the *Soil Science Society of America Journal* about the exhibit.<sup>1</sup>

Ross Braun, retired from USDA-NRCS, was a key person to get Dig It! into the Saint Louis Science Center. Braun was one of the original docents for Dig It! during its 19-month stay in Washington, DC. "I'd go there on Friday afternoons, sometimes weekends, and teach people about soil science with an activity cart," Braun recalls. Even after Dig It! left the Smithsonian, Braun continued these same activities for a year because the cart was so popular. Only his retirement and subsequent move back to Missouri could stop his volunteering at the Smithsonian!

When Braun was settled in Missouri, he started looking for a way to volunteer. In addition to speaking at master gardener and naturalist groups, he joined the Saint Louis Science Center's advisory committee for its GROW exhibit, which opened in June 2016. GROW is a 1-acre, permanent exhibit that tells the story of food, from farm to fork.

doi:10.2134/csa2017.62.0502  
Read these open access articles at <http://bit.ly/2ozZyga> and <http://bit.ly/2nGELnK>.

**Above:** The exterior of GROW, a gallery of the Saint Louis Science Center where the Dig It! exhibit will be incorporated. **Inset:** Dig It! has inspired countless young people since it first opened in 2008 at the Smithsonian to understand soils as a natural resource that is essential to all life.

"At the time, I was hoping that Dig It! could be part of the GROW exhibit, but getting GROW completed and running was such a large endeavor itself, it would not have worked," Braun says. But now that the center has experience with GROW, Braun saw an opportunity to meld the two exhibits.

### A Good Fit

SSSA's CEO Ellen Bergfeld saw that opportunity, too. She had been talking with the Science Center about Dig It! for several years. "The GROW exhibit educates people about food production and the land," Bergfeld says. "The Saint Louis Science Center was established as a Smithsonian affiliate museum in 2016 and does an excellent job of attracting large and diverse audiences. The fit with the GROW gallery is phenomenal. Being in the center of the United States—in the 'heartland' so to speak—also makes a lot of sense for Dig It!"

Saint Louis Science Center executives concurred. Part of Dig It! will be integrated into the GROW exhibit itself: the

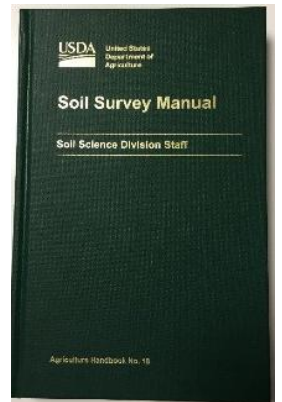
**A Note From Your Newsletter Editor:** For those of you who are tuning in after 2009, MAPSS raised more than the requested \$10,000 for this project - more than \$10,800!!! More than any other New England state. We raised more than 23 other states - just \$6 less than Wisconsin.



**A Few More Words From Your Newsletter Editor:** Readers have undoubtedly noticed that while the content of this newsletter continues to focus on topics of professional interest to our members, articles and items of interest are now increasingly presented here that, while perhaps authored by folks outside of the soil science profession, they always touched upon soil science and were published in reputable journals. They are all welcomed due to their diversified and informative content. Sometimes, though, they are rather long, especially for a newsletter like ours. To balance quality versus quantity, we arbitrarily set a limit on how many pages will be printed, in its entirety, within *The Lay of the Land*. To wit, articles longer than about two pages will be presented via a hyperlink, and the number of pages it has will be shown.

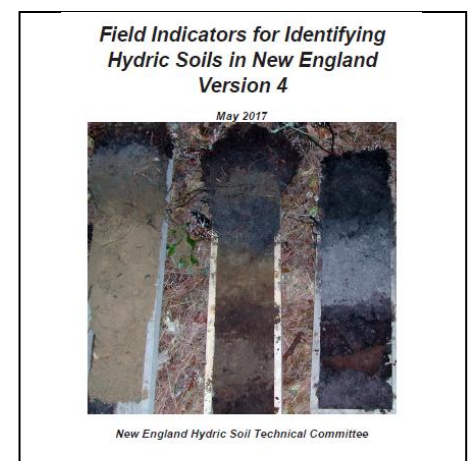
- Let's all see how that works with this edition's first article, which was sent to me by (who else?) Dave Rocque. It's about [Ticks - Symptoms, Diagnosis and Treatment](#) of Lyme disease, which caught the attention of Peter Fletcher who sent it to Dave and others on the New England Hydric Soil Technical Committee. It's about 4 pages long. I understand that it's gone around to quite a few natural resource identification groups over the last year, so some readers may have read it already.
- Here's another one Dave forwarded to me from the USDA NRCS.

The Soil Survey Manual, USDA Handbook No. 18, Fourth Edition, provides the major principles and practices needed for making and using soil surveys and for assembling and using related data. This work is performed by the National Cooperative Soil Survey in the United States and by other similar organizations worldwide. The Manual provides guidance, methodology, and terminology for conducting a soil survey. (2017) This publication is available in PDF format. Click [here](#) to download.



- Version 4.0 of the [Field Indicators For Identifying Hydric Soils In New England](#), dated May 2017, is now available. We thank Dave Marceau for sending us the hyperlink to read this 58 page Manual courtesy of the [Society of Soil Scientists From Northern New England](#). We suspect this manual will be used often by soil and wetland scientists alike, so it should be cited as follows:

New England Hydric Soils Technical Committee. 2017  
Version 4, *Field Indicators for Identifying Hydric Soils in New England*. New England Interstate Water Pollution Control Commission, Lowell, MA.





## FY2017 Priorities

Soil Science Division



The Soil Science Division (SSD) supports the NRCS mission by delivering vital information and expertise to agency staff, partners, and the public in innovative ways. The division's priorities for FY2017 will enable it to continue that service.

### Technical Soil Services

**Assist States in providing science-based technical soil services to enhance and support soil health activities, conservation planning, and program delivery and to maintain and expand our partnerships with university cooperators and other external customers.**



The Soil Science Division is committed to assisting the State Conservationists through State Soil Scientists in providing technical soil services assistance to support agency priorities and improve upon the quality and quantity of technical soil services provided. The SSD and the Soil Health Division will continue to work in partnership with States to provide science-based soil health information and applications. The SSD will

continue to collaborate with State Soil Scientists to promote increased technical assistance field training in resource assessment for conservation planning, assessments of soil health and dynamic soil properties, hydric soil identification for wetland determinations, and other conservation technical assistance. The SSD is also committed to assist States in providing technical soil services to customers with understanding and properly using the soil survey, to provide customers with predictions and interpretations about the behavior of soil, and to offer onsite investigations, soil workshops, training sessions, and volunteer opportunities to traditional, nontraditional, and underserved customers. These services will be beneficial to critical conservation areas and to broaden the conservation partnership.

### Soils Inventory

**Accelerate the foundational (initial) soil inventory on all lands, including private, Tribal, and federal lands.**



An initial soil inventory is the foundation upon which all subsequent soils products and information are developed, maintained, and interpreted. Customers continue to ask new questions, to request existing and new data, and need current and new soil interpretations to develop conservation programs and address science-based issues on soil health and other emerging land use concerns. Priority will be given to initial soil inventory on Tribal and private lands on which conservation technical assistance and farm bill program delivery are NRCS priorities.

More than 80 percent of the United States has a detailed soil survey (92 percent of non-federal lands) and maps and data are accessible through Web Soil Survey. However, over 450 million acres of soils in the United States have no soil inventory. Over 70 percent of this acreage, 330 million acres, is on Federal lands; the remaining 120 million acres contain conservation-priority areas, including Tribal lands in Alaska. In collaboration with National Cooperative Soil Survey (NCSS) partners and State Conservationists, the Soil Science Division will implement a plan to accelerate the inventory of the remaining private and Tribal lands with a proposed accomplishment of the foundational soil inventory by 2026.





United States  
Department of  
Agriculture

## VISION

A society that values soil as essential to life.

## MISSION

Provide scientifically-based soil and ecosystem information to manage natural resources

### Ecological Sites

Provide ecological site products to broaden applications and training in collaboration with National, Center, and State technical staff and Federal partners.



Ecological site inventory and descriptions are critical to selecting, implementing, and assessing conservation practices; recognizing thresholds for irreversible change in managed ecosystems; and estimating potentials for soil carbon sequestration. Using ecological site information for conservation planning is an application of NRCS existing guidelines. The first step is inventory (selecting ecological site and ecological state); the next step is defining conservation goals and objectives; then selecting appropriate conservation practices and monitoring their impacts to adjust future management decisions. Soil survey long-range and project plans will include protocols for the

definition, inventory, and description of ecological sites. Provisional ecological sites are planned to be completed and available within five years.

### National Cooperative Soil Survey

Strengthen the National Cooperative Soil Survey (NCSS) through increased transparency and collaboration with internal and external partners.



The strength of the NCSS relies on the collaboration between NCSS partners – Federal, State, and local government agencies, universities, private sector – to achieve common goals in advancing soil science. Through State Conservationists and State Soil Scientists, the Soil Science Division will strengthen communication lines to promote agency priorities in soil health, conservation initiatives, and providing science-based conservation planning

to landowners. The SSD will encourage the NCSS partners to actively participate in regional and national conferences and to serve in subject matter training cadres.



Soil Science  
for the Future



USDA is an equal opportunity provider, employer, and lender.

Soil Science Division

Natural  
Resources  
Conservation  
Service

[nrcs.usda.gov/](https://nrcs.usda.gov/)



## **MAPSS SUMMER WORKSHOP DESCRIPTION: WEDNESDAY, SEPTEMBER 6, 2017**

*David L. Marceau, ME CSS #182; MAPSS President*

This year's fall workshop will be held in Searsmont. While site evaluators, CEO's, the DEP and others will be invited, we are directing this workshop towards soil scientists. The purpose of this Workshop is to demonstrate how we can utilize the Rhode Island Triangle to more accurately identify hydrologic soil groups in Maine. The characteristics used to make hydrologic soil group determinations based upon the Rhode Island triangle are texture, depth to seasonal high water table and depth to the water impermeable layer. We believe that this methodology would identify hydrologic soil groups based upon soil characteristics found on site and not rely on the current 'soil series' method of making these determinations. A depiction of the RI Triangle is shown on the next page, although we expect it will be modified for Maine soils.

We plan to discuss many issues during this workshop, including but perhaps not limited to:

1. Our comfort level with correlating soil textures to Ksat values and what this means.
2. The breaks for hydrologic soil groups in the Rhode Island Triangle and how they do not line up with our drainage classes, textures or depths to impermeable layers associated with series. Thus, many of our series are split between two and sometimes three hydrologic soil groups.
3. How to identify the characteristics of a water impermeable layer?
4. How we can improve stormwater buffers so that detention basins can be replaced with buffers?
5. How the Rhode Island Triangle methodology, revised for Maine soils, could potentially resolve conflicts in hydrologic soil group determinations?

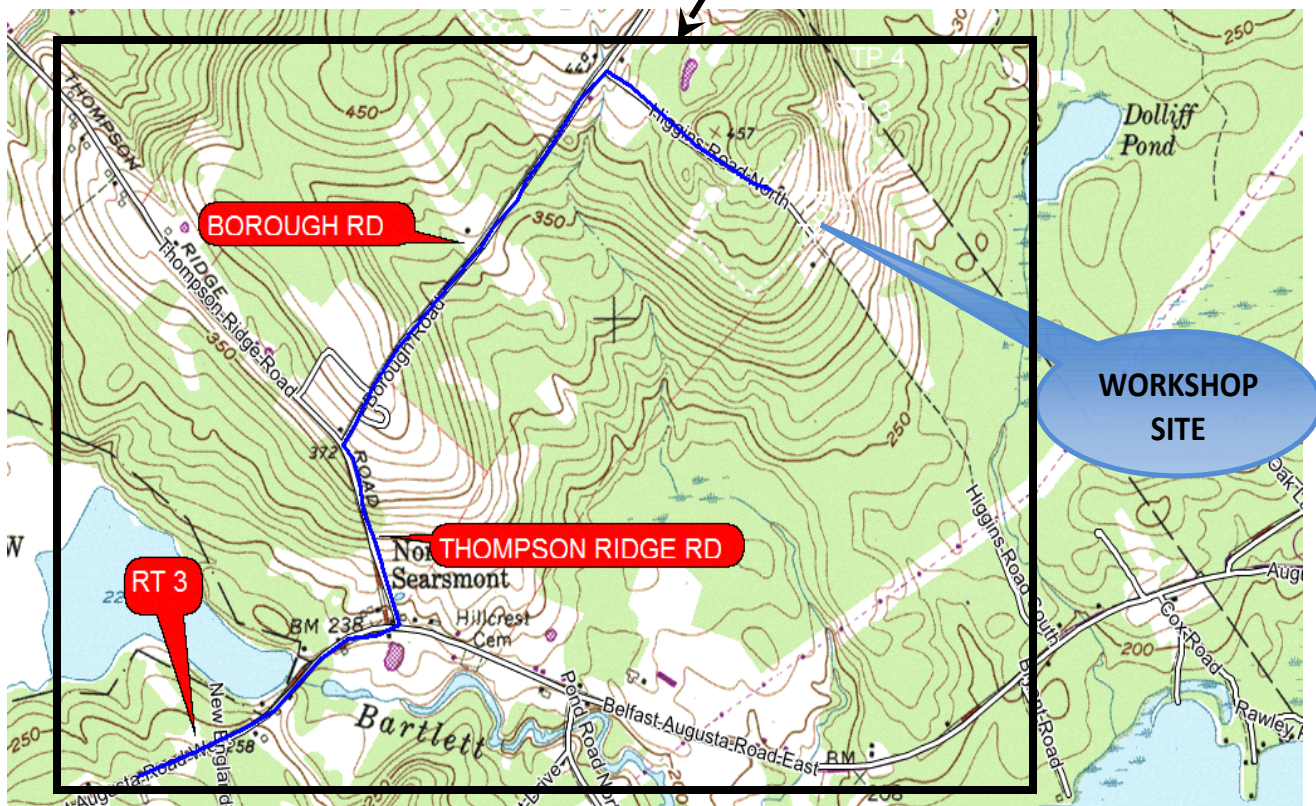
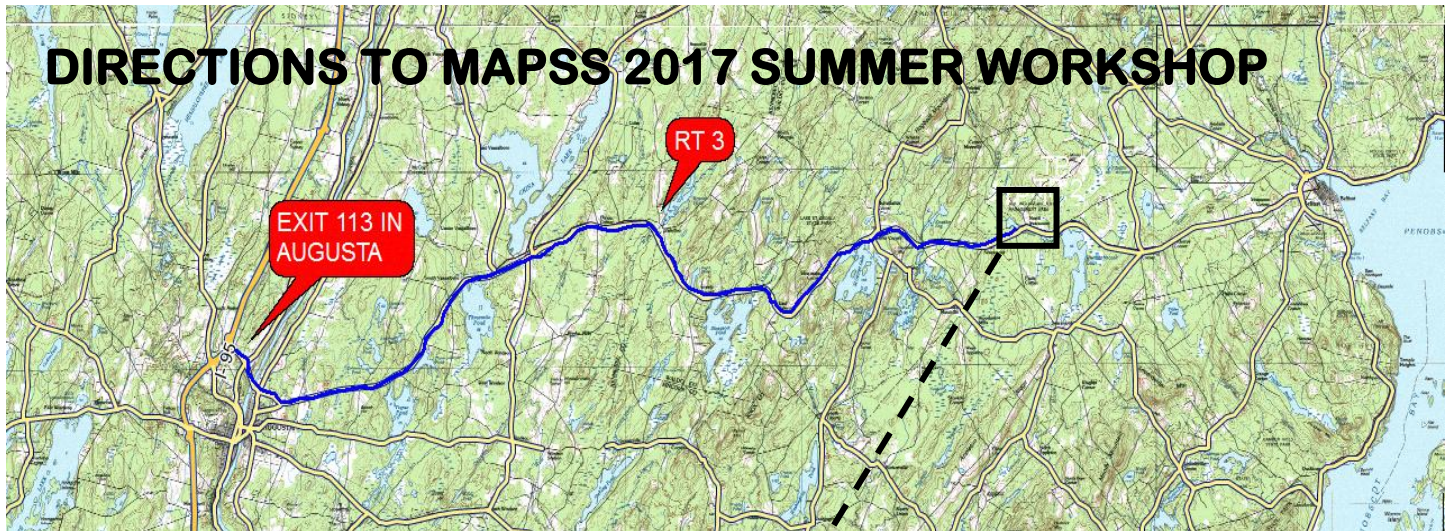
As of this writing, I, along with Dave Rocque, have hand dug and augered soils to identify and locate representative soils and conditions for demonstration purposes. However, we have not yet used a backhoe to carefully examine deeper soil profiles. Thus, we may not know the complete extent of conditions that will be portrayed at the workshop because impermeable layers and seasonal high water tables that occur at depths greater than 30 inches can be difficult to identify when digging by hand.

A group of experts will describe each of the test pits prior to the field day and we will have lab analysis for textures in horizons critical for making hydrologic soil group determinations. We will also have one foot LIDAR contours for the areas which we will be examining. Thus, if we choose to examine slopes or water sheds we will have good data to work with. In addition, we will have aerial photographs available to see if they reveal any information that might help us make decisions. Therefore we should have solid data to examine when we get into the heated discussions which we are famous for.

So, get ready to see some beautiful views of Lake Umbagog and the surrounding mountains while learning new things about soils.

Site Location maps and other Workshop related images follow on the next pages.





When approaching from the west via I-95, get off at Exit 113 and head east for 34 miles. Look for the Thompson Ridge Road which will be about a half mile after the New England Road. Turn north (left) for about 0.5 mile, then turn right (northeast) onto the Borough Road. Proceed about 0.7 mile and then turn right (southeast) on the Higgins Road North. Continue down this gravel road until you see an open field with a barn on the left with the sign 'Over The Hill Farm'. Parking will be along the driveway.



## MAPSS 2017 SUMMER WORKSHOP DETAIL MAP



### ANTICIPATED SCHEDULE OF MAPSS WORKSHOP

8:30 - 9:00 am	Registration
9:00 – 9:30 am	Introduction and overview of concepts related to hydrologic soil groups and vegetative buffers
9:30 - Noon	Examination of test pits and discussions of soil characteristics
Noon - 12:30 pm	Tony Jenkins, NRCS State Soil Scientist: Soil Survey Work Planning Session for soil related projects in Maine [Lunch – BYO]
12:30 - 1:00 pm	David Rocque, Department of Conservation, State Soil Scientist; Discussion of Vegetative buffers [Lunch – BYO]
1:00 - 3:00 pm	Examination of test pits and surface conditions related to vegetative buffers related to stormwater

NOTE: The agenda may vary depending on how things go

All soils with a depth to water impermeable layer <20" and/or a depth to the seasonal high water table of <24" will be in HSG D.

**Steps:**

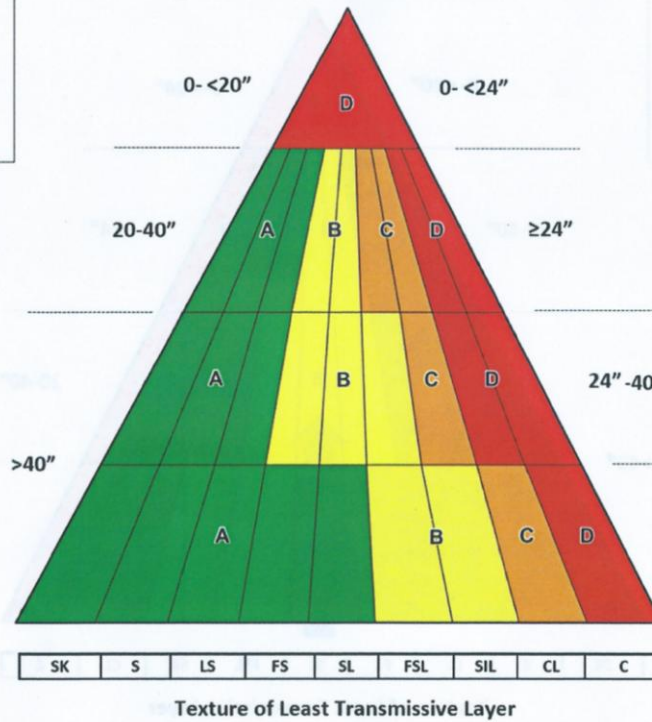
1. Depth to impermeable layer
2. Depth to seasonal high water table
3. Texture of least transmissive layer at least 16" thick

**Example:**

1. Depth to IL= 35"
2. Depth to SHWT=28"
3. Texture= Sandy Loam
4. HSG= B

### Hydrologic Soil Group Triangle

Rhode Island



SK	Skeletal
S	Sand
LS	Loamy Sand
FS	Fine Sand
SL	Sandy Loam
FSL	Fine Sandy Loam
SIL	Silt Loam
CL	Clay Loam
C	Clay

Looking Southwest Over Berkshire  
Soils On An 8 percent slope  
at 2017 MAPSS Summer Workshop Site





## REGISTRATION FOR MAPSS 2017 SOILS WORKSHOP

### Higgins Road North, Searsmont, Maine

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Phone Number: \_\_\_\_\_ E-mail: \_\_\_\_\_

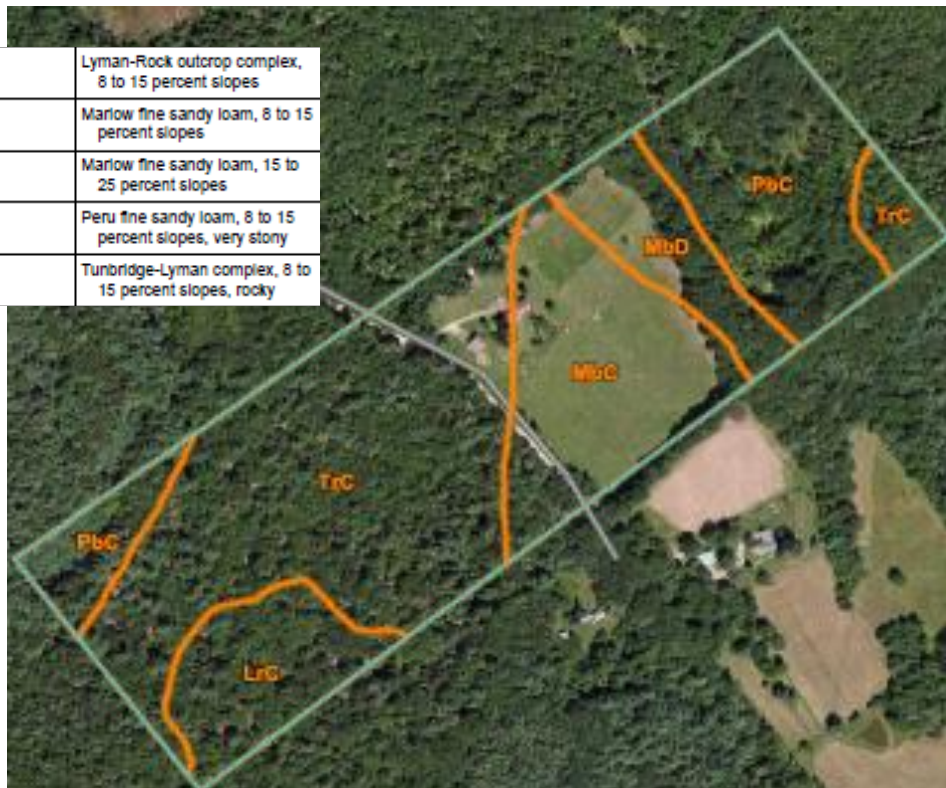
Number Attending Workshop - (Members): \_\_\_\_\_ x \$30.00 \_\_\_\_\_

Number Attending Workshop - (Non Members): \_\_\_\_\_ x \$35.00 \_\_\_\_\_

Please send checks, payable to MAPSS, to:  
Gary Fullerton, 104 Mill Turn Road, Limington, Maine 04049-3141

- ♣ Though registrations will be accepted the day of the workshop, for planning purposes, we ask that you register by Wednesday, August 23.
- ♣ DHHS will grant 6 continuing education credits for this training for Site Evaluators
- ♣ Lunch is on your own
- ♣ Got More Questions? Call (or email) David Marceau at 236-4365 ([DMarceau@GartleyDorsky.com](mailto:DMarceau@GartleyDorsky.com))

LrC	Lyman-Rock outcrop complex, 8 to 15 percent slopes
MbC	Marlow fine sandy loam, 8 to 15 percent slopes
MbD	Marlow fine sandy loam, 15 to 25 percent slopes
PbC	Peru fine sandy loam, 8 to 15 percent slopes, very stony
TrC	Tunbridge-Lyman complex, 8 to 15 percent slopes, rocky







MAPSS 2017 Treasury Report		
MAPSS Checking Account as of 12/31/16	\$11,599.62	
<u>2017 Income:</u>		
2017 Dues (full membership)	\$1,075.00	43 full members at \$25.00 each
2017 Dues (associate membership)	\$150.00	10 associate members at \$15.00 each
2017 Dues (student membership)	\$0.00	5 student members at \$0.00 each
2017 Dues (honorary membership)	\$0.00	3 honorary members at \$0.00 each
	<b>\$1,225.00</b>	
Annual Meeting Registration	\$1,080.00	27 registrants at \$40.00 each
	\$0.00	0 registrants at \$50.00 each
	\$60.00	4 students at \$15.00 each
	<b>\$1,140.00</b>	
Hydrologic Soil Groups Workshop	\$0.00	0 registrants at \$35.00 each
	\$0.00	0 registrants at \$40.00 each
	\$0.00	0 registrants at \$15.00 each
	<b>\$0.00</b>	
TOTAL INCOME	<b>\$2,365.00</b>	
<u>2017 Expenses:</u>		
Envirothon (ME Assoc of Conservation Districts)	\$1,500.00	
Annual Meeting Facility (University of Maine)	\$1,733.94	
Janet Cormier Scholarship	\$1,000.00	
Recognitions	\$78.17	
Website Host (DiscountASP.net)		
Domain Registration (Speedsoft)	\$18.95	
TOTAL EXPENSES	<b>\$4,331.06</b>	
MAPSS Checking Account as of 5/10/17	\$9,633.56	